

Pulut Mandoti: Potential GI of Enrekang Regency in Indonesia

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Geographical indication is one of the forms of intellectual property right that member countries of the World Trade Organisation (including Indonesia) endeavour to protect. *Pulut Mandoti* is a rice variety grown in Enrekang regency, South Sulawesi Province of Indonesia. This rice variety has specific properties that differentiate it from other varieties, such as its distinctive aroma that smells like fragrant pandan leaves and its taste. For this reason, this rice variety is preferred by local and international consumers. Also, if this rice variety is grown elsewhere, it will not possess the same aroma. As a result, it has a higher market value than other varieties. In this regard, this study aims to explore the use of geographical indication for *Pulut Mandoti* to improve the economic condition of local farmers in Enrekang District. The research is a legal research using normative and empirical approaches. The data were analysed by qualitative and descriptive analysis techniques. The conclusion of this research is as follows: The realisation of legal protection in the form of registration of geographical indication for *Pulut Mandoti* on behalf of the local *Pulut Mandoti* farmers will improve the economic condition of the community.

Keywords: Geographical Indications, intellectual property, *Pulut Mandoti*, TRIPS Agreement, Indonesia Trademark Law, Landa

Geographical indication is a sign that has long existed and can specifically indicate the geographical area from which a product originated. The sign is used to indicate the origin of different products, including agricultural products (foods, handicrafts, etc.) and other products (raw materials and/or processed goods). The indication of the origin of products is an important issue because the geographical factors, including natural factors, human factors, and a combination of both, in a particular area where goods are produced indicate the characteristics and quality of the goods that have been maintained over a time period and has resulted in the goods having a high reputation (fame), which in turn allows the goods to command a high economic value.¹

Pulut Mandoti is a local rice variety grown in Enrekang District, South Sulawesi Province of Indonesia. This rice variety is classified as aromatic rice. Its distinctive aroma (which smells like fragrant pandan leaves) and its taste make this rice variety widely favoured by local and international consumers. This rice is not easily grown elsewhere. Even if it is successfully grown elsewhere, it will not have the same pandan leaf aroma that it would possess

if planted in Salukanan and Kendenan, Enrekang District.

This is what gives this rice variety a higher economic value than the other types of rice in the district of Enrekang. If the characteristics of a product are maintained and its high quality is consistently preserved, the product will have a high market value. On the contrary, if the characteristics and quality are not preserved, the product's value will crash. It is common practice for a product with distinctive quality to be widely copied by people. Consequently, efforts should be made to obtain adequate legal protection for the product. Therefore, it is necessary to obtain geographical indication protection for *Pulut Mandoti* originating from the Enrekang district of South Sulawesi Province. This will lead to economic benefits and improve the standard of living of the community.

Research Method

This research is a legal research using normative and empirical approaches. The techniques applied for collecting data were face-to-face interviews, prepared questionnaires, daily notes, and observation. The data were analyzed by qualitative and descriptive analysis techniques.

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Intellectual Property Rights in the TRIPS Agreement

One of the reasons for the participation of Indonesia in international treaties concerning free trade and TRIPS (Trade Related Aspect of Intellectual Property Rights)² is the necessity to reduce or eliminate the barriers to international trade and the recognition of the need for effective protection of IPR (Intellectual Property Rights). Accordingly, there must be a will to develop procedures for the implementation of intellectual property rights in free trade. This is the basic philosophy of the TRIPS Agreement, which has been signed by Indonesia.³

The principal characteristics of the TRIPS Agreement can be divided into three aspects, as follows:

- 1) TRIPS are patterned on norms and standards that are different from the other international Agreements, especially the Agreements on trade in goods, which are more patterned on such concrete aspects as access to markets and tariffs;
- 2) As the minimum requirement, TRIPS propose full compliance with several international Agreements in the field of IPR;
- 3) TRIPS contain provisions regarding strict law enforcement and dispute resolution mechanisms by which the rights of harmed nations can be enforced.

Besides the three characteristics above, there are three other elements covered by TRIPS that should be observed by countries intending to adjust their national legislation in the field of IPR. They are new norms, higher standards, and strict law enforcement. TRIPS Agreement was reached with the intention of reducing interference (distortion) and obstacle (impediment) in international trade, the need to effectively and adequately improve IPR protection and the need to ensure that the processes and measures of law enforcement of IPR do not become obstacles to trade.⁴

Geographical Indication

Geographical indication is independently regulated in Section 3 of Article 22-24 of TRIPS Agreement. In accordance with Article 22 Paragraph (1) of TRIPS Agreement, geographical indication is defined as follows:

“...indication which identifies a good as originating from the territory of a member country, or a region or locality in that territory, where a given quality, reputation or other characteristics of the good is essentially attributable to its geographical origin...”

Based on these provisions, it is clear that the origin of goods should be linked to the reputation, characteristics and quality that are associated with that area for it to get a juridical protection. The positive role of a name associated with the origin of goods on goodwill and other characteristics can directly increase the economic benefits of trading in such goods. In short, the name itself must have a reputation. Reputation is one of the protective elements mentioned explicitly by the TRIPS Agreement.⁵

Article 56 Paragraph (1) of Indonesia Trademark Law stipulates that geographical indication is a protected sign used on goods that are linked to a specific origin or geographical environment (including natural factors, human factors, or a combination of both factors) and possess certain characteristics and qualities attributed to that origin. The signs that are used as geographical indications may be in the form of a label attached to the produced goods. These signs could be the name of a place, territory, words, pictures, letters, or a combination of these elements. The sign may be derived from a name that is constantly used, so that it becomes commonly known as the name of the place of origin of the goods.⁵

Based on Article 1 Paragraph (1) of Government Regulation of the Republic of Indonesia No. 51 Year 2007 on Geographical Indication, the definition of Geographical Indication is as follows:

“A mark which indicates the place of origin of goods such that the geographical environment, including natural factors, human factors or a combination of both factors, assigns certain characteristics and qualities to the produced goods.”

Besides being a distinctive mark, the area of origin of the goods should also have an economic value. This means that the area of origin of the goods should not only serve to distinguish the goods from other goods but should also indicate clearly that the goods are of high quality, which leads to an increase in the selling price of the goods.⁶

Basically, the protection of geographical indication is not only for agricultural products. Also, other products that are related to geographical factors (including natural and/or human factors) that are dominant in the establishment of product characteristics can also enjoy geographical indication protection. In the aspect of agricultural products, geographical indication is mostly due to the strong relationship between a product and the features of the land that produces the raw material used for the product, e.g. Australia's red wine region of Coonawarra. The wine produced here is famous

because of its taste peculiarities that arise from the red soil in Connawarra named terra rossa. Generally, geographical indication products seem to depend on the type of soil. However, other natural elements also affect the features of a product and can be protected by geographical indication. Several countries, especially those that have signed the Lisbon Treaty of 1958 and have geographical indication products that significantly increase their foreign exchange, have interpreted environmental effects not only in the sense of the influence of earth elements.⁷

Environmental influence is also defined extensively as the influence of the natural environment in totality, a view that was adopted at the International Convention on Biodiversity. Based on this context, natural environment is viewed as the totality of nature, which includes human factor, i.e. indigenous people, who are inseparable from the environment. Such a view is based on the fact that the TRIPS Agreement does not specifically determine these aspects but only states that the geographical environment should significantly determine the quality, reputation, or other special characteristics of the goods; the environmental aspects can be interpreted extensively.⁷

Geographical indication in principle contains four basic elements:⁸

- a) The determination of goods-producing region,
- b) The specification of production methods,
- c) The specification of product quality, and
- d) The name and reputation that distinguish a product from other similar products.

Unlike other intellectual property rights that regulate individual ownership, geographical indication controls collective ownership right. Collective right means that in a region that produces certain goods, those who have obtained permission to produce such goods have the right to use the name of the geographical indication for their production as long as the requirements determined collectively in the book of requirements are met. The benefits derived from the protection of geographical indication are:⁸

- a) To clarify the identification of products and establish production and process standards among the stakeholders of geographical indication;
- b) To avoid the practice of unfair competition in trade and provide consumers with protection from misuse of geographical indication reputation; an example of misuse of geographical indication is selling a product that comes from other areas with different characteristics or whose quality is less than that of the original product;

- c) To ensure that the products protected by geographical indication are genuine products, which gives confidence to consumers; and
- d) To foster local producers, support the coordination and solidify the organisation of rights holder in order to create, provide, and strengthen the image and reputation of the product name.

Characteristics of *Pulut Mandoti*

Pulut Mandoti is a rice variety in Enrekang district. It has a local competitive advantage. This rice variety is categorised under aromatic rice. It possesses the distinctive aroma of fragrant pandan leaves, which makes it widely favoured by consumers, both locally and internationally. Besides, this rice is not easily grown elsewhere. For these reasons, this rice variety has a higher economic value than the other types of rice in the Enrekang district. The characteristics of *Pulut Mandoti* as obtained from the Office of Agriculture and Plantation of Enrekang District are shown in Table 1.⁹ However, the lab test reports of *Pulut Mandoti* are shown in Table 2.

Pulut Mandoti is one of the local varieties of sticky rice that smells good, which is rare. It can grow only at 700m above sea level in Salukanan Village, Baraka sub-district, about 60 km from Enrekang City, the capital of Enrekang District, South Sulawesi Province. This glutinous rice is the most expensive of all types of sticky rice in Indonesia. There are five villages that produce *Pulut Mandoti*, namely Gandeng

Table 1 — The characteristics of *Pulut Mandoti*

<i>Umurtanaman</i> (Plant age)	190 days
<i>Bentuktanaman</i> (Plant shape)	<i>tegak</i> (upright)
<i>Tinggitanaman</i> (Plant height)	93 - 160 cm
<i>Anakan</i> (Stem)	11 - 19 stem
<i>Warna kaki</i> (Main stem color)	<i>hijaukekoklatan</i> (brownish green)
<i>Warnabatang</i> (Stem color)	<i>hijaukekuningan</i> (yellowish green)
<i>Warnatelingadaun</i> (Leaf edge color)	<i>Putih</i> (white)
<i>Warnalidahdaun</i> (Middle leaf color)	<i>Putih</i> (white)
<i>Mukadaun</i> (Leaf surface color)	<i>Hijau</i> (green)
<i>Posisidaun</i> (Leaf position)	<i>Tegak</i> (upright)
<i>Daunbendera</i> (Main leaf)	<i>Tegak</i> (upright)
<i>Bentukgabah</i> (Form of grain)	<i>Agakgemuk</i> (big)
<i>Warnagabah</i> (Color of grain)	<i>Kuning</i> (yellow)
<i>Kerontokan</i> (Fall out)	<i>Tidakrontok</i> (not fall out)
<i>Kerebahan</i> (Frenzy)	<i>Tahan</i> (hold it down)
<i>Tekstur nasi</i> (Rice texture)	<i>Ketan</i> (sticky rice)
<i>Rata-rata hasil</i> (Average yield)	3,5 tons/ha
<i>Potensihasil</i> (Potential results)	5 tons/ha
<i>Anjurantanam</i> (Suggested planting)	500 - 1000 mdpl (meters above sea level)

Table 2 — Results of the *Pulut Mandoti* laboratory test

Sample name	Analysis type	Method	Result	Unit
<i>Beras Ketan Mandoti</i> (Sticky Rice Mandoti)	<i>Kadar Air</i> (Water content)	Gravimetric Analysis	8, 15	%
	<i>Kadar Abu</i> (Ash content)	Gravimetric Analysis	0, 97	
	<i>Protein</i> (Protein)	Kjeldahl method	8, 01	
	<i>Lemak</i> (Fat)	Soxhlet Extracter	2, 28	
	<i>Karbohidrat</i> (Carbohydrate)	(by difference)	80, 59	
	<i>Kadar Amilosa</i> (Amylose content)	Spectrometer	5, 04	mg/100 g
	<i>Kalsium</i> (Calcium)		29, 13	
	<i>Zat Besi</i> (Iron Content)	AAS	0, 82	
	<i>Magnesium</i> (Magnesium)		25, 71	
	<i>Posfor</i> (Phosphorus)		119, 23	

Village, Piawan Village, Pambuluran Village, Tantido Village, and Mataring Village. It is sold at Rp.56.000 (US\$ 4) per kg. In addition to being made into Sokko, aka sticky rice, many people use it as a perfume blend for ordinary rice. One kilogram of *Pulut Mandoti* if mixed with a sack about 40 kilogram of ordinary rice is able to make the whole of the ordinary rice become fragrant.¹⁰

Most Fragrant and Expensive Sticky Rice

The glutinous rice/*Pulut Mandoti* is a variety of rice that is rare and fragrant, which only grows in Kendenan Village, Enrekang District¹¹ (Fig. 1). It has a distinctive aroma. This glutinous rice can only grow on the banks of a river in the area of Kendenan Village; it cannot grow elsewhere. Due to the value of this rare sticky rice, researchers from Japan started to grow it in Japan. Although this glutinous rice is now thriving in Japan, the aroma and taste are not the same with that grown in Kendenan village. The sticky rice/*Pulut Mandoti* is so fragrant that when cooking, neighbours can also perceive the aroma. This rice is able to make ordinary rice become fragrant and have the same aroma with *Pulut Mandoti* by adding a little of it to the ordinary rice when cooking. *Pulut Mandoti* is often presented during traditional, religious and other big events. Due to its distinctive fragrance, the Local Government in Enrekang District often entertains country guests with *Pulut Mandoti* and Dangke (a type of cheese made from cow milk fermented by communities in Enrekang District). The rice is perfect for serving in restaurants, food stalls and hotels. But, this rice can only be harvested once a year because it depends on the local weather.

President Soeharto was so amazed by the fragrance of this glutinous rice,¹² that since 1986, *Pulut Mandoti* has always been a dish at state parties. Furthermore, this rice can be stored for a long time without becoming spoilt. When stored for some time, it becomes a very suitable



Fig. 1 — Glutinous Rice Mandoti

food for people who have cholesterol disease, because the longer it is stored, the lower its sugar content.¹² This glutinous rice, which has a slightly reddish color, is one of the most expensive glutinous rice varieties in Indonesia. Residents of Gandeng Backwood, which is one of the 5 backwoods that produce *Pulut Mandoti* in Salukanan Village, sell it for Rp. 56.000 (US\$ 4) per kg.

People have taken the seedlings of *Pulut Mandoti* to be planted or developed outside the village of Salukanan.¹³ However, the product did not have the aroma for which *Pulut Mandoti* planted in Salukanan Village is known for. Similarly, experimental planting has also been repeatedly performed by residents of Tallang Ura Village, Curio District, which is directly adjacent Salukanan village, but the results are also not the same. *Pulut Mandoti* seeds planted outside the Salukanan village area may grow, but the aroma and taste would not be the same as *Pulut Mandoti* planted in Salukanan Village. Interestingly, the sources of water for irrigating the rice fields in Tallang Ura and Salukanan villages are the same; the water comes from the mountain springs of Kalo Tombang, Sengka, Orong, Pedallen, and Kalo Matangon. It is not surprising then that there is a variety known as *Pulut "Mandoti-doti"* whose grains have the same physical

form as *Pulut Mandoti*. When it is sold in the public market, and is often referred to as *Pulut Mandoti*. This product is only discovered to be fake after cooking because *Pulut Mandoti-doti* does not have the fragrance and taste of *Pulut Mandoti* from Salukanan Village. It is strongly suspected that the lands in Salukanan village have specific nutrients that bring about the flavour and aroma of the various plant species planted on it.

The village of Salukanan occupies an area of about 17 square kilometers. A large proportion of the approximately 20,000 inhabitants currently earn their living in the agricultural sector. Besides having 312 hectares of 'rice fields heritage' (i.e. the villagers' rice fields, which have been processed for hundreds of years) and the nursery of *Pulut Mandoti*, the residents of Salukanan village who reside on the hills of Mount Latimojong also grow plantation crops such as, pepper, coffee, cloves, and cocoa. Further, the flat lands of the hills are used for growing vegetable crops such as cabbage, tomatos, onions and red beans. Although, *Pulut Mandoti* is expensive and desirable, all Salukanan's rice fields are not used for its cultivation.¹³ It takes about 6 months to grow *Pulut Mandoti*, and it can only be harvested once a year. Fate explains that, therefore, from June to August every year, which is the harvest period of the rice, its price reaches the peak because the stock has started to sell out. From June to August 2015, the price of *Pulut Mandoti* reached Rp.56.000 (US\$ 4) per kg in the village of Salukanan.

As a typical rice of Enrekang District, currently, the Enrekang District Office of Industry is designing a plan to market *Pulut Mandoti* outside the area. The rice would be packaged in plastic containers containing 1 kg, 2.5 kg, and 5 kg of rice respectively. The packaging of *Pulut Mandoti* is, of course, just an attempt to promote local products that are unique to the region, since *Pulut Mandoti's* production from Salukanan village is currently unable to meet the demands of the local market. Evidently, it becomes rare at certain times, including in its place of origin.

In almost all houses located in the highlands of Enrekang, especially in Baraka sub-district, Malua, rice granaries are still very easy to find. It is certain that in every home there is at least one granary, or even more (Fig. 2 and Fig. 3). The number of granaries is usually related to the size of the rice field a person owns or the number of generations in a family. Generally, one generation in each family has at least one granary.¹⁴ However, if they already have



Fig. 2 — Rice fields of Salukanan village



Fig. 3 — Granary (Landa) in Kendenan village, Enrekang district

children, another granary is then added. Later, after having grandchildren, more granaries are added again, according to their abilities. The granaries are not only located in their yards, but many are sited near the rice fields or other locations that are designated as the location for building granary. Throughout the journey to Kendenan and the surrounding villages on the mainland of Enrekang, it is very easy to find granary buildings lined neatly around the rice fields. Although located in the rice fields or away from residential locations, the granaries are not equipped with special security and are not even locked.

Availability of Food Reserves

According to local residents, the tradition of granaries in most of the highlands of Enrekang District has lasted for more than a hundred years. It was especially useful during the era of colonization, when food was difficult to obtain. It is unclear how the tradition of building granaries started in the community, but in essence, the making of granary has the main function of maintaining the availability of food.

During colonial times, when food was difficult to obtain, people were always storing rice and other foods that can be stored for a long time in the granary.¹⁴ The goal was that if the harvest failed or if there was a disaster or any other unforeseen circumstance, there would always be a reserve of food to be eaten. Therefore, the benefit of the granary was primarily felt by people who lived during the colonial period when Netherland was in control, especially when the harvest failed. Until now, even if the situation is safe and even if the rice is much, people still fill their granary. At present, the people in the highlands of Enrekang still maintain the tradition of granary. New families or newly built homes will almost certainly have a landa, even though the highlands of Enrekang can be said to be a large rice producer and supply the main needs of the district. In other words, if it was just the need for rice to meet the local consumption, this area does not really have to worry about food shortages. However, the granary is still something that must exist and always has to be completely filled.

Under normal conditions and in the absence of extraordinary events, the contents of the granary are usually not used.¹⁵ Although rarely used, the granary is very helpful during times of urgency or emergency. For this reason, the community continues to maintain the tradition of granary even though its contents are not always used. In general, people change the contents of the granary at harvest time. The replacement is done despite the fact that the contents of the barn have not been used. The local community do not only continue the tradition of making and filling the granary, but in doing so, they still maintain the traditions of their ancestors regarding the requirements for making and filling the granary.

Regarding seeds, people still plant a number of local rice seeds that have been planted from generation to generation. In the case of granary or landa, people still follow the traditions associated with the building of a landa. They believe that a good landa is made by a pande landa or the landa making expert. Apart from farmers, pande landa still adhere to the tradition that has been followed for generations, including certain aspects and rituals involved in making a landa. The wood used for the landa's poles and walls is the banga wood that grows around the area. The roof is made of rumbia or reeds, and the walls are made of wood or plywood.¹⁶ The distance between the granary floor and the ground is about one meter to one and a half meters. The

selection of the wood types, the distance between the ground and the granary floor, and other related issues are carefully done so that the rice that is stored in the granary can remain in good condition for a long time. In addition, it is done to prevent the rice from been easily eaten by rats, termites, or other rice-eating and wood-eating animals.

Local Wisdom in Making Landa

Local people carefully choose the day on which to build a landa as well as how to fill it. There are certain days that are believed to be the perfect day to begin construction of the landa. Usually, before filling the landa, the owner pours out a little quantity of rice around the landa for mice. The goal is that the rats will no longer go to the landa because they have gotten their quota. The wisdom of this tradition held by the local people is based on the belief that it is best to grant the rights of people who are entitled to the property owned by other people.¹⁴ Accordingly, people here also believe that other people (even animals) have a right or are entitled to a part of their assets.

The traditions of the people of Enrekang mainland associated with rice, cultivation, and other related issues not only applies to granary but also to the ownership of rice fields. The Enrekang community in general, especially Baraka Subdistrict and surrounding areas, firmly hold on to their ownership of rice fields, gardens, and other landforms. The community strongly refuses to sell their inherited land because the existence of paddy fields is seen as life support, especially in urgent situations. This is the local wisdom of the community in maintaining the availability of food. According to Head of Awo Backwood, in this village, an inherited paddy field will not be sold. Such incidents are rare.¹⁴ Usually, the inherited rice paddy fields are tilled together by the heirs, and the products are enjoyed together. The heirs usually cultivate the paddy fields in turns. The duration of the agreement is between one to three years. Indeed, the inherited paddy fields here are usually not the main source of income, but serve as reserves or additional income.

Locals also have other sources of income. Some work on gardens, some work as civil servants, and some do other jobs whose income can meet their daily needs.¹² The yield of the inherited paddy fields is only harvested once a year, once every two years, or even once every three years, depending on the agreement among the heirs about how long they should work on the inherited rice paddy fields. For this reason, the

existence of rice fields in Kendenan village is maintained. For the society, it is not easy to replace rice plants with other plants.

Conclusion

Based on the characteristics of *Pulut Mandoti*, it is clear that it has the potential to be registered as a geographical indication in order to provide legal protection to existing farming communities in Enrekang district of South Sulawesi Province. The natural factors (geographical) associated with the soil and the weather/climatic elements of Salukanan and Kendenan areas greatly affect the taste, aroma and quality of *Pulut Mandoti*. The local government should take the proactive action of registering the geographical indication of *Pulut Mandoti* at the Directorate General of Intellectual Property in Jakarta for the community groups. This is expected to boost the economic activities of the community.

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