



A COMPREHENSIVE ANALYSIS OF GEOGRAPHICAL INDICATIONS IN INDIA: TRENDS, APPLICATION STATUS, AND IMPACT ON PURCHASE INTENTION

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Abstract

Geographical Indication has become a significant form of intellectual property right in India. It identifies a product's origin, suggesting that its qualities or reputation are tied to that specific region. GI serves as an effective means of safeguarding and promoting the commercial value of unique products, as well as the traditional knowledge behind them. The purpose of GI tagging is to raise awareness about products originating from various districts of India.

This study, which relies on secondary data sources such as research articles, information from the WTO, WIPO, the Geographical Indication Registry, and reports from the Controller General of Patents, Trademarks, Geographical Indications, and Designs in India, offers a descriptive analysis of GI in the country. It explores the process of GI registration in India and provides an analysis of year-wise, state-wise, and product category-wise distribution of registered GIs from April 2004 to March 2023. Additionally, the study sheds light on the status of GI applications as of March 2023. The paper also examines how GI-tagged products influence consumer purchasing decisions, noting that recognition of a product's authenticity, quality, and regional connection tends to boost consumer interest and purchase behaviour.

Keywords: Geographical indication, registration, status, GI tags, purchase intention.

Introduction

A Geographical Indication (GI) is a form of intellectual property that signifies products coming from a specific area, where the quality, reputation, or unique features are strongly connected to their place of origin. GIs highlight the crucial influence of local geography, climate, and human expertise on the unique quality of certain products. By providing a GI tag, producers can distinguish their goods from others, build a strong reputation, and often command higher prices. Additionally, GIs are considered valuable for preserving and protecting traditional knowledge, which refers to cultural practices or knowledge passed down through generations within a community.

The term "Geographical Indications" was introduced into international intellectual property law when it was included in the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). India possesses numerous known GIs, such as 'Alphonso' mangoes, 'Basmati' rice, and 'Darjeeling' tea, the latter being the first Indian product to be awarded a GI tag. To fulfill its TRIPS commitments, India passed the Geographical Indications of Products (Registration & Protection) Act in 1999, which became effective on 15 September



2003. This law led to the creation of the Geographical Indications Registry in Chennai, covering all of India, allowing producers to register their GI products. The Act is administered by the Controller General of Patents, Designs, and Trade Marks, who also acts as the Registrar of Geographical Indications.

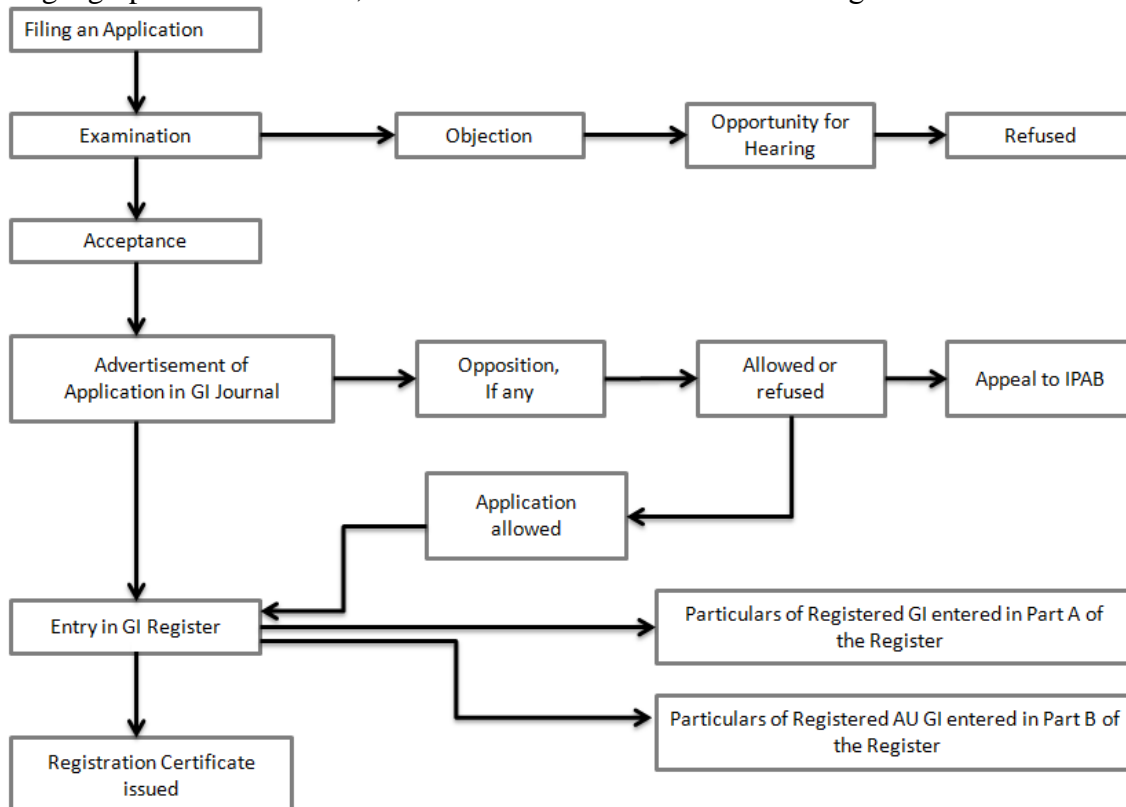
Advantages

Following advantages are provided by the Geographical Indication registration:

- Legal protection for the registered products.
- It ensures authenticity and enables consumers to obtain high-quality products with desired traits.
- Prevents unauthorized use of GI tag products by others.
- Boosts the demand for products with a GI tag in local and international markets, driving economic growth for the producers of those goods.

Registration Process:

- The Geographical Indications of Goods (Registration and Protection) Act, 1999 outlines the format in which an application for registering a GI must be filed with the Registrar of Geographical Indications.
- The Register of Geographical Indication is divided into 2 sections: Part ‘A’ lists registered geographical indications, and Part ‘B’ contains details of the registered authorized users.



Source: ipindia.gov.in



Renewal of GI

A registered GI is valid for 10 years and can be renewed upon payment of the renewal fee.

Review of Literature

Yadav, P. (2017). discusses various policy considerations, factors, and conditions essential for the development and success of GI schemes. The study focuses on the protection of GIs as an intellectual property right, emphasizing that legal protection alone should not be the sole objective for a successful GI initiative. However, the absence of adequate IP protection can undermine even the most well-designed, development-focused GI schemes. Given that GIs are tied to specific regions, they can serve as an important tool for promoting local development. Additionally, GIs can help preserve traditional cultural expressions (TCEs) and traditional knowledge (TK) because of their deep roots in local traditions. The challenge lies in establishing and executing a comprehensive GI program that can form the foundation for sustainable development, as the multifunctional role of GIs is increasingly being recognized.

Kishore, K. (2018). Conducted study on Geographical indications in horticulture and stated that among horticulture crops more than half of the items belong to fruit crops and Maharashtra and Karnataka tops state-wise ownership of geographical indications.

Sharma, S. (2019) conducted a study that examined various GI-tagged products and their growth in the Indian market. The study found that Karnataka has the highest number of GI-tagged products, with the majority registered in 2008-09. Handicrafts emerged as the most popular category, with 202 registered as of the study's date.

Ashwathi, T. M. (2020) explored the issues faced by producers of GI products and impact of GIs from social, economic, and cultural perspectives. The study revealed that the GI Act does not sufficiently protect producers' interests, and the law is not effectively enforced. Key challenges include the widespread availability of counterfeit GI products, limited government support for exporting GI goods, and low consumer awareness. Consumers tend to buy GI products mainly for their popularity rather than their authenticity.

Bashir, A. (2020) highlighted that the protection provided under the GI Act is mostly theoretical and rarely enforced in practice. An examination of the legal framework and stakeholder interactions revealed that India's current GI protection system is limited in both its scope and effectiveness. The study emphasized the need for greater awareness and responsibility among producers to register their products under the GI Act. Publicly recognizing registered GIs and taking legal action against infringements could reduce the likelihood of violations.

Raveendran, G. (2021) emphasized the importance of quality control in maintaining the reputation of GI products. The study found that GI's success is linked to product quality, and multi-level quality checks enhance the reputation and market value of GI goods both domestically and internationally.

Patel, Mr. R. M., & ZALA, D. (2021) noted that the GI tag is a symbol of pride for manufacturers and consumers, representing excellence, originality, and the protection of rights. GIs have positively impacted people worldwide, particularly poor artisans who strive to maintain high-quality standards that are recognized globally. A GI tag preserves the unique qualities of a product.

Makam, G. (2023). examined the role of GIs in protecting local products and promoting India's cultural heritage. The study analyzed legal framework surrounding GIs and their impact on traditional and rural sectors, highlighting the potential of GIs to support sustainable tourism,



economic growth, and cultural preservation. The case studies of GIs in India demonstrated how GI recognition improves producers' livelihoods, brand development, and market access. The study recommended stronger legal frameworks, increased public awareness, capacity building, and public-private partnerships to address the challenges and maximize the benefits of GIs.

Research Objectives:

1. To examine the distribution of GIs registered in India by year, state, and product category from April 2004 to March 2023.
2. To assess the status of GI applications submitted as of March 2023.
3. To explore the advantages and challenges associated with geographical indications.
4. To investigate how GI-tagged products influence consumers' purchasing intentions.

Hypothesis:

H₀₁: There is no significant impact of Geographical Indications (GIs) products on consumers' purchase intentions.

Research gap

The literature review highlights the benefits, challenges, rights, obligations, and legal implications arising from various multilateral agreements on GIs, along with a growing number of bilateral agreements that include GI provisions. There is a noticeable gap in studies providing comprehensive statistical data on geographical indications in India. This study aims to examine the distribution of registered GIs by year, state, and product category, as well as assess the status of submitted GI applications.

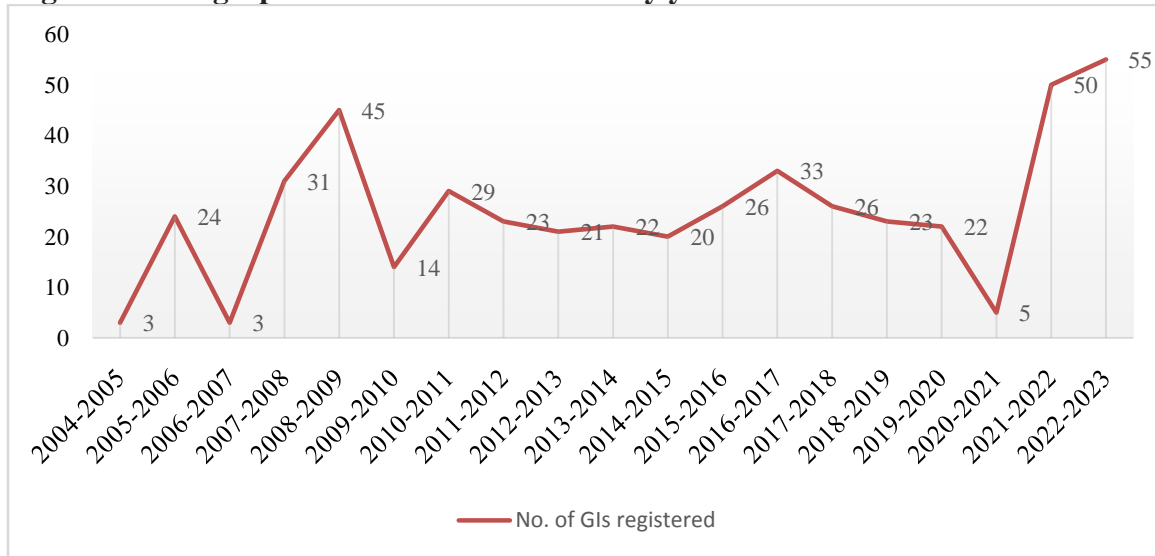
Research Methodology

This study uses a descriptive research approach. It draws on secondary data from scholarly journals, the World Trade Organization, the World Intellectual Property Organization, the Geographical Indication Registry, and the annual report of India's Controller General of Patents, Designs, Trade Marks, and Geographical Indications. Additionally, primary data was gathered from 284 respondents in Varanasi through a standardized questionnaire with a 5-point Likert scale to gauge consumer views and buying intentions regarding GI products. A random sampling method was used, and quantitative techniques like Pearson Correlation and regression analysis were applied to test the null hypothesis (H₀₁), which posits that GI products do not significantly affect consumer purchase intentions. In this study, GI products were the independent variable, and consumer purchase intentions were the dependent variable. Pearson Correlation assessed the strength of the relationship, while regression analysis evaluated the effect of GI products on consumer behaviour.



Data Analysis and Findings

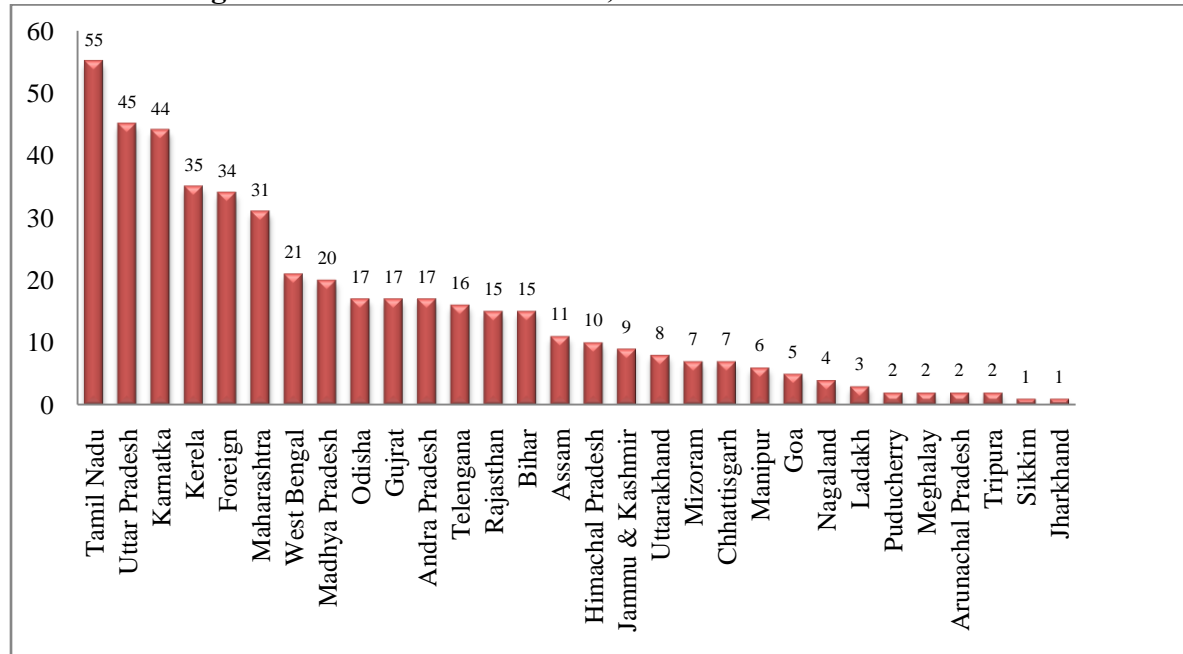
Registered Geographical Indications in India by year



Source: ipindia.gov.in

The chart illustrates the yearly distribution of Geographical Indications (GIs) registered in India from April 2004 - March 2005 to April 2022 - March 2023. A total of 475 GIs were registered during this period. In the first year (2004 - 2005), only 3 products were registered. The number of registered GIs increased to 24 in 2005 - 2006. The peak registration occurred in 2022 - 2023, with 55 GIs, followed closely by 50 GIs registered in 2021 - 2022.

State - wise Registered GI's as on March 31, 2023



Source: ipindia.gov.in (Annual Report 2022-23)



The figure shows the number of registered Geographical Indications (GIs) by state in India. Tamil Nadu leads with the highest number, having registered 55 GIs. Uttar Pradesh follows with 45 GIs, and Karnataka has 44 GIs. Kerala has 35 GIs. Puducherry, Meghalaya, and Arunachal Pradesh each have 2 registered GIs. Sikkim, Tripura, and Jharkhand have the fewest, with just 1 GI registered in each of these states.

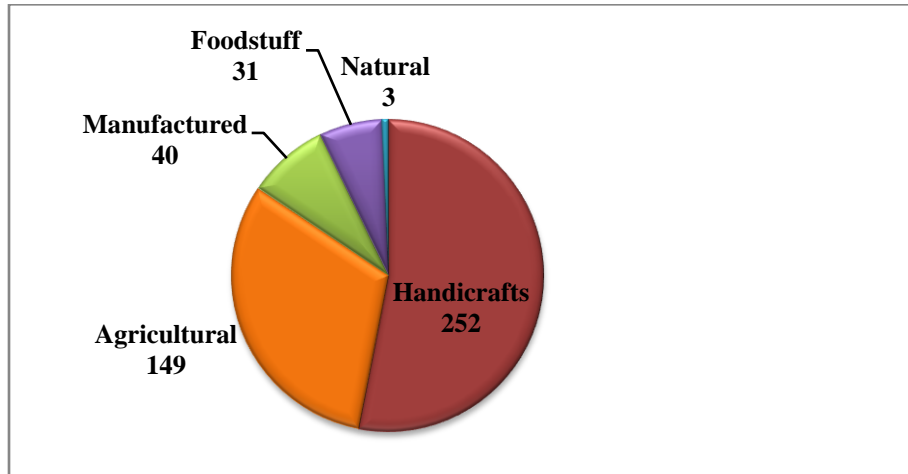
Intra-state Registered GIs status

Sr. No.	State	Registered GIs
1.	Kerala& Karnataka	2
2.	Kerala, Karnataka &Tamil Nadu	1
3.	Kerala &Tamil Nadu	1
4.	Punjab, Haryana & Rajasthan	1
5.	Maharashtra, Gujrat, Dadara& Nagar Haveli, Daman Diu	1
6.	Maharashtra & Madhya Pradesh	1
7.	Punjab/Delhi/Haryana/Himachal Pradesh/Uttarakhand/ Jammu & Kashmir /Uttar Pradesh/ Jammu & Kashmir	1
8.	Telangana & Andra Pradesh	1
9.	Karnataka & Maharashtra	1
10.	Andhra Pradesh & Odisha	1
11.	Manipur & Nagaland	1
12.	Uttar Pradesh & Madhya Pradesh	1
13.	Sikkim & West Bengal	1

Source: ipindia.gov.in (Annual Report 2022-23)

The table presents the status of intra-state GI registrations. Kerala &Karnataka have each registered 2 GI products, whereas other remaining states involved in intra-state registrations have only registered 1 GI product each.

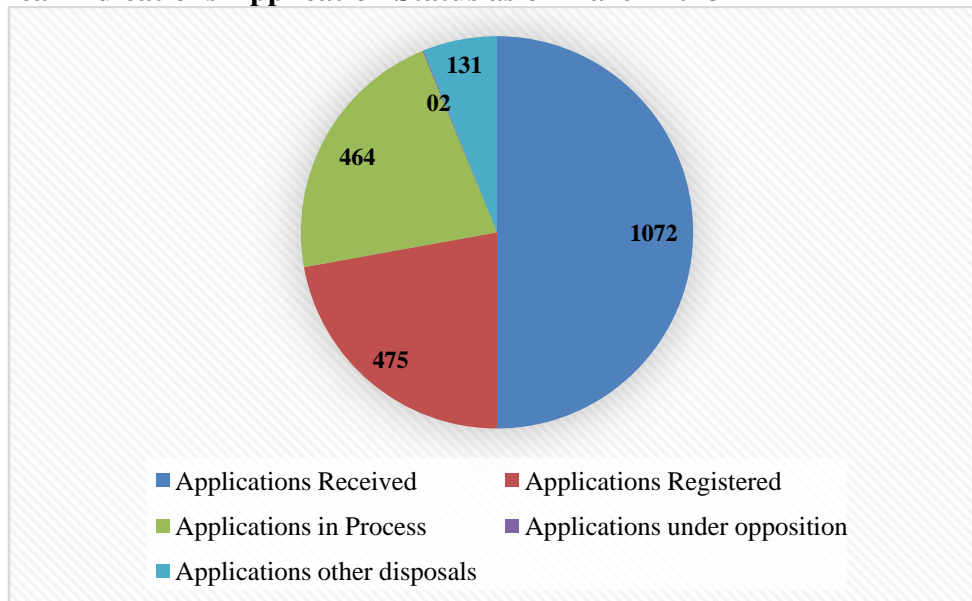
The distribution of registered GIs in India by product category



Source: ipindia.gov.in (Annual Report 2022-23)

GI-tagged products are categorized into handicrafts, agricultural products, manufactured goods, foodstuffs, and natural products. The figure indicates that the highest number of GIs were registered under the Handicrafts, with 252 out of the total. This is followed by Agricultural products with 149 GIs, Manufactured goods with 40, Foodstuffs with 31, and Natural products with just 3 registered GIs.

Geographical Indications Application Status as of March 2023



Source: ipindia.gov.in (Annual Report 2022-23)

It has been observed from the above chart that in India, out of 1072 total applications for GI registration, 464 applications were in process, 02 were under opposition, 131 applications were under other disposals, and 475 applications were registered in the Geographical Indication Registry.

H₀₁: There is no significant impact of Geographical Indications (GIs) products on consumers' purchase intentions.



Various statistical methods have been employed to determine if Geographical Indications (GI) products significantly influence consumer purchase intentions. In this analysis, consumer purchase intention is the dependent variable, while GI products are the independent variable.

Exhibit

Result of Correlation between Geographical Indications (GIs) products on consumers' purchase intentions.

Correlations			
		Geographical Indications (GIs) products	consumers' purchase intentions.
Geographical Indications (GIs) products	Pearson Correlation	1	.859**
	Sig. (2-tailed)		.000
	N	284	284
consumers' purchase intentions.	Pearson Correlation	.759**	1
	Sig. (2-tailed)	.000	
	N	284	284

**The correlation is statistically significant at the 0.01 level (2-tailed).

Interpretation -The exhibits the correlation coefficient between Geographical Indications products and consumer purchasing intention. With a correlation coefficient of 0.759, there is a clear and substantial positive link.

Regression analysis was conducted to assess whether the impact of Geographical Indications on customer purchase intention is statistically significant.

Exhibit

The following is a summary of the regression model analysis between Employee Engagement and Employees

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.759 ^a	.725	.725	.12993

a. Predictors: (Constant), **consumer purchase intention**

Interpretation - The exhibit shows that the coefficient of determination, denoted as R², has a value of .725.

The study examines the relationship between consumer purchasing intentions and Geographical Indications (GIs). The Pearson correlation coefficient of 0.759 shows a strong positive link between GI products and consumer buying intentions. This indicates that as GI products become more appealing or recognized, consumer interest in purchasing them also increases. The correlation's statistical significance at the 0.01 level reinforces this connection.



Additionally, regression analysis reveals that GI products account for approximately 72.5% of the variation in consumer purchasing intentions, as indicated by an R^2 value of 0.725. This high R^2 value shows that GI products have a significant impact on consumer buying decisions. The regression model rejects the null hypothesis (H_0), which suggests that GIs have a meaningful and statistically significant effect on purchase intentions.

To enhance public awareness of GI products, businesses, and policymakers should invest in marketing campaigns. Raising awareness about the unique attributes of GI products can further stimulate consumer interest. Emphasizing the authenticity and cultural significance of GI products can boost consumer appeal and trust, leading to increased purchase intentions. Certification and clear labelling can also support this effort. Expanding the range of GI products or introducing them to new markets can leverage their positive impact and boost consumer interest and sales. Focusing on markets that value authenticity, tradition, and quality can enhance the effectiveness of branding and marketing strategies for GI products.

Challenges

Geographical Indications (GIs) in India have been crucial in promoting and safeguarding traditional products unique to particular regions. Nevertheless, despite their advantages, several challenges affect the effectiveness of the GI system.

- **Complex and Lengthy Registration Process:** The process of obtaining GI registration involves multiple bureaucratic steps. This may discourage prospective candidates and cause a delay in the product's protection.
- **Inadequate Enforcement and Protection:** Enforcement of GI rights is often weak, with limited capacity to monitor and address infringements effectively. Instances of counterfeiting and misuse of GI status are common.
- **Market Access and Infrastructure Issues:** Many GI-producing regions face infrastructure deficiencies, such as inadequate transportation, storage facilities, and processing units. This hampers the ability of GI products to reach broader markets. Poor infrastructure limits market access and can prevent GI products from achieving their full economic potential, reducing competitiveness in both domestic and international markets.
- **Counterfeiting and Quality Control:** Counterfeiting is a significant issue, with many products falsely claiming GI status. Ensuring quality control and authenticity remains a persistent challenge.
- **Limited Market Awareness and Promotion:** There is often insufficient marketing and promotion of GI products, both within India and internationally. Limited market awareness reduces the demand for GI products and restricts their ability to command premium prices, affecting the economic benefits for producers.
- **Limited Community Engagement:** Effective GI management often requires active involvement from local communities. However, there is sometimes limited engagement and coordination among community members and organizations.
- **Lack of coordination Between Agencies:** Multiple agencies and authorities are involved in the GI process, leading to potential coordination issues and inefficiencies in handling GI-related matters.
- **Capacity Building and Training:** There is often a lack of capacity building and training for stakeholders involved in the GI process, including producers, administrators, and



enforcement agencies. Inadequate training and capacity can hinder the effective implementation and management of GI initiatives, impacting their success and sustainability.

Recommendations

To maximize the benefits of the GI system in India and address the challenges identified, several strategic actions are recommended.

- **Streamline the Registration Process:** Simplify and expedite the GI registration process to reduce bureaucratic delays and improve efficiency. An efficient registration process will encourage more producers to seek GI protection and reduce the backlog of applications.
- **Enhance Enforcement Mechanisms:** Develop a robust enforcement strategy to combat counterfeiting and unauthorized use of GI products. Strengthen coordination between the Geographical Indications Registry, law enforcement agencies, and local authorities. Effective enforcement will protect the integrity of GI products and ensure that producers benefit from their GI status.
- **Update and Amend the Act:** Revise and update the Geographical Indications of Goods (Registration and Protection) Act, 1999 on a regular basis to tackle new challenges and integrate global best practices. Periodic updates will ensure that the legislation remains relevant and effective in a changing market environment.
- **Develop Infrastructure for GI Products:** Invest in infrastructure such as processing units, storage facilities, and transportation networks to support GI products, especially in rural areas. Improved infrastructure will enhance the quality and marketability of GI products, making them more competitive.
- **Promote GI Products in Domestic and International Markets:** Implement marketing and promotional campaigns to raise awareness of GI products among consumers and businesses both domestically and internationally.
- **Support Certification and Quality Control:** Establish and support certification bodies to ensure that GI products meet high-quality standards. Provide training and resources to producers for maintaining quality.
- **Facilitate Access to Financial and Technical Support:** Provide financial assistance, grants, and technical support to small-scale producers and artisans involved in GI production. Create partnerships with financial institutions and development agencies. Financial and technical support will enable producers to overcome barriers and improve their production capabilities.
- **Balance Tradition and Modernity:** Develop guidelines to help producers adapt traditional practices to modern market demands without compromising authenticity. Encourage innovation within the framework of traditional practices. Balancing tradition and modernity will help GI products remain relevant in contemporary markets while preserving their cultural value.
- **Conduct Regular Impact Assessments:** Implement a system for regular impact assessments of GI products to evaluate their economic, social, and cultural effects. Regular evaluations will offer useful insights into how well the GI system is working and support informed decisions for improvements.



Conclusion

Geographical Indication (GI) is an evolving area of intellectual property, with each region having its own unique products that need protection. The number of registered GIs has been growing annually. As of March 2023, India has 475 registered GIs, including 34 foreign ones. The leading states with the highest number of GI-tagged products are Tamil Nadu (55), Uttar Pradesh (45), Karnataka (44), and Kerala (35). Handicrafts have the highest number of GI registrations (252), followed by agricultural products (149).

GI registration offers numerous benefits. Economically, it improves market access and value for traditional products, supports rural development, and creates jobs. GI status can also lead to higher prices, better market differentiation, and increased export opportunities, providing financial gains for local producers and communities. However, there are challenges in implementing GIs in India. Issues with legal and regulatory processes, such as inefficiencies in registration and enforcement, undermine the system's effectiveness. Additionally, market problems like counterfeiting and insufficient infrastructure affect the protection of GI products.

The study shows that Geographical Indications (GIs) enhance customer purchasing intentions by building trust and attractiveness through their authenticity and cultural significance. To capitalize on this, businesses and policymakers should invest in marketing strategies that raise awareness and understanding of GI products, as well as ensure clear certification and labeling. Expanding GI products into new markets can further boost consumer interest and loyalty. While GIs have effectively preserved India's cultural heritage and supported regional economies, ongoing improvements are needed to address challenges and optimize the system. By refining policies, improving implementation, and encouraging collaboration among stakeholders, India can maximize the benefits of GIs for its traditional industries and broader socio-economic development. Future research and policy development should focus on these areas to ensure that the GI system continues to thrive and deliver its intended benefits.

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