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Analysis of Intellectual Property Law Gaps in Ethiopia and Beyond Irana Boki Worku

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ABSTRACT

Indigenous Knowledge (IK) is deemed as the knowledge, innovations, and practices of indigenous and local communities experienced in medicine, spiritual activities, natural resource conservation, agricultural production, trade, administration, food security, etc and passes orally from generation to generation. The contemporary legal frameworks are designed in line with mostly recognizing and protecting the right of individual person emanating from scientific innovations than beliefs, knowledge, practices, innovations, arts, spirituality and other cultural expressions. Whereas, IK is held in most cases by groups and there is collective right. This paper analyzed the legal protection accorded to IK at international, regional and national level with particular emphasis to the legal gaps within Ethiopia's Intellectual Property (IP) legal frameworks. In doing so, various legal documents and literature are analyzed qualitatively and analytical research method was employed. This paper finds that there are legal gaps/lacuna within the existing IP laws and other related laws which aim at protecting knowledge, innovations and practices in general and with regard to the protection of IK in particular. The paper at hand is delimited to analyze only Ethiopia's IP laws which have identified roles in protecting IK such as copy right law, patent law, trade mark law, genetic right law, and incidentally geographical indication system. Ethiopia's IP laws are inclined mostly towards protecting individual knowledge, creativity and rights than collective rights. It is found that due to lack of adequate IP legal frameworks protecting IK, and community knowledge, developing countries in general and Ethiopia's in particular are the victim of the exploitation, usurpation, and piracy of IP rights and inability to earn the necessary economic and cultural benefits accruing from IK. The prevailing gaps within the national IP laws also pose a problem in most cases with regard to IK protection in its entirety. This indicates that it is necessary to revisit and amend, where necessary, the existing IP laws and related laws of the country, and employ alternative mechanisms of protection such as sui generis system, petty patent, and plant patent as the case might be in order to accord necessary protection to IK and accommodate the collective rights to IP legal frameworks. Urging for the existence of binding international legal framework and organizations working on IK protection can serve as alternative mechanism in order to promote the protection accorded to it. In addition, awareness creation from local to international level about the vital role of IK is necessary.

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Key words: - Indigenous community, Indigenous knowledge, Intellectual Property, legal frameworks, legal protection, sui generis

INTRODUCTION

Indigenous Knowledge (IK) can be defined as "knowledge, innovations and practices of indigenous and local Communities, which are acquired by experience, mostly passed orally from generation to generation, and are developed over time and that continues to develop. Similarly, indigenous and local communities may be defined as a group of people who have shared social, economic, and cultural values and settle in a defined geographical territory. Literatures show that there are approximately 370 million indigenous peoples in the world. They own, occupy or use up to 22 per cent of the global land area, which is home to 80 per cent of the world's biological diversity. The way of life of indigenous people/community is lead generally by IK. Nevertheless, IK shouldn't be seen as knowledge that is static or antiquated, but rather as a process that refines knowledge every day in our daily lives. Nor should it be considered as natural phenomena that are in the commons available for all to use. The fact is that considerable intellectual activity has been put in by the custodians of such knowledge, and IK is the product of purposeful investigation.

Mostly, IK of the community is highly involved in the protection of the physical environment and the corresponding climate, the production of agriculture, production of medicines, designation of calendar and time, preservation of genetic resources, and other related work of arts. IK plays a critical role in their health care, food security, culture, religion, identity, environment, sustainable development and trade. It is particularly crucial for the most vulnerable segments of their societies and for indigenous

2

¹Raju Narayana Swamy. (2014) Protection of Traditional Knowledge In the present IPR regime: A Marriage or A reality, Indian Journal of Public Administration Vol. LX, NO. 1, p.43-44 Available at: https://www.semanticscholar.org/paper/Protection-of-Traditional-Knowledge-in-the-Present-Swamy/26e5c21fb0b632835ab367c0e70769363e0138dcpdf [accessed on March 26, 2020]

²Morris Mudiwa, Global Commons; The Case of IK, IP and Bio Diversity, pp. viii available at: https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/428/mudiwam130502.pdf?sequence=1&isAllowed=y (accessed on March 28, 2020)

³University of UN, (2010) Traditional Knowledge in Policy and Practice; Approaches to Development and Human Well being, available at https://collections.unu.edu/eserv/UNU:2546/ebrary9789280811919.pdf, (accessed on March 27, 2020)

⁴International Fund For Agricultural Development (IFAD) 92016) Working Document, pp. 6,

⁵Uchenna Felicia Ugwu, (2017) The suitability of International Intellectual Property Laws for Protecting Traditional Knowledge and indigenous Innovations in Africa, African Journal of Intellectual PropertyVolume 1, No:2, pp. 117, available at:

https://www.researchgate.net/publication/319127971 The Suitability of International Intellectual Property Laws for Protecting Traditional Knowledge and Indigenous Innovations in Africa (accessed on March 27, 2020)

peoples worldwide. The protection which can be accorded to IK might be defensive and protective. The preservation, protection and promotion of the IK, innovations and practices of local and indigenous communities are of key importance for developing countries. Standards and norms for protection differ based on context (differentiation), usually through national or regional laws and policies.

The main reasons for the protection of IK might be so as to enhance and promote the benefit of IK, and to respond to the challenges posed to the IK due to different factors. Besides, the protection of IK has cultural significance where by the concerned community can maintain the social cohesion and it serves as the integral part of cultural heritage. Thus, the legal protection of IK results in concrete realization of the rights of indigenous peoples to preserve their cultural and spiritual identity. Again, the protection extended to IK is a means to contribute to biological diversity and ecological integrity. Thus, the protection of IK closely relates to the protection of the environment and living resources. Furthermore, the protection extended to IK is a means of contributing to scientific discovery and biotechnology development. Thus, technological advancement in genetic engineering and effective method of screening a huge quantity of molecules to isolate valuable active compounds for agricultural and pharmaceutical use justify the necessity of the legal protection of IK. Lastly, improving and preserving of socioeconomic conditions of the large sectors of world population is the other rationale for the need to protect IK. Thus, the fact that the world's poor satisfy 85% of their needs for food, fuel, shelter, and medicine from IK based biodiversity resources justifies best the need for the legal protection of IK.

The UN Convention on Biological Diversity (CBD, here in after), which is adopted on the conference on Environment and Development in 1992, is the only multilateral international legal instrument aims

⁶United Nations Conference and Trade and Development (UNCTAD, here in after) (2004) Protecting and Promoting Traditional Knowledge: Systems, National experiences, and International Dimensions; pp.4, available at: https://unctad.org/en/Docs/ditcted10 en.pdf (accessed on March 27, 2020)

⁷Defensive protection aims at stopping third parties from acquiring intellectual property rights over traditional knowledge. Defensive strategies might also be used to protect sacred cultural manifestations, such as sacred symbols or words from being registered as trademarks. On the other hand, protective protection seeks to grant rights that empower communities to promote their traditional knowledge control its uses and benefit from its commercial exploitation.

⁸ Stephen B. Brush, (1996) Valuing local Knowledge: indigenous peoples and intellectual property (as cited in brush & d. Stravinsky, eds), pp. 3, available at: https://eric.ed.gov/?id=ED392574 (accessed on March 28, 2020)

⁹ Tosh Dagne, (2014)Protecting Traditional Knowledge in International Property law: Imperatives for Protection and Choice of Modalities; The John Marshal Review of Intellectual Property law, Vol. 14, No. 25, available at: https://repository.jmls.edu/cgi/viewcontent.cgi?article=1343&context=ripl, accessed on March 28, 2020)

¹⁰Ibid

¹¹Rosemary J. Coombe, (2001) The Recognition of Indigenous Peoples' and Community TK in International Law 14 St. Thomas L Rev 275, 279 available at: https://www.academia.edu/737866/ The Recognition of Indigenous Peoples and Community Traditional Knowledge in International Law (accessed on March 29, 2020)

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at protecting indigenous knowledge of the community. ¹² The CBD mainly accords protection for IK related to the preservation/conservation and sustainable use of bio diversity. ¹³ This shows, the CBD inclined towards certain aspects of IK at the time of the adoption of this multilateral legal frameworks. However, in recent years, the protection of IK has received more attention in various international forums, such as World Intellectual Property Organization (WIPO), the International Labor Organization (ILO), the Food and Agriculture Organization (FAO), the World Health Organization (WHO), the UN Educational, Scientific and Cultural Organization (UNESCO) and the UN Commission on Human Rights. ¹⁴ These international institutional instruments aim at protecting the IK across the world within the member states and among the local communities.

The legal protection of IK at regional (Africa) level is also the other concern for protecting and promoting it. There are various legal and institutional set up in Africa aiming at extending protection to IK. In an era where knowledge has become increasingly accessible, very little has been done in Africa to restrict the flow of knowledge from the continent.¹⁵ In addition, the research centers located in western countries with regard to herbal medicine, traditional medicine, and other related are running to earn a profit by utilizing the IK to the exclusion of the original community who owns such IK.¹⁶ However, the existing regional IP frameworks, the law of contracts, the African model law, African Charter on Humans and Peoples Rights, and other related protocols are the possible legal frameworks that can be resorted to as far as the legal protection of IK is concerned at this moment.

When it comes to Ethiopia, IK can be found in a wide variety of contexts, including agricultural, scientific, technical, ecological and medicinal knowledge as well as biodiversity-related knowledge. In order to make the community to become the beneficiary of IK and the nation to be benefited from the same; the protection of IK is necessary. However, the indigenous community are not the beneficiary of their knowledge and resources due to usurpation of patent rights and inability to earn economic and cultural benefits accruing from these. Misconducts such as bio piracy are affecting the Ethiopian community and government. The paper at hand is limited to the analysis of Ethiopia's IP laws which have certain roles in the regulation and protection of IK.

¹²Felicia Ugwu(supra note5), pp. 119

¹³United Nations (here in after UN); (1992) Convention on Bio Diversity (CBD), Art.8, available at: https://www.cbd.int/doc/legal/cbd-en.pdf (accessed on March 29, 2020)

¹⁴UNCTAD (n6) pp.13

¹⁵ Loretta Feris, (2004) Protecting traditional knowledge in Africa: Considering African approach, African Human Rights law Journal Volume 4, pp. 242; available at: http://www.corteidh.or.cr/tablas/R21556.pdf (accessed on March 29, 2020) ¹⁶ Ibid, pp. 243

Journal of Indigenous Knowledge and Development Studies (JIKDS) Irana Boki

This article aimed to critically analyze the existing legal gaps within international, regional, and national IP legal frameworks by emphasizing on selected instruments and practical cases, where necessary. In doing so, this paper presented the overall highlight of necessary instruments at all level, brief analysis results, and conclusion with regard to the protection of IK in general and that of Ethiopia's in particular. In order to attain these aims, the analytical type of qualitative research method was employed. The analytical type of research is best to critically examine the existing legal and institutional frameworks concerning the protection of IK and the respective legal gaps. Mostly, the content analysis focused on the analysis of existing IP and related legal frameworks relating to the protection of IK at international, continental, and national level was made. Finally, the data were critically analyzed using qualitative method.

1. METHODS

In this article, the analytical type of qualitative research method was employed. The analytical type of research is best to critically examine the existing legal and institutional frameworks concerning the protection of IK and the respective legal gaps. Mostly, the content analysis focused on the analysis of existing IP legal frameworks relating to the protection of IK at international, regional, and national level was made. Finally, the data were critically analyzed using qualitative method.

2. OVERVIEW OF THE EXISTING LEGAL FRAMEWORKS PROTECTING IK

2.1. INTERNATIONAL LEGAL FRAMEWORKS FROM THE PERSPECTIVE OF IK **PROTECTION**

The need for protecting IK has been acknowledged in discussion and negotiations under the umbrella of a number of inter-governmental organizations that deal with biodiversity, the environment, indigenous peoples' rights, human rights, food and agriculture, among others. The legal protection of IK systems and their underlying biodiversity has become critical issue of global concern since the coming to force of the Convention on Biological Diversity (CBD). CBD is an international instrument through which the international community has broadly recognized the need for protecting IK as a way to reward custodians of biodiversity in the utilization of these resources mainly in biotechnology.¹⁷Above all, international IP regime has a crucial role in according protection to IK to some extent. However, the existing international IP regime is said inclined more towards protecting

¹⁷ Tosh D. supra note 9

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individual right than collective right. The IK is not well recognized under international instruments. As a result, it resulted in piracy of the community knowledge by individuals and companies for commercial purpose without prior consent of the community. Such and other related problems emanating from the existing gaps within international instruments are the central point of discussion in this paper as follows.

2.1.1. INTERNATIONAL IP LAWS¹⁸ VIS-A-VIS IK PROTECTION

The international legal system is the mixture of different types of laws/regimes governing different aspects of international concern at large. Despite the existing differences among the legal systems of different nations as to the definition of IP, it is understood that the element of mental creativity is a common characteristic for all legal systems as far as IP is concerned. The international IP laws are among the international legal frameworks and primarily regulate issues related to the work/creations amounting to IP and respective rights. IK is also best characterized by the element of creativity of the indigenous peoples with respect to its various aspects. The existence of the element of some sorts of creativity here is the fact which necessitates looking at the protection of IK from the view point of IP laws.

The world community adopted a Convention establishing World Intellectual Property Organization (WIPO, here in after) as a specialized body of UN in 1967. WIPO seeks the protection of IK in "close cooperation with other international agencies and processes" in order to take into account the "full international context of" the protection of IK.¹⁹ On the basis of the mandate given to this committee, it started to conduct negotiations since 2011 so as to come up with effective instrument which protects IK, but until now the negotiation is not ended.²⁰ Inter-Governmental Committee (IGC) was created so as to come up with an international legal instrument which protects "traditional knowledge, traditional cultural expressions/folklore and genetic resources.²¹ This shows how much it is difficult to reach on consensus among world community so as to protect and promote IK. The existing fact is that IP regime

¹⁸The international IP laws take various forms and passed through different stages of negotiations among the world community. The Berne Convention (1971) for the Protection of Literary and Artistic Works, Paris Convention (1883) for the Protection of Industrial Properties, Patent Cooperation Treaty (1970) and etc are some of the international IP laws which aim at protecting directly works which are in conformity with the respective predetermined minimum requirements, and indirectly certain aspect of IK to some extent.

¹⁹WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, (2007) Traditional Knowledge and Folklore, Genetic Resources: List of Options, 1, 13, 11th Session., ²⁰ Tesh D. supra note 9

²¹Intergovernmental Committee, WORLD INTELLECTUAL PROPERTY ORGANIZATION, http://www.wipo.int/tk/en/igc/index.htmi, accessed on April 1, 2020

is not only the protector of IK, but also pose challenges to IK in various ways such as requirements for protection and the respective formality requirements which are outside of the real nature of the IK.²²Thus, although not in its entiretyy, there are attempts so as to accord legal protection to IK at international level.

The other international IP law which extends protection to IK is Trade Related Aspects of Intellectual Property Rights (TRIPs, here in after) under World Trade Organization (WTO, here in after). Efforts were made at international level to protect IK under TRIPS system within the council of WTO.²³The TRIPS Agreement is binding on all WTO members, making protections uniform across participating nations, and resulting in highly functional intellectual property protections²⁴. However, TRIPS is not adequate in protecting IK and IK related resources of indigenous peoples for various reasons.²⁵ This is because IPR by its nature is individualistic, but IK is the product held in group and not suitable for protection under IPR regimes. Under patent, the subject matter of protection must be novel/new so as to qualify for protection,²⁶ but IK is not new rather it is an old and a long existing experience, innovation or practice of indigenous community passing from generation to generation in most cases orally. Furthermore, in most types of IP such as copy right, trade mark, and patent, accord the owners a limited term of protection,²⁷ but the IK is inter-generational by its nature and not suitable for protection through the instrumentality of IP regime.

Generally, IPR system as it currently stands is not fully suitable for the protection of IK. IP systems aim at commercializing certain pieces of IK. Moreover, the system is expensive, complicated and very far from the world-view of the communities themselves.²⁸ Therefore, the highlight analysis of the international IP laws clearly reveal the fact that there is an attempt to protect IK under this regime and the protection under certain category of IP poses a challenge to IK in itself. This shows that the

²²Ibid

²³Ibid, pp.38

²⁴Schuler.L, (2013) Modern Age Protection: Protecting Indigenous Knowledge Through Intellectual Property Law, Michigan State Law Review, Vol.21, No. 3, pp.758, available at: https://digitalcommons.law.msu.edu/cgi/viewcontent.cgi?article=1210&context=ilr (accessed on March 28, 2020) ²⁵Tesh D. supra note 9, pp.38

²⁶The international IP instruments such as patent cooperation treaty, Adopted at Washington Dc on June 19, 1970 and modified on October 3, 2001, Articles 3 and 27, and Patent Law Treaty (infra note 26), Article 3, give a mandate for member (contracting) states to fix the requirements of patent protection. Accordingly, different countries establish the novelty, and industrial applicability as a requirement for patent protection and grant in their national border. For example, Ethiopia's patent proclamation (infra note 63) Article 3(1).

²⁷For example see Article 11 of Patent Law Treaty, Adopted at Geneva on June 1, 2000, Article 41 of patent cooperation treaty; available at: https://www.wipo.int/treaties/en/text.jsp?file_id=288996 (accessed on August 30, 2020)

²⁸UNCTAD, (2004) Common Wealth Secretariat Workshop on Elements of National *Sui Generis* Systems for the Preservation, Protection and Promotion of Traditional Knowledge, Innovations and Practices and Options for an International Framework, Geneva, available at; https://unctad.org/en/Docs/ditcted200518 en.pdf (accessed on March 29, 2020)

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international IP laws are not adequate in themselves as far as the protection of IK is concerned and mostly inclined towards protecting and promoting the individual interest in commercial form than that of the community in group. The close look at the practices of some countries such as United States and European Union reveal that there is an attempt to accord legal protection to IK under the regime of sui generis IP protection beyond the existing IP frameworks. Thus, it is believed that IK and other cultural expressions can be best protected from usurpation, exploitation, and piracy acts under sui generis IP regime which allows for the enactment of statute which protects objects not protected under traditional IP laws.

2.1.2. OTHER IP RELATED INTERNATIONAL INSTRUMENTS VIS-A-VIS IK PROTECTION

The first IP related international instrument which plays a great role is CBD. Around 196 countries are the signatory of this convention as of March 30/2020. The livelihoods of indigenous peoples and the conservation of biodiversity worldwide depend on conserving and protecting IK of the use and functioning of biological and natural resources.²⁹In order to strength and promote the linkage between the protection of ecosystems, which involve a plethora of animal, plant and microbial species, and sustainable development objectives, CBD introduced as one of its three objectives the fair and equitable Access and Sharing of the Benefits (here in after, ABS) arising out of the utilization of genetic resources with those providing such resources.³⁰ The inclusion of this objective (ABS) was based on the premise that biodiversity has been used by public institutions and private entities to produce new knowledge and products that brought various benefits to its new users, but not necessarily for its original owners or custodians.³¹Traditional forest-related knowledge (TFRK) is a specific subset of IK covered by the CBD.

This indicates that CBD attempts to preserve biological resources in their habitats (*in-situ*) and outside of habitats (*ex-situ*), and obliges member states to incorporate in their domestic policies recognition of IK and traditional practices.³² CBD stressed that subject to their national legislation, countries are obliged to respect, preserve, and maintain knowledge, innovation, and practices of indigenous and local

²⁹Krystyna Swiderska, (2006) Banishing the Bio Pirates: A New Approach to Protecting Traditional Knowledge, Gate Keeper 129; Report Paper, available at: https://pubs.iied.org/14537IIED (accessed on March 29, 2020) ³⁰United Nations CBD, *supra note* 13, Article 1, 1992

³¹ UNCTAD, (2014) The Convention on Biological Diversity and the Nagoya Protocol: Intellectual Property Implications, A Report Paper; pp.1, available at: https://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=1040 (accessed on March 30, 2020)

³²Juan Antonio Herrera Izaguirre, (2008) The 1992 UN convention on Biological Diversity, pp. 1025, available at: https://www.researchgate.net/publication/26610639 The 1992 United Nations Convention on Biological Diversity (accessed on March 30, 2020)

communities embodying traditional life styles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations, and practices, and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations, and practices.³³ In addition, the convention states that member states must protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.³⁴ Generally, the above stated facts clearly indicate that CBD accords great protection to IK as far as such knowledge is related to genetic resources. However, this does not mean that it is comprehensive in protecting IK related to the conservation and use of genetic resources at their disposal. Still there is certain gaps with in CBD as far as protecting the IK is concerned because the practical case between Ethiopian government and Netherlands company over the patent right of teff. The wide misappropriation of IK related to the genetic resource without the prior informed consent and knowledge of the original community necessitates the coming into force of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the CBD, hereafter the Nagoya Protocol in 2010.³⁵ The prior informed consent is set as a prerequisite for granting access to genetic resources and the related IK. 36 The primary aim of Nagoya Protocol is to devise a mechanism how IP laws and CBD can work in conjunction so as to protect biological diversity and the related IK. The Nagoya Protocol covers genetic resources and IK associated with genetic resources, as well as the benefits arising from their utilization. The Nagoya Protocol also proposes the creation of a global multilateral benefit sharing mechanism in order to address benefitsharing with respect to genetic resources occurring in trans- boundary areas or situations where prior informed consent cannot be obtained. It also provides for the development, update and use of model contractual clauses for mutually agreed terms, as well as codes of conduct, guidelines and best practices and/or standards for different sectors.³⁷

Before coming into force of CBD, genetic resources are believed to be the common heritage of human being freely available to all.³⁸ However, as the legal and technological development advanced, the

³³CBD, supra note 13, Article 8(j)

³⁴Ibid, Article 10(c)

³⁵Ibid, pp.3

³⁶CBD, supra note 13, Article 15

³⁷UN CBD, (2011) Nagoya Protocol, available at; https://www.cbd.int/abs/text/ accessed on March 31, 2020. https://www.cbd.int/abs/text/ accessed on March 31, 2020. https://www.researchgate.net/publication/321733107 Introduction to Access and Benefit-Sharing and the Nagoya Protocol What DNA Barcoding Researchers Need to Know (accessed on March 31, 2020)

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commercial value of such genetic resources and the related IK become the concern of international community. Specially, those countries that are endowed with abundant genetic resources and related IK (developing) began to push for some control over how genetic resources were accessed and used and also for benefits from this use to be shared with them.³⁹ As a result, CBD made to incorporate access to genetic resources and the fair and equitable sharing of the benefits arising from their use was included as its third objective. It provides that States have sovereign rights over their genetic resources; therefore, the authority to determine access to genetic resources rests with national governments and is subject to national legislation.⁴⁰The access and benefit-sharing provisions of the Convention on Biological Diversity (CBD) are designed to ensure that the physical access to genetic resources is facilitated and that the benefits obtained from their use are shared equitably with the providers. In addition, this provision accords protection to the IK related to genetic resources.

The close look at and analysis into the aforementioned facts clearly reveal that there are attempts at international level in order to protect the IK related to the use and conservation of genetic resources. Being an international instrument which has no identified formal enforcing organ and other related problems, is found as an obstacle to these attempts not to produce results as intended as far as the protection of genetic resource related IK is concerned.

2.2. REGIONAL IP LAWS FROM THE PERSPECTIVE OF IK PROTECTION

Indigenous knowledge is naturally cherished as an important part of the cultural heritage and historical identity of many Indigenous and local communities, as well as many nations and regions with a shared cultural history. A human rights-based approach to indigenous knowledge has been largely neglected, yet the African Charter provides for a number of rights that provide protection to holders of traditional knowledge. In principle, IP rights are often regarded as the most effective legal mechanism to safeguard the products of human creativity.

Most of the African IP laws are also originated from the western philosophy oriented international IP laws. In addition to the international IP laws, Africans are also having certain continental IP laws which are themselves influenced by western philosophy. Accordingly, African Regional Intellectual Property Organization (ARIPO, here in after) was established through Lusaka agreement in 1976 initially by

³⁹Id

⁴⁰CBD, supra note 13, Article 15

⁴¹Shakel T. (2004) Intellectual Property and Traditional Knowledge: The Work and Role of WIPO; pp.121, available at: https://unctad.org/en/Docs/ditcted10 en.pdf (accessed on March 31, 2020)

⁴²Feris L. supra note 15, pp.243

⁴³Ibid, pp.248

incorporating 16 African states as member states.⁴⁴ In order to have a uniform mechanism for the respect and protection of IK across the member states, ARIPO's Diplomatic conference was held at Swakopmund, Namibia, 2010 and adopted Swakopmund Protocol on the protection of traditional knowledge and expressions of folklore. The diplomatic conference noted that no international normative framework has been concluded for the protection of traditional knowledge.⁴⁵ARIPO is mandated under the Swakopmund Protocol on the Protection of Traditional Knowledge and Expression of Folklore to protect the holders of traditional knowledge against any infringement of their rights and protecting expressions of folklore against misappropriation, misuse and unlawful exploitation.⁴⁶

The protocol at hand clearly stipulates the requirements IK must comply with in order to be protected and promoted to the best level. Accordingly, it must be generated, preserved and transmitted in a traditional and inter generational context, distinctively associated with a local or traditional community; and integral to the cultural identity of a local or traditional community that is recognized as holding the knowledge through a form of custodianship, guardianship or collective and cultural ownership or responsibility. Such a relationship may be established formally or informally by customary practices, laws or protocols.⁴⁷ This implies that the existing regional IP instruments attempt to protect IK related to certain aspects not in its entirety. It is due to such and other problems that the African communities' knowledge, innovations, and practices are susceptible to western societies and companies commercial practices without the former is consented and earn economic and cultural benefits. Such practices are the indication of the existence of piracy in different aspects as far as the IK of African communities is concerned.

The other regional legal instrument protecting IK is African Model Law. It is a short designation of the African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources adopted at Algeria during 2000. This law primarily aims at preserving, protecting, and maintaining the biological resources and the knowledge, innovations, and practices of indigenous and local communities so far as such IK has a role

⁴⁴Lusaka agreement, adopted on 1994 and as amended in 2004; available at: http://lusakaagreement.org/wp-content/uploads/2013/12/LA-Final-Act-upd.pdf (accessed on March 31, 2020)

⁴⁵Tibebu Solomon;(2012) Assessment of Possible Intellectual Property Protection Options of Traditional Knowledge System in Ethiopia: Special Reference in Herbal Medicine for Livestock; pp.15

⁴⁶Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore, (2010), The preamble; available at: https://www.wipo.int/edocs/lexdocs/treaties/en/ap010/trt_ap010.pdf (accessed on March 31, 2020)

⁴⁷Ibid, Part II, Section 4

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in protecting and preserving the biological resources.⁴⁸ The type of protection of IK emphasized under this model law inclines towards a sui-generis system of protection so as to rectify the challenges posed to IK protection through traditional IP laws.

The Model law acknowledges that traditional ecological knowledge and practices are often differ significantly from the Western concepts of intellectual property and, as such, warrants dissimilar protection.⁴⁹ It recognizes 'community intellectual rights' as rights that are enshrined and protected under community norms and practices and customary law.⁵⁰ It specifically acknowledges the rights of communities over their biological resources and knowledge, and the right to collectively benefit from the use of their biological resources and the utilization of their knowledge, innovations, practices and technologies.⁵¹ Furthermore, it provides for the recognition and protection of community rights under the norms and practices of customary law.⁵² It highly emphasizes in devising a mechanism which may curb the problem posed by IP laws in protecting IK. Accordingly, the model law deals with the notion of community rights as intellectual property rights that are inalienable and as such protected from appropriation.⁵³ Protection of ideas and practices exists without the requirement of a positive act such as registration, and prior publication of TK does not preclude the local community from exercising the intellectual right.⁵⁴

The above facts clearly indicate that there are problems of piracy, exploitation and usurpation of IK of African community owing to the gaps within regional IP and related laws. As a result, traditional healers are not able to be acknowledged at least leaving the economic and cultural benefits earned by individuals and organizations from developed countries. The existing scenario in Ethiopia, Tanzania, and West African countries⁵⁵ can be best raised here as an instance which shows the problem which posed from the gaps within regional IP and related frameworks as far as IK protection is concerned.

⁴⁸African Model Law, (2000), The Preamble; available at: https://www.wipo.int/edocs/lexdocs/laws/en/oau/oau001en.pdf (accessed on March 31, 2020)

⁴⁹Id

⁵⁰I bid, Article 1

⁵¹Ibid, Article 16

⁵²Ibid, Article 17

⁵³Ibid, Article 23(1)

⁵⁴Ibid, Article 23(3 &4)

⁵⁵ Morris M. supra note 2, pp. xxii

Irana Boki Journal of Indigenous Knowledge and Development Studies (JIKDS) 2.2.1. AFRICAN CHARTER ON HUMANS AND PEOPLES RIGHTS

The recognition for the respect of environmental rights,⁵⁶ property and development rights,⁵⁷ and cultural rights, ⁵⁸ is an indication of the concern of the charter in imposing the duty on member states to respect, preserve and promote the cultural and traditional practices and heritages of the peoples. The charter imposed the duty on the member states to take measures to realize the enjoyment of these rights by the citizens in their jurisdiction. IK is considered as the part of intellectual property since it is the result of the human's intellectual creativity either individually or collectively.⁵⁹ Intellectual property is a category of property in itself. Thus, the respect and protection accorded to the charter, as indicated here in above, also equally applies to the knowledge, innovations, and practices of peoples as part of the property. This is one indication of the fact that the people's right to IK is respected and protected under the charter at hand. Again, the respect and recognition of the cultural and traditional heritages of the people, as already indicated here in above, is the other indication of the concern given to the respect and protection of the IK. This is due to the fact that IK is the reflection of the cultural and traditional heritages mostly held in commons and sometimes even by individuals as the case maybe. Furthermore, the respect and recognition of the right of the peoples to live in an environment which is favorable to their development, also as indicated here in above, is the other point of consideration as far as the protection of IK at African level is concerned. The obligation of the member states to promote the conservation and ensure environmental sustainable development of the people and the use of the natural resources in their areas, shows that states must protect natural environment and the respective resources and regulate the rights to access to biological resources which in itself is an element of IK as already recognized under CBD and other international laws. This is in short the protection accorded to IK in another language. Lastly, but not least, the respect for people's right to access information, 60 and the right to social, economic, and cultural development are the other indications of the recognition and protection given to IK by the charter. This is because the peoples have given the right to participate in the decision making of the government with regard to the natural resource (genetic resource) and the development aspects in all endeavors.

⁵⁶Ibid, Article 24

⁵⁷Ibid, Article 14

⁵⁸Ibid, Article 17(2 &3) and Article 22(1)

⁵⁹Feris L. supra note 15, pp. 253

⁶⁰ African Charter on Humans and Peoples Right, as adopted on June 3, 1981, at Nairobi; Article 9(1); available at: https://au.int/en/treaties/african-charter-human-and-peoples-rights (accessed on March 31, 2020)

2.3. NATIONAL IP LAWS⁶¹ FROM THE PERSPECTIVE OF IK PROTECTION

1. *COPY RIGHTS AND NEIGHBORING RIGHTS LAW:* Proclamation No. 410/2004 and its amendment Proclamation No.872/2014 are the copy rights law in Ethiopia which aims at recognizing and protecting literary and artistic works. This law states that protecting and other creative work has a role in enhancing the cultural development. The copy right law protects the work of author if the work is original and fixed in a physical material. Author is an individual person as per the definition provided to it under the proclamation. The economic right of the author is protected for the life of the author plus fifty (50) years after the death of the author or the date of publication of the work. Nevertheless, the artistic and literary works are not limited to 'individual creation', but also, the result of mental creativity of indigenous/local communities which may be expressed as indigenous artistic works. Thus, the Ethiopian Copy Rights and Neighboring Rights and its amendment have not given a space for the rights of the community concerning artistic and literary works held collectively.

This shows the existing legal gaps within Ethiopia's copy right law is the cause for the prevailing usurpation and piracy of the communities art related knowledge by individual persons and companies. Individual artist/s is/are most of the time complained by majority for their failure to secure the consent of the original community and recognize the same while exploiting collectively held art and related knowledge for commercial purposes. However, still it is possible to accord protection to some aspects artistic and literary works under the guise of interpretation in case the community applies for the protection by fixing it or in some way. In another case, it is difficult to protect exploitation by others unless the society requires protection at its earliest stage.

2. **PATENT LAW**: The Proclamation Concerning Inventions, Minor Inventions, and Industrial Design Proclamation No. 123/1995 (Proclamation No.123/95), here in after) is said generally a patent law. This proclamation aims at encouraging local inventions and indigenous technological development. The inventions can be protected under this proclamation if the requirements of novelty, industrial applicability, and non-obviousness are satisfied at first. The duration of protection is for 15

⁶¹National IP laws' here are to refer the proclamations, and regulations which regulate different types of IP rights such as copy right, patent, trade mark, geographical indications, and etc in Ethiopia. The proper implementation of these and other IP laws is currently governed by the Ethiopian Intellectual Property Office (EIPO) which is established in 2003. This marks the new development in Ethiopia with regard to the IP.

⁶²Copy Rights and Neighboring Rights Protection Proclamation No. 410/2004, The preamble

⁶³Ibid, Article 6(1)

⁶⁴Ibid, Article 2(2)

⁶⁵Ibid, Article 20

⁶⁶Proclamation No. 123/95, The preamble

⁶⁷Ibid, Article 3(1)

years initially and there is possibility for renewal in certain aspects. These requirements pose challenge to the protection of IK to some extent because it is not easy for IK to satisfy these minimum requirements of the law at hand. This shows that the Ethiopia's patent law is designed in line with western philosophy which emphasize more on individual right than collective right of the community. As a result, it opens a room for the piracy of community knowledge by the individual persons and companies. This is due to the fact that the criteria set by the proclamation as minimum requirements are far from considering the peculiar nature of IK which is held in common. However, there are circumstances where by certain aspects of community knowledge such as traditional medicine, and hand crafts can be accorded protection under the regime of other instruments such as Biodiversity law and industrial design and minor inventions law. The experience of other countries such as India, China, and South Africa also show the same trends with regard to the possibility to protect IK under sui generis system, petty patent, and plant patent for new variety of plants as the case in Mexico.

3. **TRADE MARK LAW:** Trade Mark Registration and Protection Proclamation No. 501/2006 is the other type of Ethiopia's IP law which has a role in protecting IK to some extent. It is said that trade mark extends protection to protect signs or symbols of commercial interest for local communities and it protect all goods manufactured and services offered by manufacturers, craftsmen, professionals and traders in native and indigenous communities. The proclamation at hand also protects collective trade marks in addition to the individual trademarks. The proclamation at hand might also be used to protect signs or symbols of commercial interest for local and indigenous communities. The duration for the protection is seven years saving the possibility for renewal indefinitely as far as the mark is able to distinguish the products and services from the other. This shows that the proclamation has certain room to protect the other type of IK in Ethiopia to some extent. For instance, it is possible to raise the instance by which Guji, Harar, Yirga Chaffe, and sidama indigenous coffees are recognized internationally as the identity of the respective community and origin of Ethiopia. Ethiopian Plant Breeders' Right Proclamation No. 481/2006 recognizes the role of local farmers in the conservation and use of genetic resources that constitute the basis for breeding new varieties for agricultural production. The proclamation recognizes the rights of local farmers to use the protected new plant

⁶⁸Ibid, Article 16

⁶⁹Roza Giannina Alvarez Ninez, (2018) Intellectual property rights and protection of traditional knowledge, Genetic resources and folklore: The Peruvian experience, max Planck year book of United Nations law, vol. 12. p.518 ,Available at: https://www.mpil.de/files/pdf3/mpunyb-14 thesis rosa 12.pdf [accessed on April 4, 2020]

⁷⁰Trade Mark Registration and Protection Proclamation No. 501/2006, Article, 18

⁷¹Ibid, Articles 24 &25

⁷²Plant Breeders' Right Proclamation No. 481/2006, Article 27

www.bhu.edu.et/jikds

varieties. However, there is no room under the proclamation where by the rights of the local farmers that developed their plant varieties through different cultural and local practices, knowledge and innovations. The draft Ethiopia's Geographical Indications Draft Proclamation comes up with new innovations where by the rights of farmers that developed plant varieties through cultural and local knowledge.

4. **GENETIC RIGHTS LAW**: The access to Genetic Resources, Communities Knowledge, and Community Rights Proclamation recognizes the historical contribution Ethiopian communities made to the conservation, development and sustainable utilization of biodiversity resources.⁷³ The proclamation is adopted so as to comply with the CBD and African model law to which Ethiopia is a party.⁷⁴ It recognizes the customary practices and knowledge of the Ethiopian communities with regard to the conservation and utilization of genetic resources.⁷⁵ Community knowledge is defined as 'the knowledge, practices, innovations, or technologies created/developed over generations by local communities on the conservation and use of genetic resource'.⁷⁶ The prior informed consent of the local and indigenous community is required so as to access the community knowledge and the genetic resource.⁷⁷ It lifted any legal restriction on the traditional systems of local communities on the use and exchange of genetic resources and community knowledge.⁷⁸ In addition, the proclamation at hand extends protection to the rights of local communities over their genetic resources and community knowledge.⁷⁹

This shows that the national IP regime recognizes and protects IK related to biodiversity to some extent, but not in its entirety. However, owing to the gaps within international IP regime, Ethiopia lost a patent right over her genetic resources. The best example here is the claim over the patent right of teff between Ethiopia's government and Netherlands Company. The Netherlands court overruled the claim of Ethiopia and recognizes the patent right of the company. This is the clear indication of how much the IK knowledge of developing countries in general and that of Ethiopia's in particular is susceptible to usurpation and piracy due to the in adequacy of the existing IP regimes. Generally, this

⁷³Proclamation No. 482/2006, The preamble

 $^{^{74}}Id$

⁷⁵Id

⁷⁶The proclamation No. 482/2006, Article 2(14)

⁷⁷Ibid, Article 7(1(a&b))

⁷⁸Ibid, Article 8(2)

⁷⁹Ibid, Article 10(1)

Irana Boki Journal of Indigenous Knowledge and Development Studies (JIKDS) clearly depicts that even if the national law strongly protects IK, it is not sufficient to protect the same unless there is a binding international IP and related regime.

3. RESULTS AND DISCUSSIONS

In order to enhance the role of IK and make the community to benefit both materially and culturally in various sectors, there must be proper protection accorded to it. Such protection is currently raised at international, regional, and national level in light of IP protection. However, the existing international IP frameworks are found as stipulating hard line tests of patent, copy right, trade mark, and other laws. This shows that the international legal frameworks accord a legal protection only to a certain segment of IK and if comply with the hard line tests so far stated. In addition, the regional IP laws, which are also influenced by the western ideology and the international IP legal frameworks, accord a weak legal protection to IK. These shows how far there are legal gaps/lacuna with regard to the protection of IK both at international and continental level. For example, the practical case between Ethiopian government and the Netherlands company over the patent right of teff can be taken as a clear indication of the legal gaps at international level with regard to existing IP frameworks. The Netherlands Company got a patent over teff flour. It is believed that teff as a source of food is originated in Ethiopia, and it is the collective rights of Ethiopia's community and the government. However, due to the prevailing legal gaps within international IP laws, Ethiopia denied to get a patent right over it. This is an impact of the loose protection accorded to community knowledge and genetic resources at international level and an indication of bio piracy in this aspect.

It is so far identified that different countries and organizations developed a new regime for the effective protection of IK. This is through introducing a sui generis IP system for the protection of IK not protected under the traditional IP laws. For example, USA, Canada, Costa Rica, and European Union, are best known by employing alternative mechanisms of IK protection to the traditional IP laws/systems. Costa Rica adopted a sui generis protection system of IK under her Bio diversity protection law and accords a protection to the community knowledge, practice, and rights concerning the use of bio diversity and related rights irrespective of the fact that the knowledge is documented or not. Canada also adopted a sui generis protection system and UNESCO Convention concerning the conservation of Intangible Cultural Heritages. This shows that it is possible to protect IK outside of traditional IP laws through employing alternative mechanisms of protection. However, the commitment of the international organizations and the countries is crucial in this aspect. The other

⁸⁰Shuler, supra note 24, pp. 756

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possible alternative to respond to the so far identified gaps within the traditional international IP laws/systems is protection IK under trade secret law. In addition, utilizing petty patent model, which accords protection to knowledge involving a lesser detailed inventive step, is the other possible alternative mechanism for the protection of IK. For example, the experience of Kenya clearly depicts that it is possible to protect IK especially related to herbal/traditional medicine. Thus, it is possible to utilize the aforementioned and other alternatives of IK protection to the traditional IP regimes.

At the level of Ethiopia, there is also an attempt to accord legal protection to the knowledge, innovations, and practices of the community under different IP laws/systems. Some of these laws are also influenced by the trends of international IP legal frameworks and in most cases are ignorant of the IK. It is so far identified that, there is gap with in national IP system from the perspective of IK protection. However, this does not mean that the Ethiopia's IP and related laws are totally ignoring the innovations, beliefs, practices, spirituality, and other cultural expressions of the local communities. Rather, is identified so far that the draft Ethiopia's geographical indications law, Proclamation concerning the convention of bio diversity and ABS law, and the existing copy right law has still some rooms. Accordingly, the copy Rights and Neighboring Rights Protection proclamation which recognizes and protects artistic and literary works can be utilized in the protection of artistic and literary works heldcollectively by the community to some extent. IK cannot in most cases comply with the hard line test of copy right law due to its very nature. This shows that the existing copy right law of the country is ignorant of the very nature and importance of IK and there is a legal gap in this aspect. For instance, most of the artistic works recognized and protected by this copy right regime of the country is originated from the long standing knowledge and practice of the large communities. However, the individual artist/s has/have a copy right over such knowledge and practice irrespective of the interest and consent of the indigenous community. Such practices are the indications of the existence of piracy in this aspect due to the existence of legal gaps within the copy right law of Ethiopia.

The patent law of the country is also influenced by the minimum requirements of TRIPS and far from taking into account the very nature of IK. The minimum requirements stipulated for the protection of innovations such as novelty, and involving inventive steps are not in line with the basic nature of IK. This is because IK by its nature passes from generation to generation for indefinite period of time and the requirement of novelty cannot be satisfied. Again, the requirement of the existence of scientific invention is also far from taking into account the nature of IK as far as its protection under the patent law is concerned. Thus, it is clearly revealed that there is a legal gap under the patent law of the country with regard to the legal protection of IK. However, still there is a room for the protection of IK under

Irana Boki Journal of Indigenous Knowledge and Development Studies (JIKDS) the traditional patent law especially for minor inventions and hand crafts. The country can also introduce alternative mechanisms such as sui generis system of protection, and petty patent model of IK protection. The genetic rights law recognizes and protects the IK related only to the preservation, development, and sustainable utilization of genetic resources and community knowledge. This law can be safely said that it recognizes and protects IK related to the genetic resource within the boundary of the country. However, it is not able to protect bio piracy of bio diversity resources outside of the country. The practical case between Ethiopia's government and Netherlands company over the patent right of teff as indicated here in above is clear indication of the problem which emanate from the gaps within the international IP systems.

4. CONCLUSION

Indigenous Knowledge is the knowledge, practices, and innovations within a specific society. IK has significance in health care/medicinal production, agricultural production, environmental protection, food security, sustainable development, religion, administration, trade; etc. The legal protection accorded to IK at international level got more consideration since the adoption of CBD. The existing international IP legal frameworks accord protection to IK under various branches of law to some extent but not in its entirety. However, the existing international IP legal frameworks adopted on the basis of western ideologies are far from protecting adequately all aspects of IK due to the hard line tests there in. The prevailing gaps within international, regional and national IP systems are identified as the root cause for the exploitation, usurpation, and piracy of IK and community knowledge emanating from developing countries by nations and companies of developed countries.

In order to recognize and realize the demand of the indigenous peoples, different individuals, countries, and organizations come up with different alternatives of IK protection such as sui generis system of protection, protection through trade secret regime, petty patent model of protection, adoption of international instruments such as UNESCO Convention on the Conservation of Intangible cultural heritages, and plant patent for new varieties of plants developed by farmers. Under Ethiopia's legal system, there is an attempt to protect IK under different types of laws. The existing IP system and other related laws of the country identified as having gaps which pose challenge to the protection of IK and community knowledge in various sectors. However, still there is certain room within the existing IP regime of the country where some aspects of IK can be protected within the boundary of the country. Some alternatives are also identified as being suitable for Ethiopia to accord protection to IK and community knowledge if utilized accordingly. The prevailing legal gaps within the traditional

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international IP regime as far as the protection of IK and community knowledge are concerned posed practical problem to Ethiopia not able to patent its genetic resources such as teff abroad.

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