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Indonesia's Traditional Knowledge Documentation in Intellectual Property Rights' Perspective

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Abstract: Indonesia is a fertile place for traditional knowledge with more than 300 ethnical group inhabitants. Therefore, it is not surprising to know that Indonesia has the enormous potential of traditional knowledge. However, Indonesia is still has some problems in legal framework to protect it. The research applies doctrinal research method. The problems that will be discussed in this article is what type of traditional knowledge documentation system that used in Indonesia and how it is performed in order to protect traditional knowledge. There are few goals from this research which are to find out about Indonesia's traditional knowledge documentation system and to compare it with other countries that also use documentation as the protection method. As a result, traditional knowledge documentation system used in Indonesia is external registries which are done by parties outside the indigenous communities (Government, Academist, and NGO) and the information about traditional knowledge is placed in public domain. Even though it has not perfectly documented like India's Traditional Knowledge Digital Library, Indonesia has documented few of its traditional knowledge such as Songket pattern that belongs to South Sumatera. It could be summarized that traditional knowledge documentation has a vital role as one of the most practical methods to perform traditional knowledge protection. In order to protect traditional knowledge, these documented activities need to be enhanced so it could give the financial benefit to indigenous communities as its owner.

Keywords: Documentation; Intellectual property rights; Traditional knowledge.

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INTRODUCTION

Traditional knowledge is a term used to describe a form of knowledge that created by a group of indigenous peoples which passed through many generations and have a direct impact on nature or society.¹ Traditional knowledge always dynamically changing its character in order to accustom itself with nature and society lively condition. Although it might sound modest, traditional knowledge played a

¹ Afrillyana Purba, *et.al.*, *TRIPs-WTO dan Hukum HKI Indonesia: Kajian Perlindungan Hak Cipta Seni Batik Tradisional di Indonesia*, Jakarta: PT. Rineka Cipta, 2005, pp15-16.

major role in term of biodiversity's conservation and cultivation. Indigenous people have always lived their life by holding to their traditional knowledge and expand it to various form of technology that generally beneficial to their natural environmental condition and specifically to biodiversity condition.²

The terminology of traditional knowledge itself has a broad scope including their economic aspects to the culture of indigenous communities and country. However traditional knowledge discussions in the past were mainly focused on unique traditions and customs from the certain indigenous community. Nowadays, the topics are expanding to the extent of customary law that developing along with the traditional knowledge.³

World Intellectual Property Organization (WIPO) stated that traditional knowledge is not only limited to technological based knowledge that owned by indigenous society, but also included other knowledges such as tradition-based literature, many form of arts, show, design, brand, name and symbols, also all of the traditions based innovation and creations resulted from intellectual process in industrial, scientific, literature, and art field.⁴

Traditional knowledge as one of cultural heritage is consist of traditional

practical habit and the way of life that might be seen as something distinct to modern people. These kinds of cultural heritage could appear in many shapes such as language, crafts, music, dances, song and ceremonies, agricultural and ecological knowledge, sacred places from ancestors, and the documentation from all of them.⁵

Furthermore, the vital part of traditional knowledge could be seen from itself. Modern technology like biotechnology essentially from manipulating traditional knowledge into a new form of knowledge that has been adapted to modern science. Whether it acquired from database search or even direct discussion with the communities, it is clear that traditional knowledge stands on the pivotal point as the main source of scientific research by academics or companies nowadays. There are plenty fields granted with traditional knowledge benefit, for instance, food and beverages, health, agricultural, and cosmetology.⁶

In general, it is indeed a tough play for traditional knowledge to be protected in Intellectual Property Rights legal frame. The reasons are due to its own natural condition which allows traditional knowledge being shared and used inside the traditional communities for a long time. Moreover, mostly traditional knowledge are named as public properties that owned by all of the indigenous group's

² John Mugabe, *Intellectual Property Protection and Traditional Knowledge*, Geneva: WIPO, 2007, pp99-100.

³ David R.H., 2011, "Protection of Traditional Knowledge: Trade Barriers and the Public Domain", *Journal of the Copyright Society of the U.S.A.*, 58 (4), p407.

⁴ World Intellectual Property Organization, 2002, http://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_3/wipo_grtkf_ic_3_9.pdf [retrieved: 17th October 2017].

⁵ Lukman Hakim, 2009, "Upaya Harmonisasi Hukum Terhadap Perlindungan Pengetahuan Tradisional (*Traditional Knowledge*) di Indonesia", *Jurnal Yustika*, 12 (2), p171.

⁶ Manuel Ruiz, "*The International Debate on Traditional Knowledge as Prior Art in the Patent System: Issues and Options for Developing Countries*", Center for International Environmental Law, Washington, DC.: 2002, p4.

members. Hence, protecting traditional knowledge should not be done only from legal aspects, but also from maximization of economic's potential.⁷

A group's traditional knowledge is usually involved in their daily lives in many ways. However, the owner which is indigenous community usually neglected its financial capacity and have no intentions of protecting it from the further misappropriation that mostly done by outsiders.⁸

One of the famous traditional knowledge embezzlement happened to Indonesia's traditional knowledge which is a traditional design of Bali silver jewelry. This design was patented by a company called John Hardy International Ltd under the name of "Batu Kali" to Indonesian Directorate General of Intellectual Property Rights. Due to lack of documentation that Balinese have to prove that design belongs to them, John Hardy International Ltd could successfully secure their patent right for the design.⁹ Unfortunately, this acquisition of patents right by them caused an impact to a Balinese artist named Ketut Deni Aryasa. He got accused of plagiarism due to copying their "Batu Kali" design despite the fact this design is already known by

Balinese people for a long time by the name of "Kulit Buaya".¹⁰

*Biopiracy*¹¹ is a common case that happened when an exploration or research of traditional knowledge being held. Even though it rarely caught people attention, the parties who held this research does something other than exploiting the knowledge which is also exploiting its natural resources where the traditional knowledge comes from. Not to mention that the majority of medicine in the market at least contain one of the natural ingredients that have been proved as a result of traditional knowledge further development.¹² For instance, artemisinin is the main component in modern malaria's medicine. Artemisinin itself is derivated from the synthesis of 28 Zimbabwe traditional plants used by the indigenous people.¹³ Biopiracy could be marked as the aftermath of Intellectual Property Rights

⁷ A.F. Myburgh, 2011, "Legal Developments in the Protection of Plant-Related Traditional Knowledge: An Intellectual Property Lawyer's Perspective of the International and South African Legal Framework", *South African Journal of Botany*, 77, p845.

⁸ Heri Aryanto, 2014, "Pemanfaatan Pengetahuan Tradisional Indonesia Berdasarkan Potensi Daerah Sebagai Modal Pembangunan", *Jurnal Hukum dan Pembangunan*, 44 (2), pp296-301.

⁹ Laina Rafianti, 2017, "The Protection of The Performing Arts in Indonesia, Including In The Digital Age", *WIPO-WTO Colloquium Papers: 2017 Asian Edition*, pp87-88.

¹⁰ World Intellectual Property Organization, 2009, http://www.wipo.int/edocs/mdocs/tk/en/wipo ipt k_bkk_09/wipo iptk_bkk_09_topic1_1.pdf [retrieved: 25th October 2017]

¹¹ Biopiracy is an act of theft the traditional knowledge which categorizes as biodiversity or technical knowledge that being owned by indigenous people. The main goal is to create a new intellectual property. It could also describe as misappropriation and commercialization of traditional knowledge belong to a certain indigenous group illegally. R.D. Singh, *et.al.*, "Pharmaceutical Biopiracy and Protection of Traditional Knowledge", *International Journal of Research and Development in Pharmacy and Life Sciences*, Vol. 3, No. 2, 2014, p866.

¹² Abha Nadkarni and Shardha Rajam, 2016, "Capitalising the Benefits of Traditional Knowledge Digital Library (TKDL) in Favour of Indigenous Communities", *Manupatra*, 9 (1-2), p2.

¹³ Andrea Rinaldi and Priya Shetty, 2015, Traditional Medicine for Modern Times: Facts and Figures, <https://www.scidev.net/global/medicine/feature/traditional-medicine-modern-times-facts-figures.html> [retrieved: 2nd January 2018].

failure to protect traditional knowledge and make traditional knowledge keep getting appropriated.¹⁴

Traditional knowledge documentation considered to play important roles in term of traditional knowledge protection. A significant number of traditional knowledge biopiracy and misappropriation that arise clearly show how important for a country to protect its traditional knowledge. One of these methods is to make traditional knowledge documentation. Indonesian's government concern to this issue is shown from the legalization of two national law that could act as the legal basis of traditional knowledge documentation. These are The Law 2014 No. 28 on Copy Rights¹⁵, The Law 2016 No. 13 on Patent¹⁶, and The Law 2017 No. 5 on Cultural Advancement.¹⁷

This article will describe how important documenting traditional knowledge for its protection as an Intellectual Property Rights object.

ANALYSIS AND DISCUSSION

Traditional Knowledge Documentation

An enormous amount of potential that belongs to traditional knowledge had successfully grown people's interest to give more attention to this field. Moreover, it is not only the government but also many of cultural institutions and local society that show their interest toward the act of traditional knowledge documentation that mostly done in various countries.

¹⁴Note 12.

¹⁵The Law 2014 No. 28 on Copyrights, Article 38.

¹⁶The Law 2016 No. 13 on Patent, Article 26.

¹⁷The Law 2017 No. 5 on Cultural Advancement, Article 16-20.

According to WIPO, documentation of traditional knowledge refers to all activities of identification, fixation, and classification aimed at facilitating retrieval from an organized data set, such as paper, files, digital databases, archives or libraries.¹⁸ Documentation of traditional knowledge could also be elaborated as a collection of legal documentation that gives detailed explanation of a traditional knowledge. The main purpose of documenting traditional knowledge is to provide pieces of information related to traditional knowledge's role as prior art¹⁹. Many believe that by documenting their traditional knowledge in certain accessible forms would prevent the *mala fide* patent based on traditional knowledge in the future.²⁰

The other goal of documenting traditional knowledge is to prevent further misappropriation when a patent application has been granted. In addition, traditional knowledge documentation could also assist in indigenous people identification when it comes to sharing the benefit of traditional knowledge usage.²¹

There are two ways of documenting traditional knowledge which is by local registry system that is done inside the community or by external registry system

¹⁸ World Intellectual Property Organization, 2016, WIPO/PUB/TK/9, p1.

¹⁹ is referring to the collection of patent-related information that could be accessed by the public with the intention to measure the novelty aspect of an invention. Patent authorities responsible to do the substantial review of a patent application by referring to prior art document before granting its rights.

²⁰Rohaida Nordin, *et.al.* , 2012, "Traditional Knowledge Documentation: Preventing or Promoting Biopiracy", *Pertanika J. Soc. Sci. & Hum*, 20, p13.

²¹Note 20.

that is done outside the community. Local registry system is a system where the indigenous community members could decide together which traditional knowledge should be documented and disclosed to outside the community.²² Some example of this type of documentation is the documenting activities of gamelan that have been done by Gamelan Entrepreneur and Artist Community in Yogyakarta.²³ The other illustration is the deeds that being done by The Aboriginal Community Association (TOBA) in Argentina. This community main vision is to educating, protecting rights, and documenting indigenous peoples' traditional knowledge.²⁴

Furthermore, the other type of traditional knowledge documentation is external registry system that usually done in national or international level. This type of documentation particularly wrought by some institutions, for instance, government, a non-governmental organization, and many others. The documentation of traditional knowledge could take any form, but mainly as a collection of traditional knowledge from one or more indigenous

groups.²⁵ External registry system in Indonesia itself is performed by *Balai Pelestarian Sejarah dan Nilai Tradisional* (BPSNT) which its main task is to documenting every traditional knowledge in every part of Indonesia. In addition, there is another country that used this system which is Ghana. The documentation of traditional knowledge and folklore in Ghana is operated by The Ghanaian National Folklore Board of Trustees.²⁶

While it could be done internally or externally, there are other types of traditional knowledge documentation which is the public registry and private registry. Public registry means the information about traditional knowledge will be placed in the public domain with the ultimate goal to transform it into prior art and defensive disclosure.²⁷ There are few countries that using the public registry to documenting their traditional knowledge such as India with its well-known Traditional Knowledge Digital Library (TKDL) and South Korea with The Korean Traditional Knowledge Portal (KTKP).²⁸

The second type of traditional knowledge documentation is placing the information outside the public domain or called private registry. This type of documentation has a high capability in term of protecting traditional knowledge. Additionally, private registry system is an effective tool to be used for traditional

²²Adya Paramita P, "Sistem Registrasi Sebagai Alternatif Dalam Memberikan Perlindungan Atas Pengetahuan Tradisional (Studi Kasus Sengketa Pengetahuan Tradisional Antara Amerika Serikat dan India)", Program Beasiswa Unggulan Magister Ilmu Hukum Program Pasca Sarjana, Universitas Diponegoro, Semarang, 2008, p49.

²³Badan Penelitian dan Pengembangan HAM Kementerian Hukum dan HAM RI, *Perlindungan Kekayaan Intelektual Atas Pengetahuan Tradisional dan Ekspresi Budaya Tradisional Masyarakat Adat*, Bandung: P.T. Alumni, 2013, p96.

²⁴Afrillyana Purba, *Pemberdayaan Perlindungan Hukum Pengetahuan Tradisional dan Ekspresi Budaya Tradisional Sebagai Sarana Pertumbuhan Ekonomi Indonesia*, Bandung: P.T. Alumni, 2012, pp329-330.

²⁵Adya Paramita P, Note 22, p49.

²⁶Afrillyana Purba, Note 24, p338.

²⁷Adya Paramita P, Note 22, pp50-51.

²⁸USPTO,2005,

<https://www.uspto.gov/patent/laws-and-regulations/comments-public/traditional-knowledge-and-medicine-dictionariesdatabases> [retrieved: 13th December 2017].

knowledge access and benefit sharing arrangement.²⁹ Most of the countries that using this documentation system utilize it into their own *sui generis* law. Some countries that using this system are Peru³⁰ and Kenya where Mijikenda Community working together with Kenya Forestry Research Institute (KEFRI).³¹

Although both of these traditional knowledge documentation types seem different each other, there is one advantage from these systems which is their ability to prevent further *mala fide* intellectual property rights claim toward traditional knowledge. In order to work efficiently, the most important task that patent offices should be done is to raise their awareness about the importance of prior art search when patent applications being examined.³²

Traditional Knowledge Database

In relation to traditional knowledge documentation, there is a term called traditional knowledge database that mentioned frequently in this field. Using database resulted from traditional knowledge documentation could be seen as a traditional knowledge legal protection method along with documenting it. In June 2002, World Intellectual Property Organization stated that the use of traditional knowledge database could effectively defeat illegal patent

application based on a traditional knowledge that applied by parties other than the owner of knowledge itself.³³

A Database is a collection of related information, specifically traditional knowledge database best described as collection or compilation of information related to traditional knowledge. Moreover, information that stored in a database could be in any shape that possible, for example, a collection of written sources, or even information that is digitized. Particularly, an electronic or digital database is the type that most straightforward to use. Because this kind of database could be set to have a few level of accessing authority, from the one that open to the public to the other that may be included with certain restrictions to certainly available information.³⁴ Indonesia is creating its own electronic integrated traditional knowledge database now. This database is created by a Non-Governmental Organization called Sobat Budaya. However, after the termination of LINTRAD programed by Ministry of Research and Technology in 2005, Indonesia has not yet to create any official database by the authorities.³⁵

Traditional knowledge owner could create, develop, and maintain their own database independently without external assistance from third parties. The benefit

²⁹Adya Paramita P, *Note 22*, pp50-51

³⁰World Intellectual Property Organization, WIPO/GRTKF/IC/19/INF/10

³¹Fredrick Otswangb, 2011, "Protecting Traditional Knowledge and Associated Genetic Resources in Kenya: What A Community Needs To Know", *Trade Notes*, 31, p. 6.

³²Stephen A.H. and Justin W. V., *A Handbook on Issues and Options for Traditional Knowledge Holders in Protecting their Intellectual Property and Maintaining Biological Diversity*, Washington, DC: AAAS, 2003., p17.

³³Tonina Simeone, "Indigenous Traditional Knowledge and Intellectual Property Rights", Political and Social Affairs Division, Library of Parliament, Perancis, 2004, p. 4.

³⁴Ryan Abbott, "Documenting Traditional Medical Knowledge", World Intellectual Property Organization, 2014, p35.

³⁵Lukman, 2015, Model Pengelolaan Sumber Daya Genetik dan Pengetahuan Tradisional di Indonesia, <http://lipi.go.id/publikasi/model-pengelolaan-sumber-daya-genetik-dan-pengetahuan-tradisional-indonesia/14826> [retrieved: 2nd January 2018].

from this method is the indigenous community could control the access and documentation process by themselves. However, this method also has its own drawback which is due to their internal maintenance. Thus, the financial resources and skill that needed to develop the database are limited to only certain level. Whereas in order to function properly, a database should be updated regularly and digitally integrated. And to developing such kind of technologies is not an easy task because there are a plenty amount of fund and skilled human resources needed in the progress. An example of an internally maintained database is the Kaska Traditional Knowledge Network (KTKN) in Colombia.³⁶

The common type of database is the one that created by external parties outside the indigenous group. External maintained databased could be managed by organizations such as academics, museums, companies, and non-governmental organizations. In addition, there is a number of reasons underlying their act on maintaining traditional knowledge database such as, to provide sufficient legal protection for traditional knowledge, and to the extent of facilitating access to traditional knowledge so the further research toward it could be done at ease. Some database were made by collaborating with traditional knowledge owner, but some others only placing the information in public domain so people could easily access it. For instance, the World Bank Database of Indigenous Knowledge and Practices and the Honey-bee Network.³⁷

Traditional Knowledge Documentation in Indonesia

The importance of traditional knowledge documentation had also caught government attention, especially in the legal aspect. There is two national law that acts as the legal basis of traditional knowledge documentation process. There are The Law 2014 No. 28 on Copyrights, The Law 2016 No. 13 on Patent, and The Law 2017 No. 5 on Cultural Advancement. To be precise, the specific topic about traditional knowledge documentation is in Article 38 of The Law 2014 No. 28 on Copyrights. This article mentioned about the State liability to perform traditional knowledge documentation. It said that the State has a responsibility for documenting, keeping, and maintaining traditional cultural expressions.³⁸

Despite the fact that this article already gives a brief explanation about the government task in documenting traditional knowledge, it is not enough to become a legal foundation of its own activities. Moreover, Article 26(1)(2) of The Law No. 13 of 2016 on Patent also implicitly said the role of traditional knowledge documentation in order to assist the process of disclosure of origin from a traditional knowledge-based invention.³⁹

Hence, The Law No. 5 of 2017 on Cultural Advancement created and legalized. Articles 16 to 20 are the part where traditional knowledge documentation become its main focus. These articles regulated:⁴⁰

“(16) The steps of traditional knowledge documentation consisted of registration and documenting, establishing, and updating the data. Documenting traditional knowl-

³⁶ Note 34.

³⁷ Note 34, pp35-36.

³⁸ Note 15, Article 38.

³⁹ Note 16, Article 26.

⁴⁰ Note 17, Article 16-20.

edge activities is done through a system called Integrated Cultural Data Collection System. (17) The national authorities and/or local authorities with their own competency have their own responsibility for registering and documenting the cultural advancement object. (18) Every person could manage their own cultural advancement object registry and documentation system. Therefore, the Minister has an obligation to legally established the documented information. Besides, the national government and/or local government also have another liability which is to facilitate every individual who intended to take a part in registration and documentation of traditional knowledge process. (19) After the registration and documentation processes done, the Minister must legalize the result of Cultural Advancement Object. This legalization should be done through few steps which are verification and validation. When verification and validating the result, the Minister must have coordination with other ministry/institutions and experts in related fields. (20) Finally, the last step of traditional knowledge documentation process is maintaining the data that must be managed by national and/or local government. In addition, every person should also have the same right to maintaining the data. However, at the end, the Minister should still validate the data again. This maintaining process should be done periodically.”

Indonesia had already performed their own traditional knowledge documentation on the national scale by an NGO named Sobat Budaya (www.budaya-indonesia.org) Even though the popularity is not as well-known as India's Traditional Knowledge Digital Library, this database had plenty of Indonesia traditional knowledge. According to two previous types of documentation system, Indonesia's documentation system included in the public registry which put the traditional knowledge on public domain with the main goal is to give defensive protection toward illegal patent application.⁴¹ However, due to

the absence of government participation, whether as the creator or verification, this database could not be categorized as an official database nor prior art. Thus, this database will only become a collection of information for preservation purposes.

In addition, the national government is not the only party who involved in traditional knowledge documentation process. Local government and few local organization also independently collecting and documenting traditional knowledge from their own provinces. Although there are not capable enough of protecting traditional knowledge legally, these documentations are sufficient enough to become one of prior art search references. The table below presented about the documentation process of traditional knowledge that had been done by national or local authorities and organizations.⁴²

⁴¹Jane Anderson, “*Indigenous/Traditional Knowledge & Intellectual Property*”, Duke University

School of Law, Durham, North Carolina, 2010, p10.

⁴²Badan Penelitian dan Pengembangan HAM Kementerian Hukum dan HAM RI, Note 23., pp50-116.

Table 1. Table of Documented Traditional Knowledge in Indonesia

No.	Provinces	Implementers	The Documented Traditional Knowledge
1.	East Nusa Tenggara	<ul style="list-style-type: none"> •Government (NTT Legal Bureau, Department of Tourism and Culture) •Academics (Nusa Cendana University) •NGO (Mass Media Suara Ramagong, Community of Sasando Maker and Player, Community of Tenun Ikat Craftsmen) 	Tenun Ikat Patterns (Sotis Cicak, Pauf Mollo “Ketupat Berbingkai”, Pauf Mollo “Ketupat Berwarna”, Buaya Kaif Kauna, Kaif Mollo, Kaif Makam, Teke, Kaif Berantai Nukolo, Kaif Koti, Kaif Kauna), Tarian Jai, Tarian Likurai, Sasando,
2.	Bali	<ul style="list-style-type: none"> •Government (Department of Law and Human Rights in Bali, Department of Culture) •Academics (Udayana University) •NGO (Gianyar Village Statue Craftsmen Community, Community of Silver Jewelry Craftsmen in Celuk Village) 	Gianyar Village Stone Statue, Songket Bali, Tenun Endek Bali, Celuk Village Silver Craft Design, Irrigation System of Subak Sawah dan Subak Kebun, Wali Dance, Babalihan Dance.
3.	North Sumatera	<ul style="list-style-type: none"> •Government (Legal Bureau, Department of Tourism and Culture) •Academics (IPR Centre in University of Sumatera Utara) •NGO (Semenda Dance Group, Ulos Craftsmen Community) 	Serampang Duabelas Dance, Japin Dance, Persembahan Dance, Sigale-gale Dance, Cawan Dance, Sihutur Sanggul Dance, Cikala Pong-Pong Dance, Tak Tak Garo-Garo Dance, Tor-Tor Naposo Bulung Dance, Biring Manggis Dance, Piso Surit Dance, Uis Dance, Manduda Dance, Faluaya Dance, Maena Dance, Sapu Tangan Dance, Semenda Dance, Ulos/Songket/Sarung Tarutung.
4.	Special Region of Yogyakarta	<ul style="list-style-type: none"> •Government (Department of Tourism and Culture, Business and IPR Managements Service Centre) •NGO (Wayang Kulit Maker Community, Batik Entrepreneur Community, Pendok Craftsmen Community, Gamelan Entrepreneur and Maker Community) 	Traditional Limasan House Architecture, Pacul Grawang Traditional House Architecture, Kagerti Bumi Ceremony, Bersih Desa Ceremony, Mubeng Beteng Ceremony, Tedak Sinten Ceremony, “Surjan” Javanese Clothes, Joglo Building Structure, “Pranoto Mongso” Astronomy Knowledge, Bedoyo Dance, Jathilan (Kuda Kepang) Dance, Angguk Dance (Kulon Progo dan Purworejo), Ndolalak Dance (Magelang), Jamu, Sungging, Batik Patterns (Kawung, Parang Kusomo, Truntum, Batik Tambal, Batik Pamiluto), Pendok, Gamelan.
5.	West Java	<ul style="list-style-type: none"> •Government (Department of Tourism and Culture, West Java Development Planning Department) •Academics (IPR Centre of Padjajaran University) •NGO (Saung Angklung Mang Udjo, Kampung Naga Indigenous Group) 	Seren Taun Ritual (Banten Kidul), Penganten Tebu Ritual, Pelabuhan Ratu people’s cultural tradition, Nyangku Ritual (Panjalu, Ciamis), West Java traditional medicine, Sisingaan Art, Kuda Renggong, Kecapi Instrument, Kakawihan Cianjuran Music, Cimande Traditional Fractures Treatment, Angklung, Kampung Naga Traditional House Architecture, Kampung Naga Governmental System.
6.	Central Sulawesi	<ul style="list-style-type: none"> •Government (Department of Tourism and Culture) 	Central Sulawesi tenun ikat patterns (Bomba, bunga mawar, burung, dan merak), Balia Traditional Healing Technique.

7.	South Sumatera	<ul style="list-style-type: none"> •Government (Department of Tourism and Culture) •NGO (South Sumatera Traditional Music “Orkes Rejung Pesirah” Activists) 	<p>Songket Cloth, Songket Weaving Art, Dul Muluk Traditional Performance, Palembang Traditional Furniture Carving Patterns (Kembang Jalar, Cucuk Rebung, dan Kembang Asem), Batanghari Sembilan Music.</p>
8.	South Borneo	<ul style="list-style-type: none"> •Government (Department of Youth, Sports, and Culture, and Tourism, South Borneo Department of Development Planning) •Academics (Lambung Mangkurat University Research Centre) •NGO (South Borneo Traditional Art Activists) 	<p>Dundam, Lamut, Andi-Andi, Madihin, Basyasyairan, Bapapantunan, Gamelan, Tarbang Haderah, tarbang Ampat, Tarbang Lamut, Tarbang Madihin, Mudki Suling, Japin Gambus Music, Kurung-Kurung Hantak Music, Kintung Music, Main Kuntau Music, Baksa and Topeng Dance, Taudat, Sinoman Haderah Dance, Basisigaan Dance, Bagandut Dance, Japin Sigam Dance, Payung Kambang Dance, Wayang Kulit Theatre, Wayang Gung Theatre, Abdul Muluk Cabang Mamanda Theatre, Topeng Dance Theatre, Kuda Gipang Carita Dance Theatre, Damarwulan Theatre, Tantayungan, Sasirangan Patterns (Kulat Karikit, Gigi Haruan, Hiris Pudak, Ular Lidi, Kambang Kacang, Bayang Raja Iris Gagatas, Kambang Sasaki, Daun Jaruju, Tampuk Manggis, Bintang), Banjar Traditional Houses (Gajah Baliku, Gajah Manyusu, Balai Laki, Balai Bini, Palimasan, Palimbangan, Cacak Burung, Tadah Alas Joglo, Lanting), Upacara Malanggar Banua, Upacara Aruh Ganal.</p>

To be precise, the database stored in *budaya-indonesia.org* website have one distinct feature that acts like a double-edged sword. This distinct feature is their advantage but also a disadvantage at the same time. That feature is freedom of every person to participate and contribute to every traditional knowledge related article on this website. On the one hand, the advantage of this system is the number of documented traditional knowledge would indeed increase in short span of time due to

active participation from many people. On the other hand, the lack of validation from authorities and experts toward every article written become their drawback. The lack of validation could lead to every documented traditional knowledge that stored in this online database have neither credibility or accuracy. Hence, the database would only become traditional knowledge information sources and preservation without any prior art and legal defensive protection abilities.

Traditional Knowledge Documentation in Other Countries

Traditional knowledge documentation as one of traditional knowledge defensive protection is not only performed in Indonesia. Few other countries also use this system varying from the public one or the private one to protect their traditional knowledge.⁴³

Public Registry System

India

As a country with second highest population number in the world, India not only has a great amount of human resources but also rich in traditional knowledge. The traditional knowledge protection is done through Patent Law. The Patent Law itself legalized in 1970 and by legalizing the Patent (Amendment) Act 2005, No. 15 India provide a defensive protection for their traditional knowledge.⁴⁴

Moreover, there is another law that intended to regulate the sustainable use of biodiversity and its components. The law is the Biological Diversity Act 2002, No. 18. Nevertheless, there is another mission behind the legalization of this law which is to obtain financial profit by way of benefit sharing from traditional knowledge utilization.⁴⁵

Furthermore, traditional knowledge protection in India is not done only by using one method. India also documenting their traditional knowledge so it could

get legal protection later. India had successfully completed their documentation of traditional medicine and healing recipes. This effort is their strategy to prevent malicious patent application based on their traditional knowledge. Their documentation is already well known for its efficiency. It is proven from its ability to revoke few patents application from the foreign inventor.⁴⁶

These patents application that has been revoked due to India's traditional knowledge documentation are:

- a. The patent application of turmeric used in wound healing by Drs. Suman Cohly and Hari Har P in 1995;
- b. Basmati Rice patent application by a Texas company named RiceTec in 1997;
- c. The patent application of neem tree extract use by W.R. Grace in 1990.

South Korea

The other country that using the method of traditional knowledge public documenting as its protection is South Korea. The history of Korean traditional knowledge itself already known for approximately 5.000 years. These traditional knowledge are using about 5.100 plants species for various purposes like medical treatment and beauty. Other than that, there is a knowledge about traditional *kimchi* storing during winter that people still using these days.⁴⁷

⁴³Rohaini, 2015, "Perlindungan Hukum Terhadap Pengetahuan Tradisional Melalui Pengembangan Sui Generis Law", *Fiat Justisia Jurnal Ilmu Hukum*, 9 (4), p430.

⁴⁴Zainul Daulay, *Pengetahuan Tradisional: Konsep, Dasar Hukum, dan Praktiknya*, Jakarta: Rajawali Pers, 2011, p122.

⁴⁵Note 44.

⁴⁶Afrillyana Purba, Note 24, pp169-170.

⁴⁷Choi Jeongyoon, 2011, *Report on International Conference on Utilization of the Traditional Knowledge Digital Library (TKDL) as a Model for Protection of Traditional Knowledge*, New Delhi, India.

Korean government themselves realized great amount of potential from their traditional knowledge, so in 2004 Korean Intellectual Property Office decided to create a database to protect Korean traditional knowledge. The documentation itself was started at 2005 until 2007 and recorded about Korean traditional healing methods.⁴⁸

This database name is The Korean Traditional Knowledge Portal (KTKP) that created and managed by KIPO. The Korean Traditional Knowledge Portal scope are included from various Korean traditional medicine knowledge from many fields, documentation of Korean and China traditional medicine knowledge, and diverse articles and patent documents about traditional knowledge. This database is now containing approximately 350.000 documentation and article about Korean traditional healing knowledge, traditional food, and intangible cultural heritage which are presented in Korean and English.⁴⁹

The Korean Traditional Knowledge Portal is an integrated database system with specific scope in each article such as medicine, the healing process, disease information that linked to each other. The documentation processes are not only performed by identifying old manuscripts, but also from various well-known scientific journals in Korea like Korean

Journal of Traditional Knowledge and other 47 famous journals.⁵⁰

South Korea integrated documentation method had able to nullify a patent application by Nestle. The patent is about fermented vegetable making process was cancelled only in South Korea due to its similarity with Korean traditional food, *kimchi*, making process. Additionally, Korea not only protecting and preserving their traditional knowledge through documentation alone. The other method they use is by applying Korean traditional knowledge in grand-scale to keep its existence worldwide. For instance, there are few popular cosmetics companies that used traditional beauty recipes in their product such as Amore Pacific, Hankook Cosmetics, Rosee, and Somang Cosmetics.⁵¹

Private Registry System

Peru

As a country that located in the Northwestern part of South America, Peru is a neighbor with few location such as coastal areas, Andean areas, and Amazon rainforest. Therefore Peru is known as a mega-diverse country because of its great biodiversity. The urge to have a national law to protect their traditional knowledge is indeed already in the government plan. It is proved in Article 63 Legislative Decree 823 1996 on Industrial Property Law. This article is not only explicitly stated about the need for traditional knowledge protection, but also the necessity to have a national law

⁴⁸Mangala Hirwade dan Anil Hirwade, 2012, "Traditional Knowledge Protection: an Indian Prospective", *DESIDOC Journal of Library & Information Technology*, 32 (3), p240

⁴⁹Lakshmi Poorna, et.al., 2014, "Preservation and Protection of Traditional Knowledge - Diverse Documentation Initiatives Across the Globe", *Current Science*, 107 (8), p1242.

⁵⁰Note 49.

⁵¹Korean Intellectual Property Office, 2011, *Introduction of Korean Traditional Knowledge Portal*, Seoul, Korea Selatan.

that regulating traditional knowledge documentation system.⁵²

In 1993, the government legalizes a national law that becomes an important milestone toward development of traditional knowledge national protection. That law is called Law 27811 and resulted from research program done by International Cooperative Biodiversity Group (ICBG). ICBG working hand in hand together with Peru National History Museum, the Cayetano Heredia University of Peru, Washington University, Serle Pharmaceuticals, and Aguaruna Indigenous People that represented by the National Confederation of Amazonian Nationalities (CONAP). Furthermore, the other goal of this program is not only to make a national law about traditional knowledge protection but also to do some research and cultivation for Peru traditional herbal plants.⁵³

The traditional knowledge documentation model that have been performed by Peru according to Law 27811 is a documentation system where the access to the database is flexible and distinct from each other. The result from traditional knowledge documentation activities is arranged in a database with limited access. The only party that has full access to it is the National Institute for the Defense of Competition and Intellectual Property (INDECOPI). This right is granted to INDECOPI because they have a responsibility to assist every patent application review, prior art

search, also maintaining and keeping the traditional knowledge that owned by indigenous peoples.⁵⁴

There are three different type of Peruvian traditional knowledge documentation system in term of their defensive protection which are Public National Registers, Confidential National Register, and Local Register. In public national registers, some of the traditional knowledge information is kept in a systematic form and could be accessed by patent offices around the world. INDECOPI's role is to provide additional information for certain authorities that need it to increased their prior art search effectiveness. The second type is Confidential National Register which regulated in Law 27811. The purpose of this system is to keep the secrecy of certain traditional knowledge due to certain reason. In order to actualize this mission, INDECOPI would protect the traditional knowledge and prohibit it from third-party access. Local Registers is a traditional documentation method where it is created, managed, and utilized by their own indigenous group.⁵⁵

The Role of Traditional Knowledge Documentation in Its Protection

Traditional knowledge documentation is not an activity that has the mere benefit of collecting and registering traditional knowledge. According to WIPO, there are at least few other benefits from the activities of documenting traditional knowledge:⁵⁶

⁵²Susanna E.C., *et.al.*, 2004, "The Protection of Traditional Knowledge in Peru: A Comparative Perspective", *Washington University Global Studies Law Review*, 3 (3), p772.

⁵³Note 52, p773.

⁵⁴Note 52, p782.

⁵⁵Note 52, pp783-78

⁵⁶ World Intellectual Property Organization, 2016, WIPO/PUB/TK/9, pp1-2.

1. As a traditional knowledge protection and preservation method.

In 2003, UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage obligated the parties to document their traditional knowledge in order to protect and keep its existence. The vital purpose of traditional knowledge documentation is to ensure that every traditional knowledge use and development able to keep its originality.

2. Protecting the sacred traditional knowledge

The processes of traditional knowledge documentation itself sometimes become a sensitive topic for certain traditional knowledge, particularly the sacred ones. These kinds of traditional knowledge usually only shared exclusively among certain people in an indigenous group. Even people who have rights to know it is regulated by their *adat* law. Traditional knowledge documentation has the capability to restrict the access to that knowledge. Moreover, in intellectual property rights perspective, the effort of documenting traditional knowledge would prevent illegal use of traditional knowledge by third-party.

3. Research and development resources

Traditional knowledge documentation is not only beneficial to traditional knowledge preservation but also beneficial to the science world. Traditional knowledge that has been documented would indeed useful for research and development about it. For instance, a further research about traditional medicine. In addition, traditional knowledge research and

development would enhance and broaden indigenous peoples and local communities (IPLC's) knowledge, vision, innovation, and creativity. It is also will increase the knowledge of the third parties such as researcher and investor.

Traditional knowledge documentation becomes a notable thing to do because of its ability to act at the same time as traditional knowledge preservation method for next generation and protecting it as a property in Intellectual Property Rights. Furthermore, as one of the way to protecting traditional knowledge legally, traditional knowledge documentation is categorized as defensive protection.⁵⁷

The term of defensive protection itself is referring to a mechanism of protection with its purpose to prevent Intellectual Property Rights misuse by the third party toward biodiversity and traditional knowledge, particularly in traditional medicine.⁵⁸ Defensive protection will not granted any rights like in any other Intellectual Property Rights regime, but it is aiming to avert and cease the rights that belong to un-rightful parties over a traditional knowledge.⁵⁹

Traditional knowledge defensive protection involved helpful preventive acts in order to make sure that no one acquired Intellectual Property Rights in such an unfair way. Three models of defensive protection are using a database as prior art, protecting the secrecy of traditional knowledge, and application of special condition which is public disclosure

⁵⁷Rohaini, Note 43, p430.

⁵⁸Agus Sardjono, *Hak Kekayaan Intelektual dan Pengetahuan Tradisional*, Bandung: P.T. Alumni, 2010, p284.

⁵⁹Rohaini, Note 43, p430.

of origin as a condition to earn an Intellectual Property Rights.⁶⁰

The protection through defensive mechanism will assure unlimited use of traditional knowledge for its own indigenous people group as its owner. This protection method could be manifested by registering and documenting the existing traditional knowledge. As a matter of fact, a certain defensive protection form has been a part of Intellectual Property system for a long time. Mostly in this system, traditional knowledge should be placed and stay in public domain in the first place.⁶¹

Disclosure of origin is a form of defensive protection in traditional knowledge documentation. Defensive disclosure related to various information and documentation that have been made so it could be accessed easily by the public and act as the prior art. Moreover, it also served to prohibit further illegal claim over a traditional knowledge. Defensive disclosure would also provide any evidence needed to facilitate invention reviewing process, discover any other parties that already use it, and as a proof whether the patent application has been publicly used in more than 1 year before the application.⁶²

The high number of the traditional knowledge-related patent application had aroused a significant concern in countries that own traditional knowledge. Many believe a patent application that has simi-

larity with traditional knowledge is not qualified because it contains no novelty. Especially if the patent application is compared with the certain traditional knowledge that becomes their direct or indirect invention resources. Hence, traditional knowledge documentation plays a major role particularly for patents authorities to cross-checking patent application. By the existence of traditional knowledge database that could take part as prior art so an invention novelty aspect could be revoked. Additionally, traditional knowledge documentation has become one of the most effective ways to prevent bio-piracy.⁶³

Nevertheless, the principle of documenting traditional knowledge sometimes caused a growing concern regarding the difficulties to control and restrict traditional knowledge dissemination among people. Furthermore, the important role that held by traditional knowledge documentation as a solution to traditional knowledge exploitation shows that traditional knowledge legal protection system still dominated by Western Law and not indigenous group customary law. On the other hand, protecting traditional knowledge by using documentation method still considered as the most relevant protection method culturally, legally, and commercially. On top of that, some WIPO delegations even find out plenty of indigenous peoples group already realized the importance of traditional knowledge documentation and managed it internally within the community.⁶⁴

⁶⁰Loretta Feris, 2004, "Protecting Traditional Knowledge in Africa: Considering African Approaches", *African Human Rights Law Journal*, 4, p246.

⁶¹David R.H., Note 3, pp412-413

⁶²Stephen A.H. and Justin W.V., Note 32, pp24-25.

⁶³Manuel Ruiz, Note 6, p5.

⁶⁴Johanna Gibson, 2004, "Intellectual Property Systems, Traditional Knowledge and the Legal

However, there are some limitations in performing this defensive protection. Firstly, the use of a database that most people believe to be the most effective way to provide information to patents authorities turns out to be not capable of revoking traditional knowledge patent application directly. It is because in order to prove the similarity between an invention to certain traditional knowledge will need a lot of additional information. Secondly, in most of the time, the documentation activities itself bring no benefit to indigenous peoples as its owner other than preserving it. Finally, mainly because its specialty to placed traditional knowledge in public domain, traditional knowledge documentation will indirectly prohibit someone from the indigenous group to file the application for intellectual property rights individually.⁶⁵

Additionally, keeping the secrecy of a traditional knowledge only by using database alone is not an easy thing to do. For instance, if a traditional knowledge is already known by few indigenous group member, keeping its secrecy is indeed a tough job. In fact, there is a considerable amount of traditional knowledge that known and shared not only within the community but also with other indigenous communities outside the circle. Nonetheless, if a traditional knowledge is only known by a single person in the indigenous community, the risk of its extinction will become even greater unless it is documented in such way to keep its secrecy.⁶⁶

Generally speaking, the limitation of defensive protection itself lie in public disclosure of origin condition that not regulated in World Trade Organization (WTO) Trade Related Intellectual Property Rights (TRIPs) Agreement. TRIPs do not require the availability of disclosure of origin in order to accept a patent application. On the other hand, the absence of this document also does not cause a patent application become invalidate or revoked. Hence, the government is not obliged to adopt to their national law about patent applicant obligation to attached disclosure of invention origin document in their application to the patent office. This indeed leads to the small number of an existing rule that clearly gives patent applicant responsibility to enclosing the document into their patent application.⁶⁷

The Commercialization of Traditional Knowledge Database

The act of traditional knowledge documentation could be named as an important step that must be done to prevent any misappropriation. However, many people think that by documenting traditional knowledge would increase the risk of unauthorized takings to happen. Moreover, traditional knowledge documentation result in form of database that could be accessed publicly would give no financial benefit either to the indigenous people as its owner or to the country where it belongs. Many believe a solution for this problem is by commercializing the data-

Authority of Community”, *E.L.P.R.*, 7, pp284-285.

⁶⁵Loretta Ferris, Note 60, p247.

⁶⁶Note 60.

⁶⁷Note 60.

base resulted from traditional knowledge documentation.⁶⁸

Nevertheless, this advice about commercializing traditional knowledge information is not fully accepted by indigenous group communities. Database commercialization is organized in form of granting third party access with a certain amount of fee as its feedback. Despite the fact that there might be some parties who gladly pay it, this idea is against indigenous people life principle of traditional knowledge. Indigenous people assume that Intellectual Property Rights regime is the one that should be protecting their right to not sell their traditional knowledge. Because the true essential meaning of traditional knowledge is to be accessed freely for humankind wellness. Whilst Intellectual Property Rights is related so much to the monopoly right over an intellectual process result. This concept is totally strange for indigenous people who unfamiliar with it.⁶⁹

The other arising concern is the lack of appreciation given to indigenous people by database buyer and user. There is a huge demand from indigenous communities to get moral recognition from companies that use their traditional knowledge. Moreover, the other reason is that Intellectual Property Rights' monopolistic trait that probably could steep up the chance of traditional knowledge being exploited without any indigenous people participate in its use. This monopolistic trait of Intellectual Property

Rights could also reach to the extent of forbidding indigenous people to access their own knowledge because the database contained that information already bought by other parties.⁷⁰

On the other hand, many believe that traditional knowledge database commercialization would bring advantage to the country where traditional knowledge belongs and the indigenous community as its owner. The activities of documenting traditional knowledge will broaden the chance to explore every uniqueness in every existing traditional knowledge. Database commercialization will also increase social awareness regarding traditional knowledge protection such as, to reduce the number of biopiracy. Actually, the real advantage of commercialization method is the suitable amount of appreciation and recognition that given to indigenous people and protecting traditional knowledge from biopiracy at the same time. However, it is should be done with a condition that requiring every party to respect the essentiality of traditional knowledge by not exploiting natural resources. In addition, the conservation should be always managed in order to keep the existence of traditional knowledge.⁷¹

Furthermore, the other benefit from traditional knowledge database commercialization is its financial profit the owner could be acquired. By doing traditional knowledge database commercialization, there is a room for the use of a profit-sharing system. This system will help government funding the further research and developing traditional knowledge po-

⁶⁸Javier Garcia, 2007, "Fighting Biopiracy: The Legislative Protection of Traditional Knowledge", *Berkeley La Raza Law Journal*, 18 (2), p24.

⁶⁹Abha Nadkarni and Shardha Rajam, Note 12, p8.

⁷⁰Note 12, p8.

⁷¹Note 12, p9

tential to its maximum level. This advantage could also be used for protecting the natural resources and participating in increasing indigenous people welfare. It could be summarized that the commercialization of traditional knowledge database will bring plenty benefit if it is done properly. Thus, not only biopiracy could be prevented but also the indigenous people would acquire their moral right over the traditional knowledge and get financial benefit from it.⁷²

CONCLUSION

In the Intellectual Property Rights point of view, traditional knowledge is one of the properties that have difficulty to be protected because of its distinct and unique features. One of its protection methods is by documenting it into a database so it could actively safeguard traditional knowledge. Traditional knowledge documentation system that used by Indonesia is external registries which are done outside the indigenous communities and the information about traditional knowledge is placed in public domain. Traditional knowledge is already regulated in few national law. However, in The Law 2014 No. 28 on Copyrights and The Law 2016 No. 13 on Patent need to be restated clearly about the parties who have authorities to documenting traditional knowledge. Furthermore, in the implementation, traditional knowledge documentation is done by an NGO under the name of Sobat Budaya. Nevertheless, this documentation could not be used as defensive protection of traditional knowledge because the lack of validation and

verification from government nor the experts which is against the Law 2017 No. 5 on Cultural Advancement.

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⁷²Note 12, p9.

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