

**The Protection of Traditional Knowledge under International
Law: With Particular Emphasis to WIPO Draft Instrument for
the protection of traditional knowledge**

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LIST OF ABBREVIATIONS

ABS – Access and benefit Sharing

CBD – Convention on Biological Diversity

CIEL– Center for International Environmental Law Center for International Environmental Law

EPO – European Patent Office

FAO – Food and Agriculture Organization

HPFI – Health and Performance Food International

IGC – The Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC)

IP – Intellectual Property

IPRs – Intellectual Property Rights

PCT – Patent Cooperation Treaty

PGRs – Plant Genetic Resources

PIC – Prior Informed Consent

PIFS– Pacific Islands Forum Secretariats

TAK – Traditional Agricultural knowledge

TCEs – Traditional Cultural Expressions

TEK Traditional Ecological Knowledge

TK – Traditional Knowledge

TMK – Traditional Medical knowledge

TRIPs – Trade Related Aspects of Intellectual Property Rights

UNESCO – The United Nations Educational, Scientific and Cultural Organization

WCT – WIPO Copyright Treaty

WHO – The World Health Organization

WIPO – World Intellectual Property Organization

WTO – World Trade Organization

1 INTRODUCTION

1.1 Background of the study

Traditional Knowledge (TK) has been playing an important role in the lives of indigenous people of the world for centuries.¹ Traditional knowledge consists of its know-how, skills, innovations and practices that are passed on from generation to generation within indigenous peoples or local communities, forming part of its cultural identity and evolving.² The scope of traditional knowledge is not limited to what has actually preserved.³ They are constantly evolving in response to the changing environment. The term traditional is used not because the knowledge is ancient or static, but rather because its creation and use are part of the cultural traditions of indigenous peoples or local community.⁴ The cultural value and identity of the people is represented by that knowledge, and thus it is held collectively.⁵ The form in which traditional knowledge exists is open ended. The knowledge might exist in oral or other forms.⁶

Traditional knowledge is found in very many diverse fields. One the one side of the spectrum one could talk about folklore or traditional cultural expressions that are expressions of knowledge and culture manifested in the form of music, dance, design, architecture and symbols. The other end of the spectrum is technical knowledge that is know how related to biodiversity, agriculture, health care and etc

Traditional knowledge contributes to the sustainable use and preservation of biodiversity, environmental and health care. Although the traditional knowledge's of indigenous people has been used to pursue different ends, the owners or holders of the knowledge are not getting benefits from their know-how, innovations, and skills.

¹ CIEL (2007) P. 1

² Art. 1 and Par. 7 of Use of terms of WIPO Draft Instrument

³ Ghosh (2012) and Art 1 (e) of Draft Instrument

⁴ Gervais (2005) P.140

⁵ Ibid

⁶ Art 1(e) of the Draft Instrument

There are different fora for the protection of traditional knowledge at international level in particular the World Trade Organization (WTO), the World Intellectual Property Organization (WIPO) and Convention on Biological Diversity (CBD). The problem is that each forum focuses on a particular facet. This results in confusion or lack of coordination among fora and agencies.

The protection of traditional knowledge is a quite new topic of discussion in trade related forums such as the WTO. The World Trade Organization is one of the potential institutions protecting traditional knowledge. Its dispute settlement has “teeth” and the intellectual property regime of WTO has significant implications for the traditional knowledge of indigenous peoples.⁷

The intellectual property regime of WTO (TRIPS) deals with the creation, use, and exploitation of mental or creative labor.⁸ It considers and protects the creation of human ingenuity as property for a limited period provided that the creation meets a certain criterion.⁹ This regime is dynamic and characterized by its ability to evolve and adapt to changes.¹⁰ The primary purpose of the intellectual property system is to induce and protect human intellectual creativity and innovation. It does so by creating a balance between rewarding creators of intellectual property on the one hand, and protecting public interest in disseminating intellectual property on the other hand.¹¹

While some scholars argue that intellectual property regimes could be used to protect traditional knowledge, indigenous peoples and countries rich in traditional knowledge are sceptical as to the aptness of the existing intellectual property rights in protecting their traditional knowledge. They argue intellectual property rights, as a means of rewarding individual effort, are based on the notion of individual property ownership.¹² The current intellectual property regimes do not recognize the collective ownership rights of indigenous and local communi-

⁷ Twarog (2004) P.61

⁸ Bently and Sherman (2004) P.1

⁹ Ibid

¹⁰WIPO (2001) P.31

¹¹ Bossche and Zdouc (2013) p.955

¹² Supra Note 4 p. 144-146

ties over their traditional knowledge.¹³ Unlike intellectual property regimes, the authors or the inventors of the creation are rarely well identified in traditional knowledge.¹⁴

Moreover, the conventional IP regimes especially patent is criticized for facilitating misappropriation of traditional knowledge.¹⁵ The WTO's Agreement on Trade Related-Aspects of Intellectual Property Rights (TRIPS) established the minimum standard and criteria for patent protection at a global level. This Agreement does not directly address traditional knowledge. However, the subject matter requirements and the nature of rights conferred to patent owners by the TRIPS agreement do have a detrimental impact on traditional knowledge of indigenous peoples or local communities.¹⁶ Article 27 of TRIPS define patent as exclusive rights granted for an invention either a product or a process that offers a new technical solution to a specific problem. It grants monopoly right to an inventor who used his knowledge and skills to produce a product or a process that is new, involve an inventive step and capable of industrial application. However, in a majority of cases traditional knowledge of indigenous peoples or local communities fails to fulfill the patentability requirements of novelty and/or inventive step. Therefore, the patent system does not grant positive protection for traditional knowledge that fails the tests of patentability. Besides, the lax standards on inventive step and/ or novelty enable individuals to obtain patent by making small modifications or by ignoring as prior art traditional knowledge.¹⁷

The conventional IP systems are also criticized regarding monopoly. IP laws confer exclusive right or monopoly over the invention or creation for a limited time. On the other hand traditional knowledge protection necessitates perpetual protection due to its nature i.e. the knowledge was developed in the past, evolves to changing circumstance, and passed from one generation to other generation.

The other concern of proponents of traditional knowledge protection is the absence of a disclosure obligation within the TRIPS agreement. The TRIPS agreement does not make disclo-

¹³ Supra Note 1 p.5

¹⁴ Supra Note 4 P. 141

¹⁵ Supra Note 1 P.5

¹⁶ IISD (2003) P. 1

¹⁷ Supra Note 1 P.5

sure an international requirement. In other words, it does not require patent applicants to disclose the country of origin of any TK used in inventions; to show evidence that they received prior informed consent; and to produce evidence of fair and equitable benefit sharing.¹⁸ In general TRIPS does not have mechanisms that ensures the commercial use and patenting of TK related invention is conducted with the benefit of the owners of traditional knowledge and prior informed consent.

Finally, the fact that TK databases worldwide are limited makes the patent examiner search for prior art i.e., TK difficult. It leads to the granting of patent to inventions that are not novel and inventive compared to TK.

The Convention on Biological Diversity recognizes the importance and value of traditional knowledge in the field of environment and biodiversity conservation. Article 8(j) of CBD requires contracting parties to respect the traditional knowledge of indigenous and local communities. It promote wider application of TK with the approval and involvement of the holders of such knowledge, in the meantime encouraging the fair and equitable sharing of benefits arising from its use. Although the Convention on Biological Diversity recognizes for TK of indigenous peoples or local communities, the provision are formulated in less mandatory language and are only applicable to traditional knowledge related to biodiversity.

Currently, the primary international forum for negotiating an international instrument to protect TK is WIPO. Under the auspices of WIPO the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), was established in 2000 to study the relationship between intellectual property and related subjects. It is mandated to undertake text-based negotiations with the objective of drafting an international legal instrument that ensure the effective protection of genetic resources, traditional knowledge, and traditional cultural expressions. This committee has prepared a draft text for an international regime for the protection of TK. The draft follows a sui generis approach for the protection of TK which combines a wide set of IP and non-IP tools and instruments. However, so far there has been more divergence than convergence on the need and scope of

¹⁸ Hong Kong WTO Ministerial Briefing Notes (2005)
https://www.wto.org/english/thewto_e/minist_e/min05_e/brief_e/brief06_e.htm

sui generis protection for TK in IGC meetings. Developing nations are in favor of a *sui generis* system for the protection of traditional knowledge as they are suspicious of the existing IP regimes. On the other hand developed countries argue that traditional knowledge could be protected by the conventional IPRs. In other words, they think the existing international instruments, especially IPRs, are sufficient to protect traditional knowledge. So, most industrialized countries are unwilling to work towards final outcome of WIPO *sui generis* draft.

1.2 Research Questions

This work is endeavoring to answer the following questions;

1. Do we need *sui generis* system for the protection of traditional knowledge?
2. Is the *sui generis* Draft instrument of WIPO effective in protecting traditional knowledge?

1.3 Scope of the study

Traditional Knowledge is a very wide subject matter. It is divided into two: TK in a general sense/ *lato sense* and TK in a narrower sense/ *stricto sense*. The former includes the ‘intellectual and intangible cultural heritage, practices and knowledge system of traditional communities, including indigenous and local communities’.¹⁹ The description embraces both the content of the knowledge itself and the traditional cultural expressions including distinctive signs and symbols associated with traditional knowledge.²⁰ On the other hand, TK in *stricto sense* refers to ‘the content or the substance of knowledge resulting from intellectual activity in a traditional context including know-how, skills, innovations, practices, and learning’²¹. So the scope of the thesis is limited to TK in *stricto sense*, *inter alia*, agricultural, scientific, technical, ecological, medicinal and biodiversity-related knowledge. It does not deal with traditional cultural expressions and genetic resources.

1.4 Methodology

The thesis depends both on primary and secondary sources to address the above-mentioned research questions. It has used primary international instruments relevant for the protection of

¹⁹ WIPO/GRTKF/IC/13/5(b) Rev. P. 23 of Annex 1

²⁰ WIPO/GRTKF/IC/6/4 P.28

²¹ Art 3 WIPO/GRTFK/IC/17/5

traditional knowledge. Secondary sources like books, articles and journals are also utilized to address the research questions.

1.5 Outline of the thesis

This thesis is organized into four chapters. The first Chapter deals with the background of the study, research questions, the scope of the thesis and methodology. The definition, nature, type and justification for the protection of traditional knowledge are discussed in the second Chapter. The focus of Chapter three is on the issue whether sui generis instrument on the protection of traditional knowledge is needed. Therefore, the main discussion of this chapter is about whether the existing international instruments, especially IPRs are sufficient for the protection of TK of indigenous people or local communities. It also analyzes the constitutive elements of effective sui generis system in the context of traditional knowledge. In doing so, the beneficiaries of traditional knowledge protection; rights granted; the period of time for which those rights are granted; the exceptions for the protection and the relationship of sui generis instrument with other instrument are discussed. Moreover, the modalities of protection of TK are another issue that is dealt with clarity. The last chapter is devoted to conclusions.

2 GENERAL OVERVIEW ON TRADITIONAL KNOWLEDGE

2.1 Definition of traditional knowledge

Although there have been various efforts to define TK, there is no internationally accepted definition of TK. It is an open-ended concept as different people and institutions try to define it differently depending on the perspectives that they want to pursue.²² Moreover finding a single exhaustive definition of TK at the international level is difficult in light of diverse and dynamic nature of TK and the difference in existing national laws on TK.²³ However, it is not impossible to come up with broad and flexible legally binding definition of TK. It ensures reasonable legal certainty and clarity concerning to what is protected and what is not protected. An internationally working definition of TK is also crucial to both enable the objectives of TK protection to be met and to define what lies in the public domain.

The most common way of defining TK at the international level is by distinguishing between TK in a general sense or *lato sense* and TK in a narrower sense/ *stricto sense*. The former is a broad description of the subject matter, which generally includes the ‘intellectual and intangible cultural heritage, practices, and knowledge system of traditional communities, including indigenous and local communities’.²⁴ The description embraces both the content of the knowledge itself and the traditional cultural expressions including distinctive signs and symbols associated with traditional knowledge.²⁵

The WIPO draft articles for the protection of traditional knowledge defined TK in *stricto* sense. It refers to the ‘content or the substance of knowledge resulting from intellectual activity in a traditional context including know-how, skills, innovations, practices and learning that form part of traditional knowledge system, and knowledge embodying traditional lifestyles of indigenous and local communities’.²⁶ In other words, it refers to knowledge, in par-

²² Drahos (2014) P. 23

²³ WIPO/GRTKF/IC/11/15 P. 112

²⁴ WIPO/GRTKF/IC/13/5(b) Rev. P. 23 of Annex 1.2

²⁵ WIPO/GRTKF/IC/6/4 P.28

²⁶ Art 3 WIPO/GRTFK/IC/17/5, Art. 1 and Par. 7 of Use of terms WIPO/GRTKF/IC/28/5/

ticular, the content or the substance of which is resulting from intellectual activity in a traditional context.²⁷ The acronym “TK” is used in this thesis to denote this term.

The *stricto* sense definition excludes Traditional Cultural Expressions (TCEs) from the scope of the instrument though the latter complements TK. TCEs are a form of TK dealt in a separate instrument. Indeed, TCEs are a form in which some TK is embodied, for instance, TK related to the production of a traditional creative artifact is embodied and manifested in the design, appearance and artistic form of the artifact.²⁸ So there is close relationship between TK and TCEs.

TK is more than a systematic collection of information.²⁹ It involves innovation, skills and experience in solving a particular problem in different fields or areas. The knowledge might be associated with or related to environment, medicine, natural resources and genetic resources, biodiversity conservation, and agriculture.³⁰ It could also be know how of traditional architecture and construction technologies.³¹ TK is established on observations and past experiences that are used, *inter alia*, in the management of socio-economic and ecological aspect of life.³² The knowledge is built by a group of people who through generations have been living in close contact with the nature.

Although TK and indigenous knowledge are not synonymous, in many occasions different stakeholders use these terms interchangeably. However, TK is broader than indigenous or tribal knowledge. Indigenous knowledge is a knowledge that is held and used by people who identify themselves as indigenous of a place based on a cultural distinctiveness and prior territorial occupancy.³³ On the other hand, traditional knowledge might be hold by members of a distinct culture and / or any group of humankind who are not indigenous.³⁴ Every society may have TK, but not all societies could be described as indigenous or tribal population. In-

²⁷ Kiene (2011) P. 328

²⁸ WIPO7GRTKF/IC/17/INF/9 P.2

²⁹ Mugabe (1998) p.1

³⁰ Le Gall. B (2014) p. 20

³¹ Par.7 Definition part of Draft Art

³² Supra Note 29 P.3

³³ Id

³⁴ Kuanpoth and Robinson (2009) p.2

indigenous knowledge is a subset of traditional knowledge, but traditional knowledge is not necessarily indigenous.³⁵

2.2 The nature of Traditional Knowledge

The term traditional knowledge is misunderstood and applied in confusing ways due to the difficulty of explaining its nature. The nature of TK should, however, be clarified if any legal framework to address TK needed to be effective.

The WIPO draft instrument for the protection of traditional knowledge clarifies the nature of TK by identifying various features that constitute it. Article 1 of the Draft is important in doing two things. It sets the appropriate boundaries to the scope of the protectable subject matter by clarifying the nature of TK. It describes qualities a TK should have at least to be eligible for protection against misappropriation. The provision is also crucial in understanding, interpreting and implementing the entire instrument.

The criteria for the protection articulated in these provisions are that the knowledge should be created and maintained in a collective context; inter-generational; distinctively linked to indigenous peoples or local communities; evolving and exist in codified or other forms.³⁶

TK is collectively owned and shared by indigenous peoples or local communities. It is integral to the cultural identity of indigenous peoples or local communities. The process of creation of TK is perceived as pertaining to particular people, who are intimately linked to particular socio-ecological contexts through various economic, religious and cultural perspectives.³⁷ Unlike formalized western property rights system in which individuals are holders of those rights, TK is held and owned collectively. It is generated, preserved and transmitted in a collective context. The diverse and complex customary rules of many traditional communities governing access to TK also reflect the shared nature of the knowledge. The fact that traditional knowledge is shared does not mean however everything is shared with everybody.

³⁵ Ibid

³⁶ Art 1 of the Draft instrument

³⁷,WIPO/GRTKF/IC/3/9 P.11

The draft provision uses the words ‘collective context’ in order to emphasize that an innovation, skill and know-how that are to be considered as TK should be attributable to groups such as indigenous peoples and / or local communities. Then this follows that knowledge attributable to a particular individual will not be considered as TK. The mere fact that the innovation is attributable to individuals who were members of a particular community by itself will not make the knowledge TK. Some traditional knowledge are held and kept secretly and confidentially for different reasons. In this case we should not confuse such knowledge with knowledge that is the product of individuals. Only traditional knowledge held collectively fall under the subject matter of the protection of TK. There are however national laws and/or customary laws that recognize knowledge created and held by individuals as a genuine piece of TK.

The other characteristic of TK is that it is a manifestation of the identity of indigenous peoples or local communities. It is distinctively associated with indigenous or local communities. It means that TK is characteristically associated with indigenous community or local communities and not the public as a whole.³⁸ TK is linked to local or indigenous communities through a sense of custodianship, guardianship or cultural responsibility.³⁹ Most customary laws or practices of the traditional communities formally or informally put the obligation on their communities to preserve the knowledge and prohibit the misappropriation.⁴⁰ In other words, indigenous peoples and local communities are the guardians of TK. They have the responsibility to maintain and preserve the knowledge that is the result of intellectual creative process of their ancestors, in a way consistent with community values and customary law.

Article 1(b) of the draft articles requires the knowledge to have a conceptual link with the beneficiaries of protection that are specified in Article 2. It clarifies the minimal traditional linkage that should exist between TK and its holders in order for knowledge to be protected by the instrument. Traditional knowledge that originally fulfilled this criterion would no longer enjoy protection if it were no longer possible to distinctively associate it with indigenous people or local communities. The knowledge that was protected at a certain point in

³⁸ WIPO/GRTKF/IC/8/5 P. 14

³⁹ An overview of the Nature and Forms of Traditional Knowledge In Indonesia P.3 http://www.wipo.int/edocs/mdocs/tk/en/wipo_tkdl_del_11/wipo_tkdl_del_11_ref_t11_2.pdf

⁴⁰ WIPO/GRTKF/IC/25/INF/7

time satisfying the requirements of article 1 of the draft at later stage might be disseminated to the public. Therefore it might be unjustifiable to ask the consent from groups who originate it to use the knowledge. Article 7 also makes it clear that TK will enjoy protection as long as the criteria in article 1 fulfilled.

The inter-generational nature of TK is mentioned in Article 1 (c) of the Draft Articles. The inter-generational nature of TK implies the knowledge is passed from one generation to next generation. TK is the achievement and common heritage of a particular community. It belongs not only to past and present generations but also to the future generation.

Some consider TK as an age-old knowledge that lacks creativity and innovative efforts. They claim that otherwise the knowledge would not be traditional. However, as rightly explained by Barsh and affirmed by draft article 1(e) TK is dynamic in its shape and substance.

“What is ‘ traditional’ about traditional knowledge is not its antiquity, but the way it is acquired and used. In other words, the social process of learning and sharing knowledge, which is unique to each indigenous culture, lies at the very heart of its ‘traditionality’. Much of this knowledge is actually quite new, but it has a social meaning, and legal character, entirely unlike the knowledge indigenous people acquire from settlers and industrialized societies.”⁴¹

TK was continuously developed following any change in the environment, geographic conditions and other factors. It is not static knowledge rather it is continuously evolving and integrating new knowledge. It is predicated on the experience of earlier generations and adapted to the new environment and socio-economic challenges of the present. Therefore, traditional knowledge that is handed down or passed on from one generation to another is not necessarily the same. The new generation inherits not only knowledge that is handed down from the other generation, but it also adds new knowledge to the stock of knowledge.⁴² Hence, TK is the framework of ongoing innovation and innovation might be taken place within the knowledge of indigenous and local communities.

⁴¹ Barsh (1999) P.42

⁴² Dutfield (2001) P. 247

Finally, it is important to note that there are various forms in which TK may be found. Article 1(d) of the draft, which clarify the forms in which TK may exist states traditional knowledge might subsist in codified, oral or other forms. The form in which traditional knowledge exists is not a precondition for protection.

In conclusion, the draft provision dealing with the nature of TK is crucial in distinguishing and finding the right balance between TK that is subject to protection and knowledge that had become part of the public domain. The criteria for eligibility for protection listed in article 1 of the draft are cumulative and do not need any further consideration.

2.3 Classification of traditional knowledge

Before going into the discussion about the relevance of intellectual property regime for the protection of traditional knowledge in the following chapter, it is important to distinguish traditional knowledge into different categories. Categorization of traditional knowledge into different groups has significant consequence from the perspective of IP and in designing appropriate modalities for the protection of TK.

Traditional knowledge is broadly categorized into two: disclosed and undisclosed TK. The classification of TK, as disclosed or undisclosed, is controversial and has significant consequence from the perspective of IP. There are different ways that holders of TK disclose their knowledge such as orally or through documentation. Traditional knowledge could be publicized to third parties or non-members of such communities with or without the consent of the holders of TK.

Based on the degree of the disclosure of TK, we can classify it into different types. It is classified as publicly disclosed TK, publicly available TK with limited accessibility, TK held within indigenous and local communities and secret or confidential TK.

Publicly disclosed traditional knowledge is a category of traditional knowledge widely open to the public and could be easily accessed.⁴³ This type of traditional knowledge is excluded from the protection of conventional forms of IP because it is not considered novel as it is dis-

⁴³ WIPO7GRTKF/IC/17/INF/9 P.6

closed to the public.⁴⁴ However, it could be taken as prior art. The problem is it might not be accessible by patent examiners unless there will be a strong initiative to document such TK as prior art. The documentation of publicly disclosed TK will prevent subsequent inventions, which are based on TK from easily satisfying the novelty requirement of patent law. Article 3(3) of the Draft gives discretion to states to exclude this type of TK from the principle of prior informed consent provided that the users of this traditional knowledge give equitable compensation for holders of TK.

Publicly available TK with limited accessibility is available only in specific places. It is available in library, archive or other repositories.⁴⁵ It could only be accessed by those who have access to repository. On the other hand, publicly available TK could be accessed by anyone.⁴⁶ TK held within indigenous and local communities is disclosed and known within such communities. This kind of TK is publicly available but not widely known to the community. Specific persons may make the disclosure of such kind of TK to specific individuals or groups in specific times, spaces, manners, and for specific purposes. Such kind of knowledge could be accessed only directly through the contacting of indigenous peoples or local communities.

Secret/confidential traditional knowledge is held by specific individuals or class of individuals living within indigenous and local communities.⁴⁷ Other members of indigenous and local communities cannot even access such TK. This kind of TK is kept at a very secret place so that it could not be disseminated or fall into the public domain. This category of traditional knowledge might be protected through conventional IP instruments.

2.4 Types of traditional knowledge

Traditional knowledge in *stricto* sense recognized in article 1 of the draft instrument is not limited to any field of arts or technology since human invention is open ended. However, I will discuss in the following paragraphs only three basic subsets of TK i.e. Traditional Medical Knowledge (TMK), Traditional Ecological Knowledge (TEK) and Traditional Agricultural Knowledge (TAK).

⁴⁴ Ibid

⁴⁵ Ibid

⁴⁶ Ibid

⁴⁷ WIPO/GRTKF/IC/17/INF/9 P.9

Traditional Medical Knowledge is found in almost every country in the world and demands for its service is increasing.⁴⁸ It has provided for and sustained the health needs of people over time. In some Asian and Africa countries, up to 80 percent of the population use traditional medicine, including for primary health care.⁴⁹ In many developed countries, 70 to 80 percent of the population has used some forms of alternative or complementary medicines.⁵⁰ The commercial and scientific value of the traditional medical system is growing significantly.⁵¹ Nowadays huge pharmaceutical companies are developing modern drugs and vaccines using a natural resource and associated traditional knowledge.

The World Health Organization (WHO) defines traditional medicine as

“The total combination of knowledge and practices, whether explicable or not, used in diagnosing, preventing or eliminating physical, mental or social diseases and which may rely exclusively on past experience and observation handed down from generation to generation verbally or in writing”⁵²

Traditional medical knowledge is created in a manner that reflects community traditions. It is not only concerned with curing of the disease but also with the protection and promotion of physical, spiritual, social, mental and material wellbeing. Traditional medical knowledge related with the use of plants, herbs, minerals, animals; traditional birthing methods; traditional bone setting techniques and spiritual healing.⁵³ As a subset of TK, it shares the characteristics of the former. It is inter-generational, dynamic and collective heritage of a particular indigenous and local community.

Compared to another domains of traditional knowledge, traditional medical knowledge is a type of knowledge that is mostly misappropriated by private persons. Nowadays it is common to hear claims against the misappropriation of TMK by unauthorized third parties, who

⁴⁸ WHO Fact Sheet N134 “Traditional Medicine”(December 2008)
http://www.wipo.int/export/sites/www/tk/en/resources/pdf/tk_brief6.pdf

⁴⁹ Ibid

⁵⁰ WIPO background Brief N 6 Intellectual Property and Traditional Medical Knowledge
http://www.wipo.int/export/sites/www/tk/en/resources/pdf/tk_brief6.pdf

⁵¹ Ibid

⁵² Supra Note 48

⁵³ Supra Note 50

have patented compounds derived from traditional medicine without the prior consent of TMK holders and fair compensation.⁵⁴

The problem of biopiracy is also prevalent in the fields of Traditional Agricultural Knowledge. Traditional agricultural knowledge is a system of knowledge about crop and its environments.⁵⁵ This kind of knowledge is categorized into three categories - knowledge related to substance, management, and organization.⁵⁶ The first type of knowledge is about soil types, pests, pathogens, environmental conditions and crop genotypes.⁵⁷ Management related knowledge is concerned with irrigation techniques, soil amendments, planting patterns, pest control, and crop selection.⁵⁸ The last type of traditional agricultural knowledge is knowledge related to tenure arrangements, resource allocation, and dependency on alternative production.⁵⁹ In general traditional agricultural knowledge also shares the attributes ascribed to other traditional knowledge discussed above. The importance of TK in agricultural fields is recognized in paragraph 2 of the preamble of the Draft Article.

Traditional Ecological Knowledge is another basic sub - domain of traditional knowledge. Ingils defined traditional ecological knowledge as follows:

*“TEK is a cumulative body of knowledge and beliefs, handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment. Further, TEK is an attribution of societies with historical continuity in resource use practices; by and large, these are non-industrial or less technologically advanced societies, many of them indigenous or tribal.”*⁶⁰

It is knowledge about the environmental and biodiversity conservation and sustainability.⁶¹

⁵⁴ Ibid

⁵⁵ B. Brush (2006) P. 1502

⁵⁶ Ibid

⁵⁷ Ibid

⁵⁸ Ibid

⁵⁹ Ibid

⁶⁰ Berkes (1993) p.3

⁶¹ Ibid

In conclusion traditional knowledge also might be found in a wide variety of other contexts such as traditional architecture and traditional building techniques, traditional food preservation, processing and conservation methods.

2.5 Justification for the protection of TK

Many advocates of TK protection think it is hardly worthy to question of why we need to protect TK. A popular view is that traditional knowledge should be protected because it is a valuable good. This statement by itself is however too general to justify the protection of traditional knowledge. The reasons for the protection of traditional knowledge nevertheless have been one of the most debated issues during the negotiation of the draft text on the protection of TK. However, it is important that states that seek should ideally reach consensus on the objective or objectives of international protection of TK.

Otherwise clear objectives, laws and policies for the protection of traditional knowledge are unlikely to be effective. The following paragraphs discuss both the draft articles objectives and policies that imply legal and moral imperatives for protecting TK and other various plausible justifications for the protection of TK.

Proponents of traditional knowledge argue for the protection of TK from the perspective of personhood.⁶² Indigenous peoples and local communities often think that TK encompasses cultural elements that are integral to their sense of identity. TK is integral to indigenous groups identity or peoplehood. It is important in shaping the identity of indigenous groups and its culture. Consequently, it has been argued that the objects and expressions that are fundamental to group identity merits protection and deserve particular legal attention. In other words, recognition of TK of indigenous peoples or local communities is extremely inalienable and important to in order to respect their dignity, cultural integrity and intellectual and spiritual values.⁶³ Paragraph 2 of the preamble of the draft articles clearly articulated the importance of TK in maintaining the cultural integrity and spiritual values of TK holders.

⁶² Carpenter. A, Katyal K and Riley. R (2009) P.1047

⁶³ Ibid

The reason intellectual property is protected in general is also helpful in justifying legal protection for TK.⁶⁴ The grounds of justifications are divided into two different groups. On the one hand, IP regimes aimed at creating incentives for a certain desired behavior, such as investment in research and development of new products or the publication of valuable investment.⁶⁵ On the other hand, it seeks to reward the labor and creative work of the inventor, author or generally speaking the creator of the new intellectual concept.⁶⁶ The latter reason can be described as moral or natural rights of the creators over the fruits of their work. Moral arguments used to justify the intellectual rights of an inventor and author is also important to justify the need for legal protection of TK.⁶⁷ Moral rights confer an author and inventor a right to attribution and integrity with respect to her creations. It is argued that communities should also enjoy a right of attribution and integrity with respect to its collective creations.⁶⁸ IP protection should apply to traditional knowledge not less than it does to other forms of intellectual property. The difference between traditional knowledge and conventional creation of intellectual property is that the former is developed collectively over a very long period of time while in the case of later only one or group of inventor or author works specifically on the project in order to create a new intellectual concept.⁶⁹

The importance of traditional knowledge in promoting innovation is recognized in paragraph 7 of the preamble of the draft articles. As such it is worth to reward as conventional forms of intellectual property of TK of indigenous peoples or local communities.

The protection of TK contributes significantly to the improvement of the lives of traditional knowledge holders and communities.⁷⁰ Many Indigenous peoples and local communities depend on TK for their health, livelihoods, and their general wellbeing. Thus, regimes that encourage the conservation and continued use of TK improve the lives of millions of people. Especially traditional agriculture knowledge systems successfully enabled millions of people

⁶⁴ Honds (2006) P.6

⁶⁵ Kur and Drier (2013) P.6

⁶⁶ Ibid

⁶⁷ Supra Note 64

⁶⁸ Ibid

⁶⁹ Ibid

⁷⁰ Dutfield (2004) P. 329

to subsist for thousands of years in some of the most hostile environments.⁷¹ The importance of TK related to plant genetic resources for food and agriculture is recognized in article 9.2 of FAO International Treaty on Plant Genetic Resources for Food and Agriculture. Also, Article 4(3) of the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions indicates the relevance of TK for sustainable development and poverty alleviation. Paragraph 2 of the preamble of the draft articles also recognized TK as a means to ensure food security.

Traditional knowledge plays a vital role in boosting national economies.⁷² Currently, Traditional medicine of indigenous and local communities is widely used for in preservation of health and as an input in biomedical research. Most of the time, they constitute a source of income not just as drugs in themselves rather as the source of chemical substances forming the basis of new pharmaceuticals.⁷³ Moreover, the potential benefit that will be derived from domestic and international trade of TK-based product such as handicrafts, agricultural products, and non-wood forest products is very high indeed.⁷⁴ Thus, protection of TK has the potential to improve national economies of developing countries through the commercial use of their biological resource and increasing exports of TK-related products.

TK is important in the preservation of the environment, enhancement of biodiversity and natural resource management.⁷⁵ Article 8(1) of the CBD and Paragraph 2 of the preamble of the draft instrument briefly mentioned the relevance of TK for the conservation and sustainable use of biological diversity and environmental protection.

In addition to aforementioned reasons, proponents of TK protection consider the legal protection of TK as one way of reparation. Historically property law has been used to legitimize the conquest of indigenous lands and resources and now indigenous peoples TK could be used to claim the cultural resources of such group.⁷⁶ To put it in other words, many indigenous peoples culture has been damaged by colonialism practices of western countries. Advocates of

⁷¹ Ibid

⁷² Supra Note 70 P. 98

⁷³ Dutfield(2006) P.16

⁷⁴ Ibid

⁷⁵ Paragraph 2 of the preamble of the draft Articles

⁷⁶ Supra Note 62 P .1022

the protection of TK believe giving legal protection to TK is one way of providing reparation for wrong committed against indigenous peoples.

Although the era of colonialism by States ended a couple of decades ago another form of colonialism i.e. the exploitation of TK by private persons is emerging as a threat to the culture and knowledge of indigenous peoples. It is important to realize that nowadays the primary reason for the protection of traditional knowledge is to prevent biopiracy.⁷⁷ It has been claimed that the TK of indigenous peoples and local communities is exploited by the acts of individuals and companies. Third parties began to misappropriate TK through the patent system and used TK for commercial ends without authorization of holders of TK.⁷⁸ In other words, companies and research organizations misappropriated traditional knowledge into two ways. Either they use TK as a basis for an invention and then subsequently gets patent without the authorization of TK holders or obtain patent on TK of indigenous peoples or local communities.⁷⁹

Finally, the legal reason for the protection of TK is to comply with international treaties including biodiversity, plant genetic resources, and human rights instruments.⁸⁰ The rights of indigenous people are recognized in many international human rights instruments including Universal Declaration Human Rights, International Convention on Civil and Political Rights, International Convention on Economic Socio-Cultural Rights and UN Declaration on the rights of Indigenous peoples. TK that is integral to the cultural identity of people should be protected to implement the rights of indigenous peoples rights incorporated in these instrument

⁷⁷ Policy objectives of the Draft instrument

⁷⁸ Supra Note 64 P. 3

⁷⁹ Ibid

⁸⁰ Tonye (2010) p.5

3 THE LEGAL FRAMEWORK FOR THE PROTECTION OF TRADITIONAL KNOWLEDGE

This chapter is devoted to the discussion of whether the sui generis draft instrument of the World Intellectual Property Organization (WIPO) is necessary for the protection of traditional knowledge and addressing the interests and expectations of indigenous peoples or local communities. To address the above issue in the next sections the discussion will be on the role of the existing international instruments in protecting TK and challenges inherent in such instruments in protecting the intellectual knowledge of indigenous peoples or local communities. The discussion on international instruments mainly focuses on IPRs recognized in TRIPS, CBD, Nagoya protocol and Bonn Guideline on ABS. The other issue that is dealt within in this chapter should not be separated from the above discussion about what should be the substantive elements of a sui generis system for the protection of traditional knowledge. In connection with this, the effectiveness of the substantive provisions of the draft articles of WIPO in addressing on the one hand the needs and expectations of indigenous or local communities and the public interest in accessing traditional knowledge on the other hand, will be examined.

3.1 Protection of Traditional Knowledge under existing international instruments

Different ideas are suggested by scholars on the issue of how to safeguard traditional knowledge of indigenous peoples or local communities that is shared and often distributed widely among communities and beyond. Some argue traditional knowledge should be protected through domestic laws.⁸¹ However, national systems aimed at protecting TK should be supported by international measures adopted at the regional or global level. In other words If misappropriation of TK is needed to be prevented effectively there should be international laws transcending countries borders that give protection for TK. International instrument for protection of traditional knowledge is necessary due to the fact that misappropriation of traditional knowledge of indigenous peoples or local communities is not confined within national boundaries.⁸² International coordination and cooperation are essential to achieve the goals of traditional knowledge protection.⁸³ Therefore, the existence of international legal framework

⁸¹WIPO,Background Brief (2014) Most of the times in different international initiatives developing countries have been supportive of international legal framework for the protection of TK than developed countries.

⁸² Dinwoodie (2005) P. 1

⁸³ WIPO Booklet n.2 P. 10

for an effective protection of TK should be seen as one step forward concerning the promotion of the interests and legitimate expectations of TK holders.

The issue of protection of TK is a very recent topic that has been discussed in different international fora particularly in World Trade Organization (WTO), World Intellectual Property Organization (WIPO) and addressed in the Convention on Biodiversity (CBD). Traditional Knowledge has been one of the main issues at WIPO since 1998 and at the World Trade Organization (WTO), particularly since the General Council began to prepare for the 1999 Seattle Ministerial Conference.⁸⁴ The dialog on TK is on the need to recognize the value of the knowledge and the intellectual contributions of indigenous and local communities. There is also an initiative to maximize the benefits of TK for these communities and minimize the harmful effects of misappropriation. Interestingly, nowadays the numbers of institutions that are recognizing the value of the knowledge of indigenous and local communities in relation to natural resource management, agriculture and health is increasing.

Although TK by itself is very old knowledge, there is no single international legal instrument dealing with its protection in a holistic, comprehensive and harmonized manner. Consequently, holders of traditional knowledge, countries rich of traditional knowledge and activists supporting traditional knowledge holders are calling for legal protection of TK at an international level through the aforementioned fora. They are demanding protection for traditional knowledge either through existing IP regime or more frequently through a sui generis system as they tend to be dubious about the aptness of current IPRs in protecting TK.⁸⁵ However, to advocate for a particular system of protection for TK, it will be useful to articulate whether there exists possibilities for the protection of TK within the existing international instruments including IP. The reasons for the need of completely new system of protection should be identified. Therefore, in the following sections the discussion will be on whether the existing international instruments, especially IPRs are sufficient for the protection of TK of indigenous people or local communities.

⁸⁴ Dutfield (2001) P. 236

⁸⁵ Id p. 234

3.1.1 Protection of traditional knowledge through Intellectual Property Rights of TRIPS

As has been discussed earlier traditional knowledge might exist in different forms i.e. disclosed or undisclosed traditional knowledge. The degree in which TK is exposed may implicate different kinds of intellectual property protection. Consequently, some scholars argue that traditional knowledge can be protected under various forms of intellectual property laws. The WTO Agreement on Trade Related-Aspects of Intellectual Property (TRIPS) is the most comprehensive body of international law on intellectual property law. It establishes the minimum enforceable standards on patents, industrial designs, trade secrets, copyright, trademarks and geographical indications. This instrument has however been criticized for its detrimental impacts on various issues.⁸⁶ Among other things it is being criticized for facilitating patent related biopiracy or misappropriation of cultural heritage.⁸⁷ Indigenous people and local communities and advocates of such groups are very suspicious of the ability of the existing intellectual property framework in accommodating their interests. In the following sections, therefore, the issue whether the IPRs framework of TRIPS can be used for the protection of TK, will be examined. Under this topic, the conceptual and practical challenges inherent in the application of IPRs for the protection of TK especially patent will be discussed.

3.1.1.1 Copyright and related law

At International level, the WTO Agreement on Trade Related-Aspects of Intellectual Property the Berne Convention and the WIPO Copyright Treaty (WCT) are the major instruments dealing with copyright. These copyright conventions provide for the protection of the form of expression of ideas and do not address the content of the knowledge as such. As is explained earlier the scope of the thesis is limited to traditional knowledge as such i.e. “content or substance of knowledge resulting from intellectual activity in a traditional context”. Therefore, copyright law is more relevant to the protection of traditional cultural expression than for traditional knowledge. However, this does not mean that traditional knowledge as such cannot be protected indirectly through copyright and related laws. The descriptions of traditional knowledge that are systematically arranged and can be individually accessed might be

⁸⁶See generally Gervais (2001) 248-6, Ragavan (2001); Brown (2003)

⁸⁷ Ibid

protected by copyright.⁸⁸ However, this kind of indirect protection does not give protection to the content of knowledge resulting from intellectual activity i.e. TK as such.⁸⁹ Therefore, indirect protection will not prevent the misappropriation of the traditional knowledge of indigenous people or local communities. Even though copyright might protect description of traditional knowledge, still third parties could take and use the substantive content of TK without the permission of the knowledge holders.

3.1.1.2 Patents

On the surface, traditional knowledge bears resemblance to the sort of intellectual property protected by patents though the way in which traditional knowledge is developed, held or communicated is significantly different from most of patented inventions.⁹⁰ Patent rights are exclusive rights granted to an invention that provides a new way of doing something, or offers a new technical solution to a problem.⁹¹ Patent law grants a monopoly right to the owner of the patent for a limited period, generally 20 years.⁹² Patents exclude third parties from using, distributing or selling the patented invention without the patent owner's consent.⁹³

The main question that should be asked in exploring the link between traditional knowledge and patents is whether and how the patent system could be used to protect traditional knowledge. In general the kind of protection that are necessary for the protection of traditional knowledge could take two forms i.e. defensive protection and positive protection. Positive protection of traditional knowledge gives IPRs such as a patent or alternative rights to indigenous peoples and local communities over their traditional knowledge.⁹⁴ It empowers the holders of TK to promote their TK, control its uses and benefits from its commercial exploitation.⁹⁵ A law that requires the disclosure of origin and benefits sharing agreement ensures communities rights to maintain control over its TK. On the other hand defensive protection

⁸⁸ WIPO/GRTKF/IC/13/5(b) Rev. p. 19

⁸⁹ Ibid

⁹⁰ Erstling (2009) p. 297

⁹¹ Art 27 TRIPS,

⁹² Art 33 TRIPS

⁹³ Art 28 TRIPS

⁹⁴ Dutfield (2006) p. 35

⁹⁵ WIPO Background brief (2014) http://www.wipo.int/pressroom/en/briefs/tk_ip.html

assists to preserve the traditional knowledge holders' right to use TK they created against any third party who derives an invention from it and seek to patent the invention.⁹⁶

A comprehensive approach for the protection of TK needs to consider both positive and defensive protection as two sides of the same coin.⁹⁷ Deciding on the issue whether a patent law could offer both positive and defensive protection for traditional knowledge requires the examination of the objectives of patent system.

The main objective of Patent law is to grant exclusive protection for qualifying inventions. It also have defensive objective, it ensure the denial of patent rights to inventions that lacks sufficient level of inventiveness or known to the public.⁹⁸ Keeping these objectives in mind patent law is relevant to the protection of TK in two ways. On the one hand, it can be used in a very limited way to give positive protection for TK of indigenous people of local communities in a scenario where traditional knowledge meets the basic requirements of patentability. However, in most of cases traditional knowledge is considered non-patentable due to the misconception that traditional knowledge is not innovation; it has no scientific component or it is public domain information that can freely use without legal constraint.⁹⁹ As discussed at the beginning of the chapter one of the nature of traditional knowledge is that it is not a static knowledge. A new and innovative advancement in TK of indigenous peoples or local people might occur.¹⁰⁰ Moreover, there are traditional knowledge that are held secretly by certain groups of local community or indigenous people. In such cases, TK holders who innovate within their knowledge system and create inventions that are technically patentable might ask patent protection. In other words, the holders of the knowledge might subject their knowledge to a patent if it is novel, inventive and industrially applicable. However, before the holders of TK file patent applications they should ask whether the patent system is in their best interests in giving protection to their traditional knowledge. Filing for patents is in general expensive,

⁹⁶ Supra Note 90 p.315

⁹⁷ WIPO Booklet n.2 p.27

⁹⁸ Supra Note 90 p.298

⁹⁹ WIPO/GRTKF/IC/13/7 p. 4

¹⁰⁰ Ibid

complicated and time-consuming for most TK holders.¹⁰¹ Even though a patent is obtained over TK it might be difficult to monitor and enforce.

Although TK holders might want to use the patent system (i.e. knowing the procedural pitfalls of the patent system) to protect their knowledge, it might not offer them a kind of protection that goes with the nature of their knowledge. It has been argued that patent law is not tailored to address the intergenerational characteristics of traditional knowledge.¹⁰² The term of protection under the patent law is relatively limited. It grants the inventor exclusive right over a period of twenty years. This limited duration of protection compared to the intergenerational timeframe in which TK is developed might be inadequate to ensure the due preservation of TK.¹⁰³

Moreover, TK that has been around for generations might not be protected by the patent regime because it cannot be attributed to a specific individual or entity. However, some argue that the communal nature of traditional knowledge is not a problem to get patent. Duffield argues that nowadays it is becoming evident that modern inventions are achieved collectively as a one-man invention is not very possible because often inventions depend on companies' capital investment in laboratories and equipment.¹⁰⁴ Consequently, it would be unfair to single out individuals for collective attainments.¹⁰⁵ However, while group work can be protected under patent law, the collective of individuals who have each contributed still needs to be clearly identified. Therefore, there is no system of recognizing collective or community ownership over traditional knowledge. The patent law confers entitlement to an individual or small group of individuals who will be recognized as inventor or inventors respectively.

The other main shortcoming of the patent system with regards to granting positive protection for TK is its failure to give positive protection to historical and communal knowledge that are *not inventive* according to its standards. Article 27(1) of TRIPS stipulates that: 'patent shall be available for any inventions, whether product or process, in all fields of technology, pro-

¹⁰¹ Dagne (2012) p. 148

¹⁰² CIEL (2007) p.5

¹⁰³ WIPO/GRTKF/IC/13/5(b) Rev. p. 28

¹⁰⁴ See generally Duffield (2013)

¹⁰⁵ Duffield (2001) p. 254 See generally Duffield (2013)

vided that they are new, involves an inventive step and are capable of industrial application.¹⁰⁶ These three basic requirements of patent are most of the time not in favor of the knowledge of indigenous peoples and local communities. Traditional knowledge fails to meet the patentability requirements due to different reasons. On many occasions, traditional knowledge is not considered as novel because it is transmitted from generation to generation and disclosed to the public or widely spread among the holders of the knowledge and beyond these communities.¹⁰⁷ Moreover, the traditional knowledge might not be considered as obvious to persons skilled in the relevant art.¹⁰⁸ What makes the issue of TK even more complicated is that often TK holders do not have the required technology and capacity to transform their knowledge into new commercially valuable commodities.¹⁰⁹ Therefore, in those cases positive protection of traditional knowledge cannot be successfully accomplished through the patent system. Consequently, there should be laws that aiming at granting positive protection in the scenario where the holders of TK could not patent their TK. Absence of legal protection for traditional knowledge that is widely known within the community and beyond will leave the holders of the knowledge with no benefit while third parties that make a slight modification to knowledge of indigenous peoples or local communities are rewarded.

With regard to defensive protection, it has been suggested that the patent system could be used as a defensive measure against misappropriation of traditional knowledge. Often scholars approach the issue of the protection of TK as an issue of defending and try to address it through rules of intellectual property, specifically patents.¹¹⁰ The defensive objective of patents might ensure that anyone other than holders of TK do not obtain patent rights over the knowledge of indigenous peoples or local communities. In other words, patent law may grant defensive protection through the notion of prior art.

Prior art is any information available to the public prior to the filing date of patent application.¹¹¹ As a general rule information that is in the public domain cannot be subject to pa-

¹⁰⁶ Art 27(1) of TRIPS

¹⁰⁷ WIPO/GRTKF/IC/13/5(b) Rev. p. 27

¹⁰⁸ Ibid

¹⁰⁹ Marcelin (2010) p.11

¹¹⁰ Ullrich (2005) P.5

¹¹¹ Ruiz(2002) p. 6

tent.¹¹² According to Article 27 of TRIPS, an invention will be worthy of patent protection if it is novel and non-obvious. The patent examiner will grant patent if prior art neither anticipates invention nor rendered obvious the invention.¹¹³ The patent office will measure the novelty of the invention against the available prior art.¹¹⁴ It will also determine the nonobvious of the invention taking into account any matter that forms part of the state of the art.¹¹⁵ The requirements of novelty and invention step together with the notion of prior art can be beneficial in preventing third parties from obtaining patent right over TK.¹¹⁶

The main thing that should be noted is that the notion of prior art of patent system is relevant to protect traditional knowledge due to the following reasons. According to the WIPO IGC consultation report “a significant number of patent applications concern inventions which are in some way related to traditional knowledge.”¹¹⁷ The issue of misappropriation of traditional knowledge might be triggered in different ways when individuals file patent application. First, they may use traditional knowledge to invent new products or processes. In other words, others may derive their invention from TK or base their invention on it and file patent application. In this case, the patent office will ascertain the fulfillment of the fundamental requirements of patentability (novelty and non-obvious) of the invention compared to TK from which the invention might have been derived. This is to mean that traditional knowledge could be considered as prior art during the examination of patent application and might destroy an invention’s novelty or non-obviousness.¹¹⁸

However, the defensive protection of traditional knowledge through the existing international patent system is not without shortcomings.¹¹⁹ This is because the Patent Cooperation Treaty (PCT) poses a challenge to the defensive protection of TK. In this treaty, the scope of prior art is limited to only written disclosures. According to Rule 33.1 of the PCT Regulations prior art is defined as follows

¹¹² Ibid

¹¹³ Supra Note 90

¹¹⁴ Supra Note 111

¹¹⁵ Ibid

¹¹⁶ Christine Jessica (2014) p. 132

¹¹⁷ WIPO/GRTKF/IC/13/7 p.1

¹¹⁸ Supra Note 90

¹¹⁹ Id p. 317

“.....everything which has been made available to the public anywhere in the world by means of written disclosure (including drawings and other illustrations) and which is capable of being of assistance in determining that the claimed invention is or is not new and that it does or does not involve an inventive step (i.e., that it is or is not obvious), provided that the making available to the public occurred prior to the international filing date.”¹²⁰

The limitation of search of prior art to written disclosures will have a detrimental effect on the holders of TK. It is because even though throughout the world there is documented TK, most of it exist in oral forms.¹²¹ Consequently, unless the rules of PCT are amended it will be difficult to fully prevent third parties other than holders of TK from acquiring patent right over the knowledge of indigenous peoples or local communities.

The second scenario is where the issue of misappropriation of TK arises in connection to patent applications that when a persons other than the holders of TK file a patent application over identical traditional knowledge. It is therefore, clear that the patent system is important for the defensive protection of TK.

Finally, while the patent system can provide protection for traditional knowledge the currently patent regime is accused of facilitating biopiracy or misappropriation by tolerating third party patenting of TK. Biopiracy is a broad concept that refers to ‘the exploitation of TK by individuals or multinational companies without the authorization of the holders of that knowledge, and /or the patenting of inventions based on TK without the consent of the knowledge holders or payment of compensation’¹²². According to Marcelin, biopiracy is not only illegal access of traditional knowledge to invent new product but also a simple demise of the socio-cultural contribution of local and indigenous communities amounts to bio-piracy.¹²³

¹²⁰ PCT Regulations Rule 33.1(a)

¹²¹ Supra Note 111 P. 12

¹²² Dutfield (2004) p. P. 52

¹²³ Supra Note 109 p.19

The misappropriation allegations made by indigenous peoples and developing countries appear to be valid and well documented.¹²⁴ The patenting of the processing of teff¹²⁵ flour is an example of alleged misappropriation. It is evidence of how the limits and failures in prior art search and examination process of European Patent Office (EPO) paved the way to questionable patent grant. Ethiopian communities are complaining against the patenting of the invention of the processing of teff that was similar to traditional knowledge. The traditional knowledge about the processing of teff flour could not be patented because of non-fulfillment of the novelty and inventiveness step requirement. However the Netherlands Company, Health and Performance Food International (HPFI) obtained patent on processing of teff without any due respect to Ethiopian communities rights over their resources and intellectual efforts. In practice, the teff patent prevents Ethiopia from utilizing teff for most forms of relevant production and marketing in the countries where it is granted.¹²⁶

The Netherlands company invention on the processing of teff is similar to Ethiopian community traditional knowledge on the production or processing teff. Therefore, the patent application on the processing of teff should have been rejected for lack of novelty and non-obviousness in lights of the pre-existing TK of Ethiopian community. Indeed, the patent on teff is result of EPO poor patent examination process i.e. the office while examining the patent application it does not take into account the traditional knowledge of Ethiopian community as priory art. The absence of a compulsory requirement to disclose source and origin of traditional knowledge that forms part of the invention in current patent law is another reason for granting of teff patent. Although the Ethiopian government on behalf of the community wants to challenge the patent once granted, it is unable to bring proceedings due to financial limitations. Thus, the teff patent is an evidence of how the improper implementation of patent regime negatively impact on local communities interests in their TK.

¹²⁴ Oseitutu (2011) p. 153

¹²⁵Gebreselassie (2012) p.70, Andrsen and Wing (2012) P.7 Teff is one of the genuses of Egarostis that is originated in and domesticated in Ethiopia. At national level the cereal is important for consumption purpose. It is used mainly in making of Ethiopian staple *Injera*, which is traditional bread eaten with spicy stews. It is also used to prepare other traditional foods including a pudding (genfo) and local alcoholic drinks such as tella and katikala. The main quality of this cereal is that it is gluten free which therefore makes it appealing to a certain group of people including those who are gluten sensitive or suffering from coeliac disease. Compared to other seeds such as wheat, barley and sorghum the nutritional content of teff such as calcium, protein and iron is also quite high.

¹²⁶ See for detail readings Andersen and Winge (2012)

In general, the misappropriation of traditional knowledge through patent law could take two forms. In the first scenario patent might be granted over traditional knowledge to third parties, meaning persons other than indigenous people or local communities who generate or hold the knowledge. The second and the most common forms of misappropriation are the access and use of traditional knowledge by individuals or entities for the purpose of inventing new products or process. Often third parties access traditional knowledge without the consent of owners or holders of traditional knowledge and providing fair compensation.

The patent law might curtail the bio-piracy of TK of indigenous peoples or local communities that is conducted through patenting of TK. Indeed, the first type of misappropriation is not often the result of legal gap in the patent system. It is rather a practical problem occurred due to weak investigation procedure of prior art by the patent offices and /or inaccessibility of TK of indigenous people or local communities easily to patent offices. The patenting of TK of indigenous people and local communities by other parties than holders could be prevented with the improvement of procedural rules for the investigation of prior art of patent offices and the establishment of traditional knowledge database.

The second form of misappropriation through patent is result of existing legal gaps in patent laws. The patent provisions of TRIPS do not require the patent applicants to disclose the source of knowledge used in invention. It does not also require the patent applicants to produce evidence of the prior informed consent of the holders of knowledge and benefit sharing agreements in cases TK is used to invent new products or processes. Actually, one should question whether patent law should have such mandate or role i.e. for the protection of traditional knowledge in light of the objectives and purpose of TRIPS. It is clear that the intellectual property system was not created with the aim of protecting traditional knowledge. However, it can contribute to and support regimes that protect traditional knowledge against misappropriation.¹²⁷ By doing so, it would legitimate itself and leave those totally opposed to patents per se with fewer arguments with which attack the system.¹²⁸

¹²⁷ Venero(2005) p. 31

¹²⁸ Ibid

It should be noted that the defensive protection through the disclosure obligation would enable parties to comply with the obligations provided under Article 8(j) of the CBD that will be discussed in the next section. This provision requires parties to ensure that access to the traditional knowledge of indigenous peoples or local communities occurs with the involvement of knowledge holders or owners and the equitable sharing of benefits arising from the utilization of TK.

In this thesis the writer argues that the problem of bio-piracy will not be solved completely even if TRIPS agreement is amended i.e. the patent applicant is required to disclose the TK used in inventions, provide evidence prior informed consent and evidence of fair and equitable benefit sharing. Although the inclusion of disclosure requirement in TRIPS can be valuable and effective in blocking illegitimate patent rights over TK based invention, it will not stop others from actively using or exploiting TK without the consent of the knowledge holders. As defined above biopiracy is not confined only to the misappropriation of traditional knowledge through the patent law. Any unauthorized use and access of traditional knowledge of indigenous peoples by the third parties is characterized as biopiracy.

In conclusion, the current patent system as it stands now has its own problems and fails to protect much of the traditional knowledge. It is partly facilitating the misappropriation of on indigenous and local communities. If taken individually it is a poor tool for addressing traditional knowledge concerns. Therefore, a new *sui generis* system that gives both positive and defensive protection for TK is required.

3.1.1.3 Trade Secrets

As discussed in Chapter two, there are different kinds of traditional knowledge. Although TK is shared communally, there is also knowledge that indigenous people or local communities do not want to share with any anyone. Trade secret may be used to protect traditional knowledge that has not been publicly disclosed or held secretly. In other words, indigenous peoples or local communities can deploy the TRIPS section on undisclosed information as a means to protect TK and to commercially exploit their knowledge. However, once the knowledge is discovered by a third party or leaked to the public others can use it. So, there must be mechanism to protect TK that has been publicly disclosed and does not meet the criteria for protection of undisclosed information.

3.1.2 Protection of traditional knowledge through Convention on Biological Diversity

The convention on Biological Diversity (CBD) is another international forum at where issue of traditional knowledge is debated. It sets a legal framework and a foundation for the development of biodiversity legislations at national level, in order to regulate access to and use of Plant Genetic Resources (PGRs) and to address the protection of the rights of rural communities.¹²⁹ It provides for basic international obligations of member parties to achieve its basic objectives i.e. biodiversity conservation, sustainable use of biological resources, benefit sharing, and community rights.

What makes the convention most fascinating is that it is the first international legal instrument to recognize the relevance of the traditional knowledge, innovations and practices of rural communities for the conservation and sustainable use of biodiversity. It encourages parties to respect, preserve, maintain and ensure wide application of such knowledge and practices with the approval and involvement of traditional communities. Moreover, states have the responsibility to ensure these groups receive equitable shares of benefits deriving from the utilization of their traditional knowledge.¹³⁰ Another specific provision of particular interest is Article 15 on Access and benefit Sharing (ABS). It requires access to traditional knowledge to be based on the Prior Informed Consent (PIC) of indigenous and local communities and with the evidence of fair and equitable sharing.

The other interesting aspect of this convention is the recognition of the importance of IPRs, in particular patent, for the protection of TK. Realizing that the patent system is likely to have impact on its objectives, the convention encourages members to cooperate with the aim of ensuring that the patents and other IPRs are not counter-productive but rather supportive to its objectives.¹³¹

Nevertheless, there is a debate as to the compatibility of TRIPS and CBD. It has been argued that TRIPS does not recognize the objectives of CBD as it confers patent rights to inventors who base their invention on traditional knowledge without prior informed consent and with-

¹²⁹ Correa 2004; see also Laird et al 2003.

¹³⁰ Art. 8 (j) CBD

¹³¹ Art 16 (5) CBD

out due recognition and providing for compensation to owners or holders of TK. Furthermore, they argue that if TRIPS and CBD need to be implemented in a mutually supportive way the former should be amended so as to require the patent applicant to disclose the source and origin of the knowledge as well the ABS undertakings. Due to the pressure, by the international community including WIPO, the DOHA Ministerial Meeting of the WTO reached a decision in December 2001 that explores the interrelationship between TRIPS and CBD. However, the discussion on the issue is still ongoing.

One of the drawbacks of the CBD is that it does not impose strong obligations on states as regards the realization of the local communities' rights over their traditional knowledge. The obligations of the states are not strongly worded and put into practice. Moreover, even if the CBD recognizes a right of prior informed consent and fair and equitable benefit sharing, it does not recognize such rights as regards all traditional knowledge. The scope of application of the convention is limited to TK relevant for the conservation of biodiversity. In other words, the Convention is not applicable to other categories of TK discussed in chapter three such as Traditional Medical Knowledge and Traditional Agricultural Knowledge. In addition, the Convention does not define the protected subject matter.

3.1.3 The Nagoya Protocol and Bonn Guidelines

The Nagoya Protocol on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) is additional agreement to the CBD.¹³² It entered into force on 12 October 2014. The protocol formulates a transparent legal framework for the effective implementation of one of the three objectives of the CBD, namely fair and equitable sharing of benefits arising out of the utilization of genetic resource and traditional knowledge. It requires states to ensure the prior informed consent for access to and use of indigenous peoples and local communities' genetic resources and traditional knowledge.¹³³ Although the role of Nagoya protocol in addressing the interests of TK holders should not be underestimated, all of the critical points addressed above with regard to CBD also apply to the protocol.

¹³² Izatul (2013) p. 675

¹³³ Tobin (2013) P. 144

The other instrument relevant for the protection of TK is Bonn Guidelines. Bonn Guidelines contribute toward the development of access and benefit regimes that recognize the protection of traditional knowledge.¹³⁴ It also encourage cooperation between contracting Parties to address alleged infringements of access and benefit-sharing agreements related to TK. It urges states to ensure the principle PIC and ABS in accessing of traditional knowledge. The guideline is not however, a legally binding instrument.

3.2 Sui Generis systems for the protection of Traditional Knowledge

As discussed in the previous sections it is difficult to protect traditional knowledge within the existing system of IPRs. It does not fit into the requirements of copyrights, patents and trade secret. The Convention on Biological Diversity does not protect traditional knowledge effectively because its scope is related to traditional environmental knowledge. Consequently, a sui generis system specifically designed for the protection of TK is necessary in order to safeguard the needs and expectations of TK holders. Although scholars usually call for a sui generis system for the protection of traditional knowledge, they fail to discuss the possible modalities of effective sui generis systems for the protection of TK. In the following section, the elements of an effective sui generis system will be discussed. The presumed effectiveness of the WIPO draft articles for the protection of traditional knowledge will be examined in light of those elements. Although the WIPO draft for the protection of traditional knowledge has been negotiated for some years the substantive content of the draft has changed constantly and drastically because the states cannot agree on them.

3.3 Components or elements of effective sui generis systems for the protection of TK

Sui generis is a Latin term meaning ‘of its kind’ and is used to describe something that is unique or different.¹³⁵ According to Saurombe, what makes an IP system sui generis is that the modification of some of its features so as to adequately accommodate the unique characteristics of the subject matter (traditional knowledge) and specific policy needs which leads to the establishment of a distinct system.¹³⁶

¹³⁴ (Paragraph 11(j)) Bonn Guideline

¹³⁵ Black’s Law Dictionary (2nd ed.)

¹³⁶ Saurombe (2009) P. 199

In the following section, the crucial elements of any sui generis system aimed at protecting that address the concerns of indigenous people or local communities will be discussed. As to the writer of this thesis effective sui generis system should be aimed at filling the gaps existing in the existing international instruments by addressing the concerns and the needs of TK holders and clarify the issues that arise on the subject matter.

It should define comprehensively and clarify the subject matter taking account of distinctive characteristics of TK. It should clearly identify the rationale and justification for the protection of TK. In addition, appropriate modalities for the protection of TK need to be known. Is it copyright-like or patent-like or exclusive right or acknowledgment and compensation? It should also identify holders and beneficiaries of traditional knowledge holders. Additionally the issue whether the duration of protection of TK should be different from other conventional IPRs has to be addressed. The other parameter that should be taken into account in determining the effectiveness of a sui generis system is whether it balances on one hand the interest of technology holders and modern users of TK and the concerns of TK holders on the other hand. The exceptions to the protection of TK have a vital role in balancing the above interests. The relationships and extent of compatibility of new sui generis system with other international instruments including TRIPS need to be addressed. Finally, if traditional knowledge needed to be protected effectively these institutions working on interests related with TK should cooperate and coordinate their actions towards the protection of TK.

3.3.1. Definition of the subject matter

As discussed in chapter one defining the subject matter of protection is not an easy task. TK is a very complex and dynamic concept that could be defined differently by different stakeholders. A working definition of traditional knowledge under a sui generis instrument should ensure legal certainty and clarity as regards what is protected and what is not protected under the instrument. The WIPO draft instrument provides working definition in Article 1 and paragraph 7 of use of terms part. They reflect the nature of TK and also clarify the scope of protection of the subject matter. The approach of WIPO in defining TK is consistent with other

international IP frameworks.¹³⁷ A precise definition of TK as scientific or restrictive legal definition is not a crucial requirement for identifying the mechanisms for its protection.

What is important for the protection of TK is the identification of certain characteristics that it must be fulfilled as a condition for the protection such as intergenerational nature, collectives and dynamic nature. Moreover, most patent laws do not define precisely the concept of invention.¹³⁸ As such the approach taken by WIPO in defining the subject matter will not make the instrument unique from other IP instruments. What is expected from a sui generis draft is a definition that is comprehensive and reflective of nature of the subject matter. It is not expected to define the subject matter exhaustively.

3.3.2. Beneficiaries of traditional knowledge

One of the debates around TK is that the question who should be the beneficiaries of protection of TK. It is not questionable that the holders of the knowledge, who generate, preserve and transmit the knowledge in a traditional and intergenerational context, should benefit from their knowledge. The question is, however, how to identify the holders of the knowledge who will benefit from the legal protection provided by the sui generis instrument. Clarification of beneficiaries of TK is important to determine from whom Prior Informed Consent (PIC) should be acquired to access and use traditional knowledge and determine with whom a benefits sharing agreement concluded. In general, it is only holders or owners of the knowledge can invoke the misappropriation provision of the sui generis instrument.

Although indigenous people or local communities who hold the knowledge should benefit from the protection, in practice it is not easy to delimit the sphere of groups entitled for the protection. It is difficult to clearly understand what constitutes such communities and indigenous groups.

Article 2 of the draft is full of brackets as it tries to clarify who should benefit from the protection of traditional knowledge. The provision identifies indigenous peoples or local communities as principal right holders. The approach of the draft in identifying the holders of

¹³⁷ WIPO/GRTKF/IC/4/ 8 P. 10

¹³⁸ Ibid

rights is consistent with the nature of traditional knowledge. As discussed in chapter one, traditional knowledge is collectively held by and related to the cultural identity of indigenous peoples or local communities. Therefore by the very natures of it communities or indigenous peoples are to be beneficiaries of the protection of the knowledge.

The draft article also articulates a situation where a state will be the beneficiary of the protection of TK. In scenarios where it is difficult to identify indigenous people or local communities, a state is entitled to receive the benefits of TK protection on behalf of these communities. Article 2(2) of the draft provision lists cases where it is not possible to identify beneficiaries of protection under Article 2(1).

3.3.3. Modalities of protection for traditional knowledge

The international discussions on the modalities of the protection of TK were originally mainly focused on how IP law can give defensive protection for TK. However, considering its holistic nature recent developments at international level indicate that TK might be appropriately protected through a bundle of different instruments including non-IP tools.¹³⁹ It is because different types of TK may require different forms of protection, and flexibility is required in tailoring modalities of protection for TK through a sui generis instrument.¹⁴⁰ Therefore, it should be emphasized that non-IP instruments are equally important as tools to protect TK as IP is.

Sui generis systems should comprise both economic and moral rights like intellectual property in general, and copyright in particular.¹⁴¹

A sui generis instrument for the protection of TK might use IP as instrument to protect TK. On the one hand the existing IP law and legal system as they stand now might have the role of protecting TK by conferring exclusive rights to holders of TK. As such sui generis systems might explicitly recognize the relevance of IP regimes in protecting TK.¹⁴² Secondly,

¹³⁹ Ramidasi and Louafi(2006)

¹⁴⁰ WIPO/GRTKF/IC/6/4 p.33

¹⁴¹ WIPO/GRTKF/IC/3/8 p.28

¹⁴²The WIPO draft recognize the relevancy of existing or adapted IPRs for the protection of TK in Art 10 and paragraph 5 of WIPO by articulating complementary role of IPRs in protecting TK. Moreover, Article 3 recognizes the defensive role of the patent law through disclosure requirement and prior art. On the other hand article

the existing IP rights could be adapted to protect TK. Finally, sui generis rights might be specifically designed to suit the characteristics of TK subject matter and interests of the right holder.

The existing IP systems might be adapted or modified through sui generis systems to take account of TK holder's interest. To do so some parts of existing IP systems should be adjusted in accordance with the needs and choices of holders of the knowledge. The crucial adaptation has to be made in the existing patent systems. These include taking of TK as prior art and as a non-patentable subject matter to ensure that third parties cannot obtain a valid patent to such TK. In this regard, the WIPO sui generis draft for the protection of TK recognizes TK as prior art relevant to determine the patentability of the invention, Article 3 BIS 1(ii) (C).

The draft articles also require members to take different practical measures that enable the patent examiner discover relevant TK as prior art in patent application. These measures include the creation of systematically arranged TK database and registers accessible to the patent office and the development of guidelines for the purpose of examination of patent application relating to TK.¹⁴³ The draft introduced TK databases for the purpose of defensive protection of TK in order to prevent illegitimate third party assertion of patents over traditional knowledge and thereby prevent misappropriation of TK through the patent system. If the information provided in TK databases is detail i.e. includes the geographic location of traditional knowledge and holder of traditional knowledge, it might be also used to foster PIC and encourage the participation of traditional knowledge holders in decision-making. It should be noted that traditional knowledge database might be protected by copyright law but not the information itself.

The introduction of a disclosure requirement for the patenting of TK-based inventions through a sui generis instrument is another way of preventing misappropriation of TK. It also enforces compliance with legal obligations governing access to traditional knowledge. One of the main criticisms against patent law was the absence of a requirement to disclose the source and origin of TK and PIC requirement in cases where the patent applicant bases his invention

3 BIS acknowledges the importance of TK database in facilitating prior art by the patent office and then prevention of misappropriation of TK of indigenous peoples or local communities.

¹⁴³ The caption of article 3 BIS evidence that TK databases are complementary measures for defensive protection of TK. Article 3BIS (1)(f) and (g) deals with the establishment of TK databases and guidelines on it for the purposes of facilitating search of prior art and then avoiding erroneous grant of patent.

on TK of indigenous peoples or local communities. In this regard, the CBD is also not free from criticisms even though it articulates a disclosure requirement. The disclosure requirement of CBD is very limited in scope. It is applicable only to TK related biodiversity. Article 4 BIS of the draft articulates a disclosure obligation to ensure effective protection of TK. However, this provision shows the persisting debate among IGC members about the type of disclosure requirements the draft should introduce. The above provision provides three alternative types of disclosure requirement i.e. voluntary disclosure,¹⁴⁴ mandatory disclosure¹⁴⁵ and intermediate type¹⁴⁶ of disclosure requirement.

Voluntary disclosure requirements encourage disclosure of TK relevant to the patented invention. The patent application will not be disqualified due to non-compliance with this provision.¹⁴⁷ The mere purpose of such type of disclosure requirement is to enhance transparency.¹⁴⁸ Mandatory disclosure is a strong type of disclosure requirement that connects patentability, nullity or revocation with disclosure of origin. In other words, the failure of the patent applicant to disclose, or dishonest disclosure, has its own legal consequences. The consequences are either that the application will not be accepted or if granted it would be revoked.¹⁴⁹ The patent applicant has the burden to disclose the source and origin of TK used in the invention.

On the other hand, intermediary disclosure requirement does not connect patentability or nullity with disclosure.¹⁵⁰ The non- fulfillment of disclosure has criminal and administrative sanctions.

The writer of this thesis thinks both mandatory disclosure and intermediary disclosure requirements might be effective in preventing the unauthorized appropriation and commercialization of TK. The legal consequence of non-disclosure or dishonest disclosures in both cases might discourage third parties from illegally misappropriating TK. It will also remedy a lack

¹⁴⁴ Art 4 BIS 1-4 of the draft articles

¹⁴⁵ Art 4 BIS 1-3 and Alternative Art 4 BIS. 4 of the draft articles

¹⁴⁶ Art 4 BIS 1-4 of the draft articles

¹⁴⁷ Dutfield (2006) p. 35

¹⁴⁸ Ibid

¹⁴⁹ Alternative Art 4 BIS. 4 of the draft articles

¹⁵⁰ Henninger (2009) p.4

of informed consent and assure benefits sharing of the commercial use of TK. However, as will be discussed in the next sections, mandatory disclosure that have the effect of nullifying the patent for failure to disclose origin and source is criticized as TRIPS inconsistent measure.

The fact that there are TK that are not protected by the existing or adapted IP tools raise the need to develop sui generis exclusive rights. A sui generis exclusive rights for the protection of TK includes: the right to create, maintain, control and develop TK; the right to authorize or deny access and use/utilization of TK based on prior informed consent, the right to be commercially benefited from the use of TK based on the principle of fair and equitable compensation and moral rights such as acknowledgement of the holders of TK that are important particularly for the protection and preservation of cultural identity of traditional communities

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The above-mentioned exclusive rights over traditional knowledge confer entitlement to the right holders to authorized access to, or disclosure of the protected TK. Third parties are required to get authorization from holders of traditional knowledge to utilize TK for commercial purpose. Moreover exclusive right over TK ensures that third parties do not claim IP rights over protected subject matter without the prior informed consent of holders of TK.

Prior informed consent is a CBD principle and procedural right. The application of PIC is further elaborated in the Bonn Guidelines. It ensures that traditional knowledge holders have control over use and access of their knowledge. In this regard, Article 3 of the draft article requires third parties to consult TK holders before they access and use the knowledge of indigenous peoples or local communities. Prior informed consent is required according to the draft article 3(1) when the traditional knowledge is held secretly. The holders and users of TK might determine the scope of use through contracts, licenses or agreements. Third parties should also inform the consequences of intended use to holders of knowledge.

An extension of PIC is the principle of access to and benefits sharing agreement. The sui generis system through the principle of access and benefits sharing ensures TK holders receive an equitable compensation from the use of their TK. In this regard Article 3(1) (B) rec-

¹⁵¹ Art 3(1) the draft

ognizes the economic rights of TK holders. It makes the commercial use of traditional knowledge subject to just and appropriate compensation for the benefit of traditional knowledge holders.

Compensation is in line with fairness and equity to the holders of TK, who holds or preserves the knowledge secretly and collectively. According to article 4(1) of the draft, liabilities for compensation in particular arise where the knowledge is accessed or acquired without the authorization of TK holders.¹⁵²

One thing that should be noted is that article 3 of the draft categorized traditional knowledge into three groups for the purpose of conferring different sui generis rights for different type of traditional knowledge. They are categorized into: secretly held TK, publicly available but not widely known and TK that is already in public domain.

Access and use of the secretly held TK require both the prior informed consent of holders of the knowledge and fair and equitable compensation for the use. In addition third parties are required to acknowledge the holders of the knowledge and to use the knowledge in a manner that respects and acknowledges the cultural value of its holders. The use of publicly available but neither widely known nor secret TK requires the existence of fair and equitable benefit sharing agreement and respect of the moral rights of TK holders. On the other hand, when third parties utilize TK that has already entered into the public domain they are only expected to acknowledge the holders of TK as source of traditional knowledge.

Finally, according to Article 3(1) (a)(IV) when traditional knowledge is a base for invention the patent applicant is required to comply and provide evidence of PIC and benefit sharing agreements. This provision ensures that third parties retroactively negotiate a benefit sharing agreement with the holders of TK in a scenario where patent applicants fail to produce an ABS agreement.

¹⁵² Article 4 deals with sanctions and remedies for the misappropriation of TK of indigenous peoples and local communities. The consequences of infringements of economic and moral rights of TK holders are divided into civil, administrative and criminal. The same provision also requires sanctions and remedies for violation of the rights of TK holders to take account of the needs of TK holders and is culturally appropriate.

3.3.4. Term of Protection for traditional knowledge

One of the most controversial issues in traditional knowledge debate is the duration of protection.¹⁵³ TK holders and advocates of the interests of these groups seek an indefinite term of protection for TK while others are skeptical of the perpetual protection.¹⁵⁴ The duration of the protection of traditional knowledge is one of the arguments raised for its protection through sui generis means rather than the conventional IP laws. One of the characteristics of IP is that it grants time-limited right to promote creativity and inventions. In doing so, it enhance the public domain and benefit the public. The limited time of protection is the main reason the existing IP, even if granted, are not suitable to meet the interests of indigenous groups.

It has been argued that an effective sui generis system should create the perpetual protection.¹⁵⁵ There are different justifications for perpetual protection of TK. First, TK could be adequately protected if the rights of traditional knowledge holders are indefinite because TK show continuity and marked by evolution over time.¹⁵⁶ Second, the intergenerational nature of the knowledge suggests the indefinite protection of traditional knowledge.¹⁵⁷ Moreover, traditional knowledge is related to the cultural identity and dignity of indigenous peoples or local communities so the protection should not be limited in time. There is a difference between inventions protected through IPRs and TK in that the later are cultural properties reflective of the identity of a group while the former are individual intellectual achievements. Therefore, TK is heritage that must be protected in perpetuity, for the lifetime of the culture. As explained above the objectives for protection of TK are distinct from incentivizing the inventor. It is aimed at prevention of offence, recognition of different knowledge systems, respecting indigenous people culture and dignity, protecting the guardianship that they have with their TK and ensuring PIC and Equitable ABS as a reflection of their relationship.¹⁵⁸ The objectives for the protection of TK are the other reason why the protection of TK does not fit with the current IP system and necessitates perpetual protection.

¹⁵³ OseiTutu(2011) p. 260

¹⁵⁴ Supra Note 116 p.203

¹⁵⁵ WIPO/GRTKF/IC/6/4 p.3

¹⁵⁶ Supra Note 101

¹⁵⁷ Ibid

¹⁵⁸ Supra note 116 p.203

Article 7 of the draft instrument, in line with above-mentioned justifications, requires states to give perpetual protection for TK as long as the criteria of eligibility for the protection are fulfilled. This provision gives qualified indefinite protection for TK. The protection for TK will continue as long as it meets one condition for eligibility provided for in the article. In other words, the protection for TK subsists as long as it remains distinctively associated with the cultural and social identity of the beneficiaries is shared and maintained in a collective context and is intergenerational.

On the other hand, advocates of perpetual protection argue the granting of an exclusive right for an unlimited time would contravene the concept of public domain that ensures the public interest in using the information and knowledge.¹⁵⁹ Once traditional knowledge falls into the public domain, it is considered to be open for use by all. According to OseITutu, perpetual protection of traditional knowledge will represent a barrier to access to information and affordable knowledge goods.¹⁶⁰

It is true that when designing a legal regime that regulates traditional knowledge there should be appropriate mechanisms that balance the TK holder's desire for perpetual protection and that of the use of traditional knowledge for the general public good. The desire for perpetual protection for TK and public interest to use the knowledge might be balanced by the provisions of exceptions and limitations to rights conferred.

In this regard Article 6 of the draft treaty tries to balance interests of holders and users of TK by providing exceptions and limitations for the protection of TK. The draft introduces two types of exceptions i.e. general exceptions and specific exceptions.

The general exceptions are provided for Article 6(1). It gives discretion to states to adopt a fair use exception through national legislations provided that certain conditions are met i.e. beneficiaries are acknowledged; the provision is not offensive or derogatory to the beneficiaries; is compatible with fair practice; does not conflict with normal utilization of TK by the

¹⁵⁹ Supra note 153

¹⁶⁰ Ibid

beneficiaries and does not unreasonably prejudice the legitimate interests of beneficiaries taking account of the legitimate interests of third person.¹⁶¹

On the other hand, specific exceptions permit the use of TK for non-commercial purposes such as teaching and learning, in case of national emergency and for preservation and display and presentation in library and museums.¹⁶² Therefore, those exceptions imply that the use of TK requires the PIC of holders of TK only when the use is for commercial propose or for an activity that is likely to assist in achieving a commercial purpose. In other words commercial uses or uses that are not likely to assist in achieving commercial purposes are exempted from PIC requirements. Hence, the public might use such exceptions to ensure its desire to access the knowledge and information of TK holders.

3.3.5. The relationship between the WIPO sui generis draft and other international agreements

Traditional knowledge is a cross-cutting topic. Consequently, sui generis instruments for the protection of TK might interact with many international instruments. For instance access and use of TK relating to biodiversity is regulated by international laws dealing with access to biodiversity such as CBD, the Nagoya Protocol and Bonn guidelines. The protection of TK is also related to intellectual property systems. Moreover, the issue of protection of TK is linked to the human rights of indigenous people that are recognized in different human rights instruments.¹⁶³ Human rights are the means and the end for the protection of TK. This is to mean there are several human rights instruments that justify its protection. On the other hand, the protection of TK is one way respecting the human rights of indigenous people.

The key matter that sui generis instruments should address is how the new form of protection for TK that is provided by it interface with IP laws and other international instruments. In this regard Article 10 and paragraph 5 of the preamble of the draft requires the instrument to be consistent with other international instruments. Generally, it is an accepted principle that sui generis instruments should be complementary to any applicable conventional IP protec-

¹⁶¹ Art 6(1) of the draft

¹⁶² Article 6(3)

¹⁶³ See generally Morten (2014)

tion.¹⁶⁴ It is often referred to as filling the gap and should not replace or prejudice the acquisition of, any applicable IP protection.¹⁶⁵

One of the issues raised with regard to the relation of the sui generis systems with IP laws is that whether the WIPO draft introduction of mandatory disclosure requirement, which result in invalidity or revocation of patent for failure to disclose the source and PIC, might conflict with the TRIPS agreement. It should be noted that the issue of compatibility of the sui generis instrument with TRIPS would not be raised if IGC members adopted other types of disclosure requirements having less adverse consequences on patent applications and issued patents. Moreover, it will not be issued as long as third parties do not file patent application on TK based inventions.

Some argue that mandatory disclosure requirements requiring the patent applicants to disclose the origin of traditional knowledge used in invention and produce evidence of PIC in addition to the fulfillments of the obligations for acquiring patent protection, it is inconsistent with the TRIPS agreement and requires a revision of TRIPS.¹⁶⁶ On the other hand others argue that inserting disclosure requirements and requiring evidence of PIC and ABS agreements in the patent laws as prerequisite for patent acquisition will not conflict with TRIPS.¹⁶⁷ It is to be noted that there is nothing in international agreements that prohibits a disclosure requirement as an additional substantive condition for granting entitlement to patent rights.¹⁶⁸ Also, there is nothing in patent treaties that prohibits invalidation of issued patents for failure to comply disclosure requirements.¹⁶⁹ Hence disclosure of source in patent applications should be seen as a permissible substantive condition on entitlement to apply for patent rights. Also the WIPO technical study on disclosure of origins of genetic resources and traditional knowledge and evidence of compliance with access and benefit sharing requirements, and their relationship with international intellectual property agreements, confirms the compatibility of mandatory disclosure requirement with international patent treaty.¹⁷⁰

¹⁶⁴ PIFS (2010) P.76

¹⁶⁵ Ibid

¹⁶⁶ Teran and McManis(2011) p.19

¹⁶⁷ Sarnoff (2006) p. 3

¹⁶⁸ Ibid

¹⁶⁹ Ibid

¹⁷⁰ WIPO/GRTKF/IC/5/10

Nevertheless, the adoption of intermediary disclosure requirements, which does result in civil or criminal sanctions external to patent laws, would minimize concerns regarding inconsistency of the draft disclosure requirements with international patent treaty provisions.

The protection of traditional knowledge also interfaces with legal systems regulating access to TK related genetic resources. Therefore, sui generis systems should be designed in a manner that ensures consistencies with laws regulating access to TK related to genetic resources.

In conclusion, there are different international institutions and diverse legal rules and approaches that seek to address the problems of misappropriation of traditional knowledge. Although the existence of diverse institutions and laws for protecting TK could be taken as an advantage, there must be inter-institutional dialogue between different intuitions working on protection of TK so as to minimize the risk of inconsistency of approaches.¹⁷¹

¹⁷¹ Thathong(2014) p. 31-32

4 CONCLUSIONS

International laws transcending borders are essential for the effective protection of traditional knowledge. However, there is no international instrument that deals with the protection of traditional knowledge in a comprehensive and holistic manner. Absence of sufficient international instruments on the subject matter has been the main reason for misappropriation of intellectual knowledge of indigenous people or local communities. Protecting traditional knowledge by way of the existing intellectual property (IP) regimes, rather than protecting traditional knowledge, represents a threat to traditional knowledge of indigenous people or local communities. Both the Convention on Biological Diversity and Nagoya protocol are very narrow in scope and thus not apt to protect all types of traditional knowledge. Moreover, they do not grant all kind of protection that traditional knowledge needs.

The limitations and shortcomings of the existing international instruments in addressing the needs and expectation of holders of traditional knowledge imply a need for a sui generis instrument. A sui generis instrument that takes into account the nature of traditional knowledge and addresses issues of TK holistically is important for the protection of traditional knowledge. In this context, the formulation of a sui generis instrument for the protection of traditional knowledge under the auspices of WIPO is a sensible approach.

In doing so, an effective sui generis system for the protection of traditional knowledge should constitute: the criteria for protection; the beneficiaries of protection; define the rights granted; the period of time for which those rights are granted; define the exceptions to those rights and its relation with other international instruments. In this regard, the WIPO draft instrument for the protection of traditional knowledge is effective.

Often the search for appropriate modalities of protection of traditional knowledge is controversial. There is currently no a single model of protection that is best suited to protect different types of traditional knowledge. A sui generis instrument of WIPO that combines intellectual property law, equitable benefit sharing provisions for the holders of traditional knowledge, provisions of prior informed consent, and provisions of disclosure of origin of traditional knowledge responds to the needs of indigenous peoples or local communities. The Convention on Biodiversity (CBD) and Nagoya protocol rules for access and use of tradition-

al knowledge related to biodiversity could also be supplementary to ABS regimes of WIPO draft articles.

It should be noted that a sui generis instrument of WIPO should be in harmony with international instruments including intellectual property law, environmental laws and human rights laws. Holders of traditional knowledge might also recourse to those regimes to protect their knowledge against misappropriation effectively.

Finally, traditional knowledge is not a self-contained regime. It touches very diverse issues, and there are a number of institutions interested in the subject matter. If traditional knowledge is to be protected effectively, these institutions working on it should cooperate and coordinate their action towards the protection of TK.

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6 Annex 1

**The Protection of Traditional Knowledge: Draft Articles
Rev. 2 (March 28, 2014, 8:00 pm)**

Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore

Twenty-Eighth Session

Geneva, July 7 to 9, 2014

THE PROTECTION OF TRADITIONAL KNOWLEDGE:

DRAFT ARTICLES

Document prepared by the Secretariat

1. The WIPO General Assembly in 2013 decided that the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (the IGC) will “continue to expedite its work with open and full engagement, on text-based negotiations with the objective of reaching an agreement on a text(s) of an international legal instrument(s) which will ensure the effective protection of GRs, TK and TCEs” and that “the focus of the Committee’s work in the 2014/2015 biennium will build on the existing work carried out by the Committee and use all WIPO working documents, including WIPO/GRTKF/IC/25/5, WIPO/GRTKF/IC/25/6 and WIPO/GRTKF/IC/25/7 which are to constitute the basis of the Committee’s work on text-based negotiations, as well as any other textual contributions by members.”
2. At its Twenty-Seventh Session, which took place in Geneva, from March 24 to April 4, 2014, document WIPO/GRTKF/IC/25/6, was made available as document WIPO/GRTKF/IC/27/4. The IGC developed, on the basis of that document, a further text, “The Protection of Traditional Knowledge: Draft Articles Rev. 2”. It decided that this text, as at the close of its discussions on “Traditional Knowledge”, under agenda item 6, on March 28, 2014, be transmitted to the WIPO General Assembly taking place in September 2014, “subject to any agreed adjustments or modifications arising on cross-cutting issues at the Twenty-Eighth Session of the IGC in accordance with the IGC’s mandate for 2014-2015 and the work program for 2014, as contained in document WO/GA/43/22”.
3. The text “The Protection of Traditional Knowledge: Draft Articles Rev. 2”, as developed during the Twenty-Seventh Session of the Committee, is annexed to the present document.
4. The Committee is invited to review the document contained in the Annex, in accordance with its 2014-2015 mandate, its work program for 2014 and the decision on agenda item 6 during its Twenty-Seventh Session referred to above. [Annex follows]

PREAMBLE/INTRODUCTION

Recognize value

- (i) recognize the [holistic] [distinctive] nature of traditional knowledge and its [intrinsic]

value, including its social, spiritual, [economic], intellectual, scientific, ecological, technological, [commercial], educational and cultural value, and acknowledge that traditional knowledge systems are frameworks of ongoing innovation and distinctive intellectual and creative life that are [fundamentally] intrinsically important for indigenous [peoples] and local communities and have equal scientific value as other knowledge systems;

Promote awareness and respect

(ii) promote awareness and respect for traditional knowledge systems; for the dignity, cultural [integrity] heritage and intellectual and spiritual values of the traditional knowledge [holders]/[owners] who conserve, develop and maintain those systems; for the contribution which traditional knowledge has made in sustaining the livelihoods and identities of traditional knowledge [holders]/[owners]; and for the contribution which traditional knowledge [holders]/[owners] have made to the [conservation of the environment] conservation and sustainable use of biodiversity, to food security and sustainable agriculture, healthcare, and to the progress of science and technology;

Alternative

(ii) promote respect for traditional knowledge systems, for the dignity, cultural integrity and spiritual values of the traditional knowledge holders who conserve and maintain those systems;

[End of alternative]

Promote [conservation and] preservation of traditional knowledge

(iii) promote and support the [conservation of and] preservation [of] [and respect for] traditional knowledge [by respecting, preserving, protecting and maintaining traditional knowledge systems [and providing incentives to the custodians of those knowledge systems to maintain and safeguard their knowledge systems]];

Consistency with relevant international agreements and processes

(iv) take account of, and operate consistently with, other international and regional instruments and processes, in particular regimes that relate to intellectual property and access to and benefit sharing from genetic resources which are associated with that traditional knowledge;

[Promote access to knowledge and safeguard the public domain

(v) recognize the value of a vibrant public domain and the body of knowledge that is available for all to use, and which is essential for creativity and innovation, and the need to protect, preserve and enhance the public domain;]

Document and conserve traditional knowledge

(vi) contribute to the documentation and conservation of traditional knowledge, encouraging traditional knowledge to be disclosed, learned and used in accordance with relevant customary practices, norms, laws, and/or understandings of traditional knowledge holders, including those customary practices, norms, laws and/or understandings that require prior informed consent or approval and involvement and mutually agreed terms before the traditional knowledge can be disclosed, learned or used by others;

Promote innovation

(vii) [the protection of traditional knowledge should] contribute toward the promotion of innovation and to the transfer and dissemination of knowledge to the mutual advantage of holders and users of traditional knowledge and in a manner conducive to social and economic welfare and to a balance of rights and obligations;

Provide new rules and disciplines

(viii) [recognize the need for new rules and disciplines concerning the provision of effective and appropriate means for the enforcement of rights relating to traditional knowledge, taking into account differences in national legal systems;]

Relationship with customary use

(ix) not restrict the generation, customary use, transmission, exchange and development of traditional knowledge by the beneficiaries, within and among communities in the traditional and customary context, [in accordance with national law]

POLICY OBJECTIVES

This instrument should aim to:

Provide Indigenous [Peoples] and [local communities] [and nations]/[beneficiaries] with the [legal and practical/appropriate] means, [including effective and accessible enforcement measures/sanctions, remedies and exercise of rights], to:

a. [prevent] the [misappropriation/misuse/unauthorized use/unfair and inequitable uses] of their traditional knowledge;

b. [control ways in which their traditional knowledge is used beyond the traditional and customary context;]

c. [promote [the equitable sharing of benefits arising from their use with prior informed consent or approval and involvement or approval and involvement]/[fair and equitable compensation], as necessary; and]

d. encourage [and protect] [tradition-based] creation and innovation.

[Prevent the grant of erroneous intellectual property/[patent rights] over [traditional knowledge and [[traditional knowledge] associated [with] genetic resources].]

USE OF TERMS

For the purposes of this instrument:

[Misappropriation] means

Option 1

any access or use of the [subject matter]/[traditional knowledge] without prior informed consent or approval and involvement and, where applicable, without mutual agreed terms, for whatever purpose (commercial, research, academic and technology transfer).

Option 2

is the use of protected traditional knowledge of another where the [subject matter]/[traditional knowledge] has been acquired by the user from the holder through improper means or a breach of confidence and which results in a violation of national law in the provider country, recognizing that acquisition of traditional knowledge through lawful means such as independent discovery or creation, reading books, receiving from sources outside of intact traditional communities, reverse engineering, and inadvertent disclosure resulting from the holders' failure to take reasonable protection measures is not [misappropriation/misuse/unauthorized use/unfair and inequitable uses.]

[Misuse] may occur where the traditional knowledge which belongs to a beneficiary is used by the user in a manner that results in a violation of national law or measures endorsed by the legislature in the country where the use is carried out; the nature of the protection or safeguarding of traditional knowledge at the national level may take different forms such new forms of intellectual property protection, protection based on principles of unfair competition or a measures-based approach or a combination thereof.]

[Public domain] refers, for the purposes of this instrument, to intangible materials that, by their nature, are not or may not be protected by established intellectual property rights or related forms of protection by the legislation in the country where the use of such material is carried out. This could, for example, be the case where the subject matter in question does not fill the prerequisite for intellectual property protection at the national level or, as the case may be, where the term of any previous protection has expired.]

[Publicly available] means [subject matter]/[traditional knowledge] that has lost its distinctive association with any indigenous community and that as such has become generic or stock knowledge, notwithstanding that its historic origin may be known to the public.]

Traditional knowledge [refers to]/[includes]/[means], for the purposes of this instrument, know-how, skills, innovations, practices, teachings and learnings of [indigenous [peoples] and [local communities]]/[or a state or states].

[Traditional knowledge may be associated, in particular, with fields such as agriculture, the environment, healthcare and indigenous and traditional medical knowledge, biodiversity, traditional lifestyles and natural resources and genetic resources, and know-how of traditional architecture and construction technologies.]

[Unauthorized use] is use of protected traditional knowledge without the permission of the right holder.]

[[_**“U_s_e_”**]/[_**“u_t_i_l_i_z_a_t_i_o_n_”**]]_ _means

(a) where the traditional knowledge is included in a product [or] where a product has been developed or obtained on the basis of traditional knowledge:

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

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

(b) where the traditional knowledge is included in a process [or] where a process has been developed or obtained on the basis of traditional knowledge:

(i) making use of the process beyond the traditional context; or

(ii) carrying out the acts referred to under sub-clause (a) with respect to a product that is a direct result of the use of the process;

(c) the use of traditional knowledge in non-commercial research and development; or

(d) the use of traditional knowledge in commercial research and development.]

ARTICLE 1

SUBJECT MATTER OF [PROTECTION]/[INSTRUMENT]

The subject matter of [protection]/[this instrument] is traditional knowledge:

(a) that is created, and [maintained] in a collective context, by indigenous [peoples] and local communities [or nations] [,whether it is widely spread or not];

(b) that is [directly] [linked]/[distinctively associated] with the cultural [and]/[or] social identity and cultural heritage of indigenous [peoples] and local communities [or nations];

(c) that is transmitted from generation to generation, whether consecutively or not;

(d) which may subsist in codified, oral or other forms; and [or]

(e) which may be dynamic and evolving.

[Criteria for Eligibility

Protected traditional knowledge is traditional knowledge that is [distinctively] associated with the cultural heritage of beneficiaries as defined in Article 2, that is generated, [maintained], shared and transmitted in a collective context, is intergenerational and has been used for a term as has been determined by each [Member State]/[Contracting Party] [but not less than 50 years].]

ARTICLE 2

BENEFICIARIES OF PROTECTION

2.1 Beneficiaries [of protection] are indigenous [peoples] and local communities [and/or nations] who create, [hold], maintain, use and/[or] develop the [subject matter]/[traditional knowledge] [meeting the criteria for eligibility defined in Article [1]/[3].]

Alternative

2.1 [Beneficiaries of [protection] are indigenous [peoples] and local communities[1] who create, [hold], maintain, use and/[or] develop the [subject matter]/[traditional knowledge] defined in Article 1.]

[Where a [Member State's]/[Contracting Party's] constitution [does not recognize] indigenous or local communities, then that [Member State]/[Contracting Party] may act as a beneficiary with regard to the traditional knowledge that exists within its territory.] [Note: This footnote is to be read as part of the alternative to Paragraph 1.]

[End of alternative]

2.2 [Where the [subject matter]/[traditional knowledge] [is not claimed by specific indigenous [peoples] or local communities despite reasonable efforts to identify them,] [Member States]/[Contracting Parties] may designate a national authority as custodian of the [benefits]/[beneficiaries] [of protection under this instrument] where the [subject matter]/[traditional knowledge] [traditional knowledge meeting the eligibility criteria in Article 1] as defined in Article 1:

(a) is held by a community [whose] in a territory [is] that is entirely and exclusively coterminous with the territory of that [Member State]/[Contracting Party];

(b) [is not confined to a specific indigenous [people] or local community];

(c) is not attributable to a specific indigenous [people] or local community; or

(d) [is not claimed by a specific indigenous [people] or local community.]]

2.3 [The [identity] of any national authority established under Paragraph 2 [should]/[shall] be communicated to the International Bureau of the World Intellectual Property Organization.]

ARTICLE 3

[[CRITERIA FOR AND] SCOPE OF PROTECTION

Scope of Protection

3.1 Where the [subject matter]/[traditional knowledge]/[protected traditional knowledge] is [sacred], [secret] or [otherwise known] [closely held] within indigenous [peoples] or local communities, [Member States]/[Contracting Parties] [should]/[shall]:

(a) [ensure that beneficiaries have the exclusive and collective right to]/[provide legal, policy and administrative measures, as appropriate and in accordance with national law that allow beneficiaries to]:

i. [create,] maintain, control and develop said [subject matter]/[traditional knowledge]/[protected traditional knowledge];

ii. discourage the unauthorized disclosure, use or other uses of [secret] [protected] traditional knowledge;

iii. [authorize or deny the access to and use/utilization of said [subject matter]/[traditional knowledge]/[protected traditional knowledge] based on prior and informed consent; and]

iv. [be informed of access to their traditional knowledge through a disclosure mechanism in intellectual property applications, which may [shall] require evidence of compliance with prior informed consent or approval and involvement and benefit sharing requirements, in accordance with national law and international legal obligations],

(b) [ensure that]/[encourage] users [to]:

i. attribute said [subject matter]/[traditional knowledge]/[protected traditional knowledge] to the beneficiaries;

ii. [provide beneficiaries with [a fair and equitable share of benefits]/[fair and equitable compensation], arising from the use/utilization of said [subject matter]/[traditional knowledge] based on mutually agreed terms;]

Alternative

ii. enter into an agreement with the beneficiaries to establish terms of use of the [subject matter]/[traditional knowledge]/[protected traditional knowledge];

[End of alternative]

iii. use/utilize the knowledge in a manner that respects the cultural norms and practices of the beneficiaries as well as the inalienable, indivisible and imprescriptible nature of the moral rights associated with the [subject matter]/[traditional knowledge]/[protected traditional knowledge].

3.2 [Where the [subject matter]/[traditional knowledge]/[protected traditional knowledge] is still [held], [maintained], used [and]/[or] developed by indigenous [peoples] or local communities, and is publicly available [but neither widely known, [sacred], nor [secret]], [Member States]/ [Contracting Parties] [should]/[shall] [ensure that]/[encourage] that users/[provide legal, policy and administrative measures, as appropriate and in accordance with national law to [ensure] [encourage] users [to]]:

(a) attribute and acknowledge the beneficiaries as the source of the [subject matter]/[traditional knowledge]/[protected traditional knowledge], unless the beneficiaries decide otherwise, or the [subject matter]/[traditional knowledge] is not attributable to a specific indigenous [people] or local community;

(b) [provide the beneficiaries with [a fair and equitable share of benefits]/[fair and equitable compensation] arising from the use/utilization of said [subject matter]/[traditional knowledge]/[protected traditional knowledge] based on mutually agreed terms;]

Alternative

(b) enter into an agreement with the beneficiaries to establish terms of use of the [subject matter]/[traditional knowledge]/[protected traditional knowledge];

[End of alternative]

(c) [use/utilize the knowledge in a manner that respects the cultural norms and practices of the beneficiaries as well as the inalienable, indivisible and imprescriptible nature of the moral rights associated with the [subject matter]/[traditional knowledge]/ [protected traditional

knowledge][; and][.]

(d) [be informed of access to their traditional knowledge through a disclosure mechanism in intellectual property applications, which may [shall] require evidence of compliance with prior informed consent or approval and involvement and benefit sharing requirements, in accordance with national law and international legal obligations].]

3.3 [Where the [subject matter]/[traditional knowledge]/[protected traditional knowledge] is [publicly available, widely known [and in the public domain]] [not covered under Paragraphs 2 or 3], and protected under national law, [Member States]/[Contracting Parties] [should]/[shall] [ensure that]/[encourage] users of said [subject matter]/[traditional knowledge] [to]:

(a) attribute said [subject matter]/[traditional knowledge]/[protected traditional knowledge] to the beneficiaries;

(b) use/utilize the knowledge in a manner that respects the cultural norms and practices of the beneficiary as well as the inalienable, indivisible and imprescriptible nature of the moral rights associated with the [subject matter]/[traditional knowledge]/[protected traditional knowledge][;] [and]

(c) where applicable, deposit any user fee into the fund constituted by such [Member State]/[Contracting Party].]

Alternative

3.3 [Protection does not extend to traditional knowledge that is widely known or used outside the community of the beneficiaries as defined in Article 2.1, [for a reasonable period of time], in the public domain, protected by an intellectual property right or the application of principles, rules, skills, know-how, practices, and learning normally and generally well-known.]]

[ARTICLE 3 BIS

COMPLEMENTARY MEASURES

3BIS.1 [Member States]/[Contracting Parties] should [endeavour to], subject to and consistent with national and customary law:

(a) facilitate/encourage the development national traditional knowledge databases for the defensive protection of traditional knowledge, [including through the prevention of the erroneous grant of patents], and/or for transparency, certainty, conservation purposes and/or transboundary cooperation;

(b) [facilitate/encourage, as appropriate, the creation, exchange and dissemination of, and access to, databases of genetic resources and traditional knowledge associated with genetic resources;]

(c) [provide opposition measures that will allow third parties to dispute the validity of a patent [by submitting prior art];]

(d) encourage the development and use of voluntary codes of conduct;

(e) [discourage information lawfully within the beneficiaries' control from being disclosed, acquired by or used by others without the beneficiaries' [consent], in a manner contrary to fair commercial practices, so long as it is [secret], that reasonable steps have been taken to prevent unauthorized disclosure, and has value;]

(f) [consider the establishment of databases of traditional knowledge that are accessible to patent offices to avoid the erroneous grant of patents compile and maintain such databases in accordance with national law;

i. there should be minimum standards to harmonize the structure and content of such databases;

ii. the content of the databases should be:

a. languages that can be understood by patent examiners;

b. written and oral information regarding traditional knowledge;

c. relevant written and oral prior art related to traditional knowledge.]

(g) [develop appropriate and adequate guidelines for the purpose of conducting search and examination of patent applications relating to traditional knowledge by patent offices;]

3BIS.2 [In order to document how and where traditional knowledge is practiced, and to preserve and maintain such knowledge, efforts [should]/[shall] be made by national authorities to codify the oral information related to traditional knowledge and to develop databases of traditional knowledge.]]

3BIS.3 [Member States]/[Contracting Parties] [should]/[shall] consider cooperating in the creation of such databases, especially where traditional knowledge is not uniquely held within the boundaries of a [Member States]/[Contracting Parties]. If protected traditional knowledge pursuant to article 1.2 is included in a database, the protected traditional knowledge should only be made available to others with the prior informed consent or approval and involvement of the traditional knowledge holder.

3BIS.4 Efforts[should]/[shall] also be made to facilitate access to such databases by intellectual property offices, so that the appropriate decision can be made. To facilitate such access, [Member States]/[Contracting Parties] [should]/[shall] consider efficiencies that can be gained from international cooperation. The information made available to intellectual property offices [should]/[shall] only include information that can be used to refuse a grant of cooperation, and thus [should]/[shall] not include protected traditional knowledge.

3BIS.5 Efforts [should]/[shall] be made by national authorities to codify the information related to traditional knowledge for the purpose of enhancing the development of databases of traditional knowledge, so as to preserve and maintain such knowledge.

3BIS.6 Efforts [should]/[shall] also be made to facilitate access to information including information made available in databases relating to traditional knowledge by intellectual property offices.

3BIS.7 Intellectual property offices [should]/[shall] ensure that such information is maintained in confidence, except where the information is cited as prior art during the examination of a patent application.]

ARTICLE 4

SANCTIONS, REMEDIES AND EXERCISE OF RIGHTS/APPLICATION

4.1 [Member States [should]/[shall] ensure that [accessible, appropriate and adequate] [criminal, civil [and] or administrative] enforcement procedures[, dispute resolution mechanisms][, border measures][, sanctions] [and remedies] are available under their laws against the [willful or negligent [harm to the economic and/or moral interest]] [infringement of the protection provided to traditional knowledge under this instrument] [[misappropriation/ misuse/unauthorized use/unfair and inequitable uses] or misuse of traditional knowledge] sufficient to constitute a deterrent to further infringements.]

4.2 The procedures referred to in Paragraph 1 should be accessible, effective, fair, equitable, adequate [appropriate] and not burdensome for [holders]/[owners] of protected traditional knowledge. [These procedures should also provide safeguards for legitimate third party interests and the public interest.]

4.3 [The beneficiaries [should]/[shall] have the right to initiate legal proceedings where their rights under Paragraphs 1 and 2 are violated or not complied with.]

4.4 [Where appropriate, sanctions and remedies should reflect the sanctions and remedies that indigenous people and local communities would use.]

4.5 [Where a dispute arises between beneficiaries or between beneficiaries and users of traditional knowledge, each party [may]/[shall be entitled to] refer the issue to an [independent] alternative dispute resolution mechanism recognized by international, regional or [, if both parties are from the same country, by] national law [, and that is most suited to the holders of traditional knowledge].]

4.6 [Where, under applicable domestic law, the [intentional] wide diffusion of [protected subject matter]/[traditional knowledge] beyond a recognizable community of practice has been determined to be the result of an act of [misappropriation/misuse/unauthorized use/unfair and inequitable uses] or other violation of national law, the beneficiaries shall be entitled to fair and equitable compensation/royalties.]

[ARTICLE 4 BIS

DISCLOSURE REQUIREMENT

4 BIS.1 [[Patent and plant variety] Intellectual property applications that concern [an invention] any process or product that relates to or uses traditional knowledge shall include information on the country from which the [inventor or the breeder] applicant collected or received the knowledge (the providing country), and the country of origin if the providing country is not the same as the country of origin of the traditional knowledge. The application shall also state whether prior informed consent or approval and involvement to access and use has been obtained.]

4 BIS.2 [If the information set out in Paragraph 1 is not known to the applicant, the applicant shall state the immediate source from which the [inventor or the breeder] applicant collected or received the traditional knowledge.]

4 BIS.3 [If the applicant does not comply with the provisions in Paragraphs 1 and 2, the application shall not be processed until the requirements are met. The [patent or plant variety] intellectual property office may set a time limit for the applicant to comply with the provisions in paragraphs 1 and 2. If the applicant does not submit such information within the set time limit, the [patent or plant variety] intellectual property office may reject the application.]

4 BIS.4 [Rights arising from a granted patent or a granted plant variety right shall not be affected by [any later discovery of] a failure by the applicant to comply with the provisions in Paragraphs 1 and 2. Other sanctions, outside of the patent system and the plant variety system, provided for in national law, including criminal sanctions such as fines, may however be imposed.]

Alternative

4 BIS.4 [Rights arising from a grant shall be revoked and rendered unenforceable when the applicant has failed to comply with the obligations of mandatory requirements as provided for in this article or provided false or fraudulent information.]

[End of alternative]

Alternative

[NO DISCLOSURE REQUIREMENT]

Patent disclosure requirements shall not include a mandatory disclosure requirement relating to traditional knowledge unless such disclosure is material to the patentability criteria of novelty, inventive step or enablement.]

[End of alternative]

ARTICLE 5

ADMINISTRATION [OF RIGHTS]/[OF INTERESTS]

5.1 [Member States]/[Contracting Parties] [may]/[shall] [establish]/[appoint] a competent authority or authorities, [with the free, prior and informed consent of] [in consultation with] [traditional knowledge [holders]/[owners]], in accordance with their national law [and without prejudice to the right of traditional knowledge [holders]/[owners] to administer their rights/interests according to their customary protocols, understandings, laws and practices].

Optional addition

[Where so requested by the beneficiaries, a competent authority may, to the extent authorized by the beneficiaries and for their direct benefit, assist with the management of the beneficiaries' rights/interests under this [instrument].]

[End of optional addition]

Alternative

5.1 [Member States]/[Contracting Parties] may establish a competent authority, in accordance with national law, to administer the rights/interests provided for by this [instrument].

[End of alternative]

5.2 [The [identity] of any authority established under Paragraph 1 [should]/[shall] be communicated to the International Bureau of the World Intellectual Property Organization.]

[ARTICLE 6

EXCEPTIONS AND LIMITATIONS

General Exceptions

6.1 [Member States]/[Contracting Parties] may adopt appropriate limitations and exceptions under national law [with the prior informed consent or approval and involvement of the beneficiaries] [in consultation with the beneficiaries] [with the involvement of beneficiaries][, provided that the use of [protected] traditional knowledge:

(a) [acknowledges the beneficiaries, where possible;]

(b) [is not offensive or derogatory to the beneficiaries;]

(c) [is compatible with fair practice;]

(d) [does not conflict with the normal utilization of the traditional knowledge by the beneficiaries; and]

(e) [does not unreasonably prejudice the legitimate interests of the beneficiaries taking account of the legitimate interests of third parties.]]

6.2 [When there is reasonable apprehension of irreparable harm related to [sacred] and [secret] traditional knowledge, [Member States]/[Contracting Parties] [may]/[shall]/[should] not establish exceptions and limitations.]

Specific Exceptions

6.3 [[In addition to the limitations and exceptions provided for under Paragraph 1,] [Member States]/[Contracting Parties] may adopt appropriate limitations or exceptions, in accordance with national law, for the following purposes:

- (a) teaching, learning, but not research resulting in profit-marking or commercial purposes;
- (b) for preservation, display, research and presentation in archives, libraries, museums or cultural institutions, for non-commercial cultural heritage or other purposes in the public interest; and
- (c) in the case of a national emergency or other circumstances of extreme urgency [or in cases of public non-commercial use];
- (d) [the creation of an original work of authorship inspired by traditional knowledge.]

This provision, with the exception of Subparagraph (c), [should]/[shall] not apply to traditional knowledge described in Article 3.1.]

6.3 Regardless of whether such acts are already permitted under Paragraph 1, the following shall be permitted:

- (a) the use of traditional knowledge in cultural institutions recognized under the appropriate national law, archives, libraries, museums for non-commercial cultural heritage or other purposes in the public interest, including for preservation, display, research and presentation should be permitted; and
- (b) the creation of an original work of authorship inspired by traditional knowledge.]

6.4 [[There shall be no right to [exclude others] from using knowledge that:]/[The provisions of Article 3 shall not apply to any use of knowledge that:]

- (a) has been independently created [outside the beneficiaries' community];

(b) [legally] derived from sources other than the beneficiary; or

(c) is known [through lawful means] outside of the beneficiaries' community.]

6.5 [Protected traditional knowledge shall not be deemed to have been misappropriated or misused if the protected traditional knowledge was:

(a) obtained from a printed publication;

(b) obtained from one or more holders of the protected traditional knowledge with their prior informed consent or approval and involvement; or

(c) mutually agreed terms for [access and benefit sharing]/[fair and equitable compensation] apply to the protected traditional knowledge that was obtained, and were agreed upon by the national contact point.]]

6.6 [[Member States]/[Contracting Parties] may exclude from protection diagnostic, therapeutic and surgical methods for the treatment of humans or animals.]]

6.7 [National authorities shall exclude from protection traditional

ARTICLE 7

TERM OF PROTECTION/RIGHTS

[Member States]/[Contracting Parties] may determine the appropriate term of protection/rights of traditional knowledge in accordance with [Article 3/[which may] [should]/[shall] last as long as the traditional knowledge fulfills/satisfies the [criteria of eligibility for protection] according to Article [1]/[3].]]

ARTICLE 8

FORMALITIES

Option 1

8.1 [Member States]/[Contracting Parties] [should]/[shall] not subject the protection of traditional knowledge to any formality.

Option 2

8.1 [[Member States]/[Contracting Parties] [may] require formalities for the protection of traditional knowledge.]

Alternative

[The protection of traditional knowledge under Article 3.1 [should]/[shall] not be subject to any formality. However, in the interest of transparency, certainty and the conservation of traditional knowledge, the relevant national authority (or authorities) or intergovernmental regional authority (or authorities) may maintain registers or other records of traditional knowledge to facilitate protection under Articles 3.2 and 3.3.]

[End of alternative]

ARTICLE 9

TRANSITIONAL MEASURES

9.1 These provisions [should]/[shall] apply to all traditional knowledge which, at the moment of the provisions coming into force, fulfills the criteria set out in Article [1]/[3].

Optional addition

9.2 [[Member States]/[Contracting Parties] [should]/[shall] ensure [the necessary measures to secure] the rights [acknowledged by national law] already acquired by third parties are not affected, in accordance with its national law and its international legal obligations.]

Alternative

9.2 [[Member States]/[Contracting Parties] [should]/[shall] provide that continuing acts in respect of traditional knowledge that had commenced prior to the coming into force of this [instrument] and which would not be permitted or which would be otherwise regulated by this [instrument], [should be brought into conformity with these provisions within a reasonable period of time after its entry into force[, subject to respect for rights previously acquired by third parties in good faith]/should be allowed to continue].

Alternative

9.2 [Notwithstanding Paragraph 1, [Member States]/[Contracting Parties] [should]/[shall] provide that:

- (a) anyone who, before the date of entry into force of this instrument, has commenced utilization of traditional knowledge which was legally accessed, may continue such utilization of the traditional knowledge[, subject to a right of compensation];
- (b) such right of utilization shall also, on similar conditions, be enjoyed by anyone who has made substantial preparations to utilize the traditional knowledge.
- (c) the foregoing gives no right to utilize traditional knowledge in a way that contravenes the terms the beneficiary may have set out as a condition for access.]

[ARTICLE 10

RELATIONSHIP WITH OTHER INTERNATIONAL AGREEMENTS

This instrument [should]/[shall] establish a mutually supportive relationship [between [intellectual property [patent] rights [directly based on] [involving] [the utilization of] traditional knowledge and with relevant [existing] international agreements and treaties.]

[ARTICLE 11

NATIONAL TREATMENT

[The rights and benefits arising from the protection of traditional knowledge under national/domestic measures or laws that give effect to these international provisions [should]/[shall] be available to all eligible beneficiaries who are nationals or residents of a [Member

State)/[Contracting Party] [prescribed country] as defined by international obligations or undertakings. Eligible foreign beneficiaries [should]/[shall] enjoy the same rights and benefits as enjoyed by beneficiaries who are nationals of the country of protection, as well as the rights and benefits specifically granted by these international provisions.]

Alternative

[Nationals of a [Member State]/[Contracting Party] may only expect protection equivalent to that contemplated in this instrument in the territory of another [Member State]/[Contracting Party] even where that other [Member State]/[Contracting Party] provides for more extensive protection for their nationals.]

[End of alternative]

Alternative

[Each [Member State]/[Contracting Party] [should]/[shall] in respect of traditional knowledge that fulfills the criteria set out in Article 1, accord within its territory to beneficiaries of protection as defined in Article 2, whose members primarily are nationals of or are domiciled in the territory of, any of the other [Member States]/[Contracting Parties], the same treatment that it accords to its national beneficiaries.]

[End of alternative]]

ARTICLE 12

TRANSBOUNDARY COOPERATION

12.1 In instances where the same [protected] traditional knowledge [under Article 3] is found within the territory of more than one [Member State]/[Contracting Party], those [Member States]/[Contracting Parties] [should]/[shall] endeavour to cooperate, as appropriate, with the involvement of indigenous and local communities concerned, where applicable, with a view to implementing this [instrument].

12.2 Where the same [protected] traditional knowledge [under Article 3] is shared by one or more indigenous and local communities in several [Member States]/[Contracting Parties], those [Member States]/ [Contracting Parties] [should]/[shall] endeavour to cooperate, as appropriate, with the involvement of the indigenous and local communities concerned, with a view to implementing the objectives of this [instrument].

[End of Annex and of Document]