

## Research Article

## Legal Protection for Traditional Medicine Knowledge of Paliasa Leaves in Traditional Community of South Sulawesi Through Intellectual Property Regime

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## ABSTRACT

Traditional knowledge as a work which is communal property and has opposition characteristics to the legal regime of Intellectual Property rights. Thus, imposing for a regime of intellectual property used as a system to protect traditional knowledge would only cause anomalies in Indonesian society itself and the existing legal regime of Intellectual Property rights in Indonesia is not yet capable of protecting traditional knowledge, especially that associated with genetic resources. The existence of local wisdom of communities in South Sulawesi to genetic resources is to use Paliasa (*Kleinhovia Hospita* Linn.) leaf as a medicinal plant which are well documented in ancient texts "lontarak pabbura" and organized by Ammatoa as Kajang indigenous leaders. Therefore, it needs a protection model to protect traditional knowledge and their genetic resources associated with traditional knowledge through a sui generis system as positive protection and defensive protection models in order to provide comprehensive protection against traditional knowledge belonging to the Indonesian people.

Keywords: Legal Protection; Traditional Medicine; Paliasa; Kajang.

## ABSTRAK

Pengetahuan tradisional sebagai karya yang merupakan milik komunal dan memiliki karakteristik yang bertentangan dengan rezim hukum Hak Kekayaan Intelektual. Dengan demikian, pemberlakuan rezim kekayaan intelektual yang digunakan sebagai sistem untuk melindungi pengetahuan tradisional hanya akan menimbulkan anomali dalam masyarakat Indonesia sendiri dan rezim hukum Hak Kekayaan Intelektual yang ada di Indonesia belum mampu secara komprehensif melindungi pengetahuan tradisional, terutama yang terkait dengan genetik. sumber daya. Keberadaan kearifan lokal masyarakat Sulawesi Selatan terhadap sumberdaya genetik adalah dengan memanfaatkan daun Paliasa (*Kleinhovia Hospita* Linn.) Sebagai tanaman obat yang terdokumentasi dengan baik dalam teks kuno "lontarak pabbura" dan diorganisasikan oleh Ammatoa selaku tokoh adat Kajang. Oleh karena itu, diperlukan model proteksi untuk melindungi pengetahuan tradisional dan sumber daya genetik yang terkait dengan pengetahuan tradisional melalui sistem sui generis sebagai model proteksi positif dan proteksi defensif guna memberikan perlindungan yang komprehensif terhadap pengetahuan tradisional milik masyarakat Indonesia.

Kata kunci: Perlindungan Hukum; Pengobatan Tradisional; Paliasa; Kajang.

## A. INTRODUCTION

There are various issues related to genetic resources and traditional medicine knowledge occurring in Indonesia and other countries as well. One of the examples of these cases is sambiloto (*Andrographis paniculata*) and brotowali (*Tinospora cordifolia*) in which one of Japanese cosmetics companies have got patents on products made from these two plants (Litaay, Prananingrum, & Krisanto, 2010; Untung, 2008; Litaay, 2011; Patlis, 2005). This case shows how weak cultural defense mechanisms in protecting traditional knowledge and anything associated with genetic resources in developing countries, especially in Indonesia (Pharmanegara, 2009; Adhiyatma, 2017). This has called an urgency to immediately provide protection on Indonesian traditional knowledge and genetic resources particularly on Paliasa (*Kleinhovia hospita* Linn.) leaf as one of among thousands species of Indonesian genetic resources that are also associated with the traditional knowledge of people in South Sulawesi. The benefit of Paliasa leaf in treating some chronic diseases has attracted much attention from scholar (e.g Arung et al., 2009; Djabir, 2016; Wahyudin, Kaelan, & Sila, 2013; Zhou et al., 2013; Rozali, & Mangun, 2002; Abdulah et al., 2017; Djabir et al., 2017; Salempa et al., 2014; Herlianto et al., 2014; Shukla, Mehrotra, & Guleria, 2014; Soekamto et al., 2012; Wullur et al., 2015; Raflizar, 2009; Nurhidayah et al., 2013; Rochmawati et al., 2016; Yuliana, & Herawati, 2016; Tambaru, 2016). However, many of these studies related to the health benefits of these plants, none of them specifically discusses the

implications of the use of paliasa leaf by indigenous people in the field of intellectual property rights regime. The issue discussed by this article is considered profoundly important, regarding the fact that the use of traditional medicines by customary peoples, especially in developing countries, is often negligible by authorities that implies on the lack of recognition of their rights on the use of the traditional medicine. As a result, when traditional medicines have been further exploited by pharmaceutical companies, their rights are no longer recognized, and the explorations of these medicines are further exclusively held by those industries.

Protection of traditional knowledge associated with genetic resources has become a trending issue in WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (hereinafter referred to as WIPO IGC), as well as in Nagoya Protocol on Access to Genetic Resources (Robinson, 2010; Buck, & Hamilton, 2011; Nijar, 2011; Hamilton, 2006; Bavikatte, & Robinson, 2011; Mgbeoji, 2014). To date, this forum has not succeeded in regulating international legal instruments for this issue. Another trending issue is an issue discussed in the Conference of The Parties of CBD (hereinafter referred to as COP CBD) (Kiene, 2009). This second forum has regulated international legal instruments in the protocol model as the complement of the Convention on Biodiversity (CBD). This protocol aims at further implementing one of three CBD's goals which consist of the fair and equitable sharing of benefits arising from the utilization of genetic

resources. This protocol has also been ratified by Germany which was the last country to ratify it on 22 April 2016 as part of the 74 countries which ratified the protocol.

This article examines the characteristics of Intellectual Property (hereinafter referred to as IP) rights protection against traditional knowledge and anything related to genetic resources. The specific focus of this study is about Paliasa leaf (*Kleinhovia Hospita* Linn) as genetic resources associated with the traditional knowledge of South Sulawesi society.

## B. RESEARCH METHOD

A non-doctrinal approach is used as a method with a socio-legal approach in this article. Use of socio-legal approach was to analyze problems with looking at the provisions contained in the laws in the legal protection of intellectual property rights regime in Indonesia and helped answer the problems when observing the community in South Sulawesi, in particular, Makassar Local Community and Kajang Indigenous People for Paliasa leaf as genetic resources associated with traditional knowledge in the societies. So that arrived at the conclusion that needs a *sui generis* system to protect traditional knowledge based on genetic resources in Indonesia. For the data collection was done by interviewing, observing, and searching ancient manuscripts.

Interviews were conducted with informants from Balai Kesehatan Tradisional Masyarakat/The Traditional Community Health Center in Makassar, elite figures in Lembanna, and Kajang Indigenous leader in Bulukumba. The observation was carried

out in the community of South Sulawesi such as observing Makassar Local Community when using traditional medicine, and other communities as mentioned. Therefore, it was found that traditional knowledge over Paliasa leaf within the communities remains inherited and stakeholders for the benefit sharing and prior informed consent to the use of Paliasa leaf still exist. When observation was done, close to Makassar, there is also a local community in Gowa cultivated Paliasa leaf. Meanwhile, searching for ancient manuscripts have been found in the Badan Arsip dan Perpustakaan Pemerintah Provinsi Sulawesi Selatan/ Government Bureaux of South Sulawesi and Library. All of the data collected showing that traditional knowledge of South Sulawesi society has been recorded from ancient times. And finally, for analyzing of this article has been done through interpreting logically and systematically.

## C. RESULTS AND DISCUSSION

### 1. WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore

WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (WIPO IGC) is a committee that is established to negotiate texts from an international legal instrument, particularly the ones which guarantee the protection of genetic resources, traditional knowledge, and traditional cultural expression (OseiTutu, 2011). This committee presents the indigenous panel from the

representative of indigenous peoples and local community. There are some discourses discussed in the WIPO IGC, ie including the discussion of the draft on policy objective, guiding principle, substantive principle, core principle, the draft article for genetic resources, traditional knowledge, and folklore. The most recent meeting on the 30th session discussed the topic around a glossary of key terms related to IP and genetic resources, traditional knowledge, and folklore.

## 2. Conference of the Parties of Convention on Biological Diversity (CBD)

The 12<sup>th</sup> meeting of COP of CBD has been held in Pyeongchang, The Republic of Korea from The 6 to 7 of October 2014. The 13<sup>th</sup> meeting will take place in Cancun, Mexico in December 2016. COP has the highest authority among the countries which ratified the Convention on Biological Diversity in every biennial meeting to discuss the advance, set priority and commit to work plan, agree on various international issues to achieve the goal of Convention on Biological Diversity which is the sustainable use of biological diversity and equitable and fair benefit-sharing of the result of genetic resources utilization.

There have some discourses and decisions discussed in COP, among others, the decision to establish The Open-ended Ad Hoc Intergovernmental Committee for the Nagoya Protocol. Discussion on Article 8(j) and provisions related to CBD. As well as adopted the Protocol on Access and Benefit Sharing of genetic resources and Associated Traditional Knowledge. Principally, Protocol on Access and Benefit Sharing of genetic resources and Associated

Traditional Knowledge regulate protection on traditional knowledge associated with genetic resources based on the following principles:

- a) Material which is protected is biological diversity which is also associated with genetic resources using protection model which is through the access and equitable and fair benefit-sharing of the result of genetic resources utilization with the providers of genetic resources through the monitoring system, contract clausal model, technology transfer as well as Mutual Agreed Term and mechanism of financial sources so that it can contribute to the conservation and its sustainable use of the components of biological diversity.
- b) Protection criteria, the requirement to receive protection is by establishing the national regulatory system and through Prior Informed Consent (hereinafter referred to as PIC) as well as a mutual agreement by considering indigenous law, community protocol, and procedures which can be applied so that there will be a particular condition to promote and improve researches which will contribute to conservation and the sustainable use of biological diversity and simplify actions for access of non-commercial research activities.
- c) The holder of traditional knowledge right associated with genetic resources is stakeholders which in this case are indigenous peoples and the local community.
- d) Rights that are protected is the economy right and moral right, which are: (1) Economy right in this

protocol emphasizes on equitable benefit sharing over the benefit of the use of genetic resources and also which is related to traditional knowledge of indigenous peoples and local community.; dan (2) Moral right in this protocol obliges parties that use genetic resources and anything related to traditional knowledge to have PIC, agreement and involvement of indigenous peoples and local community as the providers of genetic resources as regulated in national laws.

- e) Protection law. This protocol obliges the parties to appoint one national focal point that is in charge as a liaison with CBD secretariat, and appoint one or more national authorities that are competent to the access and benefit sharing, and the establishment of clearing house mechanism based on Article 18 section (3) of CBD stating that in order to give information about access and benefit sharing, there must be access for the information provided by every relevant party for the implementation of Nagoya protocol. The information is about legislative, administrative, and policy measures of access and benefit sharing; information about national focal point and competent national authorities; permit or anything equal to it which is issued at access as a proof of the decision for PIC guarantee.

As mentioned before, there will be the 13<sup>th</sup> COP this December 2016 in Cancun, Mexico. One of the agenda in this meeting is the report of the Ad-hoc Open-ended Inter-Sessional Working Groups about Article 8(j) and related provisions of CBD of the 9<sup>th</sup> meeting in Montreal, Canada on 4 to 7 of November

2015. Five recommendations about voluntary guidance for the mechanism development, rules or other proper initiatives have been adopted in order to ensure the prior informed consent or approval and involvement of indigenous peoples and local community to access their knowledge, innovation, and practice, equitable benefit sharing arising from the utilization and application of the knowledge, innovation and relevant practice for conservation and sustainable use of biological diversity, and for reporting and prevention the stealing of traditional knowledge which is against the law (Yusuf, 1998; Miyamoto, 2008).

### 3. Traditional knowledge based on Genetic Resources Protecting in Indonesia

Legal regime of intellectual property in Indonesia is derived from WTO-TRIPS Agreement. As the member of WTO, regulations related to IP need to in harmony with TRIPS Agreement (Yusuf, 1998; Miyamoto, 2008). Because of it, Indonesia enacted and promulgated some laws related to intellectual property, that is Act No. 28/2014 on Copyrights, Act No. 13/2016 on Patent, Act No. 20/2016 on Trademark, Act No. 31/2000 on Industrial Design, Act No. 32/2000 on Layout-designs of Integrated Circuits, Act No. 30/2000 on Trade Secret, and Act No. 29/2000 on Plant Varieties.

Copyrights Act is the newest regulation which was amended in 2014. This regulation, in one of the provisions, states that all creations and product related to people's rights are protected by the Copyrights Act. In other words, all work owned by Indonesian people including work of indigenous

people itself can be protected by the Copyrights Act. However, this regulation is formed to protect literature work, art and knowledge not work in the form of invent.

While the Patent Act is intended for work in the field of technology, the right is given by the state in certain amount of time as stated in the Patent Act. A patent of invention may be granted if the applicant well describes that the invention covers inventive steps that can be applied in industry and the patent examiner is convinced that the claim is absolutely novel after the prior art search. Regarding traditional knowledge, Indonesia's Patent Act is regulated in Patent Act number 13 of 2016 in article 26 which states that inventions relating to those derived from genetic resources or traditional knowledge must clearly and correctly state the origin of the source, and consider the principles of benefit sharing and / or access. Utilization of genetic resources and / or traditional knowledge reasons for mentioning the origin of genetic resources and / or traditional knowledge in the description so that genetic resources and / or traditional knowledge are not recognized by other countries and in order to support Access Benefit Sharing (ABS)

There is also protection through trade secret. Trade secret is one form of IP protection in the field of technology or business. However, IP may be protected by trade secret only if the information is not widely spread, it has economic value, and the secrecy is well kept by the owner. Some traditional knowledge is still kept its secrecy for some reasons including precious spiritual secret and sacred things

that need to be protected by its community. In addition, the concept of the ownership of trade secret is individual and monopolistic as stated in Article 4 of Trade Secret Act regulating that the owner of trade secret has rights to use the trade secret he owns for himself only; and, grant license to another party or forbid another party to use the trade secret or reveal the trade secret to the third party for commercial use (Ramli, 2001).

The concept of the ownership of this individual and monopolistic trade secret is different from the concept of the ownership of traditional knowledge which is communalistic in nature. Therefore, trade secret regime cannot be applied for legal protection of traditional knowledge which is based on genetic resources. Traditional knowledge can be guaranteed its position as medicine derived originally from plants through protection of plant varieties. Protection of plant varieties is granted by the state and is conducted through plant breeding. It is also explained that protection of plant varieties can be granted when there is novelty, uniqueness, regularity and stability, as well as naming. Traditional knowledge based on this rule also notes that local varieties are developed collectively as the ownership of local community controlled by the state. Similarly, the protection of plant variety also requires novelty. This will make it impossible for traditional knowledge to be guaranteed by the Plant Varieties Act because traditional knowledge is not a new thing anymore and it is also not a variety of plants.

In the realm of legal protection in Indonesia, Indonesia has had some regulations governing the

problems of legal protection of traditional knowledge which is related to genetic resources. However, these regulations still cover sectoral scale and are still considered as rules that are viewed as giving less protection on traditional knowledge and anything related to it. These regulations are in the form of Presidential Decree No. 100/1993 on Research Permit for Foreigners. Through this decree, LIPI (Indonesia Researches and Sciences Institution) forms permit granting coordination team for foreigners, and then this policy is renewed with governmental regulation No. 41/2006 about Permit of Conducting Research Activity and Development for Foreign Universities, Foreign Research and Development Institutions, and Foreign Business Entities and Foreigners. This regulation obliges the applicant to propose research permit to the minister, in this case ministry of research and technology by enclosing required documents including research proposal, CV and recommendation from research fellow in Indonesia. Previously, Act No. 18/2002 on National System of Research, Development and Application of knowledge has been issued. In addition, some sectoral regulations such as Forestry Ministerial Decree No. 447/kpts-11/2003, Health Ministerial decree No. 723/menkes/SK/VIII/2008, Agriculture Ministerial Regulation No. 15/permentan/OT.140/3/2009 on Guidance of the Making of MTA, Health Ministerial Regulation No. 657/Menkes/per/VIII/2009 on The Delivery and Use of Clinical Specimen, Biological Material and the Information content. Meanwhile, CBD and Nagoya Protocol has been ratified through Act No. 5/1994 on

the legalization of Convention on Biological Diversity and Act No. 11/2013 on the Legalization of Nagoya Protocol.

The development of traditional knowledge is part of the principles and principles of the National System of Science and Technology. The law on the national system of science and technology regulates that it recognizes, respects, develops and preserves the diversity of traditional knowledge, local wisdom, biological and non-biological genetic resources, and culture as part of the national identity.

#### 4. The Inability of IP Regime to Protect Genetic Resources-based Traditional Knowledge

Some contexts of IP protection tend to provide protection for each individual or inventor. This has caused work or creation owned communally to be rejected by IP regime to get protection. It is impossible for communal ownership to be protected in IP regime because of some reasons. The first, the owner identity of the work or creation is anonymous. The second, the time term given by the law has been overdue. The third, the process of making and the formula contained in the creation has been widely known and definitely, it is no longer a new creation.

The concept of communal right still attaches within Indonesian people. This fact that later on causes problems of Indonesian work whose ownership is communal. Knowledge gained from Indonesia indigenous peoples or local community that then developed by foreign party is a form of development of knowledge. However, if the result of the use is intended for gaining an individual right and for commercial need, there will be business interest

here in the form of monopoly of the ownership of the developed knowledge to become the main product used to collect capital and profit as much as possible. If the developed knowledge is given back to the people for common interest and is owned collectively, the monopoly of the product cannot be done because this product has become communal ownership. This will effect on the developer company capital enhancing and the inhibition of a company development process. This is why IP regime protection cannot grant protection holistically for communal ownership and tends to admit individual ownership for the sake of supporting the fulfilment of the goal of a company establishment which is to gain maximum profit. And most of those companies are in developed countries.

Development of IPR protection is apparently unable to protect the traditional knowledge. The inability to provide legal protection for traditional knowledge through intellectual property law system, due to differences in characteristics between IPR and traditional knowledge, as seen in the concept and characteristics of the dialectic between IPR and traditional knowledge. Although both intellectually rooted in the intellectual creativity, the IPR and traditional knowledge have a difference in character. In IPR's parameter, the idea or suggestions must to be realized in the form of tangible expression that can be seen and heard, but if the idea of renewable energy is not always in the form of tangible expression, the expression could be in the form of verbal / oral, intangible expression. IPR ideas in the form of creative works in the arts and sciences,

design, brand, technology and the findings of the species as a works or invention a novelty and not the same as the previous disclosure of originality, if the idea of traditional knowledge must be contained and produced as an act and knowledge as well as specific techniques rooted hereditary tradition.

Indonesian intellectual property law is based on the TRIPs agreement would also adopt a monopolism and individualism. This understanding clearly different cosmology of communal character of Indonesian society that makes the intellectual creations created by the creators and inventors is not intended to be privately owned as property, but merely aims to meet the needs of the community in which the individual of creator or inventor is a part of the community concerned. Thus, to create something works or invention is the result of action and individual effort, so the results in thier works or its invention can be enjoyed collectively by all members of society in which the individual is located.

Indonesia's intellectual property law is not based on the basic ideas, values, norms sourced from Indonesian society itself, because the Indonesian people are familiar with the values and character of communal religious / spiritual philosophy have contrast from that derived IPR international conventions which us individualistic and monopolistic. The policy in the intellectual property law system with transfer of intellectual property law system was derived from Western society such as Europe and the United States to the Indonesian legal system. But according to Chambliss and Seidman (1971) in the theory of the law of the non-transferability, the law



can not simply be transferred from one society to another.

#### 5. The Existence of Paliasa Leaf as Genetic Resources and Traditional Knowledge of South Sulawesi Society

Traditional knowledge which is based on genetic resources discussed in this research is traditional medicine derived from Paliasa leaf and is believed by people in south Sulawesi to have efficacy, especially in the cure of hepatitis disease. According to Health Ministry Regulation No. 246/Menkes/Per/V/1990, Article 1 provides that traditional medicine is the substance or ingredients in the form of plant material, animal material, mineral material, the preparation galenic or mixture and these ingredients, which traditionally been used for treatment of experience. This belief of people in south Sulawesi is not only in traditional way, but also scientifically researchers have conducted laboratory researches to find out the substances contained in Paliasa leaf. For instance, a research conducted by Raflizar and Sihombing (2009) testing the efficacy and benefit of Paliasa leaf on a mouse suffering liver inflammation, concluded that Paliasa leaf extract can protect liver inflammation caused by CCl<sub>4</sub>. However, at that time, the researchers have not been able to identify which chemical substance that is efficacious. Similar research has also been conducted by Nunuk Hariani Soekamto and the result of her research has been presented in the Scientific Oration of the acceptance of the position of professor in organic natural material in chemistry field. Nunuk said that plants belong to family of Sterculiaceae has potential

to be developed as anti-hepatitis medicine. In another type of Paliasa, which is *Kleinhovia Hospita* Linn., particularly in its stem and leaf, based on her research in 2008, she found coumarin compound group, which is 7-hidroksi-6-metoksi coumarin (scopoletin). This compound which was further examined by M.H. Farah and Saelsson G (1992) has anti-hypertension, anti-inflammation, and anti-allergy effect and can inhibit prostaglandin synthetase (Tempo.co, 2010). In June 2011, Faculty of Pharmacy of Hasanuddin University has launched herbal product whose the raw material is leaves of Paliasa plant (*Kleinhovia Hospita* Linn) for the cure of liver disease (Antara, 2011). Further research and development of Paliasa leaf are still conducted by Hasanuddin University Board of Researchers in order to cultivate and ensure that traditional knowledge is still used by people in South Sulawesi, in particular and Indonesia people in general.

For people in southern Sulawesi area, Paliasa leaf contains efficacy as medicine to cure hepatitis disease. Those people concoct Paliasa leaf by boiling seven dried leaves using 2 glasses of water until there is only one glass of water left then the potion is drunk 1-3 times for each potion for seven days. Knowledge about efficacy of that plant is obtained from information inherited from one generation to another generation. To date, it is not only local community but also community of indigenous people who has interest of the use Paliasa leaf in daily life and as tradition ceremony ritual material. The existence of the community of traditional knowledge stakeholders is as important as the existence of the

creativity itself because the community that so far has maintained from generation to generation the way of its use and its development.

The existence of Paliasa leaf as genetic resources associated with traditional knowledge in Indigenous people of Kajang in Tanah Toa Village, Bulukumba represents the existence of genetic resources associated with traditional knowledge in community of indigenous people. The existence of Paliasa leaf genetic resources in Makassar and Gowa people represents genetic resources associated with traditional knowledge in local community.

These stakeholders either from indigenous people or local community who still cultivate Paliasa leaf as genetic resources associated with traditional knowledge will become the approver based on Prior Informed Consent as the formulation of agreement of genetic resources use and also will determine to whom benefit sharing will be given.

The existence of Kajang Indigenous people is supported with strong effort by managing ecosystem in balance and sustainably. This because of cultural value system contained in Pasangri Kajang. The sacredness of values contained in Pasangri Kajang for Kajang indigenous people if not implemented in daily life will have bad impact on the life of Kajang indigenous people. As local wisdom, Pasang contains various ancestor teachings whose substances are collection of messages, advices, guidances and rules on how someone can position him/herself in macro and micro cosmos and also custom of creating harmonisation of nature-human-

God (Akib, 2003). This Pasang becomes a parameter whether something is "good" or "bad", or whether something is "allowed" or "forbidden", or whether something will be "intended" or, in the opposite, it will be "opposed" (Akib, 2003). Pasang does not explain specifically the use of Paliasa leaf as medicine and how to make it as potion. However, in Pasang there are some messages that are also particularly related to some Pasang teachings that are intended to preserve the environment.

More specifically, traditional wisdoms that are contained in Pasang ri Kajang are, Nikasipalliangi ammanra-manraloa borong (it is prohibited to damage forest); Napa'jari inne linoa lollong bonena lapipakkagunai risikonjo tummantanga ri bahonna linoa. Mingka u'rangi to'i, larroi linoa rikau talarie' nalapangngu' rangia (earth and anything on it is created for the benefit of human. But also remember, if the mother nature is angry at you, nothing can stop it); Angnganre na rie', care-care na rie, Pammalli juku na rie', tan koko na galung rie, Balla situju-tuju (the formulation of this Pasang shows that the simplicity of life that influences the system of environment management of indigenous people); Punna nitabbangngi kayua, Nipappirangngangngi angngurangi bosi, Appantanre'tumbusu, napau turiolowa (if wood is cut down, this will reduce rain and diminish the source of springs); Parakai lino a'rurung bonene, kammaya tompa langika siagang rupa taua, siagang boronga (take care of the care and all the things on it, and so for the sky, for the human, and for the forest); Anjo boronga anre nakulle nipanraki. Punna nipanraki boronga, nupanraki

kallennu (forest can not be damaged, if you damage the forest, it is the same as you damage yourself); Anjo natahang ri boronga karena pasang. Rettopi tanayya rettoi ada' (forest can be preserved by tradition. If the earth is destroyed, then tradition is destroyed as well); Talakullei nisambei kajua, iyato' minjo kaju timboa. Talakullei nitambai nanikurangi borong karamaka. Kasipalli tauwa a'lamung-lamung ri boronga, nasaba' se're wattu la rie' tau anngakui bate lamunna (wood can not be replaced, the wood will grow. Sacred forest can not be expanded or reduced. People are not allowed to grow plants in the forest because one day there will be someone who will claimed the plants).

An interview with Ammatoa as Kajang Indigenous leader on July 31, 2014 reveals that in Kajang indigenous people, the use of Paliasa leaf, apart from its use as medicine, is also used in tradition ritual. One of tradition rituals using Paliasa leaf is Andingingi. Andingingi is a ritual to cool down the whole universe. The core activity of this ritual is called abbebase. Abbebase activity is performed by wagging to the four the four cardinal points and surrounding all the participants which is intended to cool down the nature so that the nature will be cold, safe, serene and peace again. The action of wagging the water to the four cardinal points is performed using a big tied bunch of leaves. The leaves used is special plants, including Tobi (fruit of young Areca Palm), Biruppa (betel leaf), Paliasa Leaf, Koddoro buku and some leaves usually used as medicine.

As explained by Erica-Irene Daes (1997) that a number of unique elements in indigenous peoples

has always relation with natural resources, which are there is a very close relation between indigenous people with land, area, and their resources; the relation has various dimensions and social, cultural, spiritual, economical, and political responsibility; collective dimension of the relation is significant; aspects among generations of the relation is crucial thing for the identity, heritage and the sustainability life of indigenous peoples culture; and probably, some elements that are also related to indigenous peoples and its relation to land, territory, and resources have not covered in these examples.

As indigenous people that still use Paliasa leaf for medication and ritual instrument as well as for local wisdom that is still strongly supported by its people, Kajang Indigenous People include as one of stakeholders of genetic resources associated with the traditional knowledge.

Another consideration can be taken from the research in Health Centre of Traditional People or Balai Kesehatan Tradisional Masyarakat (hereinafter referred to as BKTM) in Makassar as one of government institutions whose goal is to provide information about traditional, alternative, and complementary health service development. In this centre, discussion, researches, testing, education and training of traditional health are conducted in eastern part of Indonesia. Cultivation in this centre is conducted on genetic resources that has been clinically tested and applied. In this centre, some Indonesian genetic resources in which some of it is Bugis-Makassar people traditional knowledge, including Paliasa leaf, has been cultivated. Sri

Intanrani Widyastuti said that although the development of the efficacy of Paliasa leaf has been conducted by Hasanuddin University party, BKTMM Makassar has also cultivated Paliasa as one of plants which is efficacious medicine and as one of plants that is stated as safe traditional medicine to be consumed (Widyastuti, 2016). BKTMM Makassar also serves the requests of seeds of genetic resources (medicine plants) to be given for the needed parties, such as, society health centre (puskesmas) of Manimpahoi Sinjai District of South Sulawesi. This health centre submitted attachment of seeds needed by them to BKTMM Makassar. One of the seeds requested was Paliasa leaf (<http://bktmm-makassar.org/fag-online.html>). One of local communities in Gowa also did cultivation of Paliasa leaf.

The community is called Rumah Hijau Denassa (Denassa Green House). Rumah Hijau Denassa was established to save and replant rare and endemic plants especially the ones from Sulawesi. Activities in Rumah Hijau Denassa is not only looking after and planting, but also regularly gives seeds for free, using the house as group studying, growing concern for environment in school aged children and introducing ancestor culture. In this house also, the stories of plants from social, economical, and cultural perspective is documented.

Furthermore, Rumah Hijau Denassa as local community that takes part actively in preserving various genetic resources of South Sulawesi endemic including Paliasa leaf and educate people about the efficacy of Paliasa leaf as well as those of other

genetic resources is one of South Sulawesi local communities that can take role as stakeholders of Paliasa leaf and various genetic resources that are cultivated.

BKTMM Makassar as a government institution can represent local communities of Makassar people as the institution which cultivates paliasa leaf along with other genetic resources. As a matter of fact, the local communities of Makassar, based on the observation on the field, does not show any interest in planting and preserving paliasa leaf. However, the knowledge about paliasa leaf is still inherited to Makassar people to date.

The development of traditional knowledge paliasa leaf with a good governance and touch a modern technology occurring have economic resources potential for increasing and developing industrial, trade and tourism. In the regional autonomy paradigm based on Regional Government Act Number 23 Year 2014 so the development of local potential have a special characteristic occurring wide-open. The Regional Government likely more to increase capacity of local communities primarily improving of local wisdom and local creativity of traditional knowledge of Paliasa leaf to become a product which have an innovative characteristic as a competitive advantage for prosperity local community.

#### D. CONCLUSION

Protection of traditional knowledge associated with genetic resources has become trending issue currently in WIPO ICG that to date, this forum has not

succeeded in formulating international legal instrument and in COP CBD. Different with WIPO ICG, COP CBD has succeeded in formulating international legal instrument in the form of The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity.

Characteristics of IP individual-monopolistic then was adopted by Indonesia as the consequence of WTO membership. Legal protection regime of IP rights through laws and regulations in Indonesia has similar characteristic which is individual-monopolistic as logical implication of the ratification of TRIPS Agreement by Indonesia. This Agreement is minimum provision standard of the enactment of intellectual property rights protection in Indonesia. Traditional knowledge as work or invention owned collectively has characteristic which is opposed to IP right legal regime. Therefore, forcing intellectual property regime as a system which can protect traditional knowledge will only cause anomaly within Indonesia people themselves and the existing IP right legal regime in Indonesia has not been able to protect traditional knowledge especially the one related to genetic resources.

Local wisdom of South Sulawesi Society towards genetic resources is to use Paliasa leaf as medicine plant by boiling seven dried leaves with 2 glasses of water until there will be one glass of water left. Then, the potion is taken 1-3 times for each potion for 7 days. Another local wisdom is to use Paliasa leaf in tradition ritual of Kajang indigenous

people as one of materials to cool down the whole universe as believed by Kajang indigenous people. Local wisdom that still exists and is preserved by indigenous people and local community of South Sulawesi in the utilization of *Kleinhovia hospita* Linn. as genetic resources has also been well documented in ancient text lontarak pabbura and preserved in the leadership of Ammatoa as the custom leader of Kajang Indigenous people. Thus, as indigenous people and as people's local community in South Sulawesi, Kajang Indigenous people and local community of Rumah Hijau Denassa are the stakeholders of Paliasa leaf that have rights to grant approval based on Prior Informed Consent and also have right to gain fair and equitable benefit sharing for the utilization of Paliasa as genetic resources associated with traditional knowledge of the people.

Therefore, the protection of *Kleinhovia hospita* Linn plant and other plants which are Indonesian's genetic resources associated with traditional knowledge through *sui generis* approach is an action that need to be immediately conducted because there has not been adequate laws and regulations that can protect traditional knowledge and anything related to genetic resources comprehensively. IP right legal regime is not an alternative that can be used to protect genetic resources associated with traditional knowledge of Indonesian people. Moreover, it is necessary to immediately hold a cooperation project among governmental elements and non-governmental institutions in identifying, inventorying and documenting all genetic resources associated with traditional knowledge of indigenous

peoples and/or local community. The paradigm of regional autonomy should be seen as an opportunity for the management and utilization of traditional knowledge as an regional asset more precisely in accordance with the potential and the local characteristics of intellectual property assets, including the development of local / regional respectively.

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