

Indonesian System of Geographical Indications to Protect Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions

Miranda Risang Ayu Palar,^{1†} Dadang Epi Sukarsa² and Ahmad M. Ramli³

^{1,3}Dept. of Law on Information Technology & Intellectual Property, Faculty of Law, Universitas Padjadjaran, Raya Bandung Sumedang KM.21, Hegarmanah, Jatinangor, Kabupaten Sumedang, Jawa Barat 45363, Indonesia

²Dept. of Law on Environment, Spatial and Land, Faculty of Law, Universitas Padjadjaran, Raya Bandung Sumedang KM.21, Hegarmanah, Jatinangor, Kabupaten Sumedang, Jawa Barat 45363, Indonesia

Received: 14 April 2017; accepted: 21 May 2018

Geographical Indications are the Intellectual Property Rights' system protecting a sign attached to a good or service indicating its geographical origin. A Geographical Indication is the only conventional intellectual property subject matter where the right holder is an entire community rather than an individual. The communal nature of rights to community property such as genetic resources, traditional knowledge and traditional cultural expressions makes obtaining protection difficult under conventional intellectual property regimes where rights holders are conventionally individuals. This article considers Geographical Indications as a promising legal option and responds to the need for pragmatic legal means by which Indonesian products embodying genetic resources, traditional knowledge and/or traditional cultural expressions may enjoy protection within Indonesia's current Intellectual Property System. The main questions posed include the following: does the Geographical Indication Protection System in Indonesian Law Number 20 of the Year 2016 sufficiently protect all products deriving from or associated with genetic resources, traditional knowledge and/or traditional cultural expressions? How should this system be positioned relative to other pertinent Laws and regulations dealing with the same matter(s)? Should another Law or regulation be added or considered in order to strengthen protection? This article aims to provide answers by analysing results from literature and empirical studies. Data from literature studies were obtained from primary and secondary legal resources, in particular from Laws and implementing regulations, as well as various published research on protected products. Data from empirical studies consists of qualitative data gathered through direct observations and non-structured interviews. Results of these studies demonstrate Geographical Indication systems can be used to protect some but not all products associated with or derived from genetic resources, traditional knowledge and/or traditional cultural expression. Geographical Indication protection should therefore be exercised in addition to other Laws and implementing regulations specializing in safeguarding and protecting genetic resources, traditional knowledge and/or traditional cultural expressions.

Keywords: Geographical Indications, Genetic Resources, Traditional Knowledge, Traditional Cultural Expressions, WIPO, TRIPS Agreement, Indonesian Law Number 20, Lisbon Agreement for the Protection of Appellations of Origin, book of requirements, Indonesian Trademarks Appeal Commission, indication of source, Madrid Agreement for the Repression of False or Deceptive Indications of Source on Goods, 1891, Paris Convention for the Protection of Industrial Property, Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits, the Bill of Indonesian Government Regulation on Traditional Cultural Expressions, 2018, Geneva Act of the Lisbon Agreement on Appellations of Origin and Geographical Indications

Why Geographical Indications?

Recently, Directorate General of Intellectual Property (DGIP) under the Ministry of Justice and Human Rights of the Republic of Indonesia officially announced 2018 as the year of Geographical Indications (GIs). During 2018, each of the 34 provinces in Indonesia is required to obtain at least one registration for a Geographical Indication (GI), meaning at least 34 new GIs should register in Indonesia before 2019.¹ By the end of April 2018,

already 65 new GIs were registered in Indonesia.² This amount of registrations is sensible for two reasons.

First, Indonesia has 7.81 million square kilometers of territory³ including more than 13 million islands, and is inhabited by more than 300 ethnic groups.⁴ Second, Indonesia is known as one of the most culturally diverse and mega biodiverse countries in the world,⁵ indicating potential for many more Indonesian GIs to be registered. Remarkably, only six of the 65 registered GIs are foreign GIs, which is considerably few.¹ In 2016, Indonesia officially

[†]Corresponding author: Email: miranda.risang.ayu@unpad.ac.id

transformed Indonesian Trademarks Law Number 15 of the Year 2001 into new Law Number 20 of the Year 2016 about Trademarks and Geographical Indications (Law Number 20).⁶ This is the first Law in Indonesia using GIs as part of its entitlement, and the Law implies that GIs should become as important as trademarks, copyrights, patents, industrial designs and other intellectual property (IP) subject matters, each of which already have their own independent Laws. Law Number 20 also aims to provide solid protection and faster procedure of registration for products made by non-individual producers.⁷

GIs are the only IP subject matter under the Agreement on Trade-Related Aspects of IP Rights (TRIPS Agreement) where the principal right holder is a community and not an individual.⁸ Thus, in the Indonesian legal system, the right to a GI is considered a “communal IP right” alongside communal rights to genetic resources, traditional knowledge and traditional cultural expressions. Given the cultural diversity across Indonesian communities, seemingly all potential GIs in Indonesia are likely to have associations with genetic resources, traditional knowledge, traditional medicines and traditional cultural expressions produced by or deriving from indigenous and local communities.

The Indonesian Government has conducted major efforts to preserve, protect and optimise Indonesia's biological and cultural diversity as cultural, intellectual and economic assets. The Ministry of Foreign Affairs of the Republic of Indonesia began efforts by negotiating the possibility to endorse a multilateral binding instrument(s) to protect community based IP rights for genetic resources, traditional knowledge and traditional cultural expressions.⁹ The Ministry of Education & Culture established a national system to inscript hundreds of cultural heritages from localities and provinces in Indonesia to become national and international cultural heritages.¹⁰ The Ministry of Environment & Forestry has also played an active role in sharing benefits of legal arrangements for genetic resources and traditional knowledge associated with genetic resources in international fora as well as in national Law making, including its endorsement of implementing regulations.¹¹

The Ministry of Justice & Human Rights, especially the DGIP, proceeds to use protection of GIs as part of the Executive Government's initiative to amend Laws on copyrights, patent and trademarks. In the new Copyrights Law of the year 2014, *sui generis*

articles about traditional cultural expressions were added.¹² In the new Patent Law of the year 2016, a *sui generis* article about mandatory disclosure of origin for an invention that is based on genetic resources or traditional knowledge was inserted.¹³ Many articles were also introduced in trademark and geographical indication Law number 20 to provide details on how to obtain protection of community based products bearing GIs or other indications of source.

The DGIP also established a special sub-directorate dealing with IP rights held by communities.¹⁴ This sub-directorate is under the Directorate of Cooperation's authority,¹⁴ meaning the scope of works can interconnect with realms of other directorates as well as other ministries in so far as the communal right holder is concerned.

Efforts to enhance protection of genetic resources, traditional knowledge and traditional cultural expressions, however, have not reached much resolution because efforts supposedly involve nine ministries other than the Ministry of Foreign Affairs, Ministry of Education & Culture, Ministry of Environment and Forestry, and Ministry of Justice & Human Rights. The other nine ministries are the following: Ministry of Agriculture; Ministry of Ocean and Fishery; Ministry of Industry; Ministry of Trade; the Ministry of Research, Technology & Higher Education's; Ministry of Tourism; Ministry of Health; and Ministry of National Affairs. The inter ministerial nature of protecting communal IP objects also called for the Coordinative Ministry on Political, Justice & Security Affairs to take part, and lately, for the Coordinative Ministry of Human Resources & Culture to lead efforts. The ministries should work together to amend, endorse and harmonize a number of scattered legal instruments and implementing regulations related to genetic resources, traditional knowledge and traditional cultural expressions. They should also take steps to empower capabilities of many communities across hundreds of Indonesian islands to act as adequate applicants and beneficiaries of their own products.

With regard to the complexity, length of time and enormous budget by which to provide comprehensive protection, the GI system could become a shortcutting approach to protect those products based on or associated with genetic resources, traditional knowledge and traditional cultural expressions. This paper explores such possibility, particularly in the Indonesian context.

GI Protection in Indonesian Law Number 20, 2016

Article 2 of Law Number 20 states the scope of the protection as covering trademarks and GIs.¹⁵ GI is defined as an indication which identifies the origin of a good and/or a product, where the geographical environment, including natural factors, human factors or the combination thereof, is/are attributable to the reputation, quality, and certain characteristic(s) of the good and/or product.¹⁶ The right protecting a GI is an exclusive right granted by the government.¹⁷ Right holders obtain the right through registration and can enjoy the right as long as the given reputation, quality and characteristic of the good and/or product prevails.¹⁷ One of the four grounds for refusal to register a new trademark also relates to GIs. Article 21(1)(d) states that an application for registration of a trademark shall be refused if the trademark is exactly the same or substantially similar to a registered GI.¹⁸

According to Law, legal protection for GIs shall only be obtained through registration,¹⁷ therefore the system is constitutive. It differs from a declaratory system of indications of source, which can be obtained without registration and simply *via* actual use in marketplace.¹⁹ In this regard, Article 53 of the Law gives legal standing for two types of right holders eligible to apply for protection of a GI: (1) an institution or agency representing either an indigenous community or a local community who produces the object and lives in the geographical area of the production; or (2) a provincial or local government located where the the good and/or product originates.²⁰ Producers living outside of Indonesia can also apply for protection through their legal representative or lawyer in Indonesia, as long as they have obtained protection for the GI in their own country.²¹ Protection may be obtained based on relevant international legal instruments or international contracts.

Article 54(3) of Law Number 20 also impliedly outlines eligibility for protection in Indonesia.²² Natural resources, handicrafts and industrial products can be protected as GIs. In this regard, Indonesian Law does not differ between levels of protection for general products at the first level and for wines & spirits at the second level, as denoted in the TRIPS Agreement.²³ Instead, Indonesian Law tries to provide the strength of second level protection in the TRIPS Agreement for all possible products. To achieve the strength of the TRIPS Agreement's second level protection, Indonesian Law models GI protection on the 1958 Lisbon Agreement for the Protection of

Appellations of Origin (Lisbon Agreement). Even though Indonesia has not historically been a member of the Lisbon Agreement,²⁴ Indonesian Law is inspired by the Lisbon system's requirement of environmental factors to establish the link between an object and its geographical origin.

Article 56 of Law Number 20 also specifies the ground of refusal for an application seeking registration and protection of a GI.²⁵ Substantively, a GI cannot be registered if it contains matters of the following three types: (1) matters contrary with the state's ideology, national Laws and regulations, morality, religions, decencies, and public order; (2) matters deceptive to the public as to reputation, quality, characteristic, origin, production's process and/or function; and (3) matters using the name of a registered plant variety from the same genus, except if the name is added *via* use of a phrase indicating its geographical origin.²⁵ Additionally, an application to register a GI shall also be refused if a document depicting the description of a GI, commonly known as a "book of requirements," is incorrect. The application shall also be refused if the object is apparently or actually the same as an already registered GI.²⁵ Applicants may object to a formal refusal by submitting a case to the Indonesian Trademarks Appeal Commission.²⁵

Illegal use of a registered GI is regulated in Article 66.²⁶ Once a violation is clearly proven, it can be litigated in the Indonesian Commercial Court. Illegal or violative use of a GI can be in the following forms:

- a. Direct and indirect utilization of a GI which fails to qualify the specifications stated in the description of the GI;
- b. Direct and indirect utilization of a GI on other protected or unprotected goods and/or products with a clear intention to:
 - 1) Signify that the good and/or product is of the same quality as the good and/or product with GI protection;
 - 2) Gain economic benefit from the usage;
 - 3) Gain economic benefit from the reputation of a registered GI;
- c. Utilization of a GI that constitutes conduct deceptive to the public;
- d. Utilization of a registered GI by unauthorized person;
- e. Imitation or misappropriation that misleads the public about the true origin or the true quality of the good and/or product, which is shown on the packaging, advertisements, description of the

object, or through deceptive information about the true origin of the object and/or the object's contents;

- f. Any other deceptive conduct which potentially obscures the public's views as to the true geographical origin of the object; this category may also include confusion, dilution, deception and usurpation of a GI.²⁷

In order to improve Indonesian public compliance with Law Number 20, Indonesian IP Laws provide penal sanctions in all IP subject matters, including trademark and GI subject matters.²⁸ Because Law suits may result in penal or criminal sanctions, a Law suit should be initiated only as an *ultimum remedium* or last effort. Article 101(1) of Law Number 20 states that every person who illegally uses a sign that is exactly the same as a registered GI of a good and/or product in the same form or kind that is owned by another party, is sentenced to a maximum 4 year imprisonment and/or a maximum fine of 2,000,000,000 Indonesia Rupiah (IDR).²⁹ Similarly, Article 101(2) of the Law states that every person who illegally uses a sign that is substantially similar to a registered GI of a good and/or product in the same form or kind that is owned by another party, is also sentenced by a maximum 4 year imprisonment and/or a maximum fine of 2,000,000,000 IDR.³⁰

Influences of International Legal Instruments

Article 1.6 of Indonesian Law Number 20 defines a GI as the following:

*"[A]n indication which identifies the origin of a good and/or a product, where the geographical environment, including natural factor, human factor or the combination thereof is/are attributable to the reputation, quality, and certain characteristic of the good and/or product."*³¹

GI is defined in Article 22(1) of the TRIPS Agreement as the following:

*"[A]n indication which identifies a good as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin."*³²

An appellation of origin is defined in Article 2(1) of the amended 1958 Lisbon Agreement as the following:

"[T]he geographical denomination of a country, region, or locality, which serves to designate a product originating therein, the quality or

*characteristics of which are due exclusively or essentially to the geographical environment, including natural and human factors..."*³³

From the above definitions, it is fair to say the definition of GI in the Indonesian Legal System combines definitions provided by the TRIPS Agreement and the Lisbon Agreement. Why the Indonesian GI system is a combination of these two international systems is speculated below.

Firstly, the Indonesian definition describes the substantive scope of a GI as "an indication," exactly like the TRIPS Agreement. However, the protectable object in the Indonesian definition includes not only "goods," as substantiated in the TRIPS Agreement, but also "products." Products are a typical denominated scope of the Lisbon Agreement, which includes both goods and services. Thus, the Indonesian GI system can protect a good, service, or combination thereof. Interestingly, this breadth of protection is new. In old Indonesian Law on Trademarks Number 15 of the Year 2001, the protectable element of a GI was only for goods, and not for both goods and products or products alone.³⁴ Since Indonesia's system protects goods and products, it more closely resembles the Lisbon System, even though Indonesia neither is member to nor has ratified the Lisbon Agreement.

Secondly, the Indonesian system combines the TRIPS Agreement System (TRIPS System) and Lisbon Agreement System (Lisbon System) in establishing compulsory linkages between a product and its geographical origin. The TRIPS System requires a good to have or be of a certain quality, reputation or other characteristic that is reflective of its geographical origin.³⁵ In the TRIPS System, each requirement can only consist of one form, e.g. one quality or one characteristic, but form varies within the broad "other characteristic" category.

Differently, the Lisbon system requires a product to have a certain quality or other characteristic indicative of a geographical environment.³⁶ The Lisbon System also substantiates that the geographical environment shall include natural and human factors as accumulative factors.³⁶ These accumulative factors limit the Lisbon System's potential inclusivity of protectable products because the product must be substantially influenced by the natural environment. Natural or geographical environment factors include forestry, agricultural and animal husbandry practices and products. Moreover, in comparison with the TRIPS

System, the Lisbon System is more rigid making compliance more difficult. Indonesia strongly objects to the limitation and rigidity of the Lisbon System and stands for the flexibility of the TRIPS System.

The Indonesian System, in line with the TRIPS System, also requires reputation, quality and certain characteristic(s) of a good and/or product. However, unlike in the TRIPS System, these factors are not disjunctive. A product from a protected GI in Indonesia shall have reputation, quality and certain characteristic(s) altogether, as accumulative factors. Additionally, the Indonesian System put natural factor and/or human factor as the cause(s) of the subsisted reputation, quality and certain character of the product. In this regard, the Indonesian System is more meticulous than the TRIPS System, not for the sake of making registration and protection more complicated, but to ensure that only premium products receive protection. Politically, this meticulousity could also be seen as Indonesia's effort to integrate both TRIPS and Lisbon Systems into domestic Law.

Thirdly, the Indonesian System adopts the "linkage establishment" requirement from the Lisbon System that requires geographical environment factors as indicated above. However, the environmental factor should not be an accumulation of natural and human factors, as allowed in the Lisbon System. In Indonesian Law, it is more flexible. The factor can be solely natural, solely human, or both. This is why the objects of Indonesian GIs are not limited to only agricultural and food products. They can also include handicrafts or industrial products, whose human factor is the only predominant factor. Actually, Indonesia maintains its position as a non-member observer of the World Intellectual Property Organization (WIPO) multilateral negotiation of the Lisbon System³⁷ because of this accumulative factor differentiation. From the Indonesian point of view, requiring an accumulation of natural and human factors would hinder Indonesia's capability to protect many products that are based on traditional knowledge and traditional cultural expressions but that have no association with genetic resources.

It is important to note that Indonesian Law now regulates "indication of source" as an independent sub-system of GI protection. The Indication of source sub-system protects against unfair competition in business practices by simply requiring a product to indicate its true geographical origin.³⁸ There are special International legal instruments for protecting indications

of source, namely the Madrid Agreement for the Repression of False or Deceptive Indications of Source on Goods of 1891 (Madrid Agreement), all of the Madrid Agreement's more recent revisions and the 1967 Stockholm Act of the Paris Convention (Additional Act of Stockholm). Yet Indonesia has ratified none of these.

Article 1(1) of The Madrid Agreement regulates that "[a]ll goods bearing a false or deceptive indication by which one of the countries to which this Agreement applies, or a place situated therein, is directly or indirectly indicated as being the country or place of origin shall be seized on importation into any of the said countries."³⁹ Indonesia is not a member of the Madrid Agreement, but is a party to the Paris Convention for the Protection of Industrial Property (Paris Convention)⁴⁰ and a member of the TRIPS Agreement.⁴¹ The Paris Convention and its revisions mention indications of source and appellations of origin (instead of GIs). Thus, protection for an indication of source is recognized by Indonesian Law through Indonesia's ratification of the Paris Convention. The prohibition on the use of false or deceptive indications of source on goods in the Indonesian legal context can also be counted as one of appropriate measures to prevent or control licensing practices or conditions that may constitute an abuse of IP rights or have an adverse effect on competition in the relevant market, as highlighted in Article 40 of the TRIPS Agreement regulating anti-competitive practices in contractual licences.⁴² Indonesia's protection for indications of source is also provided in Articles 63, 64 and 65 of Law Number 20.⁴³

According to Article 26(1) of the Patent Law Number 13, 2016 (Law Number 13), there is a mandatory disclosure of origin for an invention that is based on genetic resource and/or traditional knowledge.⁴⁴ Article 26 further obligates the Indonesian Government to harmonize implementation of Law number 13 with other Laws and implementing regulations in Indonesia.⁴⁵ These *sui generis* provisions particularly refer to the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilization to the Convention on Biological Diversity (Nagoya Protocol).⁴⁶ Indonesia ratified the Nagoya protocol in Indonesian Law Number 11, 2013. According to Law Number 11, if a new invention uses goods that are based on a genetic resource or traditional knowledge already bearing an indication of source, patent protection for this new invention would be easier to obtain because the indication of source has already disclosed the origin of the good's resource.

Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions: Definitions and Scopes

In Indonesia, current understanding of genetic resources, traditional knowledge and traditional cultural expressions has been guided by legal constructions of scattered Laws and regulations, rather than a clear, comprehensive and unified Law. In late 2014, the House of Senate of the Republic of Indonesia tabled a bill of Law for protection of traditional knowledge and traditional cultural expressions. However, the House of Representatives blocked this draft. Previously, inter ministerial efforts were conducted in drafting a separate bill of Law to manage and protect genetic resources, but this draft did not draw sufficient attention from either Chambers of Parliament to even be tabled. Rather than domestic initiative, protection instead derives from ratified international legal instruments. Article 2 of the United Nations Convention on Biological Diversity (ratified by the Indonesian Law Number 5, 1994) defines “genetic resources” as genetic materials of actual or potential value.⁴⁷ The Convention also defines “genetic material” as any material of plant, animal, microbial or other origin containing functional units of heredity.⁴⁷

Considering the need to have a more concrete basis to implement the UN Convention on Biological Diversity, the Indonesian Government ratified the Nagoya Protocol.⁴⁸ This protocol urged the Minister of Environment and Forestry to endorse Regulation Number P34, 2017 (MEF Regulation Number P34) about acknowledgement and protection of local wisdom in the management of natural resources and the environment.⁴⁹ Article 1 of MEF Regulation Number P34 states the definitions of “genetic resources,” “local wisdom” and “traditional knowledge.” Genetic resource is defined as a genetic material that embodies actual and potential values.⁵⁰ Genetic resources are typically the body of a plant, animal or micro-organism which has a function and ability to inherit character.⁵¹ Local wisdom is defined as a set of noble values that guides the way of life for a local community, including values to protect and manage the sustainability of the environment and natural resources.⁵² Traditional knowledge is a part of local wisdom, a source of knowledge acquired from intellectual activity in a traditional context, as well as skill, innovation, and practices of indigenous and local communities.⁵³ Traditional knowledge includes written and unwritten traditional ways of life that is transmitted through generations and related to the sustainable

protection and management of the environment and natural resources.⁵⁴

Based on the above Indonesian legal definitions, a genetic resource can be a plant, animal or micro-organism such as bacteria, viruses or fungi. Differently, traditional knowledge refers to a traditional technique or practice, such as traditional techniques in building houses, markets or dams; traditional techniques in irrigation, hunting, fishing, farming, weaving or cooking; and techniques in traditional healing practices, including traditional medicines, tribal cosmetics, or other skills, innovation and practices invented and maintained by the communities in their traditional contexts. On these subject matters, Law Number 13 provides a *sui generis* article about a mandatory disclosure of origin for any invention based on genetic resources or traditional knowledge.⁵⁵

Presently, there is no legal definition for “traditional cultural expression” in international legal instruments. Traditional cultural expression is typically defined by an ad-hoc, working definition in multilateral negotiations, especially in the WIPO forum.⁵⁶ However, the 2005 UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions (ratified by Indonesian Government Regulation Number 78, 2011) provides a certain extent of concrete guidance.⁵⁷ Article 4.3 of the Convention defines “cultural expressions” as those expressions with a cultural content and resulting from the creativity of individuals, groups and societies.⁵⁸ Accordingly, a *traditional* cultural expression could simply be a cultural expression with additional traditional character in its cultural content. Indonesian Law Number 28, 2014 about Copyrights (Law Number 28) regulates *sui generis* protection of traditional cultural expressions with special treatment.⁵⁹ For example by recognizing that the holders or owners of traditional cultural expressions are communities and not individuals.⁵⁹

Different from traditional knowledge, traditional cultural expressions are about an expression, which can be tangible or intangible. An expression embodies traditional values of its community. Tangible examples include handicrafts or tools made through application of traditional knowledge. An intangible example, *Woleka Dance*—from the indigenous villages of Tarung and Waitabar in Sumba Island, East Nusa Tenggara, Indonesia—is a traditional cultural expression in the form of an ancient tribal

dance. This dance is performed by girls wearing traditional black woven clothes named *Ye'e Mete Bolo*. The exotic darkness of *Ye'e Mete Bolo* is another type of a traditional cultural expression. Like *Woleka Dance* the clothing derives from traditional weaving and coloring techniques, specifically originating in the western part of Sumba Island,⁶⁰ yet *Ye'e Mete Bolo* clothes are tangible goods as opposed to an intangible dance technique.

In the draft of Indonesian Government Regulation on Traditional Cultural Expressions dated 17 February 2018, traditional cultural expressions include all forms of creative works (tangible, intangible or a combination thereof) that indicate the existence of traditional cultures and that are held by communal right holders in an inter-generational context.⁶¹ Traditional cultural expressions can be in the form of verbal and textual expressions, songs, music, moves, dances, various performing arts, theatres, visual arts, vernacular architectures, landscapes, and more. Sacred rituals and ceremonies may also be regarded as traditional cultural expressions.⁶²

GI Products in Indonesia

Over a span of ten years—since endorsement of Government Regulation Number 51, 2007 about GIs⁶³ until the end of 2017—Indonesia registered 63 products under the protection of its GI system. Only six of these 63 are foreign GIs.¹ Based on successful applications for GI protection, the Association of Geographical Indications of Indonesia categorizes Indonesian “GI products” in 7 groups: coffees, food plants, spices, fruits, woven clothes, tobaccos, and mix commodities. Foreign GIs that have been registered in Indonesia fall into three categories: alcoholic beverages, cheese and silks.⁶⁴ Coffees, food plants (or food crops), spices, tobaccos, alcoholic beverages and cheese are made from genetic resources. Some are the result of traditional culinary techniques. Table 1 demonstrates the relationships between many of Indonesia’s registered GI products and the genetic resources, traditional knowledge and/or traditional cultural expressions from which they derive.

Indonesian GI system: Extent of Protection

The question of whether a GI system can be used to protect genetic resources, traditional knowledge and traditional cultural expressions remains unanswered. In this regard, Table 1 illustrates a number of important points in the Indonesian legal context. *Firstly*, The GI system in Indonesia protects a number

of genetic resource based products in the form of foods and agricultural products, notably: coffees, teas, rice, potatoes, spices, fruits, tobaccos, vegetables, vegetable oils, herbs, nuts and sugar. It also protects products that are derived from animal husbandry, such as milk and honey. The types of genetic resource based products which may enjoy protection can be expanded as long as they meet criteria set forth in Law Number 20.

Secondly, the GI system in Indonesia also protects traditional knowledge and traditional cultural expressions. Examples include various types of woven clothes and Jepara furniture. Historically, Jepara furniture was made with wood sourced from the Jepara area.¹⁰¹ However, by the time Jepara furniture became a registered GI product, the geographical area of Jepara no longer included forests.¹⁰² Yet, the traditional technique of carving Jepara furniture and the depiction of unique ornaments on Jepara furniture were maintained by the Jepara craftsmen, meaning Jepara furniture was granted GI protection of solely based on a human factor. Equally noteworthy, several types of woven clothes—except those colored with organic dyes sourced from plants, predominantly made for wealthy consumers—are produced without any association with a genetic resource, and continue to receive GI protection.

Thirdly, traditional knowledge subsisted in all GI products in Indonesia until the end 2017, even though the intentions of obtaining GI registrations for the products were neither to preserve nor exploit the economic benefits of traditional knowledge, *per se*. This requirement of traditional knowledge derivation for a protected genetic resource based product seeks to ensure there exists a strong link between the product and its designated area of production, especially by denoting local producers as a human factor accompanying the natural factor. In the case of GI protected handicrafts, traditional knowledge was more important because it became a sole factor to establish the link.

Most of the traditional knowledge embodied in the products, however, was not regarded as exceptionally valuable or protection-worthy because scientific research on the products found substantial weaknesses in the traditional knowledge used to plant, cultivate and package the products.¹⁰³ Researchers argued that some plants were not planted well enough or cultivated strongly enough to resist pests, could not be massively cultivated, and were suspected of being contaminated by bacteria in the process of packaging.

Table — 1: Relationship between Indonesia's registered GI products and the genetic resources, traditional knowledge and/or traditional cultural expressions

A. Coffees

S. No.	Name	Origin	Genetic Resource ⁶⁵	Traditional Knowledge	Traditional Cultural Expression
1	Kintamani Arabica Coffee	Kintamani highland, Bali Island	<i>Coffea arabica L.</i>	Subak watering technique, post harvesting technique ⁶⁶	-
2	Gayo Arabica Coffee	Gayo Plateau, Nangroe Aceh Darussalam Special Province, Sumatera Island	<i>Coffea arabica L.</i>	Traditional agro-forestry system ⁶⁷	-
3	Flores Bajawa Coffee	Flores Island, East Nusa Tenggara Province	<i>Coffea arabica L.</i>	Ngada tribal organic processing technique ⁶⁸	-
4	Kalosi Enrekang Arabica Coffee	Enrekang Regency, South SuLawesi, SuLawesi Island	<i>Coffea arabica L.</i>	Traditional marketing of Enrekang traders ⁶⁹	-
5	Java Preanger Coffee	11 mountains of <i>Priangan</i> (Preanger), West Java Province, Java Island	<i>Coffea arabica L.</i>	Cultivating and processing 6 plant varieties of coffees into various flavors ⁷⁰	-
6	Java Ijen Raung Coffee	Ijen and Raung mountains, East Java, Java Island	<i>Coffea arabica L.</i>	Agro-forestry plantation technique ⁷¹	-
7	Toraja Arabica Coffee	Tana Toraja Highlands, South SuLawesi Province, SuLawesi Island ⁷²	<i>Coffea arabica L.</i>	Traditional plantation technique ⁷³	-
8	Java Sindoro Sumbing Coffee	Sindoro Sumbing mountains, Central Java Province, Java Island	<i>Coffea arabica L.</i>	Traditional plantation technique ⁷⁴	-
9	Sumatera Simalungun Coffee	Simalungun regency, North Sumatera, Sumatera Island	<i>Coffea arabica L.</i>	Traditional plantation technique ⁷⁵	-
10	Sumatera Mandailing Coffee	Mandailing region, North Sumatera Province, Sumatera Island	<i>Coffea arabica L.</i>	Traditional plantation technique	'Kopi Takar' serving tradition ⁷⁶
11	Sumatera Koerintji Coffee	Kerinci mountain, Jambi Province, Sumatera Island	<i>Coffea arabica L.</i>	Traditional plantation technique ⁷⁷	-
12	Sumatera Lintong Coffee	Lintong region, North Sumatera Province, Sumatera Island	<i>Coffea arabica L.</i>	Traditional plantation technique ⁷⁸	-
13	Lampung Robusta Coffee	Lampung Province, Sumatera Island	<i>Coffea canephora Pierre</i>	Traditional cultivation technique ⁷⁹	-
14	Semendo Coffee	South Sumatera Province, Sumatera Island	<i>Coffea canephora Pierre</i>	Local wisdom in cultivation techniques ⁸⁰	-
15	Temanggung Coffee	Temanggung Regency, Central Java Province, Java Island	<i>Coffea canephora Pierre</i>	Traditional agricultural technology ⁸¹	-
17	Empat Lawang Coffee	South Sumatera Province, Sumatera Island	<i>Coffea canephora Pierre</i>	Traditional bean-processing technique ⁸²	-
18	Pinogu Coffee	Pinogu region, Gorontalo Province, SuLawesi Island	<i>Coffea canephora Pierre</i>	Traditional plantation and processing techniques ⁸³	-
19	Pupuan Bali Coffee	Pupuan region, Bali Island	<i>Coffea canephora Pierre</i>	Subak watering technique, post harvesting technique	-
20	Tambora Coffee	Tambora mountain, Sumbawa Island, East Nusa Tenggara Province	<i>Coffea canephora Pierre</i>	Traditional plantation and roasting technique ⁸⁴	-

(contd.)

Table — 1: Relationship between of Indonesia's registered GI products and the genetic resources, traditional knowledge and/or traditional cultural expressions (contd.)

S. No.	Name	Origin	Genetic Resource	Traditional Knowledge	Traditional Cultural Expression
21	Tungkal Jambi Coffee	Tungkal region, Jambi Province, Sumatera Island	<i>Coffea liberica Bull</i>	Traditional plantation technique ⁸⁵	-
22	Rangsang Meranti Coffee	Meranti mountain, Riau Province, Sumatera Island	<i>Coffea liberica Bull</i>	Traditional plantation technique	-
B. Food Crops					
1	Adan Krayan Rice	North Kalimantan Province, Kalimantan Island	<i>Oryza sativa</i>	Indigenous farming technique of Krayan white rice ⁸⁶ and food processing techniques	Serving traditions of rice as main courses or snacks
2	Pandanwangi Cianjur Rice	Cianjur Regency, West Java Province, Java Island	<i>Oryza sativa</i>	Traditional technique of wet land farming ⁸⁷ and food processing techniques	Serving traditions of rice as main courses, snacks or a part of offerings
3	Cilembu Sweet Potatoes	Cilembu Village, Sumedang Regency, West Java Province, Java Island	<i>Ipomoea batatas</i>	Traditional techniques of drying, ripening and ash baking	Serving traditions as snacks
C. Spices					
1	Muntok White Pepper	Bangka Belitung Islands, Bangka Belitung Province	<i>Piper nigrum L. (merica)</i>	Traditional technique of processing ⁸⁸	-
2	Lampung Black Pepper	Lampung Province, Sumatera Island	<i>Piper nigrum L.</i>	Traditional technique of farming ⁸⁹	-
3	Siau Nutmeg	Siau Island, Sangir Archipelago, North Sulawesi Province ⁹⁰	<i>Myristica fragrans Houtt</i>	Traditional technique of harvesting ⁹¹	-
4	Tomandin Fak-fak Nutmeg	Fak-fak Regency, West Papua Province, Papua Island	<i>Myristica argentea</i>	<i>Mbaham Matta</i> tribal medicine ⁹² and spice	-
5	Minahasa Clove	Minahasa Regency, North Sulawesi Province, Sulawesi Island	<i>Syzygium aromaticum</i>	Traditional technique to process and serve the clove ⁹³	-
6	Moloku Kie Raha Clove	<i>Moloku Kie Raha</i> Sultanates, Moluccas Archipelago, Maluku Province	<i>Syzygium aromaticum</i>	Indigenous technique to process and serve the clove ⁹⁴	-
7	Alor Archipelago Vanilla	Alor Archipelago, East Nusa Tenggara Province	<i>Vanilla planifolia Andrews</i>	Traditional plantation technique ⁹⁵	-
8	Koerintji Cinnamon	Kerinci Mount, Jambi Province, Sumatera Island	<i>Cinnamomum burmannii (Cassia vera)</i> ⁹⁶	Local wisdom of cultivation technique ⁹⁷	-
D. Fruits					
1	Pondoh Sleman Snake Fruit	Sleman Regency, of Yogyakarta Special Region, Java Province	<i>Salacca zalacca</i>	Traditional plantation technique	-
2	Dieng Carica	Dieng Plateau, Central Java Province, Java Island	<i>Vasconcellea cundinamarcensis</i>	Traditional technique to process the fruits into eatable sweets	-
3	Gayo Aceh Keprok Orange	Gayo Pateau, Aceh Province, Sumatera Island	<i>Citrus reticulata</i>	Traditional plantation technique ⁹⁸	-
4	So'e Mollo Orange	So'e Regency, Timor Island, East Nusa Tenggara Province	<i>Citrus reticulata</i>	Traditional plantation technique ⁹⁹	-
5	Sukatali Sapodilla	Sumedang Regency, West Java Province	<i>Manilkara zapota</i>	Traditional plantation technique ¹⁰⁰	-

(contd.)

Table — 1: Relationship between of Indonesia's registered GI products and the genetic resources, traditional knowledge and/or traditional cultural expressions (*contd.*)

S. No.	Name	Origin	Genetic Resource	Traditional Knowledge	Traditional Cultural Expression
6	Komering <i>Duku</i> (<i>Duku Komering</i>)	Ogan Komering Regency, South SuLawesi Province, Sumatera Island	<i>Lansium domesticum</i>	Komering tribal plantation technique	-
E. Woven Clothes					
1	Mandar Silk Woven Clothes	Polewali Mandar Regency, West SuLawesi Province, SuLawesi Island	-	Traditional technique to weave the silk	Mandar texture, ornaments and costumes
2	Sikka Ikat Woven Clothes	Sikka Regency, East Nusa Tenggara Province	-	Traditional technique to weave the ornaments of the clothes	Sikka texture, ornaments and costumes
3	Tanimbar Ikat Woven Clothes	Tanimbar Archipelago, Maluku Province	-	Traditional technique to weave the ornaments of the clothes	Tanimbar texture, ornaments and costumes
4	Gringsing Ikat Woven Clothes	Bali Province, Bali Island	-	Traditional technique to weave the ornaments of the clothes	Gringsing texture, ornaments and costumes
F. Tobacco					
1	Sumedang Black Tobacco	Sumedang Regency, West Java Province, Java Island	<i>Nicotiana</i>	Traditional technique to plant, cut and dry the black tobacco	-
2	Sumedang <i>Mole</i> Tobacco	Sumedang Regency, West Java Province, Java Island	<i>Nicotiana</i>	Traditional technique to plant, cut and dry the white tobacco	-
3	Srinthil Temanggung Tobacco	Temanggung Regency, Central Java Province, Java Island	<i>Nicotiana</i>	Traditional technique to plant, cut and dry the tobacco	-
G. Various Commodities					
1	Jepara Furniture	Central Java Province, Java Island	-	Traditional technique to carve the furniture	Jepara furniture ornaments
2	Sumbawa Mare Milk	Sumbawa Island, West Nusa Tenggara Province	-	Traditional technique to produce and preserve the milk	-
3	Sumbawa Forest Honey	Sumbawa Island, West Nusa Tenggara Province	-	Traditional technique to obtain and preserve the forest honey	-
4	Lombok Water Spinach	Lombok Island, West Nusa Tenggara Province	<i>Ipomoea aquatica</i>	Traditional technique to plant the spinach water	-
5	Aceh Patchouli Oil	Aceh Province, Sumatera Island	<i>Pogostemon cablin</i>	Traditional technique to extract the oil	-
6	Sidoarjo Smoked Milkfish	Sidoarjo Regency, East Java Province, Java Island	<i>Chanos chanos</i>	Traditional technique to smoke the milkfish	-
7	Kubu Bali Cashew Nut	Kubu Village, Bali Province, Bali Island	<i>Anacardium occidentale</i>	Traditional technique to dry and fry cashew nut	-
8	Muna Cashew Nut	Muna Regency, South East SuLawesi Province, SuLawesi Island	<i>Anacardium occidentale</i>	Traditional technique to dry and roast the cashew nut	-

(contd.)

Table — 1: Relationship between of Indonesia's registered GI products and the genetic resources, traditional knowledge and/or traditional cultural expressions (*contd.*)

S. No.	Name	Origin	Genetic Resource	Traditional Knowledge	Traditional Cultural Expression
9	Kulon Progo Palm Sugar	Kulon Progo Regency, Yogyakarta Special Region, Java Island	<i>Cocos nucifera</i>	Traditional technique to produce the palm sugar	-
10	Purwaceng Dieng Herbal Viagra	Dieng Plateau, Central Java Province, Java Island	<i>Pimpinella pruatjan</i>	Traditional technique to transform the roots of the plant into the herbal viagra	-
11	Amed Bali Salt	Amed Coastal Village, Bali Province, Bali Island	-	Traditional technique to produce the sea salt	-
12	Java Preanger Tea	14 mountains in West Java Province, Java Island	<i>Camellia sinensis O. Kuntze</i>	Traditional technique to plant, dry and cut the tea	-

Simultaneously, the standard of quality necessary for products to be worthy of GI protection continued to be premium. So to increase quality, traditional farmers were advised to get involved in capacity building programs. In these programs, instead of being advised to preserve their traditional knowledge related to farming, the farmers were encouraged to modify traditional techniques and adopt more modern practices.

Fourthly, some GI products have associations with traditional cultural expressions, especially regarding how products are served. In other words, the traditional cultural expressions for these products were characterized more so by the final appearance of a product than by traditional knowledge used in processing or blending the raw products. Thus, the traditional cultural expressions were not the main factors of protection, but of commercialization.

Drinking products including *Coffea arabica L.* (Arabica coffee), *Coffea canephora Pierre* (Robusta coffee) and *Coffea liberica Bull* (Liberica coffee) from different places and regions in Indonesia dominated the registered GIs in Indonesia until the end of 2017. They were sold not only in packages of raw and roasted coffee beans or grinds, but also as liquid coffee. In addition to these coffees, *Camellia sinensis O. Kuntze*—a tea from the mountains of West Java Province registered under the GI of Java Preanger Teas also sold in both raw form and a ready-to-drink, liquid form. Two examples of culinary expressions specific to how coffee should be served and consumed are *Kopi Takar* (Takar coffee) for Sumatera Mandailing coffee and *Kopi Tubruk* (Tubruk coffee) for coffees originated from Java and Bali Islands. Both the *Kopi Takar* and *Kopi*

Tubruk registrations embody both traditional knowledge in how to process coffee beans and traditional cultural expressions of how to serve coffee beverages.

From the food products sector, most *Ipomoea batatas* (sweet potatoes) from Cilembu Sumedang are sold as raw products in traditional markets and retail stores. Interestingly, several department stores in Bandung also sell *Ipomoea batatas* ready-to-eat snacks after first baking the potatoes in modern ovens,¹⁰⁴ presumably since the unique reputation of the potatoes relates as much to the distinctive honey-sweet flavor resulting from baking as to their geographical origin from the Cilembu village in Sumedang Regency. Many consumers believe the aroma would be better if the potatoes were baked in a traditional way by covering them with hot firewood ashes as villagers traditionally did in Cilembu. Cilembu villagers traditionally serve the sweet potatoes from the hot ash along with a glass of Sundanese bitter tea, constituting a unique traditional culinary expression, especially if served in a traditional ambiance.

Types of *Oryza sativa*,¹⁰⁵ especially *Adan Krayan Rice* and *Pandan Wangi Cianjur Rice*, are both sold as packaged raw products and served in a traditional manner. Since most Indonesian across various regions eat rice as a main dish, resulting in many traditional types of rice, many traditional ways of processing rice, and many traditional culinary expressions of serving rice exist. In some tribes and indigenous communities, rice is also used as a part of spiritual celebrations and ritual offerings. In particular is a good example of this, as it is primarily cultivated by the Dayak Lundayeh indigenous tribes of North

Kalimantan, where use of rice in sacred ceremonies is indispensable.¹⁰⁶ The Dayak tribe known as Kaharingan, in particular, is an example of an indigenous tribe where rice is central to ceremonial celebrations.¹⁰⁶

Problems of Indonesia's Existing GI System

From the discussion above, it is evident that the GI system in Indonesia can be used to protect plant-based genetic resources for food and agricultural products that are based on traditional knowledge associated with corresponding genetic resources, as well as tangible traditional cultural expressions like handicrafts. However, four outstanding problems exist with Indonesia's current GI system.

First, Indonesia's GI system cannot protect a derivative genetic resource that has been transformed by sophisticated technology into a completely different and novel form. This is because the latter, transformed product has lost its environmental character and has become more industrial than reflective of place. Moreover, such transformed and unprotectable products are usually invented by an individual expert in a modern scientific laboratory rather than by an indigenous or local community in their traditional context. An example of a transformed product is those modern skin cosmetics that use modern technology to transform a fungus into a particular form suitable for use in the cosmetics; this form of the fungus is different from the natural form traditionally used to ferment a traditional Indonesian soy bean cake.¹⁰⁷ Because the fungus needs to be transformed in a modern laboratory before it can be used in cosmetics, the final cosmetic products should be registered as patent products and not GI products since such laboratory formation is completely alienated from its geographical origin.

There is also no evidence that Indonesia's GI system can protect traditional knowledge that has no association with a genetic resource, such as traditional techniques in land watering, food processing, weather forecasting, compassing, building various vernacular or tribal houses and more. Nor is the system useful in protecting intangible traditional cultural expressions such as traditional dances, traditional sports, oral traditions, sacred ceremonies, rituals and traditional songs and musics. In short, the current GI system in Indonesia is useful for protecting many types of genetic resources, traditional knowledge and traditional cultural expressions, but not all types.

Second, protection seems to take a prolonged length of time to acquire. This is primarily due to challenges presented when identifying or establishing rights holders. The slow examination process inside the DGIP Office is not the primary culprit, instead it is often difficult to establish a solid community that can be identified as the right holders in the first place. In Indonesia, rights to use protected GIs on products are held by different communal formations. These formations need prior consolidation and empowerment before they are ready to apply for the protection. Readying these formations depends heavily on governmental approval, and approval often prolongs for more than 3 years. As a result, today—more than 10 years after endorsement of Government Regulation Number 51, 2007 specifying and clarifying the registration process—the amount of registered GIs in Indonesia remains considerably small. Even though in recent Law Number 20, its compulsory document of description of a GI is shorter and provides more clarity and efficiency, the prior community empowerment and recognition continues to necessitate much time.

Third, the inclusive or exclusive nature of a GI right is unclear for traditional knowledge and traditional cultural expressions. In the Indonesian legal system, the nature of the right to use a GI is defined as an exclusive right held by a community. However, it remains unclear whether the rights to traditional knowledge and traditional cultural expressions are exclusive or inclusive. If inclusive, then the group of communal holders of the right could expand to include non-members of the local community, so long as the non-members have been using the knowledge or the expression in good faith and taking an active role in preservation and enhancement of the expression.

Many traditional dances, songs and foods in Indonesia exhibit an inclusive nature. For example, Balinese or Yogyakarta traditional dances are inherited and maintained by local communities across the Bali Island and in the Yogyakarta Special Region of Java Island. Yet, many professional dancers who perform, teach, and introduce the beauty of the dances to students and audiences around the world actually originate from different regions, different islands and even different countries. An inclusive nature of the right to "use" (perform, teach, etc.) Balinese or Yogyakarta traditional dances would allow recognition of non-Balinese and non-Yogyakartaese

dancers as additional right holders. The good faith element would require these additional holders to obtain authority from the main maestros of the dances, and to maintain the trust of local communities that the potential holders would preserve and develop the dances in line with original traditions.

Additionally, an inclusive nature is stipulated in the bill of a government regulation about traditional cultural expressions.¹⁰⁸ This draft seeks to implement Article 38(4) of Law Number 28 (about copyrights), which is specifically on point for protection of traditional cultural expressions.¹⁰⁹ However, Law Number 28 also includes the possibility for traditional cultural expressions to be considered an exclusive right.¹¹⁰ For example, “*Legong*” is a genre of Balinese traditional dances that has been inscribed as an intangible cultural heritage.¹¹¹ “*Legong Keraton Peliatan*” traditional dance in particular is from the Peliatan village of Ubud in Bali Island and is protected as an inclusive and community based traditional cultural expression. On the other hand, “*Legong Sampek Eng-Tay*,” a specific but different type of Legong traditional dance has the potential to be protected as an exclusive and individual right. This is because “*Legong Sampek Eng-Tay*” was created by an individual choreographer for the Ayu Bulan Traditional Dance Group as a modification of a Chinese love story.¹¹² To make matters more convoluted, the Ayu Bulan group is known for preserving and teaching both “*Legong Keraton Peliatan*” and “*Legong Sampek Eng-Tay*” outside of Bali Island.¹¹³ So while the right to “*Legong Sampek Eng-Tay*” alone may seem exclusive and individually held, the group’s sharing of both Legong dances seems to be an exercise of an inclusive and community held right. But again in contradiction to the latter inclusive character, a general compilation of pictures and stories about various Balinese Legong dances, including “*Legong Keraton Peliatan*” and “*Legong Sampek Eng-Tay*” could also be protected as an individual and exclusive right of the author of the compilation.

Fourth, defining the geographical area where a potential GI product originates may prove problematic. Many potential products in Indonesia originate from areas that extend beyond the borders of just one administrative locality, regency or province.¹¹⁴ The difficulty in such situations is the time and effort required to determine such a cross-border geographical area. While most likely difficult,

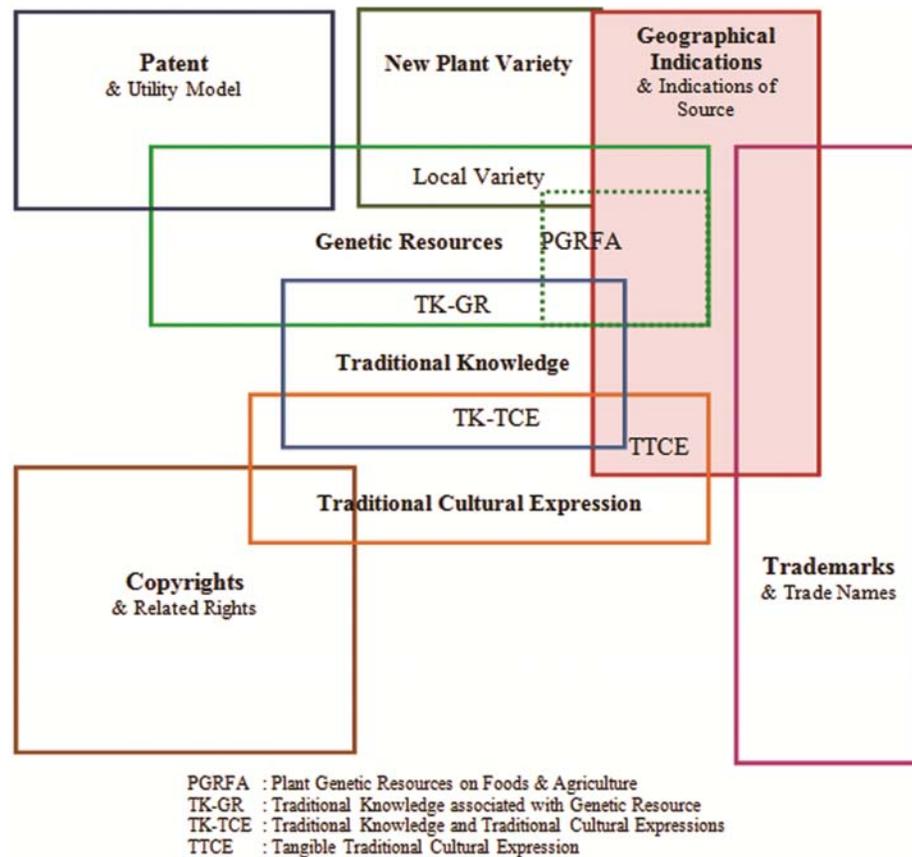
a cross-border geographical area is not impossible to determine. However, if the area is an international cross-border geographical area between two or more countries, the problem is likely unsolvable in Indonesia’s current GI system.

Limitations of the Indonesian GI Protection System

The limitations of Indonesia’s GI system, as well as the intersection in Indonesia between GIs and other conventional IP protection systems in providing comprehensive protection for genetic resources, traditional knowledge and traditional cultural expressions is depicted in the Fig. 1.

Geneva Act of the Lisbon Agreement

In regard to the problems and limitations of Indonesia’s GI protection system, the latest development in WIPO multilateral negotiations in the WIPO forum may lead to changes in the Indonesian System. In particular, negotiations surrounding the 2015 Geneva Act of the Lisbon Agreement on Appellations of Origin and Geographical Indications (Geneva Act) adopted in May 2015,¹¹⁵ may prove most effectuating. The Geneva Act attempts to resolve several issues. The first issue is the inability of the original 1958 Lisbon Agreement to attract more member countries, irrespective of 1967 revisions and 1979 amendments. The Geneva Act also attempts to resolve concerns surrounding the afore mentioned rigidity of the Lisbon protection system. Endorsement of the TRIPS Agreement, while perhaps well-intended, actually exacerbated concerns regarding GIs because the TRIPS System seemingly went too far in the opposite direction. Except with respect to the TRIPS System’s endorsement of second level protection for wines and spirits, the TRIPS system seems too flexible for Indonesian acceptance. Finally, the Geneva Act attempts to address the growing interest of developed countries in WIPO multilateral negotiations to provide a pragmatic and workable system that would protect genetic resources, traditional knowledge and traditional cultural expressions. The communal nature of right holders for a GI is in line with the communal nature of general custodianship held by indigenous and local communities of genetic resources, traditional knowledge and traditional cultural expressions. By holistically aligning protection opportunities and addressing key concerns, protection for GIs appears promising in Indonesia as a result of the Geneva Act.



Figure—1: Intersection in Indonesia between GIs and other conventional IP protection systems

The Geneva Act includes a number of important points, at least partially due to combining protections provided in the Lisbon System and the TRIPS System. Like the TRIPS Agreement, the Geneva Act requires full compliance of its members,¹¹⁶ yet it is more flexible than the Lisbon Agreement. The Geneva Act also allows members to choose whether they would like to become a member of both the Lisbon Agreement and the Geneva Act, or the Geneva Act only.¹¹⁷ The only prerequisite for members to become a member of Geneva Act is that members must be a member of Paris Convention.¹¹⁸ Another important point of the Geneva Act is its scope of protection. The Geneva Act extends the strength of the TRIPS System's second level protection to products other than wines and spirits.¹¹⁹ Additionally, the Geneva Act introduces innovative language that would allow a product originating from a cross border geographical area to obtain protection.¹²⁰ The protection would first require bilateral or regional agreement between two or more related countries, followed by joint application for protection through a commonly designated competent authority.¹²¹

Indonesia has already registered a number of handicrafts as GI products, based on Indonesian traditional cultural expressions of local producers that have no connection with any genetic resource. Under the Geneva Act, these handicrafts and other registered GI products, enjoy stronger protection than the baseline protection provided in TRIPS. According to the minimum standard protection principle of TRIPS, Indonesian domestic Law does not violate any obligations of the TRIPS Agreement and the products can be marketed safely in Indonesia as protected GI products.¹²² In other words, contracting parties whose legal means by which to protect a GI are already established in their home country, may continue to enjoy international protection for handicrafts to the extent allowed in parties' domestic legal systems.¹²² However, handicrafts will not be eligible for registration under an appellation of origin, nor can handicrafts enjoy stronger protection than that which is provided in the Lisbon System's member countries' domestic Law.¹²² Moreover, Indonesia does not further regulate the protection for appellation of origins in Law Number 20 like it does for GIs and indications of source.

Ultimately, Indonesia's objections to the 1958 Lisbon System and its 1979 revision are resolved in the Geneva Act. The Geneva Act does not require its members to first become members of 1958 Lisbon Agreement, which abates concerns about the Lisbon System's rigidity. Furthermore, in its full title the Geneva Act uses both the TRIPS Agreement's term "geographical indications" along with the Lisbon Agreement's term "appellation of origins," making the scope of protection more attractive to contracting parties, including Indonesia. It implies that the TRIPS System for GIs has placated concerns on the TRIPS System's flexibility. Thus, Indonesia may strongly consider becoming a member of Geneva Act, thereby adopting more means by which to protect GI products deriving from genetic resources, traditional knowledge and traditional cultural expressions.

Conclusion

The GI protection system in Indonesia successfully protects a number of food and agricultural products derived from plant genetic resources, traditional knowledge associated with genetic resources and tangible traditional cultural expressions, especially handicrafts. However, because of their geographical nature, GIs cannot protect modern technological inventions that include derivative or transformed genetic resources, traditional knowledge without genetic resource association, intangible traditional knowledge, or intangible traditional cultural expressions. GIs can protect several types of products that embody genetic resources, traditional knowledge and traditional cultural expressions, but not all. Indonesia's GI system is very useful in providing protection for end-products of some genetic resources and tangible traditional cultural expressions, but not for traditional knowledge *per se*.

Over the past five years, in addition to the GI protection system, the Indonesian Government has taken notable efforts to protect genetic resources, traditional knowledge and traditional cultural expressions in Indonesia. Some results of these efforts include the following: provisions for traditional cultural expressions inserted into Copyright Law; mandatory disclosure of origin for inventions derived from genetic resources or traditional knowledge in Patent Law; ratifications of international legal instruments dealing with access to a number of plant genetic resources for foods and agriculture; benefit

sharing on the utilization of genetic resources and traditional knowledge associated with genetic resources; and implementation of the regulation about protection of local wisdom in the context of environmental protection and management. There is also a new Law, endorsed in late 2017, dedicated to cultural development that includes protection for and enhancement of traditional knowledge and traditional cultural expressions. All laws and regulations are expected to function harmoniously and in compliment to one another.

However, there are a number of bills of Law and implementing regulations which have yet to be enacted, including: the bills of Law on genetic resources management; the bill of Law on indigenous communities; and the bill of Law implementing regulation on the protection of traditional cultural expressions. These bills require resolution, otherwise the problem of legal standing for indigenous communities seeking to protect their traditional knowledge and traditional cultural expressions would remain unresolved in the Indonesian Legal System. These bills also require careful consideration of complications that may arise when the laws and regulations disseminate. On this front and of primary concern, the considerably non uniform or low awareness levels of new laws and regulations throughout Indonesian society would make both dissemination and compliance most challenging.

Sui generis legal means primarily focused on the protection of genetic resources, traditional knowledge and traditional cultural expressions remain necessary for the future of Indonesia, especially to preserve the following: traditional knowledge that lacks any direct association with genetic resources, traditional medicines and cosmetics; traditional knowledge in environmental management systems; intangible traditional knowledge; sacred and secret traditional knowledge; and vast types of local wisdom that lack direct linkage to environmental preservation and management issues.

The Geneva Act addresses many of Indonesia's concerns surrounding the Lisbon and TRIPS Agreements, especially in resolving international cross-border protection issues and expanding the international market for Indonesian GI products of handicrafts into the Lisbon Agreement's member countries. However, aside from the many advantages offered in the Geneva Act, there exists a serious challenge in Indonesia. Currently, the amount of

registered domestic GIs remains much higher than the amount of foreign GIs. Ratification of the Geneva Act could invert the ratio of Indonesian to foreign registered GIs if the awareness of potential right holders in Indonesia cannot be increased. If ratified, Indonesia would also need to be prepared for tougher competition in local markets that would certainly become playing fields for more foreign competitors. Empowerment of those communities who would be right holders of potentially registered GIs should be the first priority, before Indonesia ratifies the Geneva Act.

References

- Direktorat Jenderal Kekayaan Intelektual Kementerian Hukum dan Hak Asasi Manusia RI (Directorate General of Intellectual Property, Ministry of Justice and Human Rights, Republic of Indonesia, E-Indikasi Geografis (E-Geographical Indications), ig.dgip.go.id).
- Interview with Riyaldi, *Tim Ahli Indikasi Geografis* (Geographical Indication's Team of Experts), Directorate General of Intellectual Property, Ministry of Justice and Human Rights, Republic of Indonesia; Head of *Asosiasi Indikasi Geografis Indonesia* (Indonesian Geographical Indications' Association), Jakarta (accessed on 26 April 2018).
- Badan Pembinaan Hukum Nasional, Kementerian Hukum dan HAM Republik Indonesia* (National Law Development Agency, Ministry of Justice and Human Rights), *Indonesia Merupakan Negara Kepulauan Terbesar Di Dunia* (Indonesia is the biggest Archipelago Country in the World), *Warta BPHN* (28 October 2015) <bphn.go.id>.
- Suryadinata L, Arifin E N & Ananta A, *Indonesia's Population: Ethnicity and Religion in a Changing Political Landscape*, Indonesia's Population Series No. 1, 2003, ISBN: 978-981-230-218-2, 1-194.
- Antara, *Indonesia's Cultural Diversity Unparalleled*, Embassy of the Republic of Indonesia, Oslo, Norway (30 May 2012), <http://indonesia-oslo.no/indonesias-cultural-diversity-unparalleled/>; *13 Cultural Diversity in Indonesia*, Facts of Indonesia (2017), <https://factsofindonesia.com/cultural-diversity-in-indonesia> (accessed on 6 January 2019); Rintelen K von, Arida E & Hauser C, A review of biodiversity-related issues and challenges in mega diverse Indonesia and other Southeast Asian countries, *Rio Journal*, (accessed on 11 Sept 2017), <https://riojournal.com/article/20860>.
- Law Number 20, 2016 about Trademarks and Geographical Indications [hereinafter Law Number 20] (Indonesia).
- Tarigan M, Opening Speech of Mr. Freddy Harris, Director General of Intellectual Property, *Training of Trainers on Geographical Indications for Provincial Government, Directorate General of Intellectual Property, the State Secretariate for Economic Affairs of Switzerland (SECO)*, Indonesia-Swiss Intellectual Property (ISIP) Project Phase II, Jakarta, 24-26 April 2018.
- TRIPS: Agreement on Trade-Related Aspects of Intellectual Property Rights, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annexure 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994) [hereinafter TRIPS Agreement].
- Indonesia to Chair the International Convention on Intellectual Property*, Ministry of Foreign Affairs Republic of Indonesia (26 November 2018), <https://www.kemlu.go.id/en/berita/Pages/Indonesia-to-Chair-the-International-Convention-on-Intellectual-Property.aspx>.
- Diplomacy Delivers: Indonesian-Australian Cooperation Successfully Protects National Cultural Heritage Objects*, Ministry of Foreign Affairs Republic of Indonesia (29 August 2018), <https://www.kemlu.go.id/en/berita/Pages/Diplomacy-Delivers-Indonesian-Australian-Cooperation-Successfully-Protects-National-Cultural-Heritage-Objects.aspx>. Note that "heritage" in the context of this sentence implies some degree of tangibility, but as will be explored throughout this article, the dictionary definition of heritage simply refers to "something that has been or may be inherited by legal descent of succession" and is not necessarily tangible. <https://www.dictionary.com/browse/heritage>.
- Minister of Environment and Forestry of the Republic of Indonesia, Decree of the Minister of Environment and Forestry Number P.2/Menlhk/Setjen/Kum.1/1/2018 Concerning Access to Genetic Resources of Wild Species and Benefit Sharing on Their Utilization (1 January 2018), http://www.graccess.co.id/assets/document/P2_Akses_SDG_Ingris.pdf.
- Law Number 28, 2014 about Copyrights [hereinafter Law Number 28] (Indonesia), amending Law Number 19, 2002 about Copyrights (Indonesia).
- Law Number 13, 2016 about Patent [hereinafter Law Number 13] (Indonesia), amending Law Number 14, 2001 about Patent (Indonesia).
- Directorate General of Intellectual Property Ministry of Law and Human Rights Republic of Indonesia, *Trademark Protection in Indonesia: Latest Developments, Challenges, and Opportunities*, World Intellectual Property Organization [WIPO] (2016), https://www.wipo.int/edocs/mdocs/pac/en/wipo_tm_tyo_2_16/wipo_tm_tyo_2_16_3_1.pdf.
- Law Number 20, Article 2 (2016).
- Law Number 20, Article 1.6 (2016). Law Number 20, Article 1.7 (2016).
- Law Number 20, Article 21(1)(d) (2016).
- Law Number 28, 2014 about Copyrights; about the declaratory/non-registration system.
- Law Number 20, Article 53 (2016).
- Law Number 20, Article 54 (2016).
- Law Number 20, Article 54(3) (2016).
- TRIPS Agreement, Articles 22-24 (1994).
- Contracting Parties, Lisbon Agreement*, WIPO, https://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&reaty_id=10 (accessed on 6 January 2019).
- Law Number 20, Article 56 (2016).
- Law Number 20, Article 66 (2016).
- Law Number 20, Article 66 (2016). Friedmann D (2017) *TPP's Coup de Grâce: How the Trademark System Prevailed as Geographical Indication System*. In: Chaisse J., Gao H., Lo C. (eds) *Paradigm Shift in International Economic Law Rule-Making*. ODS 2017. Economics, Law, and Institutions in Asia Pacific. Springer, Singapore.
- Criminal provisions in Law Number 28, 2014 about Copyrights, Law Number 13, 2016 about Patent, Law Number 20, 2016 about Trademarks and Geographical

- Indications, Law Number 29, 2000 about Protection of New Variety of Plants, Law Number 30, 2000 about Trade Secrets, Law Number 31, 2000 about Industrial Design, Law Number 32, 2000 about Design of Integrated Circuit Lay-Outs.
- 28 Law Number 20, Article 101(1). Note that 2 billion IDR translates to roughly \$138,000 USD, as of December 2018.
- 29 Law Number 20, Article 101(2) (2016).
- 30 Law Number 20, Article 1.6 (2016).
- 31 TRIPS Agreement, Article 22(1) (1994).
- 32 WIPO, *Lisbon Agreement for the Protection of Appellations of Origin and their International Registration*, 31 October 1958, as revised on 14 July 1967 and as revised on 28 September 1979 [hereinafter Lisbon Agreement], https://www.wipo.int/export/sites/www/lisbon/en/legal_texts/lisbon_agreement.pdf.
- 33 Law Number 15 Year 2001 regarding Marks.
- 34 TRIPS Agreement, Article 22(1) (1994).
- 35 Lisbon Agreement, Article 2(1) (1979).
- 36 WIPO, *Contracting Parties, Lisbon Agreement*, https://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=10 (accessed on 6 January 2019).
- 37 Law Number 20, Article 63-65 (2016).
- 38 WIPO, *Madrid Agreement Concerning the International Registration of Marks* [hereinafter Madrid Agreement], Article 1(1), 14 April 1891, as amended 28 September 1979, <https://wipolex.wipo.int/en/text/283529>.
- 39 WIPO, *Contracting Parties, Paris Convention for the Protection of Industrial Property*, 15 October 2018, https://www.wipo.int/export/sites/www/treaties/en/document_s/pdf/paris.pdf.
- 40 World Trade Organization [WTO], *Amendment of the TRIPS Agreement*, https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm (accessed on 6 January 2019).
- 41 TRIPS Agreement, Article 40 (1994).
- 42 Law Number 20, World Trade Organization [WTO], *Amendment of the TRIPS Agreement*, https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm (accessed on 6 January 2019).
- 43 Law Number 13, Article 26(1) (2016).
- 44 Law Number 13, Article 26(2-3) (2016).
- 45 Secretariat of the Convention on Biological Diversity, *Nagoya Protocol on Access to Genetic Resources and their Fair and Equitable Sharing of Benefits Arising from their Utilization* [hereinafter Nagoya Protocol], <https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>.
- 46 United Nations Convention on Biological Diversity, Article 2, <https://www.cbd.int/doc/legal/cbd-en.pdf>.
- 47 Nagoya Protocol.
- 48 Ministry of Environmental and Forestry Regulation P34 Year 2017 [hereinafter MEF Regulation No. P34].
- 49 Ministry of Environmental and Forestry Regulation P34 Year 2017 [hereinafter MEF Regulation No. P34], Article 1 (2017).
- 50 Ministry of Environmental and Forestry Regulation P34 Year 2017 [hereinafter MEF Regulation No. P34], Article 1(4) (2017). Article 1(4) of MEF Regulation No. P34 Year 2017 Ministry of Environmental and Forestry Regulation P34 Year 2017 [hereinafter MEF Regulation No. P34], Article 1(2). Article 1(2) of MEF Regulation No. P34 Year Ministry of Environmental and Forestry Regulation P34 Year 2017 [hereinafter MEF Regulation No. P34], Article 1(3).
- 51 Ministry of Environmental and Forestry Regulation P34 Year 2017 [hereinafter MEF Regulation No. P34], Article 1(3). Article 1(3) of MEF Regulation No. P34 Year 2017 Law Number 13, 2016.
- 52 Working definitions in the WIPO multilateral negotiations about genetic resources, traditional knowledge and traditional cultural expressions, WIPO Inter-Governmental Committee on Genetic Resources, Traditional Knowledge and Folklore, XXVIII Session, *Consolidated Document relating to Intellectual Property and Genetic Resources* (7-9 June 2014) WIPO/GRTKF/IC/28/4; WIPO Inter-Governmental Committee on Genetic Resources, Traditional Knowledge and Folklore, XXVIII Session, *Draft of Articles of the Protection of Traditional Knowledge* (7-9 June 2014) WIPO/GRTKF/IC/28/5; and WIPO Inter-Governmental Committee on Genetic Resources, Traditional Knowledge and Folklore, XXVIII Session, *Draft of Articles of the Protection of Traditional Cultural Expressions Number* (7-9 June 2014) WIPO/GRTKF/IC/28/6.
- 53 Regulation Number 78, 2011. Is that the correct Year? Or is it 2010? <https://repit.files.wordpress.com/2011/11/perpres-78-tahun-2010-english-version.pdf>.
- 54 United Nations Educational, Scientific and Cultural Organization [UNESCO] Convention on the Protection and Promotion of the Diversity of Cultural Expressions, Article 4.3, 20 October 2005, <https://en.unesco.org/creativity/sites/creativity/files/passeport-convention2005-web2.pdf>.
- 55 Law Number 28, 2014.
- 56 In-depth interview with traditional weavers from We'e Lowo Tribe, Tarung ancestral village, West Sumba Regency, East Nusa Tenggara Province, Indonesia, December 2017.
- 57 Bill of Government Regulation of the Republic of Indonesia about Traditional Cultural (17 February 2018), Article 1(1) Bill of Traditional Cultural Expressions, Article 4(2) (2018) The Government Regulation on Geographical Indications was enacted based on the old Law of Trademarks Number 15, 2001. Yet, this regulation is still in force since it has not been terminated by the endorsement of Law Number 20.
- 58 Report of National Conference of the Association of Geographical Indications of Indonesia Year 2017 (January 2018) p. 13. European Commission Staff, Report on the protection and enforcement of intellectual property rights in third countries, at 15, COM (2018), 47 final (accessed on 21 February 2018), http://trade.ec.europa.eu/doclib/docs/2018/march/tradoc_156634.pdf.
- 59 World Coffee Research, Safeguarding Coffee Genetic Resources, Protecting Coffee Forever, <<https://worldcoffeeresearch.org/work/global-coffee-conservation-strategy/>> (accessed on 28 February 2018) 19:49.
- 60 Mawardi S, Advantages, Constraints and Key Success Factors in Establishing Origin and Tradition-Linked Quality Signs: The Case of Kintamani Bali Arabica Coffee Geographical Indication, Indonesia, Case Study on Quality Products Linked to Geographical Origin in Asia carried out for FAO, *FAO Fiat Paris* (25 May 2009), 15-16.
- 61 Hanisch S, Dara Z, Brinkmann K & Buerkert A, Soil fertility and nutrient status of traditional Gayo Coffee Agroforestry Systems in the Takengon Region, Aceh Province, Indonesia,

- Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 112 (2) (2011).
- 62 Maharaja Coffee & Tools, Maharaja Organic Flores Bajawa product description, <<http://maharajacoffee.biz/coffee-kopi/maharaja-organica-flores-bajawa-200g>> (28 February 2018) 21:18 (Western Indonesian Time).
- 63 Nielson J, The politics of place: Geographical identities along the coffee supply chain from Toraja to Tokyo, in Niels Fold and Bill Pritchard (ed), *Cross-continental Food Chains*, Routledge, Taylor & Francis Group, 2005, 197.
- 64 Purnama S, *Introducing Java Preanger Arabica Coffees which have been Protected as Geographical Indications*, <<http://www.disbun.jabarprov.go.id/index.php/artikel/detailartikel/119>> (28 February 2018) 23:10 (Western Indonesian Time).
- 65 Puspitasari N, Santoso T I & Mawardi S, Distribution of soil fertility of smallholding Arabica Coffee farms of Ijen-Raung Highland area based on altitude and shade trees, *Pelita Perkebunan Coffee and Cocoa Journal*, 29 (2) (August 2013) 104.
- 66 Mawardi S, Establishment of Geographical Indication Protection System in Indonesia, Case in Coffee, Worldwide Symposium in Geographical Indications, Patent Office of Republic of Bulgaria & WIPO, WIPO/GEO/SOF/09/3, 11 June 2009.
- 67 Marampa E M & Dewi L, Kajian Kopi Toraja sebagai Media Fermentasi Kombu (Study on Toraja Coffee as a Medium for Kombu Fermentation), Proceeding, *Seminar Pendidikan Nasional dan Sainstek 2016* (National Seminar on Education and Science & Technology 2016) 397-403.
- 68 Widodo WE *et al.*, Kinerja Alsln Sangrai Kopi Tipe Fluidisasi dan Uji Kualitas Kopi Sangrai (Performance of fluidization type of coffee's roasted Alsln and quality examination of roasted coffee), *Jurnal Teknologi Pertanian (Journal of Agriculture Technology)*, 16 (2) October 2016. ISSN 2528-2794, <http://jtp.ub.ac.id/index.php/jtp/article/view/495/857> (accessed on 24 March 2018).
- 69 Saragih JR, *Aspek Sosioekologis Usaha Tani Kopi Arabika Di Dataran Tinggi Kabupaten Simalungun Sumatera Utara* (Socio-ecological aspects of arabica coffee farming in Simalungun Highland Regency, North Sumatera), *Jurnal Sosiohumaniora (Socio-Humaniora Journal)*, 19 (3) (November 2017) 253-259.
- 70 Gumulya D & Helmi I S, *Kajian Budaya Kopi Indonesia* (Study on the Indonesian coffee culture), *Jurnal Dimensi Seni Rupa dan Desain (Dimension Journal on Design and Visual Arts)*, 13 (2) (February 2017) 153-172.
- 71 Saputra D, *Kendala dan Upaya Petani Dalam Meningkatkan Produktivitas Kopi Di Kecamatan Air Hangat Timur Kabupaten Kerinci* (Handicaps and efforts of traditional farmers to enhance the productivity of coffee in East Air Hangat, Kerinci Regency), *Sekolah Tinggi Keguruan dan Ilmu Pendidikan* (Academy of Teaching and Education) Padang, West Sumatera (2016) 1-6.
- 72 Agnes H R P, Marbur P & Hanafiah A S, *Evaluasi Kesesuaian Lahan Pada Tanah Entisol Di Kecamatan Lintong Nihuta Kabupaten Humbang Hasundutan Untuk Tanaman Kopi Arabika* (Evaluation on the suitability of Entisol Land for Arabica Coffee cultivation in Lintong Nihuta District, Humbang Hasundutan Regency), *Jurnal Online Agroeko teknologi (Agro-eco-technology Online Journal)* 2 (1) (December 2013) 1-12, ISSN No. 2337-6597.
- 73 Hamni A, Akhyar G, Suryadiwansa & Burhanuddin Y, Tarkono, *Potensi Pengembangan Teknologi Proses Produksi Kopi Lampung* (The potential development of production process development on Lampung Coffee), *Jurnal Mechanical (Mechanical Journal)*, 4(1) (March 2013) 1-7.
- 74 Nurhaida I, Hariyanto S P, Bakri S, Junaidi A & Syah P, *Penginventarisasian Kearifan Lokal dalam Praktik Wanatani Kopi Dalam Debat Kelestarian Fungsi Hidro-Orologis Wilayah Resapan Di Lampung Barat* (Inventory of the local knowledge in coffee agro forestry for sustainability debate of hydro-oro logical function at the recharge area in West Lampung), *Jurnal Pembangunan Pedesaan (Journal of Rural Development)*, 2 (August 2005) 99-101.
- 75 Wijaya M I, *Usahatani Kopi Robusta Di Kecamatan Candiroto Kabupaten Temanggung, Studi Kasus Desa Gunungpayung Dan Desa Sidoharjo* (The Cultivation of Robusta Coffee in Candiroto District, Temanggung Regency, Case Study of Gunungpayung Village and Sidoharjo Village), *Program Studi Pendidikan Geografi* (Education of Geography Study Program), Faculty of Social Science, Universitas Negeri Yogyakarta (August 2017) 1-15.
- 76 Resdianto T, Batubara M M & Iswarini H, Alumni & Lecturers of Agro-Business Study Program, Faculty of Agriculture, Universitas Muhammadiyah Palembang, *Analisis Perbandingan Pendapatan Antara Petani Kopi Yang Mengolah Buah Kopi dengan Menggunakan Alat Pulper Kopi dan Yang Tidak Menggunakan Alat Pulper Kopi Di Desa Tangga Rasa Kecamatan Sikap Dalam Kabupaten Empat Lawang* (Analytical comparison of earnings between farmers whose coffee was processed by Pulper and by traditional technique in Tangga Rasa Village, Sikap Dalam District, Empat Lawang Regency), *Societa IV-1* (June 2015) 14-18, ISSN 2301-4180.
- 77 Sancayaningsih R P, Suryanto E, Reza E & Wiryanan IF, Community empowerment program in Pinogu, Bone Bolango Regency, Gorontalo Province, Indonesia, concerning to the unique local biodiversity conservation, *Indonesian Journal of Community Engagement*, 1 (2) (March 2016) 183-196.
- 78 Aklimawati L, Yusianto & Mawardi S, *Karakteristik Mutu dan Agribisnis Kopi Robusta di Lereng Gunung Tambora, Sumbawa* (Characteristics of Quality Profile and Agribusiness of Robusta Coffee in Tambora Mountainside), Sumbawa, *Pelita Perkebunan* 30.2 (2014) 159-80.
- 79 Buku Persyaratan Indikasi Geografis Kopi Liberika Tungkal Jambi (Book of Requirements of Geographical Indication's Liberika Tungkal Jambi Coffee, Geographical Indication's Certificate ID G 000 000 032).
- 80 Rafina I, *Beras Ada Tana Tam, Dataran Tinggi Borneo* (Ada Tana Tam Rice of Borneo Highland), WWF Indonesia <https://www.wwf.or.id/program/inisiatif/social_development/greenandfairproducts/beras_adan_tana_tam/> (accessed on 23 March 2018) 21-40.
- 81 Junaidi, *Beras Pandan Wangi* (Pandan Wangi Rice), *Food Station, the Centre of Information and Trade of Foods in South East Asia* <<http://www.foodstation.co.id/index.php/artikel-pasar/747-beras-pandan-wangi>> (accessed on 23 March 2018) 21-56.
- 82 Juhono J T, *Sistem Agribisnis Lada dan Strategi Pengembangannya* (Pepper agribusiness system and its

- development strategy), *Journal of Research and Development of Agriculture*, 26 (2) (2007) 76-81.
- 83 Risfaheri, *Diversifikasi Produk Lada untuk Nilai Tambah* (Diversification of products to increase the value added of pepper), *Bulletin Teknologi Pertanian Pasca Panen (Bulletin of Post Harvesting Agriculture Technology)* 8 (1) (2012) 15-22.
- 84 Caceres E O, Seeking Geographical Indication status for Siau Nutmeg in Indonesia, *EU-Indonesia Trade Cooperation Facility* (accessed on 24 March 2018) 00:53.
- 85 Isravivani N, Siau, a small island producing the world's best nutmeg, *Uni Eropa Journal*, <<http://unieropajournal.com/siau-a-small-island-producing-the-worlds-best-nutmeg/>> (accessed on 24 March 2018) 00:28.
- 86 Woretma M, *Keanekaragaman Tumbuhan Pangan dan Obat pada Masyarakat Suku Mbaham Mata di Kampung Werabuan, Kabupaten Fakfak* (Food and medicinal plant diversity of Mbaham Mata Tribe in Werabuan Village, the Regency of Fakfak), *Bogor Agricultural University*, Undergraduate Thesis (June 2013) 40.
- 87 Nelson KH, Impact on income farmer debt bondage system Cengkeh, Case Study in Liwutung Village Pasan District, Southeast Minahasa Regency, *Agri Res & Tech: Open Access Journal*, 5(4) (2017) 555-669. DOI:10.19080/ARTOAJ.2017.05.555669.
- 88 Pora S, *Tinjauan Filosofis Kearifan Sastra Lisan Ternate* (Philosophical review on the wisdom of oral literature in Ternate), *Jurnal Uniera(Uniera Journal)*, 3(1) (February 2014) 9-10.
- 89 Supriadi H, M Hadad EA & Wardiana E, *Analisis Komponen Hasil Vanili Alor Pada Beberapa Agroekologi di Nusa Tenggara Timur* (Analyses of the results' components of Alor Vanilla on selected agroecology in East Nusa Tenggara), *Jurnal Penelitian Tanaman Industri(Industrial Crops Research Journal)*, 20 (3) (September 2014) 142-150.
- 90 *Indonesian Cinnamon (Cinnamomum burmannii) Gernot Katzer's Spice Pages* (24 March 2018) 13:05, http://gernot-katzers-spice-pages.com/engl/Cinn_bur.html.
- 91 The Republic of Indonesian Official Gazette on Geographical Indication A No. 03/IG/II/A/2016 concerning Koernitji Cinnamon (25 February 2016).
- 92 Ilma Fitri, *Strategi Pengembangan Kawasan Jeruk Keprok Gayo Di Kabupaten Aceh Tengah* (Development strategy for the geographical area of Gayo Orange in Central Aceh Regency), *Master Thesis*, Study Program of Master of Agribusiness, Post Graduate Program, Universitas Syiah Kuala, Darussalam, Banda Aceh (2015) 1-109.
- 93 Martosupono M, Semangun H&Sunbanu BY, *Budidaya Jeruk Keprok So'e Di Kabupaten Timor Tengah Selatan* (So'e Mandarin Cultivation at South Timor Tengah Regency), *Christian University of Satya Wacana, Salatiga, AGRIC*, 19 (1 & 2) (2007) 76-90.
- 94 Mulyadi D, Darsiharjo & Sugandi D, *Pengembangan Budidaya Buah Sawo Sukatali ST. I (Achras Zapota L.) Sebagai Produk Unggulan Hortikultura Di Kecamatan Situraja, Kabupaten Sumedang* (The Development of Sukatali Sapodilla [Achras Zapota L.] as a Horticulture Premium Product in Situraja, Sumedang Regency), Department of Geography Education, Faculty of Social Science Education, Universitas Pendidikan Indonesia, *Antologi Geografi* (Geography Antology), 4 (1) (April 2016) 1-12.
- 95 Nangoy O M & Sofiana Y, *Sejarah Mebel Ukir Jepara, Humaniora*, 4 (1) (April 2013), <https://doi.org/10.21512/humaniora.v4i1.3436>.
- 96 Ramsay D, Working with wood: The women of Jepara, *Forest News* (6 December 2017), <https://forestsnews.cifor.org/52430/working-with-wood-the-women-of-jepara?fnl=en>.
- 97 Mawardi S, Advantages, Constraints and Key Success Factors in Establishing Origin and Tradition-Linked Quality Signs: The Case of Kintamani Bali Arabica Coffee Geographical Indication, Indonesia, Case Study on Quality Products Linked to Geographical Origin in Asia carried out for FAO, *FAO Fiat Panis* (25 May 2009), 15-16; Hanisch S, Dara Z, Brinkmann K & Buerkert A, Soil fertility and nutrient status of traditional Gayo Coffee Agroforestry Systems in the Takengon Region, Aceh Province, Indonesia, *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 112 (2) (2011); Puspitasari N, Santoso T I & Mawardi S, Distribution of soil fertility of smallholding Arabica Coffee farms of Ijen-Raung Highland area based on altitude an shade trees, *Pelita Perkebunan Coffee and Cocoa Journal*, 29 (2) (August 2013) 104; Marampa E M & Dewi L, Kajian Kopi Toraja sebagai Media Fermentasi Kombu (Study on Toraja Coffee as a Medium for Kombu Fermentation), Proceeding, *Seminar Pendidikan Nasional dan Sainstek 2016* (National Seminar on Education and Science & Technology 2016) 397-403; Widodo W E *et al.*, *Kinerja Alsln Sangrai Kopi Tipe Fluidisasi dan Uji Kualitas Kopi Sangrai* (Performance of fluiditation type of coffee's roasted Alsln and quality examination of roasted coffee), *Jurnal Teknologi Pertanian (Journal of Agriculture Technology)*, 16 (2) October 2016. ISSN 2528-2794, <http://jtp.ub.ac.id/index.php/jtp/article/view/495/857> (accessed on 24 March 2018).
- 98 For example(s) of potatoes offered for sale in baked form.
- 99 Directly translated to English as "Asian rice".
- 100 Nugraha B S, Lane Prihanti Putri, John Suprihanto, *Krayan Heart of Borneo: Indonesian Potential Tourism Destination Enjoyed by Malaysia*, The 1st International Conference on South East Asia Studies, (2018) 118-129, <https://knepublishing.com/index.php/Kne-Social/article/view/2329/5151>.
- 101 Saliman A R, *Hukum Bisnis Untuk Perusahaan: Teori Dan Contoh Kasus* (Business Law for Corporations: Theory and Case Examples', 5th Edition, Kencana Publisher, Jakarta (2010) 118.
- 102 Bill of Government Regulation of the Republic of Indonesia about Traditional Cultural Expression (accessed on 17 February 2018).
- 103 Law Number 28, Article 38(4) (2014).
- 104 Law Number 28, Article 38(4)(o,q) (2014).
- 105 *Traditional Balinese Dance*, Bali Spirit, <https://www.bali-spirit.com/community/blog/traditional-balinese-dance> (accessed on 6 January 2019).
- 106 Pramudya W E, *Sampek Engtay, Tari Legong, dan Tekad Melawan Kekerasan* (Sampek Engtay, Legong Dance, and the Aim of Anti Violence), *Pikiran Rakyat Newspaper* (11 March 2018) 09:29 <<http://www.pikiran-rakyat.com/hidup-gaya/2018/03/11/sampek-engtay-tari-legong-dan-tekad-melawan-kekerasan-421018>>. For the original story in Legong Dance, Dibia I W, *Cerita Panji dalam Seni Pertunjukan Bali* (the Story of Panji in Balinese Performing Arts), in St. Hanggar B. Prasetya, I Wayan Dana (eds.), *Prosiding Seminar Tokoh Panji Indonesia* (Proceeding

- Seminar about the Figure of Panji in Indonesia), Directorate of Development of Arts and Film, Ministry of Education and Culture of the Republic of Indonesia & Faculty of Performing Arts, Institute of Arts of Indonesia, Yogyakarta (8 May 2014) 38-45.
- 107 In-depth interview with Bulantrisna Djelantik, main founder of Ayu Bulan Dance Group.
- 108 Traditional clothes are produced and known with their local origins: Yogyakarta Batik, Solo Batik, Pekalongan Batik, Tuban Batik, etc.
- 109 Negotiators Adopt Geneva Act of Lisbon Agreement at Diplomatic Conference, Geneva (20 May 2015) PR/2015/779 <http://www.wipo.int/pressroom/en/articles/2015/article_0009.html>.
- 110 WIPO, Geneva Act of the Lisbon Agreement on Appellations of Origin and Geographical Indications, 20 May 2015 [hereinafter Geneva Act], https://www.wipo.int/edocs/pubdocs/en/wipo_pub_239.pdf.
- 111 Geneva Act, Article 31 (2015).
- 112 Geneva Act, Articles 21-22 (2015).
- 113 Gervais D, *A Look at the Geneva Act of the Lisbon Agreement: A Missed Opportunity?* In Calboli I & Ng-Loy W (Eds.), *Geographical Indications at the Crossroads of Trade, Development, and Culture: Focus on Asia-Pacific*, (2017) 87-121). Cambridge: Cambridge University Press. doi:10.1017/9781316711002.006.
- 114 Geneva Act, Article 2 (2015).
- 115 Geneva Act, Article 5(4) (2015).
- 116 TRIPS Agreement, Article 3(1) (1994) states that “[e]ach Member shall accord to the nationals of other Members treatment no less favourable than that it accords to its own nationals with regard to the protection of intellectual property, subject to the exceptions already provided in, respectively, the Paris Convention (1967), the Berne Convention (1971), the Rome Convention or the Treaty on Intellectual Property in Respect of Integrated Circuits . . .”