

From Bean to Benefit: How Indonesian Intellectual Property (IP) Law Protects the Coffee Farmers in Indonesia?

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Abstract

This study addresses the urgent question: How can legal protections for Geographical Indications (GIs) as a form of Intellectual Property (IP) enhance the welfare of coffee farmers in Temanggung, Indonesia? Coffee is a vital agricultural product in this region, yet farmers face challenges in maximizing its economic potential. The research positions itself within the framework of empirical legal studies, analyzing the interplay between legal protections and agricultural sustainability. The paper discusses the issue by first examining the current state of GI protection in Temanggung, identifying both obstacles faced by farmers and the government. Through qualitative analysis, the study evaluates effective strategies for implementing GI protections and their implications for farmer welfare. The main findings

indicate that while there are significant challenges in enforcing GI protections, targeted strategies—such as regular training and outreach for farmers, improved marketing initiatives, and the establishment of local regulations—can substantially enhance their livelihoods. Moreover, the research highlights the importance of increasing awareness and knowledge among farmers to leverage GI protections effectively. Overall, this study contributes to the understanding of agricultural law's role in rural development, providing actionable insights for policymakers and stakeholders aiming to support Indonesia's coffee farmers.

Keywords: Geographical Indications; Legal Protection; Coffee Farmers; Rural Development; Agricultural Sustainability

A. Introduction

Coffee farming plays an important role in the economy of Indonesia¹, particularly in regions like Temanggung, where the unique climate and soil conditions create an ideal environment for cultivating high-quality coffee.² This agricultural sector not only provides livelihoods

- 1 Coffee farming is crucial to Indonesia's economy, providing livelihoods for millions and contributing significantly to export revenue. However, it faces several challenges, including market volatility affecting farmers' incomes and investment decisions. Many farmers lack access to modern agricultural practices and resources, hindering productivity. Additionally, insufficient legal protections, particularly regarding Geographical Indications, leave farmers vulnerable to exploitation and competition. See Esther Sri Astuti, et al., "The impact of coffee certification on the economic performance of Indonesian actors," *Asian Journal of Agriculture and Development* 12, no. 2 (2015): 1-16; Wendy Aprianto, and Usep Syaipudin, "Contribution of Lampung Coffee Commodity to the Economic Improvement of Lampung Province," *Peradaban Journal of Economic and Business* 1, no. 1 (2022): 9-16; Hadiyan Wijaya Ibrahim, and Suhaiza Zailani, "A review on the competitiveness of global supply chain in a coffee industry in Indonesia," *International Business Management* 4, no. 3 (2010): 105-115.
- 2 See also T. R. Anggoro, S. N. Fadillah, and K. Prayoga, "Farming performance and evaluation of the adoption of robusta coffee cultivation based on geographical indication in Candiroto district Temanggung Regency," *IOP Conference Series: Earth and Environmental Science*. Vol. 1364. No. 1. IOP Publishing, 2024; Dyah Titisari Anugraheni, and Veronica Kusdiartini, "Coffee Supply Chain and Marketing Channel Management in Central Java," *South East Asia Journal of Contemporary Business, Economics and Law* 16, no. 3 (2018): 1-8.

for countless families but also contributes to the cultural identity of the local communities. However, despite its significance, coffee farmers in Indonesia face numerous challenges, including market volatility, competition, and inadequate legal protections. In this context, the implementation of Geographical Indications (GIs) emerges as a critical legal framework that can safeguard the interests of farmers and enhance their welfare.

Geographical Indications serve as a form of intellectual property (IP) that identifies goods as originating from a specific place, where quality, reputation, or other characteristics are attributable to that location. For coffee farmers in Temanggung, GIs can be instrumental in distinguishing their products in a global market increasingly focused on origin and quality. By protecting the reputation of Temanggung coffee, farmers can command higher prices, thereby improving their economic conditions and contributing to the overall prosperity of their communities.³ The legal recognition of these GIs is not only a matter of protecting a product but also a strategy for sustainable rural development.

Despite the potential benefits, the legal landscape surrounding GIs in Indonesia remains underdeveloped. Many farmers are unaware of their rights and the mechanisms available for protecting their products. Additionally, there are significant barriers to implementing effective GI protection, including bureaucratic challenges, lack of resources, and insufficient government support. These issues

3 See also and compare with Nurul Mustaidah, and Waspiah Waspiah, "Potential of Geographical Indications of Coffee as an Effort to Improve Community Welfare in Ngresepbalong Village on the Slope of Mount Ungaran: Potensi Indikasi Geografis Kopi Sebagai Upaya Peningkatan Kesejahteraan Masyarakat di Desa Ngresepbalong Lereng Gunung Ungaran," *Annual Review of Legal Studies* 1, no. 2 (2024): 347-372; Waspiah Waspiah, et al., "Kopi, Kamu, dan Kita: Potret Peningkatan Pemahaman Konsep Legal Protection bagi Petani Kopi Terdaftar Indikasi Geografis di Desa Tlahap Kledung Temanggung Berbasis Multi-Sektoral," *Jurnal Pengabdian Hukum Indonesia (Indonesian Journal of Legal Community Engagement) JPHI* 3, no. 1 (2020): 40-55; Dwi Surya Hartati, Firya Oktaviarni, and Windarto Windarto, "Rethinking the Future of Indonesian Coffee: Legal, Social, and Political Perspectives," *Jambe Law Journal* 6, no. 1 (2023): 69-84.

highlight the urgency for targeted strategies to enhance awareness and understanding of GIs among coffee farmers, as well as the need for stronger legal frameworks that can support their efforts.

Given the importance of coffee to Indonesia's economy, addressing these legal gaps becomes even more critical. Indonesia is one of the largest coffee-producing countries in the world, boasting nine coffee-producing regions covering a total area of 1,300,000 hectares, yielding more than 750,000 tons annually. Coffee production has shown a steady increase from 2020 to 2022, with the largest output reaching 762.38 thousand tons in 2020 and growing to 789.19 thousand tons in 2021. Although there was a slight decline in 2022, the overall trend underscores the country's significant capacity for coffee production. In 2023, coffee production in Indonesia decreased by 1.9%, reaching only 760.2 thousand tons. This decline was attributed to natural factors, particularly heavy rainfall during the coffee fruit formation period. *The United States Department of Agriculture (USDA)* projects that coffee production in Indonesia for the 2024-2025 period (April-March) will see a significant increase compared to the previous year. The USDA forecasts that coffee yields in Indonesia during this period will reach 10.9 million 60-kg bags. With 67% of this output destined for export, generating a transaction value of \$1.6 billion, and 33% satisfying domestic demand, Indonesia's potential for coffee commodity development is substantial.⁴

Additionally, Temanggung Regency is one of the largest coffee-producing areas in Central Java which has contributed as much as 43.86% of Central Java's coffee production. Based on the area of smallholder plantation production area by district/city in Central Java, coffee production in Temanggung Regency reached 10,611.06 tons with a planting area of 1,295.13 hectares for Arabica Coffee and 11,105.82 hectares for Robusta Coffee⁵. Robusta coffee in Temang-

4 Badan Pusat Statistik (BPS), *Statistik Kopi Indonesia 200: Indonesia Coffee Statistics 2022*. Volume 7, (Jakarta: Badan Pusat Statistik Indonesia, 2023). This report is available online at <<https://www.bps.go.id/id/publication/2023/11/30/abde293e6c0fc5d45aaa9fe8/statistik-kopi-indonesia-2022.html>>

5 Rola Nurul Fajria, et al., "Pengembangan UMKM Kopi pada Masyarakat

gung Regency is one of the coffees with a distinctive character and taste. One of the factors that affect the distinctive character and taste of coffee includes the harvesting method, regional characteristics, post-harvest management and the roasting process which will later determine the *specialty of coffee*⁶. Coffee plants in Temanggung Regency in this case come from selected coffee varieties planted with a Tlahab pattern. The Tlahab pattern itself is one of the intercropping planting methods carried out with tobacco planted at a distance of 4-6 meters, between which coffee and other types of vegetables will be planted.

Coffee cherries intended for harvest are subjected to manual selection, ensuring that at least 95% are red, with a maximum of 5% yellow cherries, and the exclusion of green or black cherries. The selected cherries are processed using the wet method, which involves fermentation for a period of 12 to 36 hours, followed by natural sun drying until the moisture content is reduced to 12%. It is imperative that the roasting process is conducted under optimal conditions to preserve the high quality of the coffee. However, the full implementation of advanced coffee management technologies remains limited among many producers in Temanggung. This shortfall can be attributed to several factors, including restricted access to information, technology, and capital, as well as challenges in business management within some processing enterprises. Furthermore, the dependence on manual harvesting methods may restrict time efficiency in the coffee processing workflow.⁷

The Sindoro-Sumbing Geographical Indication Protection Soci-

Perlindungan Indikasi Geografis (MPIG-KAJSS) Kopi Arabika Java Sindoro-Sumbing Kabupaten Temanggung,” *Jurnal Hilirisasi Technology kepada Masyarakat (SITECHMAS)* 3, no. 1 (2022): 1-14.

6 Pardon Pardono, et al., “Peningkatan Brand Image Kopi Robusta Temanggung Berbasis Indikasi Geografis,” *Warta LPM* 25, no. 1 (2022): 101-111.

7 Danang Purwanto, et.al., “Development of Temanggung robusta coffee: Findings and evidence from Central Java, Indonesia,” *Society* 11, no. 1 (2023): 158-172; Rindra Yusianto, et.al., “Selection of Optimal Transportation Routes in the Distribution of Temanggung Original Robusta Coffee using Genetic Algorithms,” *2022 International Seminar on Application for Technology of Information and Communication (iSemantic)*. IEEE, 2022.

ety in this case strives to be able to maintain and improve the reputation and quality of coffee produced in Temanggung Regency. One of the efforts carried out is through efforts to protect the coffee produced, so that it will not be separated from the importance of the role of coffee registered in the Geographical Indication. In 2015 the Society for the Protection of Geographical Indications of Robusta Sindoro Sumbing Coffee (MPIG KRT) has applied for the Protection of Geographical Indications of Robusta Temanggung Coffee which in 2016 has been approved by the Ministry of Law and Human Rights (Kemenkumham)⁸. Through the protection of the Geographical Indication, it is hoped that it can minimize the occurrence of intellectual property infringement and is also expected to increase the economic value and competitiveness of the coffee in the market, so that it can foster farmers' awareness of the importance of coffee processing technology procedures based on the coffee Geographical Indication standard.

In the further context, coffee farming in Indonesia also faces challenges including low prices, overproduction, and climate change impacts. The Indonesian government enacted Law Number 19 of 2013 to protect and empower farmers.⁹ Some regions, like Central Aceh, are considering local regulations to protect Gayo Arabica coffee farmers.¹⁰ Climate change threatens coffee production, with extreme events like El Niño and La Niña causing significant yield reductions. Rising temperatures also increase pest and disease incidence, potentially shifting production areas to higher elevations.¹¹ Expanding low-

8 Nuning Setyowati and Aditya Pitara Sanjaya, "Sikap Petani terhadap Pengolahan Kopi Robusta Berbasis Indikasi Geografis di Kabupaten Temanggung," *Jurnal Penyuluhan* 17, no. 2 (2021): 218-227.

9 Ryan Harris Nasution, "Penerapan prinsip fair-trade dalam upaya peningkatan kesejahteraan petani kopi di jawa barat." *Dialogia Iuridica* 10, no. 2 (2019): 50-75.

10 Rachmatika Lestari, Rahmat Pramulya, Dedy Darmansyah, Devi Agustia, Alfizar Alfizar, and Safrida Safrida. "Protection and Management of Gayo Arabica Coffee in the Laws and Regulations of Central Aceh Regency", *International Journal of Social Science and Education Research Studies* 3, no. 1 (2023): 170-178.

11 M. Syakir, and E. Surmaini, "Perubahan iklim dalam konteks sistem

quality robusta coffee production contributes to deforestation and fails to improve farmers' livelihoods.¹² To address these issues, experts recommend new certification guidelines, improved agricultural practices, better protected area enforcement, and reduced coffee planting areas. However, most coffee farmers still have limited access to climate information, markets, technology, and credit, hindering their adaptive capacity.¹³

Geographical indications (GIs) play a crucial role in establishing exclusive rights that yield significant economic benefits and enhance both regional and national economies. Public awareness is essential for realizing these benefits. A lack of awareness regarding the importance of registering GIs can hinder effective legal protection of regional resources. Therefore, strong collaboration among local governments, relevant agencies, practitioners, academics, and the Geographical Indication Protection Society (MPIG) is vital for fostering public understanding of GI protection and its potential to elevate community living standards. Inadequate protection of GIs risks legal violations and economic losses. Thus, implementing effective strategies to boost coffee processing productivity in Temanggung is necessary for positively impacting the livelihoods of local residents.¹⁴

produksi dan pengembangan kopi di Indonesia," *Jurnal Penelitian dan Pengembangan Pertanian* 36, no. 2 (2017): 77-90.

12 Timothy G. O'Brien, and Margaret F. Kinnaird, "Caffeine and conservation," *Science* 300, no. 5619 (2003): 587-587.

13 Syakir, and Surmaini, "Perubahan iklim dalam konteks sistem produksi dan pengembangan kopi di Indonesia."

14 Furthermore, it is emphasized that geographical indications (GIs) play a crucial role in protecting unique regional products and improving local economies. Studies on Kahayya coffee and Temanggung coffee demonstrate that GI protection can enhance product value and community livelihoods. However, challenges exist in implementing GI standards, including low farmer adoption rates and the need for comprehensive sustainability improvements. To address these issues, strategies such as improving farmer adoption of GI standards, optimizing the role of Geographical Indication Protection Societies (MPIG), and enhancing stakeholder involvement are recommended. Additionally, focusing on factors like climate adaptation, land conservation, and crop patterns can contribute to the sustainability of coffee farming systems from a GI perspective. Overall, effective GI protection requires collaboration among local governments, agencies,

This study aims to address the following central question: How can legal protections for Geographical Indications enhance the welfare of coffee farmers in Indonesia? By examining this question, the research seeks to uncover the strategies that can be implemented to overcome existing challenges and assess the potential impact of these legal protections on the livelihoods of farmers. Through a comprehensive analysis, the study will provide insights into the interplay between law, agriculture, and rural development.

Novianti Mangera et al in their article entitled “Perlindungan Hukum Kekayaan Intelektual Terhadap Kopi Purba (Todolo) Toraja Sebagai Upaya Pelestarian Produk Indikasi Geografis” specifically examines efforts for Toraja Ancient Coffee to obtain protection for Geographical Indications. In contrast to this study, which is not only limited to analyzing efforts so that coffee can obtain Geographical Indications, but also analyzes the obstacles faced by coffee farmers and examines the effect of coffee on the economic development of coffee farmers in Temanggung. The findings of this research will contribute to the growing discourse on agricultural law and its significance in promoting sustainable practices in rural areas. By focusing on the experiences of coffee farmers in Temanggung, this paper will not only illuminate the specific challenges they face but also propose actionable recommendations for policymakers and stakeholders. Ultimately, the goal is to highlight how effective legal protections can transform the coffee farming landscape in Indonesia, turning the journey “from bean to benefit” into a reality for local farmers.

practitioners, academics, and MPIGs to raise public awareness and maximize economic benefits. See Andi Kurniawati, Qaiatul Muallima, and Aso Alfian Nur, “The Potential of Protecting Geographical Indications of Kahayya Coffee to Improve the Economy of Local Communities,” *Awang Long Law Review* 5, no. 1 (2022): 235-240; Hanifah Ihsaniyati, and Nuning Setyowati, “Strategy of Improving the Farmers’ Adoption to Temanggung Robusta Coffee’s Geographical Indication Standard,” *IOP Conference Series: Earth and Environmental Science*. Vol. 519. No. 1. IOP Publishing, 2020; I. Ketut Ardana, “Sustainability of Temanggung coffee farming system in the perspective of geographical indications,” *Jurnal Littri* 25, no. 2 (2019): 69-80.

B. Method

This research employs a qualitative approach, specifically utilizing empirical legal research methods to investigate how legal frameworks protect coffee farmers in Temanggung, Central Java. By focusing on the law in practice, this study aims to reveal the operational dynamics of legal protections within the coffee farming sector. The methodology is analytical and descriptive, linking applicable laws and regulations to the theoretical and practical applications of positive law pertinent to the challenges faced by coffee farmers. In addition, data sources for this study comprise both primary and secondary materials. Primary data were collected through direct interviews, observations, and the analysis of relevant laws and regulations. Secondary data were obtained from academic literature, including books, journals, previous studies, and reputable websites related to the topic of legal protections for coffee farmers.

C. Geographic Indication Protection Strategy: Current Development and Challenges

Internationally, the provisions regarding Geographical Indications are contained in the *Trade Related Aspects of Intellectual Property Rights (TRIP's Agreement)*. The *TRIP's Agreement* in this case also provides a definition of Geographical Indication in Article 22 (1) which states that “geographical indication are for the purpose of this agreement, indication which identify a good as originating in the territory of 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”.¹⁵ These provisions then became the basis for regulation for their member countries in regulating Geographical Indications nationally in their countries.

Regulations regarding Geographical Indications in Indonesia it-

15 Candra Irawan, “Pendaftaran Indikasi Geografis sebagai Instrumen Perlindungan Hukum dan Peningkatan Daya Saing Produk Daerah di Indonesia,” *Proceedings Seminar Nasional Multi Disiplin Ilmu Unisbank*, (2017): 358-366. Available online at <<https://www.unisbank.ac.id/ojs/index.php/sendu/article/view/5065>>

self are contained in Law Number 20 of 2016 concerning Trademarks and Geographical Indications (MIG Law). Based on Article 1 number 6 of the MIG Law, a Geographical Indication is a sign that indicates the area of origin of a good and/or product that due to geographical environmental factors including natural factors, human factors or a combination of the two factors gives reputation, quality, and certain characteristics to the goods and/or products produced. The right to a Geographical Indication itself is an exclusive right granted by the state to the holder of the right to a registered Geographical Indication, as long as the reputation, quality, and characteristics on which the protection of the Geographical Indication is provided still exists.

The protection of Geographical Indications itself comes into effect after the registration of the Geographical Indication through an application submitted by an institution representing the community in a certain area or the local government of the province, district/city of the region where the indication to be registered originates.¹⁶ An application for a Geographical Indication based on the MIG Law in this case must be based on the results of a substantial assessment by the Geographical Indication Expert Team as stipulated in Article 58 paragraph (1) of the MIG Law. The Geographical Indication Expert Team itself is an independent team tasked with providing consideration or advice to the Minister regarding efforts to register, modify, cancel and/or supervise National Geographical Indications. The period of protection and removal of a Geographical Indication in this case lasts as long as the reputation, quality and characteristics that are the basis for giving a Geographical Indication to an item are maintained.¹⁷

16 Irawan, "Pendaftaran Indikasi Geografis sebagai Instrumen Perlindungan Hukum dan Peningkatan Daya Saing Produk Daerah di Indonesia," *Proceedings Seminar Nasional Multi Disiplin Ilmu Unisbank*, (2017): 358-366. Available online at <<https://www.unisbank.ac.id/ojs/index.php/sendu/article/view/5065>>

17 Nizar Apriansyah, "Perlindungan Indikasi Geografis Dalam Rangka Mendorong Perekonomian Daerah (Protection of Geographical Indications within the Scope of Improvement of Regional Economy)." *Jurnal Penelitian Hukum De Jure* 18, no. 4 (2018): 525-542.

Indonesia as one of the countries with a wide potential for Geographical Indications must be able to make adjustments to provide protection for Geographical Indications in a certain area. The importance of the protection of Geographical Indications in this case is influenced by economic and cultural aspects, so the protection needs to be improved. Weak protection of Geographical Indications in this case can also trigger the abuse of commercialization carried out by parties who are not entitled to economic benefits. This is evidenced by the violation of Geographical Indications in Indonesia which is quite famous, namely the Gayo Coffee Case.

Gayo Coffee, a renowned highland coffee originating from Nangroe Aceh Darussalam Province, has established a reputation over the decades as a leading producer of Arabica coffee. This coffee variety has been cultivated since 1926 and is officially registered with European Coffee B.V., located at Zwarteweg 6 B, NL-1412 GD Naarden, Netherlands, under CTM list 001242965, classified in class 30, which encompasses goods such as coffee, tea, cocoa, sugar, and artificial coffee. The issuance of the European B.V. brand certificate prompted Holland Coffee to send a cease-and-desist notice to PT. Arvis Sanada, a national coffee exporting company owned by a Gayo native based in Medan, North Sumatra. The notice requested that PT. Arvis Sanada refrain from exporting coffee to the Netherlands under the designation “*Gayo Coffee*,” citing similarities with the registered trademark. As a result, all export contracts with the Netherlands were terminated, and previously agreed-upon contracts were canceled. Furthermore, European B.V. extended this ban to all coffee companies globally, prohibiting the circulation of Gayo coffee within the Netherlands.¹⁸

18 For further information concerning to the *Gayo Coffee Case Claim*, please see also Dara Quthni Effida Dara, et al., “Legal Mechanism: Foreign Brand Claims Against Potentially Geographical Indications of Indonesia,” *Jurnal Hukum Samudra Keadilan* 17, no. 2 (2022): 131-141; Gede Aditya Pratama, Elfirda Ade Putri, and Aimee Malca Luwinanda, “International Trademark Registration Through Madrid Protocol as a Solution for Trademark Protection from Indonesia,” *3rd International Conference on Business Law and Local Wisdom in Tourism (ICBLT 2022)*. Atlantis Press, 2023; Faradila Yulis-

A clear example of the success of the protection of geographical indications in Indonesia is Arabica Coffee in Catur Village, Kintamani District, Bangli Regency. According to BPS Bali Province 2017, Kintamani has a coffee plantation area of 5,656 hectares with a production of 2,134.48 tons in 2017, all of which are Arabica coffee¹⁹. Kintamani Arabica Coffee is marketed to the international market, so that demand is not only influenced by the domestic market, but also by global demand. Bali Province's coffee export data for the last five years shows fluctuations in export volume and value. In 2014, the total export volume of coffee reached 240 tons with an export value of US\$1.2 million. This is an increase from 2013, which recorded an export volume of 36 tons with an export value of US\$205 thousand.

The coffee is known for its unique quality and taste that is influenced by the climate and volcanic soil of the area. After obtaining the Geographical Indication status, Kintamani Coffee has experienced a significant increase in selling value in the domestic and international markets. The recognition of the Geographical Indication helps to strengthen the image of Kintamani Coffee as a premium product, which increases the selling price and income of farmers. In addition, the Geographical Indication status has opened up wider market access and allowed farmers to market their coffee in a more structured and organized manner. Farmers' perceptions regarding the role of Geographical Indication certification for Arabica coffee are based on four indicators: natural factors, human factors, coffee characteristics, and coffee quality. This shows that the four indicators have an excellent perception index, with a figure of 87%.²⁰ This shows that Geographical Indication certification plays a very positive role in increas-

tari Sitepu, "The potential of geographical indications and Its legal protection," *E3S web of conferences*. Vol. 52. EDP Sciences, 2018.

19 Robinardus Jampur, Nyoman Yudiari, and Luh Putu Kirana Pratiwi, "Faktor-Faktor Yang Mempengaruhi Persepsi Petani Terhadap Peran Sertifikasi Indikasi Geografis Kopi Arabika di Desa Catur, Kecamatan Kintamani, Kabupaten Bangli," *AGRIMETA: Jurnal Pertanian Berbasis Keseimbangan Ekosistem* 9, no. 18 (2019): 19-27.

20 Robinardus Jampur, Nyoman Yudiari, and Luh Putu Kirana Pratiwi, "Faktor-Faktor Yang Mempengaruhi Persepsi Petani..."

ing the productivity of Arabica coffee in Catur Village, Kintamani District, Bangli Regency.

Therefore, it is necessary to understand the importance of protecting Geographical Indications which includes its benefits and protection for farmers. Understanding can be provided through training and counseling programs for farmers. The training and counseling program can be provided in the form of harvest and post-harvest training based on coffee geographical indications, comparative studies, assistance in the process of adopting geographical indications by partner groups, and the introduction of Appropriate Technology (TTG).²¹ The determination of coffee quality standards is one of the conditions for providing legal protection for geographical indications. The importance of maintaining the taste, taste, and quality of green beans must be maintained. In addition, there is an obligation from farmers and MPIG, namely to use registered geographical indication labels so that they become added value and a means of promotion. If there is a violation, the Ministry of Law and Human Rights in this case can review the geographical indication of Java Sindoro Sumbing Coffee²². According to the results of an interview with *Abed Nego Andreanes* as a Member of MPIG KAJSS Temanggung Regency, product quality supervision and control is carried out by MPIG in collaboration with farmers to maintain the reputation of geographical indications. This is done by (1) holding regular meetings to check the condition of coffee, (2) sharing obstacles and problems in coffee processing in the garden so that later they can find the right joint solution, (3) helping each other in the sale of Java Sindoro Sumbing Arabica Coffee, (4) going directly to the garden to find out the condition of the coffee plant, (5) and conducting evaluations in each harvest season.

Geographical indication as a communal intellectual property

21 Hanifah Ihsaniyati, Nuning Setyowati, and Adhitya Pitara Wijaya, "Edukasi Adopsi Standar Mutu Berbasis Indikasi Geografis pada Petani Kopi di Kabupaten Temanggung," *E-DIMAS: Jurnal Pengabdian Kepada Masyarakat* 11, no. 1 (2020): 59-65.

22 Waspiyah, et al., "Kopi, Kamu, dan Kita..."

asset in this case is inseparable from direct cooperation with the government and related institutions. The role of the government in this case is very necessary to be able to maintain the sustainability of the protection of geographical indications. According to the results of the interview with *Abed Nego Andreanes*, the Temanggung Regency government in this case has played a role by holding meetings and *group discussion forums* for coffee business actors, as well as facilitating exhibitions to showcase the coffee products of business actors. The government can also make efforts to increase public awareness and take initiatives to develop the potential of geographical indications and take a cumulative and collective character approach to be more in line with Indonesia's concept of communal ownership.²³

In an increasingly competitive era of globalization, marketing and promotion strategies are the main key to product success, especially for products that have unique value such as Geographical Indication certified coffee. Geographical Indications are an effective tool for building and strengthening product branding. Geographical indication, in this case, greatly affects the market because consumers will later trust the processed product more. Based on the results of an interview with *Abed Nego Andreanes*. The branding of Java Sumbing Sindoro Arabica Coffee is marked by the inclusion of a geographical indication hologram on coffee packaging that has met the MPIG KAJSS standard. Effective promotion plays an important role in expanding Temanggung coffee market access. Using geographical indications as a key part of a promotional strategy can open up opportunities in both domestic and international markets. This can be done by participating in campaigns and bazaars of geographical indications. In addition, strategies and promotions can be carried out by utilizing digital technology such as social media, *e-commerce*, and websites.

23 Ranitya Ganindha, and Sukarmi Sukarmi, "Peran pemerintah daerah dalam mendukung potensi indikasi geografis produk pertanian," *Jurnal Cakrawala Hukum* 11, no. 2 (2020): 211-221.

D. The Impact of Geographical Indication Protection on the Welfare of Coffee Farmers in Temanggung

Indonesia is known as one of the leading coffee producers in the world. Temanggung Regency in Central Java is one of the regions that has a fairly developed coffee industry compared to other regions in Indonesia²⁴. According to the Central Statistics Agency (BPS), Temanggung Regency is one of the largest coffee producers in Central Java, which is supported by the abundance of coffee raw material resources in the area²⁵. This district is located between Mount Sindoro and Mount Sumbing, thus adding to the uniqueness of the taste of the coffee produced. The sustainability of the existence of coffee in Temanggung in this case is inseparable from the role of its farmers which is still massively maintained until now. The majority of them have managed coffee plantations for several generations in a hereditary way. According to Nurmuizz, the reason farmers maintain their land is because of economic needs, ownership of basic resources, and love for coffee. While the most common factor driving interest in becoming a farmer usually starts from the ownership of basic resources, which is then reinforced by economic pressures.²⁶

However, currently coffee land is one of the assets that is very well maintained. This is due to the rapid increase in demand for Temanggung coffee, so in this case many farmers are learning how to manage it well. Coffee farmers in Temanggung are also often involved in cooperatives or farmer groups that facilitate access to a wider market and support the improvement of their welfare. In carrying out its management and trading activities, there are several related parties who work together to achieve the efficiency of coffee

24 Rachmat Nurmuizz, and Imron Rosyadi, "Analisis Strategi Pemasaran Syaa riah Terhadap Pengembangan Usaha Kopi Robusta dan Arabika Temanggung (Studi Kasus UMKM Kopi AS Temanggung)", *Thesis* (Surakarta: Universitas Muhammadiyah Surakarta, 2020).

25 Rian Wintoko, and Novi Marlana, "Analisis strategi pemasaran pada UKM rumah kopi temanggung," *Jurnal Pendidikan Tata Niaga (JPTN)* 9, no. 1 (2021): 1160-1166.

26 Amri Rahmad Insani, and R. Rijanta Rijanta, "Regenerasi Petani Kopi di Kabupaten Temanggung," *Jurnal Bumi Indonesia* 9, no. 1 (2020): 161-177.

processing. Some of these parties include coffee farmers or farmer groups, the government, the business world or businessmen, academics and the media.²⁷ In recent years, there has been an increase in awareness among farmers about the importance of protecting Geographical Indications in the products produced, resulting in the formation of the Temanggung Robusta Coffee Geographical Indication Protection Society (MPIG).

The ability of farmers to effectively manage coffee cultivation directly correlates with improvements in coffee quality. In Temanggung Regency, the two most renowned coffee varieties are Arabica and Robusta, each distinguished by differences in taste and the elevation at which they are grown, as reported by Kopi Robusta Temanggung. Robusta coffee has a rich history in Temanggung, dating back to the Dutch colonial period in 1919, and has been passed down through generations, establishing itself as a key crop alongside tobacco. To enhance coffee productivity, farmers in Temanggung have formed cooperative groups. As the market for Temanggung Robusta coffee has expanded both domestically and internationally, the local community established the Temanggung Robusta Coffee Geographical Indication Protection Society (MPIG-KRT) in 2015. This organization aims to promote and protect the unique qualities of Temanggung Robusta coffee, further supporting the economic development of the region.

Robusta coffee-producing areas include several sub-districts, including Kaloran, Kranggan, Pringsurat, and others. The natural characteristics in Temanggung strongly support the growth of Robusta coffee. Altitudes above 400 meters above sea level, ideal rainfall, air temperature between 20-30°C, and relative humidity above 80% create optimal conditions for Robusta coffee. Fertile latosol and regosol soils, as well as the use of selected coffee clones, ensure the high quality of Temanggung coffee. Picking healthy red log coffee fruits

27 Virgawati, Sari, and Eko Murdiyanto, "Kolaborasi Pentahelix dalam Mendukung Peningkatan Produksi Kopi Berkualitas di Temanggung," *Prosiding Seminar Nasional Fakultas Pertanian UPN "Veteran" Yogyakarta 2020*, (2021): 334-344.

manually with strict selection, processed with wet, dry, or honey processing techniques, and dried naturally or with an artificial drying device, makes Temanggung coffee special and of high quality.

Not only Robusta, Temanggung Regency is also known for its Arabica coffee. The potential area of Arabica coffee in Temanggung Regency is spread across 10 sub-districts, including: Parakan District covering an area of 38.75 Ha, Bulu District covering an area of 170.86 Ha, Tembarak District covering an area of 20.00 Ha, Kaloran District covering an area of 9.00 Ha, Ngadirejo District covering an area of 81.70 Ha, Candiroto District covering an area of 96.93 Ha, Tretop District covering an area of 293.00 Ha, Kledung District covering an area of 578.09 Ha, Bansari District covering an area of 40.45 Ha, Tlogomulyo District covers an area of 5.00 Ha, Selopampang District covers an area of 49.00 Ha, Wonobojo District covers an area of 46.70 Ha, the percentage of plants producing + 73% (producing plants). The development of Arabica coffee in Temanggung Regency, began by the remnants of predecessor farmers (ancestors) as a terrace strengthening plant or conservation plant as well as a diversified crop in addition to tobacco plants which are the main and superior crops.

Currently, even the demand for coffee from Temanggung continues to increase, both in the domestic and international markets. However, Temanggung Regency is still experiencing difficulties in meeting this demand due to insufficient coffee production. Currently, total coffee exports from Temanggung reach 200 thousand tons per year, with Temanggung robusta coffee accounting for 60 percent of Java Coffee's exports to Europe, Asia, and America²⁸. Although the demand is very high, the area of coffee plantations in Temanggung is only about 12,800 hectares, which is one of the reasons for the difficulty in meeting coffee demand.

Not only that, the problem of coffee prices in the market is also one of the main challenges for coffee farmers in Temanggung.

28 Berliana Anggun Septiani, and Istiarsi Saptuti Sri Kawuryan, "Analisa Penyebab Turunnya Produksi Kopi Robusta Kabupaten Temanggung," *EKUI-TAS (Jurnal Ekonomi dan Keuangan)* 5, no. 3 (2021): 365-388.

According to Ramadhana et.al. Coffee prices often fluctuate due to global market conditions, including *supply* and *demand*, market speculation, and international trade policies.²⁹ Dependence on global markets causes farmers to face sharp price changes that are not proportional to production costs, which has a significant impact on their income.³⁰ Climate is also very influential in this case, especially rain, separately rainfall has no effect on productivity while rainy days have an effect inversely proportional to the productivity of arabica coffee in Temanggung district³¹. Inadequate infrastructure, especially in coffee-producing areas, hampers distribution and lowers the quality of coffee, while limited access to financing makes it difficult for farmers to get funds for investment and technological improvements.

The challenges and obstacles that are also increasingly widespread include a decrease in market prices, when the price of coffee falls, farmers are often unable to cover production costs, thus having an impact on their welfare. In addition, the dependence on middlemen or intermediaries who offer lower prices also adds to the difficulty of farmers in obtaining fair prices. In an effort to get a fair price, farmers still find it difficult to access modern markets that can bring them to the international scene. The number of chains that must be passed makes coffee farmers get a fairly low price. This condition causes farmers to be unable to maximize the potential selling value of their coffee. In addition, factors that make it difficult for farmers to access the market are physical and information problems. Rural areas generally have poor infrastructure, which affects the mobility of coffee farmers.³² This causes a lot of economic potential that has

29 Ahmad Wildan Saputra Ramadhana, Avinda Distanian Aulia, and Toifur Ulum, "Keunggulan Komparatif Ekspor Kopi di Indonesia," *Journal of Economics, Business, Accounting and Management* 2, no. 1 (2024): 110-123.

30 Sapto Hermawan Asianto Nugroho, "Strategi Kebijakan Menyongsong Adaptasi Kebijakan Baru Dalam Perspektif Hukum Ekonomi Asianto," *Volksgeist* 3, no. 2 (2020): 2.

31 Ahmad Farkhan, Tri Nugraha Budi Santosa, and Herry Wirianata, "Analisis Pengaruh Iklim terhadap Produktivitas Kopi Arabika di Kabupaten Temanggung," *AGROFORETECH* 2, no. 1 (2024): 121-126.

32 Syapta Wiguna, Syafruddin Karimi, and Endrizal Ridwan, "Dampak skema relasi kopi sebagai pengembangan perekonomian petani kopi di pede-

not been optimally exploited.

Not only that, the lack of knowledge about Geographical Indications and the benefits that can be obtained from this recognition is also one of the important challenges for coffee farmers in Temanggung. Abed Nego said that one of the impacts of the existence of a Geographical Indication is that it can increase consumer confidence in a product produced by a region. This can later affect the market, so that the product will later be much better known by the public.

Furthermore, regarding the potential of Sindoro Sumbing Java Arabica Coffee in this case can also have an impact on improving the welfare of farmers. This is because it is possible to increase income and income from increasing sales of products that have been known to the wider community. Furthermore, it is an increase in the selling value of products because with the existence of a geographical indication certificate given to agricultural products that meet certain standards that have been set by law, the certified product has a high reputation thanks to its quality assurance so that it can provide other benefits such as strengthening the regional economy, ensuring business continuity, increasing the provision of jobs, supporting the development of agro-tourism which can increase economic income so that farmers' welfare can increase.³³ The second impact is a change in the bargaining position of farmers in the market, where the price of coffee that already has a geographical indication certification will usually have a higher selling price, such as in a survey found in the field on the Lampung robusta geographical indication³⁴. The third impact is that the geographical indication of Arabica java Sindoro cleft coffee can preserve national culture and traditions, namely by

saan," *Agriekonomika* 8, no. 1 (2019): 93-103.

33 Mirda Aprilia Mafiroh, and Luluk Lusiati Cahyarini, "Pemanfaatan Indikasi Geografis Kopi Robusta Oleh Pemegang Hak Indikasi Geografis di Povinsi Lampung," *Notarius* 16, no. 2 (2023): 741-752.

34 Mafiroh, and Cahyarini Mirda Aprilia Mafiroh and Luluk Lusiati Cahyarini, "Pemanfaatan Indikasi Geografis Kopi Robusta Oleh Pemegang Hak Indikasi Geografis Di Povinsi Lampung," *Notarius* 16, no. 2 (2023): 741-52, <https://doi.org/10.14710/nts.v16i2.40067>.

producing coffee in a manual way, namely the grading process.³⁵ Geographical indications recognize and protect the uniqueness of products resulting from traditional production techniques, including methods, materials, and processes that have been passed down from generation to generation, one of which uses *grading*. This recognition encourages producers to maintain and preserve the production methods that are typical of their region.

E. Conclusion

This study concluded and emphasized that the protection of the Geographical Indication (GI) for Sindoro Sumbing Coffee in Temanggung Regency is crucial for enhancing consumer confidence in this unique product. Strengthening GI protection can significantly contribute to boosting regional and community economic income, ultimately improving the overall welfare of the residents in the area. A deeper understanding of the importance of GIs is essential for achieving effective legal protection, as it minimizes obstacles that could hinder efforts to enhance the community's economic well-being.

To facilitate these improvements, several recommendations are proposed. First, coffee farmers in Temanggung should actively engage in initiatives aimed at bolstering legal protections for GIs. This participation can be achieved through involvement in training and educational programs designed to increase awareness of the benefits of GI protection. Additionally, local governments and relevant stakeholders must play a proactive role by promoting the significance of GI protection through regional regulations and educational efforts. Following the establishment of quality standards and collaborative frameworks, it is vital to implement regular monitoring and evaluation processes to assess the effectiveness of GI protection measures. Such assessments will provide a solid foundation for the development of specific regulations and policies aimed at safeguarding the Geographical Indication of Temanggung Coffee.

35 Pardono Pardono, et al, "Peningkatan Brand Image Kopi Robusta Temanggung Berbasis Indikasi Geografis," *Warta LPM* 25, no. 1 (2022): 101-111.

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