***Original Research Article***

**Two Decades of Geographical Indications in India: Analyzing Trends, Categories and Intellectual Property Implications**

ABSTRACT

Geographical Indications (GIs), a type of Intellectual Property Rights, connect products to their geographic origins, emphasizing unique qualities and ensuring authenticity for consumers. It also enhances the marketability of the produce. As of 2024, India has registered 643 GIs, including 605 of Indian origin and 38 of foreign origin. These GIs are categorized into five groups: handicrafts, agricultural goods, foodstuffs, manufactured goods, and natural goods. Agricultural GIs, the second-largest category after handicrafts, include 197 registrations, and it is dominated by fruits (61).Uttar Pradesh, Tamil Nadu, and Maharashtra lead in total GI registrations, while the Southern states of Maharashtra, Karnataka, and Kerela dominate in agricultural GI registration. The process of GI registration took up to five years for majority of the products. Only 275 of the 643 registered GIs had authorized users, highlighting the underutilization of GI tagging post-registration. Key challenges include administrative delays, low awareness, and regional disparities. This study recommends streamlining the registration process, improving stakeholder engagement, and addressing the identified gaps to strengthen the GI framework. Enhancing the system can protect traditional knowledge, boost rural economies, open global market opportunities, and foster sustainable development and cultural preservation.

***Keywords:*** *Geographical Indication, Agriculture, Authorised User, India, GI, Intellectual Property*

1. INTRODUCTION

Certain products are renowned for their association with their place of origin, such as Champagne from France, Tequila from Mexico, and Darjeeling tea from India. These items have established strong brand identities in the global market, closely tied to their geographical roots. A Geographical Indication is an Intellectual Property Right linking a product to its place of origin. The Paris Convention (1883) and Madrid Agreement (1891) focused on indications of source, while the Lisbon Agreement (1958) expanded to include appellations of origin. The term "Geographical Indication (GI)" was first legally defined in the WTO's 1994 TRIPS Agreement. Article 22 of the TRIPS Agreement defined GIs as indications identifying goods whose quality, reputation, or characteristics were inherently linked to their geographical origin (Lukose, 2022). The 1997 US patent on Basmati Rice highlighted the need for India to implement a domestic GI protection law, as the TRIPS Agreement mandated protection in the product's origin country (Saikia *et al*., 2024). India enacted the Geographical Indications of Goods (Registration and Protection) Act in December 1999 to align with WTO requirements, which came into effect on September 15, 2003 (Ahamed *et al*., 2022).

The protection system for GIs significantly impacted the global economic landscape and international trade. For instance, Sorgho and Laure (2014) demonstrated that GIs played a key role in shaping European Union trade, leading to both trade creation and diversion. Yin and co-workers (2024) highlighted that GIs in rural China notably accelerated agricultural growth and improved farmers’ incomes. In the EU, Raimondi *et al* (2024) discovered that a 10% increase in GIs boosted employment in both agriculture and industry, while also promoting rural development through spillover effects. Furthermore, Zhang and co-workers (2023) reported that GI branding reduced the urban-rural income gap. As per the report of World Intellectual Property Indicators (2023), China leads in global GI registrations followed by other European countries like Hungary and Germany. With this background, this study explored the status of GI registrations in India as of July 2024, with an emphasis on the registration of agricultural products. The objectives of the study were: 1) to analyse the category-wise distribution of registered GI goods, 2) to identify trend in GI registration over the past 20 years, 3) to find the state-wise distribution of registered GIs, 4) to assess the components of agricultural GI registration, 5) to determine the time duration of the GI registration process, and 6) to identify the status of authorized users. Based on the analysis, this study also aims to provide policy suggestions for the better utilization and improvement of the GI system.

2. methodology

This explorative study used secondary data from the official website of Intellectual Property India (IPR India) for the period April 2004 to July 2024. We examined the trend in GI registration, state-wise and category-wise distributions, time taken for registration, and the status of authorized users, using descriptive statistical tools like tabular and percentage analysis.

3. results and discussion

**3.1 Category-wise distribution of registered GI goods**

India's GI of Goods (Registration and Protection) Act was enacted in 2003, with the first good, Darjeeling Tea, registered under GI in 2004. Between 2004 and 2024, India registered a total of 643 GIs, comprising 605 goods of Indian origin and 38 goods from 15 foreign countries. As per Section 84 of the GI Act, foreign goods with significant recognition in India were eligible for GI registration. For instance, Peruvian Pisco, a distilled beverage from Peru, became the first foreign product to obtain GI status in India with a protected designation of origin. Among convention countries, Italy led with 17 registered goods.

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| --- | --- | --- | --- | --- | --- | --- |
| **Goods category** | **Agricultural** | **Manufactured** | **Foodstuff** | **Handicraft** | **Natural** | **Total** |
| India origin | 197 | 18 | 45 | 342 | 03 | 605 (94.1%) |
| Foreign origin | - | 32 | 05 | 01 | - | 38 (5.9%) |
| Total  | 197 (30.63%) | 50 (7.7%) | 50 (7.7%) | 343 (53.34%) | 03 (0.47%) | 643 (100%) |

**Table 1**: No. of Goods registered under the GI Act in India

Source: www.ipindia.gov.in

Section 2(1)(f) of the GI Act of 1999 defines "goods" as agricultural, natural, manufactured, handicraft items, or foodstuffs. These goods are classified into five categories: agricultural goods, handicrafts, manufactured goods, foodstuffs, and natural goods, as shown in Table 1. An analysis of registered GIs reveals that handicrafts dominate the GI registry, accounting for 53.34% of the total registrations. Agricultural products follow, contributing 30.63% with 197 entries, making them the second-largest category. Natural goods, such as Ambaji white marble, Makrana marble, and Chunarbalua Patthar, form the smallest category, representing only 0.47% of registrations. Manufactured goods and foodstuffs each constitute 7.78% of the total, with 50 entries in each group. Notably, foreign goods outnumber Indian-origin goods in the manufactured goods category, particularly in wines and spirits. This is per the global trend: wines and spirits are the largest GI registered group. However, no natural or agricultural goods from convention countries have been registered as GIs in India. From the study, we can conclude that the number of goods registered in India is much less compared to global GI registration.

**3.2 Trend in GI registration**

The process of registering a Geographical Indication (GI) begins with applying to the Geographical Indications Registry (GIR) in Chennai, ensuring compliance with Section 2(1) (e) of the GI Act 1999. The applicant must represent producers, submit an affidavit, and provide unique features and maps. The application is reviewed for deficiencies and verified by a consultative group, and objections are addressed through responses or hearings. Approved applications are published in the G.I. Journal, with a three-month opposition period. If unopposed, the G.I. is registered for 10 years, with renewal options (Choudhary *et al*., 2017).

The graph below illustrates the trend in GI goods registration over 20 years, from 2004 to 2024, showing a steady increase, particularly after implementing the GI Act, which marked the initial phase of awareness and recognition. The analysis revealed a consistent rise in overall and agricultural goods registrations, with a significant peak in 2022-23, largely attributed to government initiatives and increased international demand for certified products during that period. However, despite India’s rich cultural and agricultural diversity, annual registration numbers remained low, a disappointing fact that underscored the need for identifying and registering potential products.

**Figure 1**: The trend in GI registration over 20 years

Source: www.ipindia.gov.in

**3.3 State-wise distribution of registered GIs**

The graph below highlights the distribution of Geographical Indications (GIs) across various states in India, showcasing both total GIs and agricultural GIs. Uttar Pradesh led with 77 registered GIs, followed by Tamil Nadu (61) and Maharashtra (52), reflecting the support for GI registration from these states. Jharkhand remained the only state with no GI-registered goods. Jammu & Kashmir is the current leader in union territories but a major part of the goods were registered when it was a state. Andaman and Nicobar Islands and Lakshadweep are the Union territories without any GI registration. In terms of agricultural GIs, Maharashtra (35), Karnataka (24), Kerala (22), Tamil Nadu, and West Bengal (16 each) contributed the highest, collectively accounting for 57% of agricultural GI registrations. The Northeastern region of India demonstrated immense potential for spice crop cultivation due to its favourable agroclimatic conditions (Saikia *et al*., 2024). However, despite its biodiversity, cultural heritage, and opportunities in agriculture, horticulture, textiles, and handicrafts, the region recorded a limited number of GI registrations. This underscored the need for grassroots-level initiatives to identify and facilitate the registration of potential GI products (Pangging *et al.,* 2023). In general southern states led in overall and agricultural GI registrations. From the figure we can see that disparities persisted across states, emphasizing the need for promotional activities in less-represented states and union territories.

**Figure 2**: State-wise distribution of Registered GIs in India

Source: www.ipindia.gov.in

**3.4 Category of goods within agricultural GIs**

The agricultural goods were categorized into four groups namely field crops, horticultural crops, processed agricultural goods, and forest products, for better clarity and comprehension (Figure 3). A significant portion belonged to the horticultural crops category highlighting the importance of horticultural crops in India. Field crops represented the second-largest category, and processed agricultural goods formed a minor category pointing to the need for improvement. While forest products constituted the smallest share, comprising only 0.5% (1 product).

**Figure 3**: Agricultural goods category **Figure 4**: Horticultural goods category

 Source: www.ipindia.gov.in

Table 2. also provides an elaborate list of agricultural GIs. Within the field crops category, cereals (38) lead in GI registrations, followed by pulses (11) and a single oilseed crop, Onattukara ellu from Kerala. Among cereals, rice (28) holds the largest share, followed by millets (6), with pulses (3) also making significant contributions to agricultural GI registrations. Within the horticultural crop category, fruits (61) emerged as the predominant group (Figure 4), followed by spices (39), plantation crops (17), vegetables (13), medicinal and aromatic crops (8), and flowers (5). Among fruits, mango (16) leads the group, reflecting India's status as the global producer and exporter of mangoes. The GI-certified mango varieties are in high demand in domestic and global markets (Meena *et al.,* 2022). Red chili (14) tops the list in the spices category, valued for its vibrant red colour and spiciness. Notable varieties include Guntur Sannam chili (Andhra Pradesh), Byadgi chili (Karnataka), Naga Mirza (Nagaland), and Mizo chili (Mizoram). The plantation crops category includes prestigious commodities such as Darjeeling tea, Monsooned Malabar Robusta coffee, and Malabar pepper. Among vegetables, brinjal (6) leads, followed by onions (3). Other vegetables with registered varieties include Naga Cucumber and Naga Tree Tomato (Nagaland), Attappady Aattukombu Avara (Kerala), and Sat Shirancho Bhendo (Goa). Despite India being the second-largest producer of vegetables globally, the number of GI-registered vegetables remains limited. Jasmine dominated the flower category, with notable varieties like Madurai Malli (Tamil Nadu), Udupi Mallige (Karnataka), Mysore Mallige (Karnataka), and Hadagali Mallige (Karnataka), highlighting Karnataka's strong participation. The Ganjam Kewda flower from Odisha is the only other registered flower variety. Flowers form a relatively small category within horticultural goods. The processed agricultural goods category includes specialized products such as Kumaon Chyura oil (Uttarakhand), Sojat Mehndi (Rajasthan), Mithila Makhana (Bihar), and Bodo Khardwi (Assam). Forest products refer to materials sourced from forests that are intended for commercial or direct use. Nilambur Teak from Kerala, India's only GI-certified forest product, underscores the potential for recognizing other unique forest resources. This category-wise analysis highlights the need for greater promotion of registering underrepresented categories.

**Table 2**. The components of agricultural GI registration

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Major group (no. of goods)** | **Subgroups (no. of goods)** | **Total no. of goods** |
| A. Field crops | 1. Cereals (37)
 | Rice (28), Millet (6) and Wheat (3) | 49 |
| 1. Pulses (11)
 | - |
| 1. Oil seed (01)
 | - |
| B. Horticultural crops | 1. Fruits (61)
 | Mango (16), Orange and citrus fruit (12), Banana (08), Others (25) | 143 |
| 1. Spices (39)
 | Chilli (14), Turmeric (6), Garlic (3), Cardamom (3), Ginger (3), Coriander (2), Others (8) |
| 1. Medicinal & aromatic (8)
 | Medicinal (1), Aromatic (7) |
| 1. Plantation crops (17)
 | Coffee (7), Tea (6), Cashew (2), Coconut (1), Areca nut (1) |
| 1. Vegetables (13)
 | Brinjal (6), Onion (3), Others (4) |
| 1. Flowers (5)
 | Jasmine (4), Other (1) |
| C. Processed agricultural goods | - | - | 04 |
| D. Forest product | - | - | 01 |
| Total | - | - | 197 |

Source: www.ipindia.gov.in

**3.5 Duration of the GI registration process**

Table 3. shows the time taken from application submission to GI registration. Of the 643 registered items, 288 (44.8%) were registered within one to two years, 65 (10.1%) within one year, and 227 (35.3%) in two to five years. Most items (80.2%) were certified within one to five years, but some categories, especially food and agricultural products, took five to ten years or more due to documentation issues, legal complexities, and verification requirements. The requirement for proof of origin in India posed challenges for the agricultural sector and tribal communities, leading to delays. The process highlighted issues such as administrative bottlenecks and the need for additional verification. These delays may have contributed to the lower annual GI registration numbers in India**.**

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| --- | --- | --- | --- | --- | --- | --- |
| **Duration** | **< 1 Year** | **1-2 Years** | **2-5 Years** | **5-10 Years** | **>10 Years** | **Total** |
| Number of goods registered | 65 | 288 | 227 | 51 | 12 | 643 |
| Percentage  | 10.1% | 44.8% | 35.30% | 7.9% | 1.9% | 100% |

**Table 3**: Duration of the GI Registration Process for Goods

Source: www.ipindia.gov.in

**3.6 Status of authorized users**

Out of 634 registered GI goods, only 275 had approximately 29,624 authorized users, reflecting a significant lack of awareness among producers about the GI authorization process. According to the GI Goods (Registration and Protection) Act of 1999, “Any person who claimed to be the producer of goods for which a geographical indication (GI) had been registered could apply to be registered as an authorized user.” This status granted exclusive ownership rights, protected the goods from infringement, and allowed producers to claim associated benefits. However, more than half of the registered goods lacked authorized users, with only 95 out of 197 agricultural goods having registered users despite a total of 15,934 users in this sector. A similar pattern was observed across other categories, highlighting the challenges of limited awareness and underutilization of GI authorization.

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| --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Handicraft** | **Agricultural** | **Food Stuff** | **Manufactured** | **Natural** | **Total** |
| No. of Authorised users | 12944 | 15934 | 543 | 185 | 18 | **29624** |
| Number of Goods | 155 | 95 | 18 | 5 | 2 | **275** |

 **Table 4**: Status of Authorised Users

Source: www.ipindia.gov.in

4. Conclusion

Geographical Indications (GIs) played a crucial role in preserving cultural heritage, boosting local economies, and enhancing the value of regionally unique products in India. Despite notable progress in GI registrations, particularly in handicrafts and agriculture, annual registration numbers remained disappointingly low, highlighting the need for stronger efforts to protect and promote India’s rich cultural and agricultural diversity. Southern states performed better due to higher awareness and supportive policies, while other regions lagged behind. India also faced challenges such as slow post-registration processes, weak protection mechanisms, and inadequate marketing of GI products. Delays in registration, particularly for agricultural goods, were often caused by documentation issues, legal complexities, and verification requirements, further exacerbated by a lack of awareness among producers about the GI authorization process. Targeted policy interventions are necessary to address these issues. Streamlining the registration process, increasing awareness in underrepresented areas, and promoting the benefits of GIs to authorised users are essential. Expanding GI recognition to a broader range of agricultural and forest products will preserve traditional knowledge and biodiversity while opening up global market opportunities. This will support sustainable development and economic growth for local communities. A more strategic and streamlined approach was required to ensure the long-term sustainability of GI products in Inda, unlocking their full potential.

**COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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