

Geographical Indications and Legal Protections for Indonesian Livestock Products: A Critical Analysis of Policy and Enforcement

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Abstract

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As an agricultural country, Indonesia has considerable potential for livestock products such as meat, eggs, milk, and processed products. Indonesia's biodiversity and vast territory produce livestock products with distinctive characteristics and uniqueness that differ from similar products made in different regions. To protect against counterfeiting of the origin of livestock products, these products are given markers known as Geographical Indications. This study aims to determine the criteria for livestock products to be registered for Geographical Indications and the benefits of protection of these Geographical Indications. The research method used is normative legal research, which analyzes laws, regulations, and other data to answer this research problem. Livestock products registered for Geographical Indications must be proven to have specific characteristics because of the conditions where the livestock products are produced. Climate, latitude, rainfall, and other factors can affect livestock products. The correlation between regional factors and livestock products brings products with specific characteristics that are different from similar products. Livestock products registered with Geographical Indications benefit consumers by avoiding livestock products not produced from the Geographical Indication area. For producers of livestock products, Geographical Indications are a promotional tool that can increase sales of their products. In addition, Geographical Indications help preserve the environment of the area where livestock products are produced so that the products do not change in quality or characteristics.

1. Introduction

Camembert cheese from the Normandy region, Prosciutto di Parma, namely ham from the Parma region, Canard à foie gras du Sud-Ouest is processed goose liver from France, Paška Janjetina, namely local sheep from Croatia, are several livestock and processed products livestock products that have a reputation, quality or uniqueness that is different from similar products. This reputation and uniqueness have economic value, so it needs protection from similar products that will support its reputation. The uniqueness of the product is influenced by the product region generated. Camembert is the product of cow's milk processed through fermentation in The Normandy region in France. It has a different taste to Brie cheese de Meaux, produced in the city of Meaux and France. Special markings need to be given as protection to prevent errors in the origin of livestock products. Geographical Indication is a form of legal protection for products with a reputation, quality, or uniqueness influenced by natural factors, human factors, or a combination of both in the place where the product is produced. This protection is provided by certain marks indicating the product's origin. This mark can be a label or label attached to a product with a registered Geographical Indication.

Indonesia has regulated the protection of Geographical Indications through Law No. 20 of 2016 concerning Trademark and Geographical Indications. This arrangement is one of the government's efforts to protect unique products from Indonesia. This is because Indonesia is

a country with rich biological resources. Kintamani, Toraja, and Gayo coffee are products protected by geographical indication. The geographical factors of these three places provide different coffee flavors even though the type of coffee grown is the same, namely Arabica. Currently, 146 products with Geographical Indications are registered, including fifteen Geographical Indication products from foreign countries at the Directorate General of Intellectual Property of the Republic of Indonesia. These include agricultural products such as coffee, pepper, tobacco, and rice. Apart from agricultural products, some products are protected by human factors, namely craft items such as carvings and weaving. Apart from agricultural products, livestock products, including processed products, can potentially receive Geographical Indication protection. Currently, the livestock products that have been registered are Sumbawa honey, Sumbawa horse milk, and Teran Belitong Timor honey.

Indonesia is the largest archipelagic country, and its unique region along the equator enriches its biodiversity, giving Indonesia an advantage over other nations.¹ This biodiversity, including livestock factors such as horses from Sumbawa and Etawa goats from Kaligesing, must be protected for its sustainability and to increase breeder income. Livestock products from Indonesia need protection so that consumers can easily ensure that the livestock products they buy are truly quality products from certain regions in Indonesia. Etawa goat's milk, which has a reputation² It must be protected so consumers get Etawa goat's milk, not another type. This is the case with dangke cheese from Enrekang, South Sulawesi, which can potentially be registered as a Geographical Indication. If dangke cheese meets the requirements as a product with a Geographical Indication, it will follow in the footsteps of Kalosi Enrekang coffee, which has previously received protection.

Based on a literature search, previous research discusses the protection of Geographical Indications. The first research study by Nasrianti and Muhibuddin, titled *Legal Protection of Geographical Indications According to Law Number 20 of 2016, concerns Marks and Geographical Indications*. This research discusses the importance of protecting Geographical Indications and the process for obtaining this protection. The second research was by Sry Rahayu Eka Pratiwi N. and Rosdiana Saleh titled *Legal Protection of Geographical Indications (Comparative Study of Indonesian Law with Australia)*. This study compares the Geographical Indication protection systems in Indonesia and Australia, even though these two countries are signatories to the TRIPs agreement. Through this research, it is known that the Geographical Indication protection system in Australia is limited to wine and spirits products. At the same time, Indonesia is broad for various unique products due to geographical factors. The third research was by Tornando Sinaga, I Made Dedy Priyanto, titled *Obstacles in Registration of Geographical Indication Protection*. This research discusses the obstacles faced in registering Geographical Indications. Based on this research, the factors of public knowledge and the role of government are some barriers to registering geographical indications. Several studies on Geographical Indications related to agricultural products

¹ Eva Damayanti, *Hukum Merek Tanda Produk Hukum Merek Tanda Produk Industri Budaya* (Bandung: Alumni, 2012).

² Novi Rubiyanti, Zulfanita Zulfanita, and Rinawidiastuti Rinawidiastuti, "Analisis Pemasaran Ternak Kambing Kaligesing (Studi Kasus Di Desa Pandanrejo, Kecamatan Kaligesing, Kabupaten Purworejo)," *Jurnal Sains Peternakan Nusantara* 2, no. 01 (2022): 54–64, <https://doi.org/10.53863/jspn.v2i01.472>.

include the Urgency of Registration of Honey Pineapples from Pematang Regency as a Geographical Indication Commodity by Larasti Mahargiyaning Tyas, Budi Santoso, Irawati, Potential Registration of Geographical Indications for Semeru Slope Coffee by the Regional Government in Facing the ASEAN Economic Community by Khoirul Hidayah and Iffaty Nasyi'ah and the Importance of Registration of Liberika Coffee in Meranti Riau Regency in Communal Intellectual Property by Adi Tiaraputri, The Urgency of Legal Protection of Siak Honey Pineapple as a Potential Geographical Indication Product in Siak Regency by Evi Ratna Evalinda, Saidin, T Keizerina Devi and Jelly Leviza. Based on a review of previous research literature, there is still little research on protecting Geographical Indications for livestock products. Livestock farming as a field of agriculture also contributes to the Indonesian economy. Indonesian livestock products need to be protected to increase the contribution to the Indonesian economy and contribute to the welfare of livestock farmers. This differs from previous research, which mainly discussed the protection of geographical indications for plantation products such as coffee. With the enactment of the Law on Marks and Geographical Indications and the Ministerial Regulation of the Ministry of Law and Human Rights on Geographical Indications and its amendments, it is necessary to review the registration of Geographical Indications. Based on the description above, this research raises the issue of the criteria for products that can be registered with Geographical Indications, the potential of Indonesian livestock products and legal protection for Indonesian livestock products with specific characteristics, and the benefits of registering Geographical Indications for Indonesian livestock products. Through this research, it is hoped that Indonesian livestock products will receive protection and benefit farmers.

2. Methods

The research on geographical indications of livestock products in Indonesia is normative legal research, also known as doctrinal legal research.³ This study provides a study of legal regulations in the field of intellectual property in Indonesia, especially regarding geographical indications. This research took a legislative approach by analyzing the Indonesian legal system's laws and regulations regarding the research's problems.⁴ The results of an analysis of these laws and regulations can reveal the criteria for protecting geographical indications for Indonesian livestock products. Primary, secondary, and tertiary legal materials are secondary data used in this normative legal research. The primary legal materials used are various laws and regulations in the field of intellectual property, including Law No. 20 of 2016 concerning Trademark and Geographical Indications. References for secondary legal materials are legal publications such as previous research results, books, and other materials.

3. Results and Discussion

3.1. Protection of Geographical Indications in the Intellectual Property Legal System in Indonesia

Geographical Indication is one of the areas of intellectual property (IP) that protects products with specific characteristics or reputations related to where the product is produced. The 2001 law on trademarks combines the regulation of Geographical Indications with

³ Soetandyo Wignjosebroto, "Ragam-Ragam Penelitian Hukum," in *Metode Penelitian Hukum: Konstelasi Dan Refleksi* (Jakarta: Yayasan Pustaka Obor Indonesia, 2011), hal. 122.

⁴ Muhaimin, *Metode Penelitian Hukum* (Mataram: Mataram University Press, 2020).

trademarks. This regulation is less clear and slightly ambiguous⁵ so that it is necessary to stipulate Government Regulation No. 51 concerning Geographical Indications. In Law No. 15 of 2021 concerning Trademarks, Geographical Indications and Indications of Origin are regulated in one chapter consisting of 3 articles regulating Geographical Indications (Articles 56-58) and two articles regulating Indications of Origin (Articles 59-60). This reasonably brief provision gives the impression that Geographical Indications are part of Trademarks. This Law does not specifically regulate the registration of Geographical Indications, the period of protection of geographical indications, and violations and lawsuits against Geographical Indications. The limitations of regulating Geographical Indications in Law No. 15 of 2021 concerning Trademarks have made it difficult for producers to register their Geographical Indication products. One of the difficulties faced is that producers must create a Geographical Indication Requirements Book to register their products.⁶ Applicants have difficulty preparing a Geographical Indication Requirements Book because they do not know what to prepare to complete it.⁷ The Geographical Indication Requirements Book will explain, among other things, product characteristics, environmental factors, territorial boundaries, and the influence of natural or human factors on the products produced, including efforts to maintain the uniqueness of Geographical Indication products. In addition to the difficulty in completing the material for the Geographical Indication Requirements Book, applicants are faced with the absence of a standard format for the Geographical Indication Requirements Book.⁸ In addition to the lack of awareness of the need to register geographical indications, the obligation to create a geographical indication requirements book is one of the obstacles to the small number of geographical indication products being registered. From 2001 to 2015, only 38 Geographical Indications were registered with the Directorate General of Intellectual Property. To facilitate registration, Law No. 20 of 2016 concerning Trademarks and Geographical Indications, the Geographical Indication Requirements Book was changed to a Geographical Indication Description Document, which is not as complicated as the Geographical Indication Requirements Book.

Law No. 20 of 2016 concerning Trademarks and Geographical Indications is one of the efforts to strengthen the protection of Geographical Indications in the Intellectual Property Rights system. Indonesia is one of the countries that protects Geographical Indications with a specific legal system known as the *sui generis*⁹ system because Geographical Indications have

⁵ Devica Rully Masrur, "Perlindungan Hukum Indikasi Geografis Yang Telah Didaftarkan Sebagai Merek Berdasarkan Instrumen Hukum Nasional Dan Hukum Internasional," *Lex Journalica* 15, no. 2 (2018): 194-206.

⁶ Yudha Agung Nugraha et al., "Hambatan Pendaftaran Indikasi Geografis Tahu Sumedang Sebagai Aset Potensial Daerah" 18, no. 1 (2020).

⁷ Suwantin Oemar, "Buku Persyaratan Menjadi Kendala Pemohon Indikasi Geografis," *Bisnis Indonesia*, 2008.

⁸ Yeti Sumiyati and Tatty AR, "Model Partisipatif Penyusunan Buku Persyaratan Sebagai Prasyarat Perlindungan Hukum Indikasi Geografis," *Jurnal Hukum Ius Quia Iustum* 22, no. 3 (2015): 442-66, <https://doi.org/10.20885/iustum.vol22.iss3.art6>.

⁹ Kurniaman Telaumbanua et al., "Diskursus Hak Eksklusif Indikasi Geografis Atas Penghapusan Merek Terdaftar Dalam Perlindungan Hukum Hak Kekayaan Intelektual," *Jurnal De Lege Ferenda Trisakti* 2 (2024): 18-30.

unique or special characteristics for their regulation¹⁰. In this Law, the regulation of Geographical Indications is more complete than in the previous Trademark Law. In addition to improving rules, the government continues to socialize the importance of protecting Geographical Indications. An additional 108 Geographical Indications have been registered since the enactment of Law No. 20 of 2016 concerning Trademarks and Geographical Indications. However, to provide stricter law enforcement in the field of Geographical Indications, special laws and regulations are needed that regulate Geographical Indications.¹¹ This is based on several reasons, including Geographical Indications having different characteristics from trademarks, such as the relationship between geographical factors and product reputation, which will later be used as one of the strategies to increase product sales.¹²

The development of Geographical Indications began in France for the type of Roquefort cheese produced in the Southern part of France, specifically in Roquefort-sur-Soulzon. This cheese is fermented sheep's milk with *Penicillium mold roquefortii*, resulting in a bluish-green tinge due to mold growth. Roquefort cheese gets the AOC (*L'Appellation*) *label d'Origine Contrôlée*) in 1925 as a sign that the cheese was originally from the Roquefort-sur-Soulzon region. Regulations regarding Geographical Indications began to be implemented in France in 1919 with the loi du 6 mai 1919 relatively à la protection dec appellation d'origine or Law of May 6, 1919, on the Protection of Appellations of Origin.¹³ These provisions protect alcoholic beverages and wine produced from certain regions. Developing science and trade between countries requires multilateral regulation of intellectual property. In 1883, *the Paris Convention for the Protection of Industrial Property (Paris Convention)* was signed, which regulates intellectual property in the fields of Patents, Trademarks, Industrial Designs, Geographical Indications, and unfair competition. Article 1 and Article 19 of the Paris Convention regulate Geographical Indications, using the term as an indication of source and application of Origin, which is a sign that shows the origin of the goods and services being traded. Apart from the Paris Convention, an international convention specifically regulates the protection of products of origin (Geographical Indications), namely *the Lisbon Agreement for the Protection of Appellations of Origins and their International Registration*, which Indonesia has not ratified until now.¹⁴

¹⁰ Rian Saputra, Adi Sulistiyono, and Emmy Latifah, "Permohonan Internasional Sebagai Upaya Perlindungan Indikasi Geografis Dalam Perdagangan Global (Study Peraturan Pemerintah Nomor 22 Tahun 2018)," *Jurnal IUS Kajian Hukum Dan Keadilan* 7, no. 2 (2019): 237, <https://doi.org/10.29303/ius.v7i2.630>.

¹¹ Rinda Fitria Tamara Puteri and Budi Santoso, "Urgensi Pemisahan Peraturan Perundangan Indikasi Geografis Dengan Peraturan Perundangan Merek Di Indonesia," *Notarius* 16, no. 1 (2023): 48–65, <https://doi.org/10.14710/nts.v16i1.38219>.

¹² Virginia Aparecida Castro, Marina Toledo Arruda Lourenção, and Janaina De Moura Engracia Giraldi, "Geographical Indication as a Strategic Brand Resource in the Wine Sector in Rio Grande Do Sul/Brazil," *Revista de Administração Da UFSM* 14, no. 2 (2021): 276–96, <https://periodicos.ufsm.br/reaufsm/article/view/34790>.

¹³ Muriel Lightbourne, "What's in a Name? The Journey of Geographical Indications from Paris 1883 to Geneva 2015," *GRUR International* 70, no. 10 (2021): 932–42, <https://doi.org/10.1093/grurint/ikab050>.

¹⁴ Alif Muhammad Gultom and Sri Wartini, "Preserving Indigenous Cultures: Analyzing Geographical Indication Registration for Indigenous People Protection in Indonesia," *Journal of Judicial Review* 25, no. 1 (2023): 33, <https://doi.org/10.37253/jjr.v25i1.7647>.

Paris Convention, together with Berne Conventions for Protection of Literary and Artistic Works, was adopted in the Trade-Related Aspect of Intellectual Property Rights, which is part of the Agreement Establishing *the World Trade Organization* (WTO). Member countries of the WTO Agreement are obliged to align regulations in the field of intellectual property with the TRIPs Agreement. As one of the signatories to the WTO Agreement, Indonesia has the same obligations as other member countries to harmonize laws and regulations, one of which is in the field of Intellectual Property. Geographical Indications in the intellectual property system in Indonesia are part of the trademark. Law no. 20 of 2016 concerning Trademarks and Geographical Indications (Trademark and Geographical Indications Law) is the legal basis for regulating Geographical Indications. Indonesia uses the term Geographical Indication as a sign for goods and/or services originating from certain areas. The definition of Geographical Indications in Article 1 number 6 of the Trademark and Geographical Indications Law is: Geographical Indication is a sign that indicates the area of origin of goods and/or products which, due to geographical, environmental factors including natural factors, human factors, or a combination of these two factors, gives a certain reputation, quality, and characteristics to the goods and/or products produced.

The definition of Geographical Indications in the Trademark and Geographical Indications Law means that the elements of Geographical Indications are:

1. Marks on goods and/or products.
2. The sign indicates the region where the goods and/or products are produced.
3. Goods and/or products with this mark have certain characteristics, quality, reputation, and characteristics.
4. The characteristics, quality, and characteristics of goods and/or products are influenced by natural, human, or combination factors where the goods and/or products are produced.

According to the definition of a Geographical Indication, a product must have characteristics different from similar products produced in other regions to be registered as a geographical indication.¹⁵ The characteristics of the own linkages with the place where the product is produced. Regional factors play a very important role in making products that have certain specifications, which will improve product quality and can later increase the selling value of the product.¹⁶ These factors include climate, rainfall rain, height, rainfall ray sun, and so on. Geographical Indication is the term Indonesia uses for signs on goods and/or products with certain characteristics because of natural or human factors. A similar term is *indications of source, appeals of origin, protected designation of origin, and protected geographical indications*. Although the term is used differently, another term for indication geographical refers to a marker place product with characteristics typical of certain produced.

The aim of Geographical Indication protection is that apart from being a marker of product origin, it also guarantees product authenticity so that consumers are protected from counterfeit products. Products that have a good reputation are prone to being counterfeited.

¹⁵ World Intellectual Property Organization (WIPO), *Geographical Indications: An Introduction* (Geneva: WIPO, n.d.).

¹⁶ Miranda Risang Ayu, *Memperbincangkan Hak Kekayaan Intelektual, Indikasi Geografis* (Bandung: Alumni, 2006), hal.42.

Manufacturers who do not have good intentions will distort the product's reputation by producing fake products to the detriment of consumers. Apart from harming consumers, fake Geographical Indication products will also harm producers.¹⁷ The reputation of products with Geographical Indications is damaged because counterfeit products have different or unequal quality to genuine products. Protection of Geographical Indications also means that producers must continue to strive to maintain the quality or characteristics of their goods and/or products following the registered criteria. If goods and/or products with Geographical Indications no longer have the characteristics as registered, the protection will end. Kintamani Arabica coffee products were the first to receive Geographical Indication protection in Indonesia.¹⁸ Therefore, coffee farmers in this region must maintain the environmental conditions of their coffee plantation areas and cultivation techniques so that the characteristics of the coffee produced remain the same.

In June 2024, there will be 146 Geographical Indications registered with the Directorate General of Intellectual Property, Ministry of Law and Human Rights of the Republic of Indonesia. In recent years, more and more regions in Indonesia have registered Geographical Indications for their unique products. The increasing number of product registrations shows that there is awareness of the need to protect these unique products and market demand for the product.¹⁹ Awareness of safeguarding unique Indonesian products is an effort to emphasize Indonesia's sovereignty, including the products it produces from foreign capital ownership of these products.²⁰ This can be seen by the popping up of coffee shops that provide specialty coffee from various regions in Indonesia, which shows that many consumers want coffee from various areas in Indonesia. Of the 146 registered Geographical Indications, there are 15 Geographical Indications from other countries. Geographical Indications from different countries registered in Indonesia include alcoholic drinks such as champagne, pisco, and cognac, human-made products such as silk brocade from Thailand, agricultural products such as Basmati rice, and other processed foods – livestock products such as Gorgonzola cheese.

Original registered Geographical Indications from Indonesia can be classified according to their types: agricultural products, fishery products, livestock products, and products of human expertise. Geographical indications of agricultural products include Kintamani Bali Arabica coffee, Adan Krayan rice, and Meranti sago. Sidoarjo smoked milkfish, Temanggung crayfish, and Lombok pearls are some geographical indications of fishery products. Various types of weaving, such as Balinese gringsing weaving and Tanimbar ikat weaving, are Geographical Indications of human work, in addition to Jepara carved furniture and Bengkulu Besurek Batik. Geographical indications for livestock products include Sumbawa horse milk, Sumbawa honey, and Timor Belitong teran honey. Table 1 presents the number of Geographical Indications registered with DJKI.

¹⁷ Miranda Risang Ayu dan Laina Rafianti Palar, *Hukum Kekayaan Intelektual: Indikasi Geografis Dan Kekayaan Tradisi Dalam Teori Dan Praktik* (Bandung: PT Refika Aditama, 2019), hal.12.

¹⁸ Muh Ali Masnun, "Menakar Peluang Indikasi Geografis Pada Bidang Jasa Dalam Kerangka Hukum Indonesia : Sebuah Diagnosa Awal," *Dialogia Iurical* 13, no. November (2021): 47-60.

¹⁹ Nurohma Nurohma, "Perlindungan Indikasi Geografis Untuk Melindungi Produk-Produk Masyarakat Lokal," *Jatiswara* 35, no. 2 (2020), <https://doi.org/10.29303/jatiswara.v35i2.250>.

²⁰ Ahmad M. Ramli, Miranda Risang Ayu Palar dan Tim Peneliti, *Hukum Kekayaan Intelektual: Indikasi Geografis Dan Kekayaan Tradisi Dalam Teori Dan Praktik* (PT Refika Aditama 2019), hal. 8.

Table 1. Geographical Indications Registered with The Director General of Intellectual Property of the Republic of Indonesia

Type	Indonesia	Other countries
Agricultural product	97	11
Livestock Products	3	3
Fishery Products	7	0
Human Work/Skills	24	1
Amount	131	15

Source: E-Geographical Indication at <https://ig.dgip.go.id>

The quantity is still very small based on the number of registered Geographical Indications in Indonesia, especially for Indonesian livestock products. As one of the countries with the most incredible biodiversity and an agricultural country, Indonesia has the potential for unique, native Indonesian livestock products and needs legal protection. Etawa goat's milk and dangke, a traditional cheese from Enrekang, South Sulawesi, are examples of livestock products with certain characteristics. It is hoped that the protection given to livestock products will prevent consumers from getting fake products.

3.2. Indonesian Livestock Products

The livestock business is one of Indonesia's sources of income and opens opportunities to absorb labor. Together with other agricultural sectors such as fisheries, horticulture, and plantations, livestock products are aimed at fulfilling public consumption. Livestock products help improve society's nutritional status by providing animal protein to enhance the quality of human resources.²¹ Farm animals in Indonesia include cows, buffalo, pigs, horses, sheep, goats, chickens, ducks, quail, and rabbits. Livestock products include meat, milk, eggs, and processed products, which are helpful in meeting the human need for animal protein. Besides food, livestock products such as wool and silk can be used as clothing materials. Management of livestock businesses is carried out on a home scale, or smallholder farms and large livestock companies spread across various regions in Indonesia. Management of livestock businesses can also be carried out traditionally or modernly using high technology. Based on data from the Central Statistics Agency, Indonesian livestock product production in 2022 is presented in Table 2.

Table 2. Production of Indonesian Livestock Products in 2022

No	Commodity	Amount*
1	Beef and buffalo	1,253,000
2	Breed chicken meat	4,222,000
3	Breed chicken eggs	2,163,000
4	Dairy cow's milk	1,605,000

*in tons

Source: BPS, 2022

²¹ Perikanan dan Kehutanan Direktorat Statistik Peternakan, "Peternakan Dalam Angka 2022" (Jakarta, n.d.), hal.2.

There is quite a large potential for livestock production and diversity. It is hoped that Indonesia's biodiversity can improve people's welfare. Modernizing livestock and improving the quality of livestock products by maintaining their health are some of the efforts to increase livestock productivity. Apart from increasing productivity, efforts must also be made to protect Indonesian livestock products legally.

Indonesia's biodiversity and vast territory can influence the results of cultivated livestock. One of the livestock products that has certain characteristics is honey. Honey is the result of bee cultivation or from wild bees. Two types of honey are registered as Geographical Indications in Indonesia, namely Teran Belitong Timor honey and Sumbawa honey. The two kinds of honey have different characteristics, even though honey-producing bees produce them. The difference between the two kinds of honey is the type of bee that makes the honey. Sumbawa honey comes from wild bees (*Apis dorsata*), only found in the forests of Sumbawa and East Belitong Teran. Honey comes from bees (*Heterotrigona itama*) cultivated in East Belitung Regency. The differences in the types of bees, the honey production process, and the areas where the two kinds of honey are produced make the honey produced different.

One of Indonesia's livestock products that has unique characteristics is dangke cheese. Dangke cheese is the result of fermented buffalo or cow milk produced in the Enrekang district, South Sulawesi. Dangke cheese is characterized by an oval shape, a compact and chewy texture, a strong milky aroma, and a savory taste.²² The characteristic of dangke cheese is due to the papain enzyme, which comes from papaya sap and functions as a rennet enzyme to coagulate milk into cheese. This differs from other cheese types, which generally use rennet from bacterial cultures or other sources. Dangke cheese has a texture like soft cheese with a bitter taste due to utilizing the papain enzyme. Dangke cheese is a traditional processed food in the Enrekang district that has been known since the early 1900s. Apart from helping to meet nutritional needs, dangke cheese also has social value in the Enrekang community.²³ At family events, dangke cheese is a dish that must be available, as well as a souvenir for relatives to share.

Another livestock product with unique characteristics is native Indonesian beef. The Ministry of Agriculture of the Republic of Indonesia has branded this product as Special Bali Beef. This beef is the result of Balinese cattle that receive feed in the form of Lamtoro Taramba, in addition to post-harvest handling, to produce meat with a tender texture. Feeding Lamtoro Taramba, a local food in Lombok, gives different results for beef that does not receive Lamtoro Taramba feed. The combination of Lamtoro Taramba with other forage produces low-fat beef.²⁴ Alabio ducks are a type of local duck from South Kalimantan. Alabio ducks are widely bred in the North Hulu Sungai Regency, Central Hulu Sungai Regency, and South Hulu

²² Nurul Ilmi Musra, Serdanawati Yasni, and Elvira Syamsir, "Karakterisasi Keju Dangke Menggunakan Enzim Papain Komersial Dan Perubahan Fisik Selama Penyimpanan," *Jurnal Teknologi Dan Industri Pangan* 32, no. 1 (2021): 27-35, <https://doi.org/10.6066/jtip.2021.32.1.27>.

²³ Masgaba, "Dangke: Kuliner Khas Masyarakat Enrekang," *Walusuji* 12, no. 1 (2021): 61-75.

²⁴ Paulus Klau Tahuk, Agustinus Agung Dethan, and Stefanus Sio, "Meat and Fat Colors Characteristics of Male Bali Cattle Fattened With Green Feed in Smallholder Farms," *Journal of Tropical Animal Science and Technology* 2, no. 2 (2020): 17-25, <https://doi.org/10.32938/jtast.v2i2.592>.

Sungai Regency. The uniqueness of Alabio ducks is their productivity and good egg quality.²⁵ In 2011, the Alabio duck was designated as one of the local superior germplasms to maintain its sustainability. The livestock products described previously are only a small part of livestock products, including processed livestock products with special characteristics from various regions of Indonesia. These products need to be protected so that there is no counterfeiting of the product's origin and can improve the welfare of farmers.

Various regulations and policies regarding livestock and livestock products have been established to support the livestock industry in Indonesia. These regulations cover the production, processing, and marketing of livestock products. Some regulated aspects are licensing, animal health, sanitation and hygiene, and marketing of livestock products. These regulations include Law No. 18 of 2009 concerning Animal Husbandry and Animal Health, which was amended by Law No. 41 of 2014; Law No. 21 of 2019 concerning Animal, Fish, and Plant Quarantine; Government Regulation No. 48 of 2011 concerning Animal Genetic Resources and Livestock Breeding, Government Regulation No. 11 of 2022 concerning Amendments to Government Regulation No. 4 of 2016 concerning Importation of Livestock and/or Animal Products in Certain Cases Originating from Countries or Zones Within a Country of Origin of Importation and Presidential Regulation No. 48 of 2013 concerning Animal Husbandry. A set of regulations and policies in the field of animal husbandry and livestock products in Indonesia do not yet regulate the protection of livestock products with a certain reputation. The regulation on marketing livestock products for export and import requires a Certificate of Origin. This document indicates the origin of the animal or livestock product. This document is different from Geographical Indication because its purpose is to ensure the origin of the livestock product and does not show the relationship between the quality of the product and where the product is produced. Thus, there is no specific regulation in the field of animal husbandry that provides special protection for livestock products with special characteristics due to the influence of the geographical environment or humans. However, this regulation indirectly supports the protection of livestock products, including regulating livestock cultivation areas to produce quality products as regulated in Presidential Regulation No. 48 of 2013 concerning Animal Husbandry.

3.3. Protection of Livestock Products Through Geographical Indication Registration

Potential livestock products, including processed products, need to be protected. One form of protection is the Geographical Indication registration system. Several European countries have pioneered the Geographical Indication protection system, and registering Geographical Indications in the livestock sector has provided positive results for the local economy.²⁶ To obtain this protection, livestock products must meet the criteria for having distinctive characteristics, characteristics, or reputation related to the area where the product is produced. Sumbawa honey and Teran Belitong Timor honey have different attributes from different types of bees and differences in the Sumbawa and Belitong Timor regions, providing

²⁵ Rini Fajarwati et al., "Production and Quality of Alabio Duck Eggs in The Livestock Center Area of Sungai Pandan Village, Hulu Sungai Utara Regency, South Kalimantan," *Jurnal Medik Veteriner* 3, no. 2 (2020): 246–50, <https://doi.org/10.20473/jmv.vol3.iss2.2020.246-250>.

²⁶ Kathrin Poetschki, Jack Peerlings, and Liesbeth Dries, "The Impact of Geographical Indications on Farm Incomes in the EU Olives and Wine Sector," *British Food Journal* 123, no. 13 (2021): 579–98, <https://doi.org/10.1108/BFJ-12-2020-1119>.

unique honey results. Based on the Geographical Indication Book as one of the requirements for Geographical Indication registration, it is known that Sumbawa honey is characterized by a yellow packaging color, a sweet taste with a low water content of around 17-18%, and Teran Belitung Timor honey has a dark brown color with a sweet flavor mixed with the bitter taste and has water content around 20-22%. Livestock products from various regions of Indonesia can have their Geographical Indication registered as a marker of the area where the livestock products are produced. Livestock products must be registered following applicable regulations to obtain Geographical Indication protection. The most crucial thing in this registration is that the registrant must prove that their product has specific characteristics that are influenced by the location where the product is produced. Suppose dangke cheese is to be protected through Geographical Indication. In that case, it must be proven that dangke cheese has different characteristics from dadiah from West Sumatra or dali ni horbo cheese, known as Batak cheese, made from buffalo milk.²⁷ Likewise, specialty beef from Bali gets Lamtoro Taramba feed, which grows from the Lombok region and has different characteristics from Balinese meat from other areas.

To prove the distinctive characteristics of these livestock products, in-depth research is needed to determine how they relate to regional and characteristic factors. The product is scientifically proven. This research is certainly not easy and cheap in terms of funding. Therefore, support from various parties in livestock product-producing areas is needed to protect Geographical Indications for these products. One form of support comes from the government, both central and primarily regional governments, which has been strictly regulated in the Trademark and Geographical Indications Law. Regional governments can provide support through data tracking and cross-agency collaboration.²⁸ Apart from the Regional Government and breeders, collaboration can also be done from various parties like colleges or companies that use its results farm to support the registration process Indication Geographic. This matter is done in the East Belitong area. Work is the same between the Regional Government, PT Timah, communities, and universities tall for do study towards East Belitong Teran Honey so registered Indication The geography as well as develop honey the become product superior.²⁹ The research results on the relationship between geographical areas and livestock products in that area are one of the contents of the Geographical Indication Book, which is one of the requirements for registering a Geographical Indication. The Geographical Indication Book will describe the characteristics and qualities of products that differentiate them from similar products and their relationship to the area where the product is produced. The Geographical Indications Book also explains the boundaries of the area where the product is made based on recommendations from the authorized agency, a description of the history of traditions and production processes as well as the product processing process

²⁷ Rismaulina Simanjuntak, "Pemanfaatan Pangan Lokal Sebagai Makanan Tambahan Dan Uji Kandungan Gizi," *Jambura Journal of Health Sciences and Research* 5, no. 2 (2023): 584-89, <https://doi.org/10.35971/jjhsr.v5i2.18624>.

²⁸ Rifqi Muttaqin, "Analisis Yuridis Peran Pemerintah Kabupaten Gayo Dalam Perlindungan Indikasi Geografis Terhadap Produk Lokal," *Locus: Jurnal Konsep Ilmu Hukum* 2, no. 1 (2022): 187-207.

²⁹ Abdul Rachim et al., "Strategi Green Economy Pada Lahan Bekas Tambang Timah Melalui Budidaya Madu Teran Belitung Timur," *ABDIMAS Jurnal Pengabdian Kepada Masyarakat* 04, no. 02 (2023).

as well as labels containing Geographical Indications that will be attached to the products produced.

The next stage in obtaining Geographical Indication protection is registering livestock products with the Directorate General of Intellectual Property, Ministry of Law and Human Rights of the Republic of Indonesia. Registration is carried out by applicants with legal standing as Geographical Indication registrants, following the constitutional principle.³⁰ From Geographical Indications, legal protection is given when registration has been carried out and the registration requirements are met. Geographical Indications include communal rights, so signs will become the collective property of Geographical Indication registrants in the area where the Geographical Indication is registered.³¹ Based on this communal nature, the applicant for Geographical Indication registration following Article 53 of the Trademark and Geographical Indication Law is

1. Institutions that represent communities in some geographical regions that sell goods and/or products in the form of natural resources, handicrafts, or industrial products
2. Provincial or Regency/City Regional Government.

Geographical Indications have a communal nature; to adapt to the requirements for Geographical Indication registrants, it is necessary to form a Geographical Indication Protection Society or Masyarakat Perlindungan Indikasi Geografis (MPIG). Regarding registration of livestock product indications, the MPIG may consist of breeders, breeder groups, or livestock product processing entrepreneurs who produce livestock products. MPIG aims to manage and market products³², set product standards, and represent members in registering geographical indications. Based on Article 61 of the Trademark and Geographical Indications Law, the period of protection for a registered Geographical Indication is as long as the characteristics and quality of the registered product do not change as stated in the Geographical Indication Book. To maintain the characteristics and quality of registered products, members of the Geographical Indication registrant group must make a joint agreement to determine production procedures to maintain product quality, which must be adhered to by all members. This needs to be ensured so that product protection does not end.

Geographical Indication law enforcement is carried out through two efforts, namely preventive measures and repressive measures. Preventive measures are efforts made to prevent violations of Geographical Indications. Efforts include conducting socialisation and education regarding the importance of protecting products with distinctive characteristics to raise awareness for producers to register Geographical Indications.³³ To assist the registration process, coaching and mentoring the Geographical Indication registration process is also a

³⁰ Mieka Namura, Miranda Risang Ayu Palar, Heliha Novianty Muchtar Fuadi, "Perlindungan Hukum Indikasi Geografis Di Indonesia Melalui Standardisasi Dokumen Deskripsi Indikasi Geografis," *Jurnal Sains Sosio Humaniora* 2, no. 2 (2022): 10–16.

³¹ Purnama Hadi Kusuma and Kholis Roisah, "Perlindungan Ekspresi Budaya Tradisional Dan Indikasi Geografis: Suatu Kekayaan Intelektual Dengan Kepemilikan Komunal," *Jurnal Pembangunan Hukum Indonesia* 4, no. 1 (2022): 107–20, <https://doi.org/10.14710/jphi.v4i1.107-120>.

³² Ni Luh Putu Nia Rahmayanti and I Ketut Sudiarta, "Pembentukan Organisasi Masyarakat Sebagai Perlindungan Terhadap Indikasi Geografis Kopi Kintamani," *Kertha Semaya : Journal Ilmu Hukum* 10, no. 10 (2022): 2235, <https://doi.org/10.24843/ks.2022.v10.i10.p03>.

³³ Sugih Ayu Pratitis, "Peranan Pemerintah Dalam Meningkatkan Produk Indikasi Geografis Di Indonesia," *Jurnal Perspektif Hukum* 2, no. 2 (2021): 264–96, <https://doi.org/10.35447/jph.v2i2.433>.

form of preventive action for enforcing the Geographical Indication law. This mentoring needs to be carried out continuously so that producers can maintain the quality of their products.

Another effort as a form of Geographical Indication law enforcement is repressive action. This action is taken in the event of a violation of Geographical Indication law. The regulation of violations of Geographical Indications is regulated in Article 66 of the Law on Trademarks and Geographical Indications, which includes:

- a. Use of Geographical Indications that do not comply with the Geographical Indication Description Document;
- b. Use of Geographical Indication marks to indicate that their products are comparable to products protected by Geographical Indications to gain benefits from the use and reputation of Geographical Indications;
- c. Use of Geographical Indication marks that mislead the public;
- d. Use of Geographical Indications without rights;
- e. Imitation or misuse of Geographical Indications that can be misleading; and
- f. Other actions that can mislead the public about the truth of the origin of goods and/or products.

Violations of Geographical Indications can be handled civilly through litigation and non-litigation efforts by the injured parties. Non-litigation legal efforts are actions taken by the injured party due to violations of geographical indications by negotiating between the two parties, and mediation or arbitration is an alternative dispute resolution.³⁴ If non-litigation efforts cannot resolve the dispute, other legal efforts can be taken through the courts or litigation. Litigation efforts for violations of Geographical Indications can be made by filing a lawsuit with the Head of the Commercial Court in the defendant's jurisdiction. Filing a lawsuit with the Commercial Court is intended to resolve the dispute within a relatively short period.³⁵ Criminal law also protects against violations of Geographical Indications, as regulated in Article 101 and Article 102 of the Trademark and Geographical Indication Law. This law enforcement is based on complaints from parties harmed by violations of Geographical Indications. These parties submit their complaints to the National Police or PPNS DJKI.

3.4. Benefits of Protection of Geographical Indications for Livestock Products

The hard work of farmers to produce quality products needs to be appreciated or protected from acts of fraud by irresponsible parties who take advantage of the reputation of the livestock products. A fraud that may occur is falsifying the origin of livestock products. This counterfeiting can take the form of using a label that shows the origin of the product even though the product does not come from the area in question; for example, cheese like dangke that is not made in the Enrekang area is given a label as if the cheese was made in the Enrekang area. This action will undoubtedly harm consumers because consumers do not get the products they should receive. Apart from that, counterfeiting can damage the good name of cheese producers if the fake cheese is of a different quality.

³⁴ Anak Agung Ayu Cintya Krisna Putri and Made Aditya Pramana Putra, "Meninjau Perlindungan Dan Penegakan Hukum Terhadap Pelanggaran Hak Indikasi Geografis Di Indonesia," *Jurnal Kertha Wicara*, vol. 12, 2023.

³⁵ M. Rangga Yusuf and Hernawan Hadi, "Perlindungan Hukum Terhadap Produk Indikasi Geografis Kopi Arabika Java Sindoro-Sumbing," *Jurnal Hukum Dan Pembangunan Ekonomi* 7, no. 2 (2019): 219, <https://doi.org/10.20961/hpe.v7i2.43007>.

Breeders or other parties who are members of the Geographical Indication register group have the exclusive right to use the Geographical Indication mark to avoid counterfeiting similar products.³⁶ The Geographical Indication Label shows that the product has a certain quality, which can help producers profit from selling products with Geographical Indication.³⁷ In addition to the Indonesian Geographical Indication logo on registered Geographical Indication products, every product packaging and promotional media must include the Geographical Indication certificate number and the Geographical Indication Product Origin Code.

The group of Geographical Indication registrants jointly uses this Geographical Indication Logo. Through the logo and inclusion of the Geographical Indication certificate number and product origin code, consumers can easily ensure that the product they buy comes from the area where it is produced. Also, registering a Geographical Indication will increase pride in the region that produces goods with a Geographical Indication.³⁸ Consumers will easily remember products and regional origins that have specific characteristics. Another benefit of Geographical Indication protection is that the applicant must ensure that the condition of the territory is always in the registered state. This needs to be considered because the quality or characteristics of registered Geographical Indication products are greatly influenced by the conditions in which the product is produced. If a product with a registered Geographical Indication has qualities or characteristics different from those registered, legal protection for the product will end. To ensure product quality, the registrant of Geographical Indications must establish provisions that are complied with by the parties who are members of the registrant group to ensure that the product quality is uniform and follows what is registered.

Sumbawa horse milk, Sumbawa honey, and Belitong Timor teran honey are three livestock products that have received Geographical Indication protection. The Sumbawa Horse Milk Development Association registers the Geographical Indication of Sumbawa horse milk. Sumbawa horse milk is unique because it is milk produced from Sumbawa horses, which are local livestock from Sumbawa.³⁹ The horse milk produced has the characteristic that it can be stored for five months without going through a pasteurisation process, heating, or adding preservatives, and contains 20% of the same anti-bacterial qualities as the antibiotic penicillin. Sumbawa horse breeders who are members of the Sumbawa Horse Milk Development Association must maintain the source of the genetic power of Sumbawa horses as milk producers and the milk processing process so that the quality of the milk produced is the same

³⁶ Anton Muhajir, "Manual Pelatihan Indikasi Geografis," *Jakarta: Indonesian-Swiss Intellectual Property Project* (Jakarta, 2018), hal.15.

³⁷ M Rialin, Z Daulay, and D Delfiyanti, "Pelaksanaan Indikasi Geografis Oleh Masyarakat Perlindungan Indikasi Geografis (Mpig) Pasca Sertifikasi Di Kepulauan Meranti Dan Solok," *UNES Law Review* 6, no. 1 (2023): 692-702, <https://www.review-unes.com/index.php/law/article/view/877%0Ahttps://www.review-unes.com/index.php/law/article/download/877/624>.

³⁸ Yafet Yosafet Wilben Rissy, *Hukum Merek Dan Indikasi Geografis Internasional Dan Nasional (Indonesia)* (Salatiga: Griya Media, 2021).

³⁹ Nurul Savira and Bahtiar Bahtiar, "Studi Kualitas Susu Kuda Liar Sumbawa Berdasarkan Koefisien Viskositas Dan Dielektrisitas," *ORBITA: Jurnal Pendidikan Dan Ilmu Fisika* 8, no. 1 (2022): 91, <https://doi.org/10.31764/orbita.v8i1.8401>.

as that registered. Apart from that, breeders need to take various actions so that the condition of the area where Sumbawa horses are bred is maintained.

One of the requirements for geographical indication is that the reputation or characteristics of the product are influenced by where the product is produced. The Geographical Indication Description Document explains the boundaries of the area where the product is made and the influence of natural and human factors on the product produced. Natural factors include climate, soil type, topography, water, flora and fauna, and other factors affecting product quality. These factors are susceptible to change, affecting product quality, such as climate changes, temperature, and rainfall. Coffee is one of the products that is widely registered as a product with geographical indication. Climate change also affects changes in the environment where coffee is cultivated, thus affecting the quality of the coffee.⁴⁰ Not much different from agricultural cultivation results, livestock cultivation is also influenced by natural factors. Climate change also affects changes in the quality of milk used as raw material for cheese, thus affecting the quality of the cheese produced.⁴¹

Several laws and regulations support protecting the environment where the product is produced so that Geographical Indications are not removed. These provisions include:

- a. Law No. 32 of 2009 concerning Environmental Protection and Management law regulates that every activity that affects the environment must comply with the principles of sustainability. Production activities in the Geographical Indication area must also comply with these provisions. Based on this regulation, environmental management is carried out by considering ecological and social aspects, including the sustainable use of natural resources.
- b. Presidential Regulation No. 48 of 2013 concerning Animal husbandry; this regulation regulates Husbandry Areas. Animal husbandry is carried out in areas that must meet specific criteria. One of the criteria is the sustainability of environmental functions and the socio-cultural conditions of the community. Based on this provision, geographical indication production activities in the livestock sector are carried out in certain areas to maintain the sustainability of environmental functions. Efforts to support environmental sustainability in the Cultivation Area are also efforts to keep the unique characteristics of Geographical Indication products influenced by natural factors.
- c. Regulation of the Minister of Agriculture Number 89/Permentan/OT.140/12/2011 concerning Guidelines for Sustainable Agricultural Area Management, this Ministerial Regulation encourages implementing environmentally friendly agricultural practices. Sustainable agricultural practices can help maintain the characteristics of Geographical Indication products as stated in the Geographical Indication Description Document.

The Geographical Indication System indirectly helps preserve or protect the environment around where the product is registered. Protection of Geographical Indications also helps

⁴⁰ Selena Ahmed et al., "Climate Change and Coffee Quality: Systematic Review on the Effects of Environmental and Management Variation on Secondary Metabolites and Sensory Attributes of Coffea Arabica and Coffea Canephora," *Frontiers in Plant Science* 12, no. October (2021): 1–20, <https://doi.org/10.3389/fpls.2021.708013>.

⁴¹ M. Gauly and S. Ammer, "Review: Challenges for Dairy Cow Production Systems Arising from Climate Changes," *Animal* 14, no. S1 (2020): S196–203, <https://doi.org/10.1017/S1751731119003239>.

ensure sustainable agricultural development in the areas where products are produced.⁴² Efforts to maintain the environment of geographical indication areas are the responsibility of the geographical indication registrant and all components of the surrounding community. They must also keep the environment so that the quality of geographical indication products continues to comply with their registration.

4. Conclusions

Indonesia has the potential for livestock products in the form of meat, milk, eggs, and other processed products to help improve the welfare of farmers. Indonesia's biodiversity and vast territory mean that its livestock products have certain characteristics. Livestock products, including processed products, have certain characteristics due to the influence of the area where they are produced and need legal protection. Geographical Indication is a form of legal protection for livestock products with special characteristics due to the influence of the area where they are produced by providing a special mark on the registered product. To obtain this protection, the applicant for Geographical Indication must register his livestock products by proving that the livestock products have unique characteristics that are different from similar products produced from various regions in Indonesia. This proof was carried out by conducting a series of studies showing the characteristics of livestock products influenced by regional factors where the product is produced. Protection of Geographical Indications for Indonesian livestock products will provide certainty of origin for consumers who consume these livestock products. Apart from that, protecting Geographical Indications also helps preserve the environment in the production area. The characteristics and quality of these livestock products are greatly influenced by the conditions of the region where they are produced. If regional conditions change, which results in a change in the characteristics or quality of livestock products, these products will no longer receive Geographical Indication protection.

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⁴² Chunyan Li et al., "Do Geographical Indication Products Promote the Growth of the Agricultural Economy? An Empirical Study Based on Meta-Analysis," *Sustainability* 15, no. 19 (October 2, 2023): 14428, <https://doi.org/10.3390/su151914428>.

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