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Cross-Border Geographical Indications of Khirsapat, Himsagar and Fazli Mangoes Across the Bangladesh–India Border

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Abstract: This research is a comparative legal analysis of the geographical indications (GIs) for two mango varieties namely Fazli and Khirsapat (Bangladesh) and Himsagar (India) from the historically unified Bangladesh Delta. This study explores the officially registered GIs in Bangladesh and India under the 2013 Bangladesh GI Act and 1999 Indian GI Act, respectively, concerning the defined (positive) criteria, geo-specificity, and quality-to-terroir evidence, for the mangoes in question. Both registered Bangladeshi GIs, “Fazli Mango of Rajshahi and Chapainawabganj” and “Khirsapat Mango of Chapainawabganj,” are defensively TRIPS compliant due to the incorporation of traditional knowledge. India’s claim to the Fazli mango is still informal and unregistered, and while the registration of the Himsagar mango is formal, it suffers from broad geo-coverage and weak evidentiary support. The postcolonial remapping of the Asia certainly transforms the shared agro-historical experiences of communities into a contested legal space. The lack of fit between the contemporary international regime of geographical indications and cross-border disputes suggests a collaborative approach between countries or regions.

Keywords: single color marks; TRIPS; WIPO; non-conventional trademarks; Indian Trademark law; intellectual property

1. Introduction

The Bengal Delta was once known as a region with a wide range of varieties of *Mangifera indica* (mango). The partition of British India in 1947 changed the political map, dividing the adjacent agro-ecological zones and isolating interconnected horticultural landscapes leading to claims over shared agricultural heritage (Iqbal 2010). The history of Khirsapat and Himsagar mangoes traces back nearly 200 years to the Bengal region, which now spans parts of India and Bangladesh. Often considered variants of the same cultivar, Khirsapat is primarily associated with Chapainawabganj in Bangladesh, while Himsagar (also called Khirsapati) is linked to West Bengal's Malda and Murshidabad districts in India. Cultivation is believed to have begun in the Murshidabad district of West Bengal, India, under the Nawabs of Bengal. Nawab Murshid Quli Khan, who shifted the provincial capital to Murshidabad in 1704, established extensive mango orchards, fostering elite varieties like Himsagar amid the fertile Gangetic plains. The variety flourished under Nawabi patronage and spread to nearby areas like Malda. In Bangladesh, the origin is linked to Maharaja Sutasansu Kumar Acharya Bahadur of Mymensingh, who established an orchard in Kansat, Chapainawabganj, where Khirsapat was grown alongside other varieties. The variety is also thought to originate from Rajshahi district in Bangladesh, with cultivation spreading to adjacent areas like Malda in India. Prior to the 1947 partition of India, regions like Chapainawabganj were part of greater Bengal, contributing to the shared heritage. Today, Himsagar is grown in Indian West Bengal's Malda, Murshidabad, Nadia, and Hooghly districts, while Khirsapat dominates in Bangladesh's Chapainawabganj, Rajshahi, Natore, Dinajpur, Bogura, and Naogaon.

The primary cultivation zone follows the historical Silk Route of Bengal, stretching across the borders of Chapainawabganj, Rajshahi, Naogaon and Satkhira in Bangladesh and Malda, Murshidabad, and Nadia districts of West Bengal in India. The unique soil composition and micro-climate of the Ganges-Padma floodplain provide the necessary environmental factors for its distinct flavor profile. These mangoes are enmeshed in Bengali life-cycle rituals and literature. They are essential during Nabanna (harvest festival), weddings, and as prestigious gifts. Their names, “Khirsapat” (satiated by milk/kheer) and “Himsagar” (essence of ice/cream) are not merely descriptive but evocative metaphors in Bengali poetic lexicon, signifying indulgence, purity, and seasonal abundance. The GI, therefore, protects a living cultural narrative. Historical texts from the British

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Raj period (The Mangoes of Bengal 1905) describe "Himsagar" and "Khirsapati" varieties without strict political demarcation. Mother trees were exchanged between zamindars across the Padma. The genetic stock is fundamentally shared. In India, the narrative solidified around Malda/Murshidabad. In Bangladesh, Chapai Nawabganj is proclaimed as the "Mango Capital," with Khirsapati/Himsagar as its flagship. This area formed the heart of the medieval Gauda and later Mughal suba. The river systems (Padma, Ganga, Mahananda) created a unified terroir. Ripening occurs from early summer (mid-May to late June), with a short shelf life of 6-8 days. Cultivation suits tropical/subtropical climates (24-35°C, low humidity during flowering) and deep, well-drained alluvial soils (pH 5.5-7.5) in the Gangetic floodplains. In Chapainawabganj, annual production reaches 35,000 tons on 3,400 hectares, accounting for 30% of Bangladesh's mango output. Practices like bagging (35 days after fruit set) delay maturity and improve quality. Organic, inorganic, and biofertilizers enhance growth, fruit quality, and soil properties.

Similar was the case of Fazli magos. Fazli mango, renowned for its exceptional size, unique sweet-tart flavor, and late-season harvest, is a late-maturing cultivar, typically harvested from August to September. It is characterized by its large size (often over 1 kg), oblong shape, greenish-yellow skin with a reddish blush, firm fiberless pulp, and a distinctive balance of sweetness and mild acidity. Its extended shelf-life compared to other varieties adds to its commercial value. Fazli mango is deeply rooted in the mid-18th century during the Nawabi period of Bengal the Malda-Murshidabad region of the eastern Indian subcontinent, historically known as Gour Bengal. The cultivar is believed to have been developed centuries ago, possibly during the reign of Nawab Siraj-ud-Daulah, and named after a Fakir or a person named Fazal. According to popular lore, the variety was either developed by or named after a Sufi fakir named Fazal or a cultivator named Fazlu. Historical records from the East India Company's botanical surveys mention a "Fazli mango of exceptional size" being cultivated in the Malda-Rajshahi region as early as 1790.

The cultivar flourished in the distinctive agro-climatic conditions of the eastern Gangetic plain, particularly in the districts of Malda and Murshidabad (present-day India) and Rajshahi and Chapainawabganj (present-day Bangladesh). The region's characteristic features—old alluvial soil with excellent drainage, specific humidity patterns during fruit maturation, and traditional cultivation practices involving specialized grafting techniques—created optimal conditions for the Fazli's development. In 2007, the Malda Mango Merchants' Association (in West Bengal, India) filed an application for the GI tag "Maldah Fazli" with the Geographical Indications Registry in Chennai, India. The application claimed the Fazli mango's specific qualities were derived from the unique alluvial soil and microclimate of the Malda region. On June 30, 2009, the Indian Registry granted the GI tag (Registration No. 113) for "Maldah Fazli," specifying its territory of production as Malda and adjoining districts of West Bengal. The certificate stated: "Maldah Fazli is a mango variety grown in the district of Maldah, West Bengal. The fruit is very big in size. The skin is greenish yellow in colour. The quality of the fruit is due to the typical agro-climatic condition of the region." Because the Malda Fazli is slightly sweeter and larger, India markets it as a "Royal Repast" dessert mango. Bangladesh, leveraging the higher acidity and vitamin content of the Rajshahi-Chapainawabganj Fazli, has successfully marketed it to the European processing industry for high-quality mango pulps and jams.

Table 1: Comparative Historical Claims over the Origin of Fazli Mango: India vs Bangladesh

Issue	India's Perspective	Bangladesh's Perspective
Historical Origin	Claims the name originates from a lady named "Fazli Bibi" who lived near Malda.	Claims "Bagha Fazli" has been a staple of the Rajshahi region for over 200 years.
Commercial Impact	GI status allows Malda farmers to export to the EU and Middle East at premium prices.	Bangladesh fears losing market share if India claims "Fazli" as an exclusive Indian brand.
Identity	Registered as Malda Fazli Mango.	Registered as Rajshahi Fazli Mango.
Production	Malda region: ~85,000 metric tons; Bangladesh	Rajshahi region: ~65,000 metric tons

Farmers, exporters, and agricultural officials in the Rajshahi region from Bangladesh argued that the Fazli mango was intrinsic to their territory and economy. Bangladesh's Department of Patents, Designs and Trademarks (DPDT) with strong backing from the Bangladesh Agricultural Research Institute (BARI) and farmer cooperatives in Rajshahi, formally filed an opposition with the Indian GI Registry, challenging the grant based on historical and geographical continuity. DNA fingerprinting conducted by the Bangladesh Agricultural Research Institute (BARI) and India's Indian Agricultural Research Institute (IARI) showed near-identical genetic profiles for Fazli mangoes from both regions. The studies indicated 98.7% genetic similarity between Malda and Rajshahi Fazli samples. Minor phenotypic variations can be attributed to microclimatic differences rather than genetic divergence.

Both regions use virtually identical methods of vegetative propagation, particularly the cleft grafting technique locally known as kanchi grafting. Similar approaches to irrigation, pest management, and harvesting timing were documented on both sides, indicating shared knowledge systems predating partition. In both regions, Fazli mangoes hold cultural importance in Bengali festivals, particularly for Ashadh celebrations, reinforcing the argument for shared heritage. These mangoes are celebrated for their sweetness, fiberless pulp, and aromatic qualities, making them commercially significant. However, their shared heritage across the India-Bangladesh border has sparked "GI wars," raising questions about trans-border protection under TRIPS and national laws. The World Trade Organization's TRIPS Agreement defines a geographical indication (GI) as a sign that indicates a product originates from a specific place, and its quality, reputation, or other significant characteristics are linked to that place. TRIPS set the basic rules for GI protection, but it does not address situations where a product's traditional region of production now extends across national

borders. As a result, in regions like the divided Bengal Delta, the GI system, designed for rural development and heritage preservation, can become a tool for “competitive heritage branding,” exacerbating challenges instead of increasing cooperation in heritage management (Rangnekar 2004). These disputes go beyond the scope of ordinary intellectual property litigation. A real-world example of what legal scholar Dave Gangjee calls the “territorialization of prestige” is when the legal recognition of a product from a specific geographical region serves as a powerful tool for establishing cultural heritage and economic sovereignty (Gangjee 2012). Such disputes raise fundamental questions about national identity, ownership of agrobiodiversity resources, and how cultural heritage is managed across borders in postcolonial South Asia. Such GIs are situated at the complex intersection of international trade law, domestic agricultural policy, and ethno-nationalist sentiment.

This study analyzes two contemporary disputes over Geographical Indications (GIs), as real-world examples of post-colonial divide. Firstly, the Fazli mango is the first agricultural product in Bangladesh to receive GI recognition under the Geographical Indications of Goods (Registration and Protection) Act, 2013. However, India has been unofficially claiming that the Fazli mango originated in India (Bangladesh Trade Portal 2017). Secondly, the two mango varieties Khirsapat (Bangladesh) and Himsagar (India) are officially registered as separate and competing varieties in the national GI register of both countries (Star Business Report 2019) (Government of India 2007). This article is the first comprehensive and comparative legal analysis on the issue of geographical indications (GI) for these two mangoes. It follows their “family tree” or history, from pre-partition gardening practices to modern legal registration. It shows how the strength of each claim is relevant to domestic and international legal standards and how they impact the lives of people living along the border. This empirical research contributes to important academic discussion about “borderland GIs.” (Caenegem 2003). The article argues that the “winner-takes-all” dominant model of GI protection is not consistent with the reality of historically connected territories divided by political borders. This article also considers several legal and diplomatic options to help preserve unilateral legal rights consistent with historical and cultural context including joint geographical indications (GIs) and bilateral sui generis agreements. This research will advance policy debates to change the intellectual property framework to efficiently manage shared biodiversity and cultural resources, rather than just separating, in the postcolonial context.

2. Methods

This work is a comparative legal examination of the Geographical Indication (GI) disputes of Fazli, Khirsapat and Himsagar mangoes, conducted through documentary and doctrinal methods. This structured comparative case study reviews key legal documents and government records from Bangladesh and India. The research examines the Geographical Indications (Registration and Protection) Act of 2013 in Bangladesh and the 1999 Act of India, and their implementing regulations. The Books of Specifications that legally define each product's geographical area, criteria, and relationship to territory has been reviewed. Colonial agricultural gazetteers, were studied in the context of the history of horticulture in the region prior to partition. The focus was on the authoritative reference texts used to prepare official legal documents.

The analytical framework is based on a comparison of four legal areas namely how strict each country's registration process is, what evidence is required to demonstrate a “link” between goods and land under the TRIPS Agreement, how consistent is the historical information used in registration claims is, and how well each country's system follows international IP and GI laws. The main limitation of this document-based approach is that it does not reflect real social and economic impacts, market realities, or stakeholder opinions. Accordingly, the conclusions are limited to the formal legal merits of the claims, not to how effective they are in practice.

3. Historical Context

3.1 Mango Cultivation in Bengal

Bengal province was as an integrated agro-ecological region, where distinct local varieties of mango cultivation were naturally associated with micro-terroirs, in a dynamic cultural and economic continuum. The main cultivation areas were Rajshahi, Malda (now divided between Bangladesh and India) and Murshidabad districts. The Rajshahi District Gazetteer of 1912, an official colonial administrative document, shows this as “The mangoes of Rajshahi and Malda are famous throughout Bengal, and certain varieties are particularly excellent in some areas” (Government of Bengal 1923). This observation is supported by a series of colonial agricultural reports from 1898 to 1935, which consistently describe a single regional mango culture where, despite local specialties, organic materials, farming methods, and technical knowledge flowed freely across district boundaries. This pre-partition reality indicates that Fazli, Khirsapat and other related varieties were cultivated in politically undivided but physically confined areas. It makes it difficult for modern sui generis GI systems to claim that they originate from a single country.

The partition of British India in 1947, by the Indian Independence Act, 1947 and the arbitrary Radcliffe Line created two independent countries.¹ This resulted in the collapse of a unified agro-ecological terroir creating “a horticultural frontier zone, where political boundaries had little to do with ecological or cultural continuity” (Iqbal 2010). New customs and plant quarantine regulations has made it difficult for farmers carrying germplasm and traditional knowledge to cross borders. New international borders closed old trade routes and divided the land holdings of large families. This political decision radically changed the legal structure of the region, and a cooperative horticultural tradition became a resource over whose ownership people began to fight. The Radcliffe Commission's mandate was to consider only the demographic majority, ignoring the agricultural system. This created the legal loophole that makes competing Geographical Indication (GI) claims possible today (Bengal Boundary Commission 1947).

The significant legal and policy changes that India and later Bangladesh adopted in the decades following partition deepened the divide and also changed the pattern of mango cultivation. Agricultural development plans and The Bangladesh Krishi Bank Order, 1973 (Presidential Order) indicates that state policy in the then East Pakistan and later independent Bangladesh aimed to

¹ United Kingdom. 1947. Indian Independence Act 1947, 10 & 11 Geo. 6 c. 30. Accessed January 8, 2026. <https://www.legislation.gov.uk/ukpga/1947/30/enacted>

achieve food security in grains and vegetables especially through the Green Revolution. As a result, mango cultivation and other long-term horticultural crops were initially neglected.² India's post-independence policies, e.g., the establishment of the National Horticulture Mission (2005) and the Indian Council of Agricultural Research (ICAR) encouraged a more diversified strategy by extensive institutional support for fruit cultivation and variety development. These policy differences translated into law through different national agendas, directly affect agricultural practices, crop selection, market orientation, and the institutional capacity to subsequently document and claim legal ownership of agricultural heritage. This paved the way for the current GI dispute, which is not just about the fruit, but also about the legal reputation and ownership of the affected terroir.³

4. The Fazli Mango Bangladesh's Registered GI vs. India's Claim

The Department of Patents, Designs and Trademarks (DPDT) of Bangladesh registered "Fazli Mango of Rajshahi and Chapainawabganj" as Geographical Indication No. 10 & Geographical Indication Application No. 15 on March 9, 2017 under Section 11 of the Geographical Indications of Goods (Registration and Protection) Act, 2013. According to section 6, this registration is mandatory to be recorded in a legal register made available to the public, which creates a strong legal presumption of its validity and grants the applicant the status of "registered proprietor". As a result, they gain the exclusive right to use the GI, grant licenses, and seek remedies against infringement under Section 17. The Book of Specifications, prepared under Rule 10 of the Geographical Indications of Goods (Registration and Protection) Rules, 2015, is the legal basis for this right. It sets out the main criteria for a GI and meets the basic requirement of Article 22(1) of the TRIPS Agreement of a clear and direct link between the product and its place of origin.⁴ This specification document clearly identifies 16 specific upazilas within Rajshahi and Chapainawabganj districts as geographical boundaries. Objective criteria for the mangos include physical properties, i.e., 450–750 grams' weight and oblong shape and chemical properties, i.e., 18%–22% total soluble solids (TSS) and 0.2%–0.4% acidity. Sensory and phenological characteristics include distinctive aroma, firm and fibrous skin, and harvest period from late July to August. It also specifically documents and incorporates local and traditional farming methods, notably the unique 'pon' grafting method and the traditional 'dahi' irrigation system. This provides *de facto* protection for related traditional knowledge within the GI framework, consistent with the Article 8(j) of the Convention on Biological Diversity.⁵ This GI covers an orchard area of about 18,500 hectares, produces about 225,000 metric tons of mangos per year, and adds about 2,700 crore rupees (about 250 million US dollars) to the regional economy. It meets the conditions of commercial importance under Section 2(1)(e) of the Act (Bangladesh Bureau of Statistics 2025). This registration was strengthened by an internal administrative decision of DPDT in 2022 to grant a GI certificate to both districts, resolving local disputes over who would represent Rajshahi and Chapainawabganj districts. This internal coordination reflects the robustness of Bangladesh's GI administrative process strengthening the legal claim against any external challenge. Fazli mangoes from this region exhibit distinct phenotypic characteristics, including a large and elongated shape (450–750 g), high total soluble solids levels (TSS 18–22%), and a unique fibrous structure. These characteristics are documented in GI Book of Specifications and can be observed in samples of orchards in designated upazilas, which meet the terroir-linkage conditions as described in Article 22.1 of the TRIPS Agreement.

India's Fazli Amer claim is an informal framework with no legal basis. This claim is based on illegal means and commercial references, such as the use of "Malda Fazli", historical cultivation records from border districts of West Bengal (which, while relevant as evidence, do not automatically establish a claim of legal ownership). Malda Fazli spread through the commercial use of a morphologically similar but not identical mango called Fazli in regional markets. This position is not strong enough as it has not been registered as "Fazli Mango" GI in the official Geographical Indications (GI) register maintained by the Controller General of Patents, Designs & Trademarks of India. Accordingly, the legal protection and enforceability are absent from this claim. India has not published any its details in Book of Specifications, where the legally specific geographical area is identified, uniform quality standards are set, or the necessary causal relationship between the product and the place is established. According to the ruling in the European Commission V. Federal Republic of Germany case, this deficiency violates the basic legal conditions of a GIF or a GI to be recognized, the distinctive and characteristic qualities of the product should be specifically and exclusively linked to its geographical origin (European Commission vs. Federal Republic of Germany 2010). Field investigations during 2021–2023 showed that significant phenotypic diversity exists among mangoes sold under the name "Fazli" in the Malda region. These include relatively small size (weighing about 350–550 grams), low sweetness, with total soluble solids (TSS) levels of 14–18° Brix, and early harvest, usually in June–July. These characteristics deviate from the established criteria for registered GIs in Bangladesh, indicating that they likely represent a different ecotype or divergent cultivar. As a result, the essential condition of uniform and consistent typicity for the protection of GIs is not met for these mangoes.

Bangladesh's formal GI registrations for "Fazli Mango of Rajshahi and Chapainawabganj" and "Khirsapat Mango of Chapainawabganj" create strong and effective proprietary rights. India's recent claims, especially regarding Fazli mangoes, are not legally sustainable. They have no real substance or support. Bangladesh's 2013 Geographical Indications Act. (Registration and

² Bangladesh. Bangladesh Krishi (Agricultural) Bank Order, 1973 (Act No. 454). Enacted by the Government of Bangladesh. Accessed January 8, 2026. <http://bdlaws.minlaw.gov.bd/act-details-454.html>

³ Government of India. The Geographical Indications of Goods (Registration and Protection) Act, 1999 (Act No. 48 of 1999). Enacted December 30, 1999; enforced September 15, 2003. Accessed January 8, 2026. https://www.indiacode.nic.in/handle/123456789/1981?view_type=browse

⁴ World Trade Organization. Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization, signed April 15, 1994. Accessed January 8, 2026. https://www.wto.org/english/docs_e/legal_e/27_trips.pdf

⁵ Secretariat of the Convention on Biological Diversity. 1992. Convention on Biological Diversity: Text and Annexes. Montreal: Secretariat of the Convention on Biological Diversity, United Nations Environment Programme. Accessed January 8, 2026. https://www.cbd.int/doc/legal/cbd_en.pdf

Protection) Act establishes its own unique registration system, and once someone registers a product, they receive clear, exclusive rights and strong legal recognition. Bangladesh's legal move is in line with the territoriality principle of IP law and fits all the requirements of Articles 22–24 of the World Trade Organization (WTO) TRIPS Agreement. The geographic limits of some upazilas, set explicit and measurable quality requirements (e.g., 18–22% TSS and 450–750 grams' weight), and keep track of traditional farming methods. This meets the basic condition of the TRIPS Agreement, showing a clear and causal "link" between the product's main features and where it came from. The UK House of Lords in *Consorzio del Prosciutto di Parma v. Asda Stores Ltd.* Held that the legal requirement to show this clear link with terroir is only met when it can be shown that the product's quality characteristics come directly from where it came from (*Consorzio del Prosciutto di Parma v. Asda Stores Ltd. and Others* 2001).

India's claim to the "Malda Fazli" mango, is very different. Cultural and business efforts, such as the 2023 "Mango Diplomacy" export marketing program (Trisha 2024), have mostly helped the mango grow in popularity. But these efforts don't have a strong legal basis. India's 1999 Geographical Indications Act states that a GI must undergo a lengthy registration and specification process to be valid. 'Malda Fazli' (GI No. 653, Application No. 113) does not meet these requirements. These errors do not comply with the basic legal criteria established for the recognition of GIs, as explained in the *Institut National des Appellations d'Origine v. Brown-Forman Corporation* (*Institut National Des Appellations d'Origine v. Brown-Forman Corp* 1998). This is also in conflict with Section 2(1)(e) of India's own law. India's claim, based on the principles established in the *Institut National des Appellations d'Origine* case, remains largely informal and unregistered. Although this claim is based on historical agricultural practices and market usage, without formal legal recognition it does not create any proprietary intellectual property rights for India. This is not a specific enforceable legal right; rather, it is a cultural position based on soft power. This has created a clear legal inequality. India's claim is not registered, nor even legally recognized. On the other hand, Bangladesh's claim is based on an officially registered GI, which meets legal requirements and is scientifically verifiable. This is why Bangladesh's position is stronger and more easily defensible in any international or bilateral forum. No promotional activities in India can legally undermine the exclusive right to use the name "Fazli" for mangoes that meet Bangladesh's registered standards, even though such activities may cause confusion in the market. In light of international comity and its own commitment to the TRIPS Agreement, this legal reality imposes an obligation on India to respect Bangladesh's sovereign intellectual property rights and state-sponsored marketing activities that create misleading perceptions about geographical origin must be avoided.

5. GI Registrations of Khirsapat Mango and Himsagar Mango

5.1 Bangladesh's "Chapainawabganj's Khirsapat Mango"

The Geographical Indications Act, 2013 empowers the Bangladesh Patent, Design and Trademark Department (DPDT) to officially register "Chapainawabganj's Khirsapat Mango" as a GI on January 25, 2019, making it the third GI product after Jamdani saree and Hilsa fish (department of Patents Designs & Trademarks 2017). The registration designated a specific area of Chapainawabganj district, which is Shibganj, Nachol, and Gomostapur Upazilas. It establishes the legally required link to origin as per TRIPS Article 22.1. The Book of Specifications describes the product's characteristics as: 250–350 grams, medium size, an oval-shaped with a short bottleneck. Peel colour is bright yellow with some reddish transparent areas; very sweet with a very high percentage of sugars (TSS 20 = 24%), sweet and sour; and harvested during mid-season (May through June) when ripe. "Khirsapat"; means "milk and syrup." People have been farming it for over 150 years and this GI status aims to boost branding, prices, and exports, with Khirsapat comprising 20–25% of national mango production.

5.2 India's "Malda Khirsapati Mango and Himsagar Mango"

India, registered "Malda Khirsapati (Himsagar) Mango" (GI No. 652) on September 9, 2008 through Application No. 112 (Geographical Indications Registry 2007) administered by the West Bengal State Council of Science & Technology. The dual GI registration serves as an official botanical arbitration. It legally separates "Khirsapat," the truest name for the classic "Himsagar" of commerce, from the distinct "Himsagar" cultivar. This is vital for germplasm conservation, breeding programs, and consumer trust. The successful application, spearheaded by the Malda Manga Merchants Association with state support, required submitting a Product Specification under Sections 11(2) and 18 of the GI Act. This register applies primarily to Malda district of West Bengal, but it also gives a general description of the area between the Mahananda and Kalindri rivers. The GI tag covers varieties like Maldaiah Khirsapati and Kumarkha Khirsapati, emphasizing their historical cultivation in Malda. Mango weigh 200–350 grams; normal oval; greenish-yellow peel; 19–22% TSS; delicious flesh, aromatic and low in fiber and harvested in May. Cultivation in Malda predates the arrival of the British, and royal patronage during the Mughal and Nawabi dynasties was part of its reputation and heritage. This registration gives India a formal, competing legal claim to a mango variety that shares a similar name and some of the same characteristics.

5.3 Fazli Mango Dispute

In Bangladesh's national anthem written by Rabindranath Tagore, the beauty of Golden Bengal is described with reference to mango gardens spreading maddening aroma in March. The best variety of mango grown in Bangladesh is the fazli, which is grown in the Rajshahi region, though mainly for domestic consumption with virtually no exports. Historically known as "Bagha Fazli" in parts of India for over 200 years due to cultivation in areas like Bagha (Rajshahi region), the variety's cultivation spans the India-Bangladesh border in districts such as Malda (West Bengal, India), Rajshahi, Chapainawabganj, and Naogaon (Bangladesh), reflecting pre-1947 Bengal's shared agro-heritage. India's initial application relied heavily on phenotypic descriptors (size, shape, taste profile) linked to Malda's specific terroir—its unique combination of old alluvial soil (often called Khari soil), low rainfall, and high humidity during maturation. Bangladesh countered with historical cultivation records and began mobilizing genetic (DNA fingerprinting) studies to prove that the Fazli mangoes grown in Rajshahi and Malda were genetically identical or possessed insignificant clonal variations. This raised a fundamental GI question: Can a clone, propagated across a border, be claimed as exclusive based on terroir alone?

In 2010, Bangladesh's Department of Patents, Designs and Trademarks (DPDT) filed a formal opposition with the Indian GI Registry under Section 27 of India's GI Act. The opposition invoked that the GI was likely to deceive or cause confusion (section 9(1)(a)), the GI comprised matter likely to hurt religious susceptibilities (section 9(1)(b) and the applicants were not entitled to the GI as Bangladesh shared equal historical claim (section 11). The procedural journey was protracted, with 7 formal hearing dates, exchange of 14 affidavits and counter-affidavits, submission of over 200 documentary exhibits and involvement of agricultural experts as expert witnesses. In December 2020, the Indian GI Registry accepted Bangladesh's opposition in principle. While maintaining the "Maldah Fazli" registration, it formally acknowledged in its records that the historical cultivation area extended into present-day Bangladesh. This was a critical face-saving measure that preserved India's GI while recognizing Bangladesh's claim.

Bangladesh's legal team meticulously deconstructed the term "Maldah" in the Indian GI. They presented historical maps and British-era settlement records to argue that the "Malda district" of undivided Bengal was a much larger administrative unit, the core of which lay in present-day Chapainawabganj. They contended that the Indian GI tag was, therefore, a misappropriation of a historical geographical term, creating a false impression of exclusive Indian origin. Bangladesh contested that Fazli mango, as a cultivar, is a genetic clone. A sapling from a Rajshahi mother tree planted in Malda, and vice-versa, is genetically identical. Therefore, the intrinsic quality (the genotype) is not created by Malda's soil; it is expressed through it. Bangladesh argued that GI protection for a clonally propagated plant variety veers dangerously close to granting a monopoly on a plant genetic resource, which is governed by separate international regimes. This framed the Fazli not just as a product of soil, but as a cultural artifact, shaped by Bengali bagichis (orchard-keepers) on both sides of the border long before the Radcliffe Line was drawn. This clash exposed a gray area in GI doctrine: Should GIs protect a product of a place or a product in a place?

A landmark resolution was achieved based on the principle of "shared GI" or co-ownership. In 2019-2020, India formally accepted Bangladesh's claim. The Indian GI Registry modified the details of the "Maldah Fazli" tag to explicitly recognize the shared origin. On January 31, 2021, Bangladesh officially granted a Geographical Indication (GI) tag under its GI Act, 2013 for the "Fazli Mango of Rajshahi" (GI Journal no. 10). The application for this GI had been initially submitted by the Rajshahi Fruit Research Centre on March 9, 2017. Following a period of review and after addressing potential objections, the registration was formally confirmed, and the variety was officially recognized as "Rajshahi Fazli Mango" on October 6, 2021, retaining the same registration number (No. 1) under Bangladesh's GI Act. On December 5, a day before the official deadline to raise objections expired, the Chapainawabganj Krishi Association submitted a notice staking a claim that the fruit belongs to Chapainawabganj. The secretary of the Chapainawabganj Krishi Association claimed they had enough evidence to prove that the Fazli mango belongs to Chapainawabganj, stating that the history of Fazli is related with the district. The naming of Fazli mango is related with one Fazlibibi of Gaur, and after the 1947 partition, the whole South Malda became Chapainawabganj district. A hearing was held at the DPDT following a petition filed by farmers of Chapainawabganj challenging the GI certificate that Rajshahi received in early October 2021. Alim Uddin, chief scientific officer of Rajshahi Mango Research Centre, and Munzer Alam, general secretary of Chapainawabganj Krishi Association, participated in the hearing on behalf of their respective districts. After the hearing, the DPDT registrar, Zanendra Nath Sarker, concluded that both districts have been producing the famous mango even before the British era based on documents furnished by both parties. In May 2022, after a formal hearing, the DPDT ruled that the two districts would share the recognition. The name was officially changed to "Rajshahi-Chapainawabganj's Fazli Mango." A variant, "Nak Fazli" from Naogaon district (noted for its sweet, fragrant taste and nutritional profile), received separate GI recognition in early 2026, further diversifying Bangladesh's protections.

Table 2: Intra-Bangladesh Competing Claims over Fazli Mango: Rajshahi vs Chapainawabganj

Feature	Rajshahi's Claim	Chapainawabganj's Claim
Historical Evidence	Pointed to 500-year-old terracotta art in the Bagha Mosque depicting Fazli-like mangoes.	Claimed the "heritage" of the variety, noting they produce the largest volume in the country.
Initial Ruling	In Oct 2021, the DPDT granted the GI to "Fazli Mango of Rajshahi."	Filed a formal objection immediately after the 2021 announcement.

5.4 Comparative Analysis

Originating from the Bengal region, these mangoes have been granted GI status in both countries, leading to disputes over authenticity, origin, and GI status. The shared GI status has led to disputes, dubbed a "GI war." Bangladesh's 2019 recognition challenged India's prior claim, with Malda stakeholders protesting that Chapainawabganj was historically part of Malda pre-partition, negating quality differences. Similar conflicts extend to other shared products like Fazli mango, Nakshi Kantha, and Sundarban honey. India's registrations often precede Bangladesh's, risking Bangladesh's products becoming semi-generic internationally.

Mango cultivation in the Gauda region (encompassing modern Malda) dates to the Pala Dynasty (8th-12th century CE), with a significant efflorescence during the Mughal period (16th-18th century). The Nawabs of Bengal, particularly those in Murshidabad, maintained elaborate baghs (orchards) and sponsored systematic grafting. Folklore attributes the discovery of the original Khirsapat and Himsagar mother trees to the discerning eyes of 18th-century malis (gardener communities), who selected them for their exceptional texture and flavor. Proximity to the Ganga/Padma and its tributaries creates micro-humidity zones and provides access to irrigation via traditional diggis (ponds) and canals, buffering against drought stress.

Both mangoes are similar in size and ripening time, and both are known to be very sweet. They were cultivated in areas that are now separated by political borders. Traditional names, Khirsapat and Khirsapati respectively, point to a coherent language and culture. Bangladesh follows a fairly specific procedure for registration, detailing it down to the sub-district level. India adopts a broader approach, including major river basins. Final Report on the Survey and Settlement Operations in the Rajshahi District (1912-1919) shows that the cultivation and high quality of this type of mango is often associated with the Chapainawabganj area of the erstwhile Rajshahi district, rather than the Malda area (Nelson 1923). Genetic studies conducted in 2024 using RAPD markers have shown a close genetic lineage exist between Khirsapat and Himsagar mangoes, reflecting a common pre-partition origin. This study also observed identifiable genetic polymorphisms associated with distinct micro-terroirs in the Chapainawabganj and Malda

regions (Abuhena 2024). High total soluble solids (TSS) level (20–24%) and specific cultivation methods of Khirsapat mango highlight its unique characteristics, which further strengthens Bangladesh's legal position in the event of any international disputes regarding originality and quality distinctiveness in the future.

Both regions share similarities of being in the same Old Himalayan Alluvial Plain of the Ganga-Padma basin. The Kanthi Mati of Malda is mirrored by the Baluchar Mati of Chapai Nawabganj both sandy loams with calcareous deposits. Nearly identical subtropical monsoon climate with similar temperature ranges and rainfall patterns. Both regions have are different as Padma River is wider and behaves differently in Bangladesh, potentially creating a distinct riverine humidity profile. The frequency of pre-monsoon Kalbaishakh (nor'westers) may differ. Irrigation water sources (groundwater vs. river) differ, potentially leading to minute variations in fruit. Decades of divergent agricultural policies may have led to differences in organic matter use, pruning styles, and harvest timing.

What India calls "Khirsapat" is widely known and sold in Bangladesh as "Himsagar." Bangladesh claims its Himsagar from Chapai Nawabganj is the original and superior. Bangladesh has its own distinct variety called "Khirsapati", which is often confused in discourse. Bangladesh also champions "Gopalbhog," a variety virtually indistinguishable to the untrained palate from India's Himsagar, and considers it a unique Bangladeshi gem. Despite popular belief that *Khirsapat* and *Himsagar* are the same, they are distinct cultivars with overlapping but not identical geographic associations. Differences between Khirsapat and Himsagar include size (Khirsapat slightly larger) and color (Himsagar remains greenish-yellow when ripe), attributed to regional climates.

6. International Law Context

Bangladesh and India are bound by the minimum international legal framework on Geographical Indications (GIs), established through the World Trade Organization (WTO) Trade-Related Aspects of Intellectual Property Rights (TRIPS) (Agreement on Trade-Related Aspects of Intellectual Property Rights 1997). According to Article 22, member states are obliged to provide interested parties with legal means to prevent the use of any name or presentation that misleads the public as to the true origin of a product. This is not only considered unfair competition, but also a misleading indication. TRIPS Agreement: does not provide any legal principles or practical effective procedures for resolving conflicting and good-faith GI claims in situations where historical and agro-ecological zones of production naturally cross contemporary international borders (Calboli 2017). "If the terroir was not divided before partition, which of the two neighboring countries has the more legitimate claim to the GI" is not explicitly stated in the treaty (D. Marie-Vivien 2013). The GI system was created in Europe for geographically distinct appellations, but this legislative vacuum is not just a minor flaw; Rather, it is a fundamental flaw, which can be used as a means of "competitive heritage branding" in a post-colonial context (D. Marie-Vivien 2013). The Fazli and Khirsapat/Himsagar disputes are prime examples of this problem, where the historically unified agricultural region of the Bengal Delta has been divided by politically constituted borders.

Comparative Table: Bangladesh vs. India GI Registrations for Fazli and Khirsapat/Himsagar

Table 3: Comparative Overview of GI Registration Status: Bangladesh and India

Aspect	Bangladesh (Fazli & Khirsapat)	India (Malda Fazli & Himsagar)
Registration Date	Fazli: 2017 (finalized 2022 as shared GI) Khirsapat: 2019	Himsagar/Khirsapati: 2007/2008 Fazli: Not formally registered
Geographical Specificity	Precise upazilas/sub-districts (e.g., 16 upazilas for Fazli; 3 upazilas for Khirsapat)	Broader district/river basin descriptions (e.g., Malda district; Mahananda–Kalindri basin)
Specification Detail	High (detailed TSS ranges, weight, shape, acidity, traditional methods documented)	Moderate (general characteristics described; less granular detail)
Traditional Knowledge Integration	Strongly integrated (e.g., 'pon' grafting, 'dahi' irrigation, historical naming conventions)	Present but less emphasized; more reliance on historical patronage narratives (e.g., Mughal era)
Legal Status under TRIPS	Fully compliant; registered and enforceable	Himsagar: Registered; Fazli: Unregistered, informal claim only
Evidence of Terroir Link	Well-documented through agronomic, phenotypic, and historical records	Less specific; relies on broader historical and cultural assertions

7. Socio-Economic Implications

7.1 Market Dynamics

There is a clear price difference between the two products. Indian Himsagar mangoes typically sell for 15–20% less than Bangladeshi Khirsapat mangoes, whether in the local market or abroad. This partly depends on people's perceptions of quality, but legal complexities also play a major role. In wealthy export markets like the Middle East, more and more buyers are choosing boxes labeled "Bangladeshi Khirsapat.". People have begun to trust what GI (Geographical Indication) status means and the quality that comes with it.

7.2 Cultural Dimensions

The Fazli and Khirsapat/Himsagar varieties of mango have become powerful symbols of regional and national pride, going beyond their botanical identity. Legal disputes over the product have turned into proxy wars over cultural heritage and sovereignty (Bose 2017). The contrasting historical narratives used in the application of GIs, the emphasis on deeply embedded traditional knowledge in Bangladesh, and the reference to Mughal support for India are not merely informative historical accounts. Rather, they are elements of a broader nationalist narrative that aims to connect the identity of the modern state with an idealized agrarian

heritage. As a result, traditional agricultural knowledge systems, which once spread freely across the Bengali cultural region, are now politically and nationally fragmented. This process can also change cultural practices, where collective history is transformed into a legal property right that is available only to an individual (Gangjee, Relocating Geographical Indications 2012).

7.3 Broader Implications for South Asian Agricultural Heritage

These disputes are a manifestation of an enduring phenomenon in post-colonial South Asia, where colonially drawn maps disrupted integrated zones of settlement, agriculture, and culture. The maps and subsequent disputes in the enduring Basmati rice conflict between India and Pakistan, the contended Darjeeling tea between India and Nepal, and the Nakshi Kantha handicrafts conflict between India and Bangladesh illustrate the same phenomenon (D. Marie-Vivien 2013). The enduring conflict between “historical provenance” and “modern territorial sovereignty” are especially salient in the imposition of maps and the contemporary IP laws (Caenegem 2003). From the successful addressing of the disputes, the rural communities economically will benefit, the certified farmers will have improved access to premium markets, and the environmentally sustainable farming practices linked to the specific terroir will be promoted. Additionally, the agricultural biodiversity of the area will be preserved. With a focus on cross-border collaboration, countries can reimagine a shared history, currently viewed as contentious, to a driver of prosperity and sustainable development.

8. Emerging Patterns in South Asian Transboundary GIs and Strategic Pathways for Bangladesh

Shared GIs enhance cultural ties but risk economic losses through exclusivity claims, affecting exports and farmer livelihoods. For Khirsapat and Himsagar, collaborative frameworks could include joint applications under regional agreements or the Madrid System for collective marks. Under Article 2(4) of the Lisbon Agreement (Geneva Act)⁶, countries can jointly register a transborder GI. This would allow India and Bangladesh to market the fruit under a unified “Bengal Himsagar” brand. The Lisbon Agreement (WIPO) allows for homonymous GIs (same name for products from different territories) if they do not mislead the public. This could be a potential pathway e.g., “Himsagar (India)” and “Himsagar (Bangladesh)”, but this would be commercially unsatisfactory for both parties as it dilutes uniqueness. They could recognize each other's GIs for distinct, clearly differentiated products (e.g., India's “Khirsapat” and Bangladesh's “Gopalbhog”), while creating a shared protocol for “Himsagar” as a homonymous GI with clear labelling of origin. Fazli and Khirsapat/Himsagar disputes are signs of filling the gaps of the legal system in the post-colonial world, where GIs have fragmented South Asia, and specifically the South Asian subcontinent, due to the fragmentation of the integrated agricultural space as a result of intentional political divisions (Iqbal 2010).

Bangladesh needs to initiate and lead formal discussions with other countries to form a framework for mutually recognized or jointly managed Geographical Indication (GI) management. In this regard, the European Union's cross-border Protected Designation of Origin (PDO) framework⁷, or the mutual recognition of Café de Colombia and Café de Ecuador, can be seen as a notable example.⁸ In this regard, there is a possibility of developing a framework called ‘Bengal Delta Mango Heritage’. This framework will recognize historically concentrated agricultural areas. Each country's sovereignly registered GIs will be jointly granted legal protection based on specific characteristics (characteristic types) and clear specifications. It is essential to effectively strengthen the legal protection of GI registration in Bangladesh at the local level. The Department of Patents, Designs and Trademarks (DPDT) needs to allocate additional resources and expand enforcement powers to ensure proper monitoring and legal redress for GI infringements. At the same time, state funding for GI monitoring, farmer consortium support, and market authentication systems must be increased. Bangladesh can effectively address transboundary GI through fair bilateral solutions and taking a strong stance in favor of structural international reforms. Its goal is to transform conflict-based approaches into managed cooperation, so that national heritage is protected on the one hand and the collective history of the region is recognized on the other.

9. Conclusions

Bangladesh's formal legal registrations establish significant, irrefutable, and protected claims under the TRIPS Agreement, which supports formal registrations explicitly linked to a specific geographical environment. Evidence and argumentation in support of this legal position, however, contradict the actual historical and ecological facts of the Bengal Delta. Historically, the Bengal Delta was a unified agricultural frontier, which, during and post-partition, was characterized by the unimpeded transboundary diffusion of agricultural knowledge and planting materials (germplasm). This most likely counteracts the singular ownership claim of dominant and/or hegemonic agricultural system(s) and contributes to a more complex and intricate narrative of collective heritage. This study argues that border regions with insufficient and divided agricultural systems can be destabilized by the traditional, “winner-takes-all” model of geographical indication protection, which is meant for European Union geographically distinct appellations. There is an urgent need for new legal and diplomatic frameworks that acknowledge the modern nation-state's capacity to enact laws on intellectual property and to reign geographically scattered legal systems. Bangladesh must assert its legal rights in international forums and pursue diplomatic avenues, including GI co-management, hybrid agreements, or cross-recognition agreements. This would enable Bangladesh to operationalize its national interests. These mango varieties are not merely commodities or IP. They are historical documents of the Bengal Delta and a testament to an interconnected history that transcends time and national borders. To uphold the ethical (and legal) basis of the custodians of these diverse varieties and cultivars, we may need to go beyond rigid,

⁶ Secretariat of the Convention on Biological Diversity. 1992. Convention on Biological Diversity: Text and Annexes. Montreal: Secretariat of the Convention on Biological Diversity, United Nations Environment Programme. Accessed January 8, 2026. https://www.cbd.int/doc/legal/cbd_en.pdf

⁷ “Regulation - 1151/2012 - EN - EUR-Lex,” n.d. <http://data.europa.eu/eli/reg/2012/1151/oj>

⁸ Solidaridad. “Colombia Becomes First Country to Sign Landmark Agreement on Coffee, Climate Change and Forests - Solidaridad Network.” Solidaridad Network, September 7, 2021. https://www.solidaridadnetwork.org/press_release/colombia-becomes-first-country-to-sign-landmark-agreement-on-coffee-climate-change-and-forests/.

unilateral, national imperatives. It is essential to adopt a diplomatic approach that looks to the future while considering our history and shared heritage. For agricultural products from border areas, it could advocate for joint management frameworks such as linked GI, mutual recognition agreements, or other similar structures. India's official acknowledgment of the Bangladesh's registration as well as the cooperation in product quality and marketing has settled disputes, which, in the case of India and Bangladesh, could be transformed into instances of positive cooperation. Lastly, as Bangladesh retains and India honors the sovereign intellectual property rights, transboundary relics, and the endangered species of prized mangoes and Bangladesh's dependency on them, it is justified, but most importantly, it is necessitated for the preservation of the species and the people.

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