
LEGAL PROTECTION AND PLATFORM VISIBILITY OF GEOGRAPHICAL INDICATION PRODUCTS IN E- COMMERCE ECOSYSTEMS

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ABSTRACT

In this paper, the legal protection of Geographical Indication (GI) products and their platform visibility in the e-commerce ecosystems are analyzed, and a specific emphasis is made on the issues of genuine producers in the realm of online marketplaces. GI products are valued based on their geographical source, reputation, age-old production and cultural meaning. Some of the products that are both economically significant but are also the heritage and identity of the local people include Darjeeling Tea, Basmati Rice, Mysore Silk and Mysore Sandal Soap. Nevertheless, the blistering development of e-commerce has generated new legal and technological issues associated with the counterfeit products, deceptive product descriptions, unauthorized use of GI names, and unequal platform visibility. The paper evaluates the Indian law on the subject of GI products, it also discusses the intermediary liability of e-commerce, safe harbour, notice-and-takedown liability, and the increasingly popular problem of transacting in counterfeit products of the GI brand across borders. The paper also examines the importance of platform algorithms, sponsored listings, ratings, and search rankings in dictating the presence of GI products on the Web. It claims that legitimate GI manufacturers usually find it difficult to compete with fake sellers who have better digital marketing plans and visibility on the web. The paper uses a comparative analysis of India, European Union and the United States in order to identify the best practices that can be used in enhancing GI protection in digital commerce. Lastly, the paper suggests more robust intermediary duties, compulsory GI verification badges, specific search filters of GI products, better collaboration between governmental agencies and platforms, and the application of technologies (blockchain, QR verification, and digital traceability). The paper provides the conclusion that consumer trust, cultural heritage, and rural livelihoods require the enhanced legal enforcement and improved online visibility.

Keywords: Platform Visibility, Platform Geographical Indication Products, E-Commerce Ecosystem

Introduction

Geographical Indications (GIs) have become a significant intellectual property protection of products whose quality, reputation or other attributes can be essentially associated with their geographical origin. A range of products like Darjeeling Tea, Basmati Rice, Mysore Silk and Kanchipuram Silk is worth a commercial value in terms of regional identity and cultural heritage. Such products are in India mainly regulated by the law of Geographical Indications of Goods (Registration and Protection) Act, 1999¹ that aims at averting the use, misrepresentation, and unfair competition with regard to registered GI products. The Act understands that GI protection is not a matter of intellectual property only, but also one of maintaining livelihoods in the countryside, traditional knowledge and consumer confidence.

As digital commerce grows at an alarming rate, GI products are being marketed online via online marketplaces and e-commerce. These platforms offer great chances to artisans, farmers and local producers to reach broader national and international markets. Nevertheless, online marketplaces introduce new legal issues, too. The selling of fake products, deceptive product information, and use of GI name without authorization, as well as manipulation of search engines, may decrease the popularity of original GI products and increase that of the fake sellers. According to Bartoli, Bonetti, and Mattiacci (2022)², digital age demands a comprehensive approach to marketing GI products, involving legal protection, branding, storytelling, and digital discoverability. Upputuri, Noorullah, and Kolluri (2024)³ also argue that digital authentication technologies and smart city infrastructures have the potential to enhance the credibility and traceability of GI products in e-commerce systems.

This issue is exacerbated by the fact that most consumers, when buying products online, use platform rankings, sponsored placements, ratings, and search placement. Liang, Li, Ma, and Jiang (2025)⁴ discovered the signaling and reputation as a significant importance in consumer trust and governance over e-commerce sites, especially in the case of GI products, where the authentic sellers might not be able to compete with the fake or deceitful products that come out

¹ Geographical Indications of Goods (Registration and Protection) Act, No. 48 of 1999, INDIA CODE (1999).

² C. Bartoli, E. Bonetti & A. Mattiacci, Marketing Geographical Indication Products in the Digital Age: A Holistic Perspective, 124(9) British Food Journal 2857 (2022).

³ B. Upputuri, R. Noorullah & R. Kolluru, AuthentiQ Market Space: Leveraging Smart City Technologies for Authentic E-commerce System of Geographical Indication Products, in 2024 5th International Conference on Smart Electronics and Communication (ICOSEC) 1413 (2024).

⁴ X. Liang, G. Li, J. Ma & G. Jiang, How Do Signaling and Reputation Function as Critical Clues to E-commerce Platform Governance? Evidence from Chinese Rice Transaction Data, 25(5) Electronic Commerce Research 3637 (2025).

higher in the search results. Similarly, Pokrovskaya (2024)⁵ observes that there is a growing trend of trademark and intellectual property infringements on e-commerce websites, whereby more rigorous intermediary liability regulations and website management controls are needed. Sun (2024)⁶, also, points out that cross-border e-commerce is advancing the problem of intellectual property, especially where counterfeit products are sold internationally across jurisdictions that have weak enforcement frameworks.

In India, the legal reaction to such problems is covered by a variety of laws, such as the Consumer Protection Act, 2019, Consumer Protection (E-Commerce) Rules, 2020⁷, or the Information Technology Act, 2000. Through these laws there are obligations on online marketplaces to reveal seller information, forestall unfair trade practices and eliminate unlawful listings. However, there are still loopholes when it comes to the particular safeguarding of GI products in the digital setting, namely platform liability and counterfeit detection, as well as algorithmic visibility. The increasing abuse of GI names in the Internet market proves the necessity of more effective legal restrictions, technological checking systems and the cooperation of governmental institutions and intermediaries of e-commerce.

Research Gap

The literature on Geographical Indications (GI) and its recent developments has been predominantly concerned with registration, legal protection, branding, rural development, and the economic importance of GI products. But there is no particular study that has been conducted on the connection between legal protection and platform visibility of GI products in online markets. Current literature lacks sufficient coverage of the impacts of search algorithms, sponsored listing, rating and platform governance mechanisms on the discoverability of authentic GI products online, and the particular roles that e-commerce platforms have in curbing the misuse of GI labels online. Thus, this paper aims to bridge this gap and guide the legal analysis with the platform governance, intermediary liability, and technological solutions to the enhancement of the online visibility and protection of GI products.

⁵ A. Pokrovskaya, Protection of Trademark Rights on E-commerce Platforms: An Updated Outlook, 1(2) Journal of Comprehensive Business Administration Research 65 (2024).

⁶ T. Sun, Challenges and Strategies of Intellectual Property for Cross-Border E-Commerce Enterprises in Shenzhen (2024) (unpublished doctoral dissertation, PQDT-Global).

⁷ Consumer Protection Act, No. 35 of 2019, Gazette of India, Aug. 9, 2019; Consumer Protection (E-Commerce) Rules, 2020, Gazette of India, July 23, 2020; Information Technology Act, No. 21 of 2000, Gazette of India, June 9, 2000.

Research Objectives

The research objectives are –

- To analyse legal regulation of the protection of Geographical Indication products in the e-commerce ecosystem with references to intermediary liability, consumer law, and regulator of the platform.
- To interpret the issues impacting on the online presence of GI products and recommend legal and technological solutions on enhancing their authenticity, discoverability, and protection on digital environments.

Research methods

The paper follows a doctrinal and analytical research design by relying on primary and secondary materials. The primary sources are statutes, rules, judicial decisions and international agreement concerning Geographical Indications, e-commerce and intermediary liability. The secondary sources are books, journal articles, conference papers, reports, and online materials pertaining to GI protection, platform governance and online commerce. The paper also employs a comparative methodology by considering the law of India, European Union and the United States with the aim of identifying best practices that can enhance protection and visibility of the GI products in online marketplaces.

Conceptual Framework

Geographical Indications (GIs) are a type of intellectual property right utilized to designate products that derive out of a particular geographical location and have qualities, reputation or characteristics, which can be traced in essence to that location⁸. In contrast to trademarks, which are used to identify the commercial source of a product, GIs focus on the association between the product and the place of production. As an illustration, Darjeeling Tea, Mysore Silk and Banarasi Sarees are unique to their environment, skills and cultural activities. GIs hence play an additional role as preservation of cultural heritage, rural job and economic growth of a region as well as serving as a commercial identifier⁹.

⁸ Geographical Indications of Goods (Registration and Protection) Act, No. 48 of 1999, INDIA CODE (1999).

⁹ M. L. Clodoveo, A. Yangui, M. Fendri, S. Giordano, P. Crupi & F. Corbo, Protected Geographical Indications

GIs should be differentiated with trademarks and certification marks¹⁰. A trademark gives a specific business organization exclusive rights to a brand name or logo, whereas a GI is owned by jointly producers in a particular region. Certification marks, which are also known as such, show that a product is of a certain quality but does not necessarily have a geographical connection. The sociality of GIs means that they are especially prone to abuse in e-commerce settings where unauthorized vendors can exploit the sociality to falsely claim they have used GI labels to lure buyers.

Platform visibility is a notion that is characterized by the extent to which products can be found, ranked, and advertised on online marketplaces. Search algorithms, sponsored listings, recommendation systems, consumer ratings, and reviews are some of the methods used by e-commerce platforms to determine product visibility, but in these ecosystems, genuine GI products might be given a less pronounced visibility in the event other more aggressive promoted products are counterfeit or misleading. According to Bartoli, Bonetti and Mattiacci, legal protection of GI products is not the only factor that should be considered, but also storytelling, brand identity and online discoverability. Likewise, Liang, Li, Ma and Jiang note that reputation signals and platform governance mechanisms play a key role in making sure that real producers do not lose out in e-commerce ecosystems.

Legal Framework governing GI Products

Governance of legal protection of Geographical Indications (GIs) in India Geographical Indications In India, the legal protection of GIs is mainly regulated by the Geographical Indications of Goods (Registration and Protection) Act, 1999. According to the Act, a GI is a sign that identifies goods as the products of a certain territory, region or locality where a particular quality, reputation or other characteristic of the goods The legislation offers protection against infringement, registration and legal redress in situations of abuse. Registered owners and licensed users have a right to injunction, damages, and forfeiture of infringing goods.¹¹

The Trade Marks Act, 1999 also plays an important role in GI protection. Despite the difference between trademarks and GIs as the representatives of intellectual property, both of them are

for EVOO in Tunisia: Towards Environmental, Social, and Economic Sustainable Development, 13(20) Sustainability 11201 (2021).

¹⁰ Trade Marks Act, No. 47 of 1999, INDIA CODE (1999).

¹¹ V. K. Ahuja, Law Relating to Intellectual Property Rights 420 (3d ed. 2017).

created to avoid consumer confusion and unfair competition. The combination of the two laws under Section 25 of the Geographical Indications Act¹² and Section 4 of the Trade Marks Act¹³ assists in the prevention of misuse of the name of the region and also misrepresentation of fake products as genuine GI products.

E-commerce has also brought about some other legal issues associated with Internet sales, liability of the platform and consumer fraud. The Consumer Protection Act, 2019¹⁴ and Consumer Protection (E-Commerce) Rules, 2020¹⁵ have obligations on online marketplace to ensure correct product description, seller information and to avoid unfair trade practices, which are relevant to GI products since misleading buyers can be done directly by claiming to be genuine or of a certain geographical origin. The E-Commerce Rules also provide that platforms shall make reasonable efforts to make sure that sellers represent goods in a fair manner and are not involved in deceptive practices.

The Information Technology Act, 2000¹⁶ is also applicable in the issue of e-commerce intermediary liability. Section 79 of the Act provides that intermediaries can enjoy safe harbour protection of third party content when they take reasonable care and adhere to the directions of the government. But courts have been increasingly appreciating that platforms cannot sit back and watch as they sell counterfeit or infringing goods. This is of particular concern when it comes to GI products since online shops are frequently frequented by unauthorized sellers who use deceptive regional names to lure customers.

GI protection is understood at the international level in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Articles 22-24 of TRIPS¹⁷ mandate member states to create legal means of preventing misleading use of GI and unfair competition. 10 The European Union has come up with stronger GI regime with specific labels including Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI) which are offering higher levels of legal protection and enforcement.¹⁸

¹² Geographical Indications of Goods (Registration and Protection) Act, No. 48 of 1999, § 25, INDIA CODE (1999).

¹³ Trade Marks Act, No. 47 of 1999, §§ 9–11, INDIA CODE (1999)

¹⁴ Consumer Protection Act, No. 35 of 2019, Gazette of India, Aug. 9, 2019.

¹⁵ Consumer Protection (E-Commerce) Rules, 2020, Gazette of India, July 23, 2020.

¹⁶ Information Technology Act, No. 21 of 2000, § 79, Gazette of India, June 9, 2000.

¹⁷ Agreement on Trade-Related Aspects of Intellectual Property Rights arts. 22–24, Apr. 15, 1994, 1869 U.N.T.S. 299.

¹⁸ Dev Gangjee, Relocating the Law of Geographical Indications 198 (2012).

Platform Visibility and E-Commerce Issues

Digital technologies like search algorithms, sponsored advertisements, recommendation systems, ratings, and reviews, and reputation scores of sellers determine the visibility of products on e-commerce platforms, leading to consumer purchasing behaviour since those products that appear at the top of the search results are more likely to be noticed and bought. In the case of Geographical Indication (GI) products, visibility is of special concern since the commercial value of such products relies on consumers knowing the actuality, regional identity, and quality. Nevertheless, online markets tend to favor products that have better advertising budgets, more seller activity or better search engine optimization as opposed to products that have legitimate geographical relevance.

The largest problem GI products have to contend with is the existence of fake products and unlicensed merchants on online websites. False advertising of GI names like Darjeeling Tea, Basmati Rice or Kanchipuram Silk by people who do not have a real affiliation with the geographic area in question is a common occurrence that deceives consumers, diminishes the reputation of the legitimate manufacturers and compromises the legal status GI products have. According to Pokrovskaya, e-commerce platforms have turned out to be easy targets of intellectual property offenses since third-party sellers can easily place ads and reach a large consumer base with little or no supervision on them.

Algorithmic visibility also adds unequal opportunities to real GI producers. The majority of GI producers are small-scale artisans, farmers, and cooperatives with low levels of digital literacy and financial assets. They do not have access to sponsored listings, optimization of product descriptions, or larger-scale online advertising campaigns. Therefore, the official GI products can be given less attention than fake products offered by bigger business organizations. Bartoli, Bonetti and Mattiacci believe that the online promotion of GI products should be an integrated process that would entail branding, storytelling, educating consumers and allowing the products to be discovered in a highly competitive digital market.

Lack of trusted verification systems of GI products in the online platforms is another major challenge. It is usually challenging to make the difference between the original product and a fake one since not all marketplaces offer GI-specific filters, labels, or verification badges. Upputuri, Noorullah and Kolluru propose that digital authentication schemes like blockchain, QR codes and traceability systems could be used to test the origin and authenticity of GI

products. These tools can enhance consumer confidence and minimize the threat of fraudulent activities. On the same note, Upputuri, Noorullah, and Reddy introduce the AuthentiQ model, which would establish a secure environment to identify and buy real GI-tagged products in India.

This is further complicated by the fact that cross-border e-commerce can mean that counterfeit GI goods are sold in foreign jurisdictions where law enforcement is lax or non-existent. 10 Sun points out that e-commerce across borders can mean that Indian manufacturers trying to safeguard GI goods in foreign markets may not always be able to do so because the platform will not remove counterfeit sellers. Hence, better platform regulation, better intermediary liability, and technological checks are needed to make sure that original GI goods get decent exposure and protection in e-commerce platforms.

Platform Liability and Regulatory Challenges

The intermediaries of the e-commerce have a great role in the sale and promotion of Geographical Indication (GI) products but also contribute to the spread of fake and misleading products. Third-party sellers frequently have the opportunity to sell their products through online marketplaces without sufficient checks to determine the authenticity of the alleged geographical origin, which leads to the sale of fake products under the names of Darjeeling Tea, Basmati Rice, or Mysore Silk among original products, resulting in the confusion of the consumer and economic loss to the real producers. The liability of intermediaries is a significant legal concern in such situations since platforms are likely to receive indirect benefits such as commissions, advertising income, and traffic growth as a result of the sale of infringement goods.

Section 79 of the Information Technology Act, 2000¹⁹ provides that, e-commerce intermediaries can claim under safe harbour that they are not liable with regard to third-party content on their platforms provided they are neutral platforms and under due diligence. The platforms lose this protection when they have actual knowledge of hosting infringing material, when they do not comply with the notice to remove illegal listing, or when they are directly involved in the sale and marketing of counterfeit items. The case of *Christian Louboutin SAS v. Nakul Bajaj*²⁰ made it clear that an online marketplace can be held responsible in cases when

¹⁹ Information Technology Act, No. 21 of 2000, § 79, Gazette of India, June 9, 2000.

²⁰ *Christian Louboutin SAS v. Nakul Bajaj*, 2018 SCC OnLine Del 12915.

it actively participates in listing, advertising, packing, or delivering products.

The current process of giving notice-and-takedown to the intellectual property infringements is mostly not quick enough and effective in the GI violation. The holders of the rights might also experience delays in notifying the e-commerce platform, taking action against the seller, and locating the real seller of the infringing product, thus, stricter requirements are imposed on the e-commerce platforms to actively screen the listing, authenticate the seller, and take down the counterfeit GI products in a timely manner. Platform accountability can also be enhanced using digital verification systems, e.g. QR codes, blockchain tracing, GI authentication badges, etc.

The cross-border e-commerce also presents more difficulties since counterfeit GI products are often sold abroad where enforcement systems vary, and the intellectual property laws are inconsistent. Sun notes that weaker international coordination and unequal enforcement systems are often used by foreigners to sell their goods and avoid liability, and the digital marketplaces must be regulated to prevent the exploitation of the weak international coordination and the absence of fairness and protection of

Judicial precedents

The judicial trends surrounding Geographical Indications (GIs) and e-commerce have pointed to the increased issue of counterfeit products, false geographical representations and the contribution of online intermediaries towards the facilitation of these activities. Courts have come to appreciate that online markets can be used by rogue sellers to legitimate their use of GI names, in an attempt to draw in consumers and obtain unfair trading advantages which can erode their uniqueness and inflict harm on genuine manufacturers.

Table 1 – Judicial precedents and its relevance to e-commerce ecosystem

Case	Relevance to GI and E-Commerce
Tea Board of India v. ITC Limited	Demonstrates misuse of GI names and the possibility of consumer confusion in online product listings and advertisements.
Christian Louboutin SAS	Relevant for determining intermediary liability where online

v. Nakul Bajaj	platforms facilitate the sale of counterfeit GI products.
Yahoo! Inc. v. Akash Arora	Establishes that intellectual property rights and passing off principles apply equally in online environments.
Scotch Whisky Association v. Golden Bottling Ltd.	Shows that false claims regarding geographical origin can mislead consumers and amount to passing off.
Basmati Rice disputes	Highlights the misuse of Indian GI-related products in foreign markets and online trade.
Consorzio del Prosciutto di Parma v. Asda Stores Ltd.	Illustrates that GI protection extends to compliance with production and packaging standards, which may be misrepresented in e-commerce sales.

The case of Tea Board of India v. ITC Limited²¹, which involved ITC using the name Darjeeling to refer to one of its tea lounges, and the challenge by Tea Board on this issue, was one of the most significant in this field, although the court did not establish direct infringement. 2 Although the court did not find that ITC directly infringed, it recognized the reputation attached to the name Darjeeling Tea. Considering the e-commerce scenario, the same abuse can be met when online retailers are using GI names in their product descriptions or advertisements, without permission.

A second important case is Christian Louboutin SAS v. Nakul Bajaj²², which explained that the online marketplaces can no longer enjoy the safe harbour protection when they actively contribute to the promotion of counterfeit goods. Although the presented case concerned luxury footwear, the argument can also be applied to GI products since all e-commerce platforms are frequently covered with fake products that are marked under such labels as Darjeeling Tea, Basmati has also been identified in courts. Yahoo! Inc. v. Akash Arora²³, which intellectual property rights are fully applicable in digital space.

The cases of Basmati Rice and Parma Ham²⁴ also demonstrate that the GI-related claims may be abused in online trade and e-commerce across borders and that more stringent enforcement,

²¹ Tea Board of India v. ITC Limited, CS(OS) No. 2507/2010 (Delhi High Court).

²² Christian Louboutin SAS v. Nakul Bajaj, 2018 SCC OnLine Del 12915.

²³ Yahoo! Inc. v. Akash Arora, 1999 PTC (19) 201 (Del).

²⁴ Consorzio del Prosciutto di Parma v. Asda Stores Ltd., [2001] UKHL 7.

quicker notice-and-take measures, and heightened responsibility of intermediaries are necessary to safeguard the authentic GI products in the online markets.

Comparative Perspective

The Geographical Indications (GIs) enjoy legal protection by Geographical Indications of Goods (Registration and Protection) Act, 1999 in India and creates a system of registration and rights to the registered proprietors and authorized users. Indian law is primarily aimed at protecting against unauthorized use, passing off, and consumer deception. Nonetheless, the enforcement is still in disjointed parts, as the legal system is not specifically focused on digital platform visibility, algorithmic ranking, or the proactive liability of e-commerce intermediaries. This has allowed fake GI products to still be visible on online marketplaces even with the formal legal protection in place.

European Union is more comprehensive in the protection of GI. EU has identified several types of labels, which are Protected Designation of Origin (PDO), Protected Geographical Indication (PGI) and Traditional Specialty Guaranteed (TSG)²⁵. These are backed by stringent quality standards, compulsory certification and wide market surveillance. There is also more cross-border protection by the EU law where it is easier to take action against unauthorized sellers across the member states through verification systems, official GI labels and product traceability tools that help in differentiating authentic goods and fake products. These will enhance consumer trust and boost the presence of authentic GI products on online retail outlets.

However, the United States lacks such a separate GI regime as India or EU. Rather, GI-related protection is mostly achieved by certification marks and collective marks under the trademark law, e.g., Idaho Potatoes or Florida Oranges. The American strategy is more market-based and, less concerned with cultural heritage or regional identity, though American e-commerce platforms have established more powerful notice-and-takedown regimes, vendor authentication mechanisms, and anti-counterfeiting systems to minimize the sale of counterfeit goods.²⁶

Amazon and eBay have automated content moderation, brand registry, AI-based fake listing

²⁵ Regulation (EU) No. 1151/2012 of the European Parliament and of the Council of 21 November 2012 on Quality Schemes for Agricultural Products and Foodstuffs, 2012 O.J. (L 343) 1.

²⁶ Lanham Act, 15 U.S.C. §§ 1051–1127 (1946).

detection, and seller monitoring services to safeguard intellectual property rights, with the result being that original products are given more priority and counterfeit listings are removed faster. India can also follow the same approach, by implementing GI verification badges, special search filters of GI products, obligatory seller verification, accelerated notice-and-takedown processes.²⁷

Findings and analysis

The current Indian legal system offers a high level of protection to the Geographical Indications (GIs) in the physical market, yet it lacks sufficient solutions to the issues in the context of digital commerce. The Geographical Indications of Goods (Registration and Protection) Act, 1999 does not specifically address the online marketplaces, platform ranking, sponsored ads or search ranking, which means that fake or misleading products might receive a high profile in search results whilst genuine GI products might not get any visibility at all. There are also no specific commitments that the law has placed on platforms to differentiate genuine GI goods by labeling or filtering or certification marks.

The other significant weakness is platform responsibility and enforcement mechanisms. Though the Information Technology Act, 2000 and the Consumer Protection (E-Commerce) Rules, 2020 have some due diligence requirements to intermediaries, such systems are not designed to protect GI specifically, and they are reactive and slow, and rely on complaints by right holders. Small manufacturers and artisans might lack the necessary financial resources and legal competence to track the digital platforms and take physical steps to enforce the law, which means that counterfeit GI products can stay there too long and lead to loss of money and damaged reputation of real manufacturers.

Another huge gap is the ignorance of consumers and producers on GI protection. There are not so many consumers who can tell the difference between original and counterfeit GI products as online entries rarely contain trustworthy information about geographical location or certification status. It limits their competitiveness against fake sellers who can be more competitive on the digital marketing front.

Technological solutions may be significant in resolving these problems. GI products can be

²⁷ Irene Calboli, *Geographical Indications of Origin at the Crossroads of Local Development*, Consumer Protection and Marketing Strategies, 46 Int'l Rev. Intell. Prop. & Competition L. 760 (2015).

checked using blockchain systems, QR codes, RFID tags, and digital traceability mechanisms to determine the origin and authenticity of the product. As Upputuri, Noorullah, and Kolluru propose, the online presence and reputation of GI products in India can be reinforced substantially when legal reforms are combined with technological innovation.

Suggestions and recommendations

Stronger intermediate responsibility ought to be brought on the e-commerce platforms to enhance the protection and awareness of the Geographical Indication (GI) products in the virtual marketplaces. Along with the current due diligence commitments under the Information Technology Act, 2000 and under the Consumer Protection (E-Commerce) Rules, 2020, it should be extended to set certain obligations related to GI verification and monitoring.

Mandatory GI verification badges of genuine sellers and registered products should also be introduced in e-commerce platforms. These badges would enable consumers to be able to discriminate between genuine GI products and counterfeit goods more easily, as with the verified seller programs to trademarks and branded goods, GI verification marks would only be granted following the establishment of that the seller is an authorized user under the Geographical Indications of Goods (Registration and Protection) Act, 1999. This would make the consumers more confident and enhance the presence of genuine products on online marketplaces.

E-commerce systems should also create dedicated search filters and product categories of GI goods so that people who are interested in such products like Darjeeling Tea, Mysore Silk or Banarasi Sarees could find certified GI products separately with other items. These kinds of filtering systems would enhance discoverability and minimize the chances of deception of consumers. Platforms can also proving the origin of the products and the history of their production by using QR codes, blockchain technology, and digital traceability systems.

Increased collaboration between government-agencies, e-commerce-platforms, producer associations, and GI-registries is also required. The regulatory agencies ought to develop central databases of registered GI products and authorized vendors, which could be accessed by online markets to verify the products at their convenience.

Lastly, there is need to strengthen legal punishments on abuse of GI labels over the internet.

Repeat offenders are to be fined more, their accounts should be blocked, and in cases of criminal liability, the blocking of listings and criminal responsibility should be imposed.

Figure 1 – Suggested online visibility of GI products



Credit: AI Generated image

The infographic points to the significant changes that need to be made in order to enhance the online security of Geographical Indication (GI) products within the context of e-commerce ecosystems. It highlights the necessity of increased intermediary responsibilities such as seller verification, product listing surveillance, and quick elimination of fake products. It also suggests mandatory GI verification badges of genuine sellers which can enhance consumer confidence and aid in differentiating between real and fake products. Specialized search filters and GI-special categories may also enhance the presence of genuine products on the web. Another point that is emphasized in the infographic is the need to cooperate between government agents, e-commerce firms, and producer associations via central databases and concerted efforts. Lastly, it suggests more rigid legal punishment on misappropriation of GI labels and the use of technological means like QR codes, blockchain tracking, and digital

traceability systems to provide product authenticity and transparency.

The Darjeeling Tea infographic is more successful as it shows clearly, how a GI product must look like on the e-commerce site. It incorporates significant legal and technological elements in the form of certified seller badges, GI certification tags, search filters and traceability with QR into a plausible product listing framework. In this way, it is easier to see how genuine GI products can be differentiated among fake products in online markets. The infographic demonstrates the precise location of GI labels, seller verification, information about the origin, and traceability tools, which is why it can be considered a practical example of how platforms can become more visible and trusted by consumers. It could be used to make sure that authentic GI products are given more publicity and also minimize the chances of false advertisements and unregistered entries.

Conclusion

Finally, the issue of Geographical Indication (GI) products protection in e-commerce ecosystems needs not only substantial legal protection but also efficient digital presence. Although the protection provisions in India against abuse and infringement exists, it is not well equipped to handle the issues of the online marketplaces, counterfeit products, misleading advertisements, and the ranking of products by algorithms. The genuine GI products frequently find it difficult to compete with the counterfeit or deceptive products that become more noticeable in the digital platforms. As such, the law cannot protect them unless they are backed by proper management of the platform and enhanced online findability.

The stronger intermediary obligations, quicker notice-and-takedown procedures, special GI filters, seller authentication systems, and more severe punishment of misuse of GI labels on the internet are evident. The e-commerce platforms should be held more responsible with regard to selling and marketing of fake GI products especially in cases where they actively assist in listing the products, advertising and delivery. Simultaneously, technological advancements like blockchain, QR verification, digital traceability, and GI authentication badges could make a considerable contribution to enhancing transparency and consumer trust and product authenticity in online markets.

Finally, the safeguarding of GI products is a challenge of intellectual property law as well as a question of economic fairness, cultural conservation and sustainable development. GI products

are knowledge, traditions, and identity of local people, craftsmen, and farmers. These products should be better safeguarded to conserve cultural heritage, sustain rural communities, create jobs and enhance consumer confidence in genuine products. With the digital commerce on the rise, both legal systems and economic policy will find the visibility and integrity of GI products to be more critical.

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