International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Importance of Geographical Indication in the Handicraft sector: Brass Metal Craft Industry in Chhattisgarh State, India

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Abstract
Since the enactment of the Geographical Indications of Goods (Registration and Protection) Act in 2003, geographical indications (GIs) have emerged as a significant component of India's intellectual property rights regime, enabling the protection and recognition of region-specific products. This study examines the role and significance of GIs in the handicraft sector, with particular reference to the brass metal (Dhokra) craft industry in Chhattisgarh. Adopting an exploratory research design, the study draws on an extensive review of policy documents, theoretical and empirical literature, and both primary and secondary data related to GI-registered handicrafts. The handicraft sector plays a vital role in supporting rural and semi-urban economies by generating employment, preserving traditional knowledge, and contributing to export earnings. GIs are thus positioned as strategic instruments for safeguarding cultural heritage, promoting sustainable development, and enhancing market differentiation. The findings indicate that while GI protection holds substantial socio-economic, cultural, and environmental benefits for artisan communities, its implementation in Chhattisgarh remains constrained by low awareness, weak institutional support, limited market access, and policy inefficiencies. The study concludes that GIs can only function effectively as development tools when integrated with broader strategies such as capacity building, branding, and strengthened market linkages, and offers policy recommendations to enhance their impact on artisan livelihoods.

Keyword: Geographical Indications (GI), Dhokra Craft, Artisan Livelihoods, Sustainable Development, Chhattisgarh

1. Introduction

India has a rich cultural, historical, and traditional heritage. It is one of the world's leading producers and exporters of handmade craft products. The legacy of Indian traditional art includes tradition, grandeur, beauty, and a wide variety of styles (Chaudhary, 2022). The uniqueness of traditional crafts greatly influences developing countries' economies and cultures. The Export Promotion Council of India states that the handicraft sector contributes about ₹1 million to government revenue and employs millions of artisans and laborers across India. Many artisans from different communities produce crafts using traditional methods. About 7 million people in India work in the handicraft industry. India is a hub for handicrafts and is rich in ethnic traditions and cultural history. The term "handicrafts" covers a wide

range of handmade goods made entirely by hand, without machines, using traditional tools and equipment. In 1991, India adopted the LPG model, which opened new markets and created opportunities across sectors, boosting the country's economic growth and development. During economic liberalization, India ended the license raj by opening its market to global companies. As global borders shrink, allowing more international investment, wealthier nations are entering and dominating the economies of developing countries. India is expanding its markets to include foreign firms, individuals, and other creative industries. Countries with strong handicraft industries can play a significant role in the global market. The country's economic prosperity may depend on the growth of its craft sector. Today, India is one of the top suppliers of handicrafts worldwide, and the credit goes to the increasing global demand driven by globalization (Din & Reshi, 2018).

The 1994 Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization (WTO) requires all WTO members to provide at least a minimum level of protection for geographical indications (GIs) specified in the agreement and to choose the appropriate legal mechanism at the national level. According to Article 22.1 of the TRIPS agreement, GIs are "indications which identify a good as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation, or additional feature of the good is essentially connected to its geographical origin" (Shafi et al., 2020).

India joined the World Trade Organization (WTO) in 1995 and soon experienced rapid growth in manufacturing various creative and culturally significant products. The Geographical Indications of Goods (Registration and Protection) Act was enacted on September 15, 2003, and is governed by the Goods and Services Tax Act of 1999. Once registered, GIs are valid for 10 years and can be renewed. By March 2022, approximately 417 items across different categories had been registered. The GI Act is managed by the Registrar of Geographical Indications, who also serves as the Controller General of Patents, Designs, and Trademarks. GIs are classified into four categories: agricultural, handicraft, manufactured, and foodstuff/natural. India is known for its diverse handicrafts, including metal, brass, wrought iron, lace or zari, Dhokra, cane, kiritams, shell, leather, bamboo, bone and horn, enamel, clay, marble, jute, paper, rock, weaving or embroidery, wood, glass, lac, and painting stone handicrafts, among others (Chaudhary, 2022).

The legal framework for Geographical Indications (GIs) traditionally protects items like food, handicrafts, wine, spirits, and agricultural products and has recently linked to indigenous knowledge preservation. GIs emphasize features tied to origin, including human factors like knowledge and techniques (Shafi, 2020). The rural non-farm sector in developing countries often remains overlooked, with limited awareness of its development role. Most GIs research occurs in developed countries, especially Europe, focusing on food and agricultural products, with little attention to handicrafts in underdeveloped nations. The handicraft sector is vital for local development, employing over 10% of workers in many developing countries, second only to agriculture, and can aid economic, social, cultural, and environmental progress, serving as an effective poverty reduction tool. Many GIs in India, Pakistan, Bangladesh, Thailand, and Indonesia relate to handicrafts, critical for local livelihoods, underscoring the need for more study. Brass craft, a cultural product in Kondagaon district, Bastar, India, differs from other metal works and could gain legal protection through IPR. Given Bastar's potential, further analysis of legislative measures to protect brass GIs and local government efforts to preserve brass metal as a cultural asset is essential.

2. Methodology

This study uses mixed methods to examine the Dhokra handicraft sector in Kondagaon, Chhattisgarh (19.59° N, 81.66° E; elevation 593 m). Kondagaon, once Kondanar, is a key Bastar craft hub with a diverse economy including agriculture, horticulture, animal husbandry, forestry, weaving, and metalcraft. Dhokra metal casting, mainly by the Ghasiya tribe, is culturally and economically vital (Deshmukh et al., 2024). Due to the informal, dispersed nature of artisans, snowball sampling helped access marginalized tribal artisans and women, enabling trust-based referrals for in-depth qualitative insights. Data included semi-structured interviews, household visits, and questionnaires on market conditions, policy awareness, vulnerabilities, and technology. Secondary data from reports, NGO records, literature, and market studies, complemented by observational visits to craft outlets, revealed supply–demand dynamics and institutional roles.

3. Handicraft Industry in India

India is renowned for its craftsmanship, influenced by regional, social, and economic factors. Handicrafts reflect culture, created with local skills and resources (Yassir & Khalid, 2015). The artisan sector, part of the informal economy, underpins rural nonfarm activities and often goes uncounted in employment stats. India produces diverse crafts like lac, woodcarving, jewellery, bamboo, papier-mâché, brass, jute, bell metal, cane, pottery, terracotta, and glass, each region-specific. With 700,000 craft workers, the sector contributes 6% to GDP and 34% of exports, making 8,000 types of crafts (Yadav et al., 2021). The 1991 LPG reforms opened markets, boosting global demand and positioning India as a leading craft exporter (Din & Reshi, 2018).

4. Craft Industry in Chhattisgarh

Chhattisgarh boasts a rich cultural heritage, traditional arts, and crafts. Various craftsmanship forms are practiced throughout the state by tribal and non-tribal communities, including artisans. The primary crafts involve brass metalwork (Dhokra art), wrought ironwork, wooden art, and wall decor. These arts are widely practiced across districts in Chhattisgarh. The Bastar region is especially known for its deep-rooted traditional culture and indigenous crafts; many artistic artifacts have been found here, with Dhokra brass metalwork being among the oldest. Kondagaon district is famous for Dhokra art, producing grey-gold sculptures from brass. Known as the Shilp Nagri of Chhattisgarh, Kondagaon's tribes such as the 'Ghadwas' and 'Jharas' use techniques like lost wax or hollow-casting to create objects. The traditional Dhokra method is straightforward but demands precision, resulting in intricate, detailed pieces that serve both daily and spiritual purposes (Deshmukh et al., 2026). Dhokra, a distinguished craft from Chhattisgarh, attracts global visitors, enhancing the state's international reputation through its unique craftsmanship. "Dhokra" refers to brass artifacts with elaborate designs, made using the "lost wax" or "cire perdue" technique. Originating from Bengal, Orissa, Chhattisgarh, and Madhya Pradesh, itinerant artisans called Dhokras produce tribal artifacts valued for their strength and detailed craftsmanship (Mukherjee, 2014).

5. Geographical Indications of Goods in India (Registration and Protection) Act,1999

Geographical Indications (GIs) are safeguarded by the Geographical Indications of Goods (Registration and Protection) Act. As defined in Section 2(e) of the Act, a Geographical Indication is a label that signifies goods—whether agricultural, natural, or manufactured—originating from a specific area,

region, or locality. This designation reflects the particular quality, reputation, or characteristics that are closely connected to their geographical origin. For manufactured products, at least one production, processing, or preparation activity must occur within the designated territory, region, or locality.

The initial criterion for geographic indication (GI) protection covers handmade products, natural items, and manufactured goods. These products must have qualities, a reputation, or other features connected to their geographic origin. According to the Act's definition, goods can include agricultural, natural, or manufactured items, as well as handicrafts and industrial products, including foodstuffs. This broad definition includes many types of products. The classification is specified in the fourth schedule of the Act, which grants GI tags to 32 categories, such as musical instruments, handicrafts, paints, varnishes, and lacquers, among others. However, intangible traditional cultural expressions, such as services, are not classified. Consequently, traditional cultural expressions like jewellery may qualify for a GI tag, whereas art forms like dance are not eligible.

The second criterion requires that these commodities originate from a specific geographical region or territory known for certain qualities, reputation, or traits associated with that area. There must be a clear link between the items' reputation, quality, or other attributes and their place of origin. The word "or" signifies that items need to possess at least one of these qualities such as reputation, quality, or other characteristics. Additionally, attributes like craftsmanship skills, which develop due to the geographical region, may also be included. These skills must be geographically linked, often rooted in historical factors like early settlements. The craftsmanship is also connected to local raw materials. For example, Aranmula Kannadi, which received the Geographical Indication (GI) tag in 2005 as a unique handcrafted mirror, demonstrates how human skills and talent can be considered additional attributes, with its geographic link supported by historical evidence of the craft's origin.

India has granted Geographical Indication (GI) status to 417 products, including 258 handicrafts, 129 agricultural items, and some manufactured goods. Most of these handmade items are Traditional Cultural Expressions (TCEs). A prominent example is the Tangaliya shawl, which received a GI tag in 2008. This craft, with over 700 years of history, originates from the Saurashtra region of Gujarat. The Dangasiya community, comprising weavers and shepherds called Bharwads, plays a crucial role in this TCE. The tradition is handed down through generations within the community. According to GI standards, the Tangaliya shawl is made by the Bharwad community, and the GI tag is managed by the Tangaliya Hastkala Association, whose members are part of this community. Consequently, the community that developed this TCE can use the GI designation to protect it. Many TCE owners rely heavily on the GI Act to safeguard their products, especially those involving handlooms and handicrafts.

Section 21 of the Geographical Indications Act grants an exclusive right to use geographical indications (GIs). The Indian GI Act distinguishes between the applicant, who becomes the registered proprietor, and the authorized user, defined as anyone claiming to be the manufacturer of products associated with a registered GI, as outlined in Section 17. Producers of the product may be authorized to use the geographical indication. The law allows for the registration of tangible traditional cultural expressions (TCEs), such as handicrafts and musical instruments, but prohibits the registration of intangible TCEs, like dance routines. The community holding the TCE can use the GI only upon producing the relevant items. Applications can be filed by individuals or organizations, enabling a community to seek the GI tag for their TCEs. The definition of producers is broad, including anyone involved in packaging commodities, which means non-members can become producers and use the GI for the TCE. To register a GI, a detailed specification of the product's characteristics must be submitted, covering aspects like the

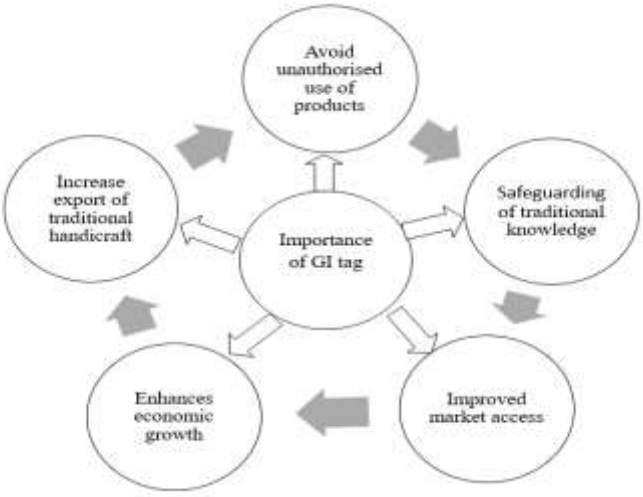
production process, types of goods, and optimal methods. If the process is not widely known, the applicant must engage with the community to meet this requirement. In return, the community may be recognized as the authorized user of the GI. Public institutions usually handle these projects with social goals rather than commercial interests. Consequently, communities are designated as authorized users, though others may also be involved. This framework should be seen as collective ownership, rather than community ownership alone, which is crucial for TCEs.

6. Importance of GI Tag

The main purpose of Geographic Indication (GI) is to gain economic benefits from qualities specific to the original production region. There are also secondary non-economic benefits such as cultural and historical preservation, environmental conservation, and strengthening local social structures. Geographical Indications (GI) are labels used for products from a specific geographic area that have unique traits or reputation linked to that region. GIs help consumers identify products that meet their quality expectations and prevent false associations with certain locations. A key goal of GI protection is to conserve biological resources, biodiversity, and cultural diversity, which are secondary benefits. Strong protection of GI products can reduce value loss caused by imitation, free riding, or misappropriation, potentially increasing income for local communities involved in production. As a result, GI is often seen as a tool to support rural development and reduce income poverty among rural populations. GI is an important framework in trade that highlights a product's origin, reinforcing its regional uniqueness, and protecting the interests of both producers and consumers. GI products are closely linked to the cultural, social, and landscape features of their specific rural areas, reflecting the socio-institutional and regional context.

Recently, geographical indications (GIs) have become a prominent issue concerning intellectual property rights (IPRs) in India. India possesses a substantial array of products eligible for geographical designations; however, efforts to harness this potential commenced only recently with the establishment of a sui generis system for GI protection through the enactment of the Geographical Indications of Goods (Registration & Protection) Act 1999 (GI Act) and the accompanying Geographical Indications of Goods (Registration and Protection) Rules 2002 (GI Rules) (Das, 2009).

Figure 1: Flow Diagram of the Importance of the GI tag



6.1 Avoid Unauthorized use of GI Tags.

The Geographical Indication (GI) tag guarantees that only authorized or local individuals within the designated area can use the product name (Sujit Kumar, Sandhya Yadav, and Sandeep Kumar Singh 2019). This system prevents the misuse of traditional products and helps producers expand into international markets (Liam Sunner 2021). Owners can pursue legal action against unauthorized users to safeguard their reputation and enhance the global commercialization of their protected goods. In a global context where developed countries often claim patent rights over products from other nations, leading to issues such as biopiracy, registering products as GIs offers a substantial competitive edge. Nevertheless, high-quality manufacturers may still face unfair competition from those who cut corners on quality but charge similar prices. Moreover, counterfeit producers deceive consumers by falsely advertising inferior goods as authentic geographical indication products.

6.2 Safeguarding of Traditional Knowledge

Traditional knowledge is highly valuable and culturally significant for its guardians and the community as a whole. Creating location-specific, communal geographical indications (GIs) is seen as an effective way to protect this knowledge legally. The GI tag helps maintain cultural identity by enabling the identification of indigenous products. This protection not only preserves traditional crafts but also shields them from factory automation, safeguarding artisans' livelihoods. Moreover, by promoting products and services internationally, GIs offer a legal framework to protect and strengthen local cultures and economies. This strategy also supports biodiversity conservation, environmental protection, and the preservation of important regional resources. However, as industry trends constantly change, GI product producers continuously strive to defend the traditional knowledge embedded in their goods. While large market players may seize on new trends, genuine traditional producers often face difficulties in gaining recognition.

6.3 Improved Market Access

Geographical Indication (GI) tags in India's handicraft industry are increasingly studied because they help protect traditional knowledge, support rural livelihoods, and preserve cultural heritage (Chaudhary et al., 2022; Shafi, 2020). Since the Indian GI Act was enacted in 1999, GI protections have expanded, especially in handicrafts, which make up over 55% of registered GI items in India (Chaudhary et al., 2022). This sector, employing millions of rural craftspeople, has faced declining demand and competitiveness due to globalization and industrialization (Khan et al., 2023). GI tags are crucial for distinguishing authentic artisanal products in both domestic and international markets, driving economic growth and sustainable development. They can serve as legal tools to develop, promote, and protect brands (Sood & Sharma, 2024; Arzuza & Giuliani, 2014). However, the industry remains underutilized because of issues like low awareness, weak enforcement, and poor market integration (Nirosha & Mansingh, 2024). A key challenge is the limited understanding and effective use of GI tags by artisans, especially in metal crafts, which hampers their ability to access broader markets and secure fair economic rewards. Current research reveals gaps in awareness about the benefits of GI registration, its socio-economic impact on artisan communities, and strategies to overcome institutional and infrastructural barriers (Kulkarni & Konde, 2011). Some studies see GI as a tool for cultural preservation and market differentiation, while others point to challenges such as organizational inefficiencies, power imbalances in supply chains, and inadequate quality control (Eliasson, 2021).

6.4 Enhances Economic Growth

The proper implementation of the Geographical Indication (GI) tag has safeguarded the legal and comm-

ercial rights of producers. This recognition helps consumers see GI-tagged products as premium, bringing economic gains for all involved. As demand and production of GI products grow, more manpower will be needed, creating more jobs and helping to curb rural emigration. When geographical indications are protected, consumers tend to view these products positively, enhancing their reputation. The collective monopoly aspect of GI holds great promise for poverty alleviation by fairly sharing the economic benefits. Additionally, global awareness of various GI products increases, encouraging more people to visit these regions and thereby strengthening local tourism. Despite these opportunities for economic development, artisans often encounter serious hurdles due to limited financial resources and access to loans. Issues such as poor fund management, low recovery rates, lack of educational support for borrowers, limited marketing for finished goods, and banks' hesitance to lend to artisans result in only a small portion of available credit reaching them.

6.5 Increase the Export of Traditional Handicrafts

India has long depended on handicraft exports to international markets because of its rich cultural heritage, which features a wide range of popular handicrafts. The export of handcrafted Indian goods has a history that goes back to ancient times. Cottage and village industries are important to the Indian economy, which faces challenges such as limited physical investment, unemployment, underemployment, regional disparities, and income inequality.

Handicraft exports contribute to the economy and serve as cultural diplomacy, showcasing India's artistic traditions globally. The country boasts diverse handicrafts like textiles, ceramics, jewelry, woodworking, and metalworking, with each region offering unique techniques and designs. Exporters target markets that value traditional crafts, including Europe, East Asia, North America, and the Middle East. The Indian government, through organizations like EPCH and the Ministry of Textiles, promotes exports via trade fairs and meetings, connecting artisans with international buyers. To meet global standards, exporters focus on quality control, eco-friendly certifications, and compliance with trade regulations. Despite challenges from competition, demand fluctuations, and logistics, they can enhance competitiveness by adopting technology, innovation, and sustainability practices.

7. Issues And Challenges of the Handicraft Industry in Chhattisgarh

7.1 Difficulties with GI legislation and Registration

In developing nations such as India, the challenges associated with the implementation of Geographical Indications (GIs) are more pronounced than in developed countries, chiefly owing to a less robust institutional framework. The contextual environment in which GIs are established is crucial to their success, as it influences their reputation and recognition for quality. Robust institutions are essential for the effective establishment of GIs, encompassing both formal mechanisms—such as GI legislation, codes, producer organisations, and inter-sectoral bodies—and informal regulations, including collaborative conventions and compliance with local, equitable, and traditional practices that may not be subject to specific oversight. Many artisans and handicraft producers in these regions possess limited educational backgrounds, highlighting the importance of raising awareness regarding the potential benefits of GI legislation among local stakeholders. For example, India enacted its sui generis law in 1999, which has since recognised 330 geographical indications, with over 200 pertaining to handicrafts.

7.2 Involvement of Middlemen

The implementation of GI tags enhances the welfare of producers. However, artisans encounter difficulties in establishing a reputable standing with consumers, as they are wholly dependent on

intermediaries such as local retailers and cooperative societies for marketing their products. These producers frequently suffer exploitation by intermediaries who do not offer equitable profits and, in certain cases, only provide minimal daily wages. The substantial manufacturing costs coupled with limited revenue hinder their ability to sustain their artisanal enterprises, thereby necessitating reliance on intermediaries. Such intermediaries often capitalize on their advantageous position for personal benefit, given their pivotal role in product promotion and distribution. Furthermore, these intermediaries operate within government-established cooperatives, which exacerbate the oppression of impoverished artisans. Cooperatives issue work identification cards to employees, who typically supply raw materials. Occasionally, major manufacturers attempt to exploit cooperative incentives by masquerading as participants. While artisans and labourers contribute their efforts, they frequently lack awareness of the true value of their work and are inadequately compensated by their employers.

7.3 Informal and Unorganised Structure

The enterprise's uneven structure and the market's characteristics are essential factors to consider. The limited scope of work often results in inadequate record-keeping. Consequently, most decisions rely on trust. Payments and receivables may face significant delays or remain unpaid entirely. This situation decreases productivity, forcing artisans to frequently halt production and leading to financial losses. Additionally, investment in automation and other areas is limited by the industry's size and structure.

7.4 Uneven Competition

Industrialisation and globalisation have accelerated the production of machine-made goods, cutting production time in half and lowering costs. As a result, the demand for traditional handicrafts has declined due to shifts in consumer preferences and increased availability of similar machine-made products, posing a major threat to traditional industries. In Varanasi, Uttar Pradesh, the silk industry faces stiff competition from machine-made alternatives. Market volatility causes many artisans to abandon their crafts, leading to a decrease in innovative handmade products. Authentic handcrafted items are unique and carry an elegance that mass-produced replicas cannot replicate. Nevertheless, machine-made counterfeits threaten artisans, as they are cheaper and often preferred by uninformed buyers. The advent of industrialisation in India introduced machinery that lessened reliance on manual labour but also had adverse effects on craft workers. Many left their villages for industrial jobs, suffered exploitation, and were pressured to abandon traditional crafts as demand for handmade goods waned. Despite the great potential of Indian handicrafts in the global market, globalisation also poses significant challenges to their sustainability.

7.5 Lack of Government Assistance

The government has implemented several initiatives to promote industry growth; however, most artisans in Chhattisgarh remain unprotected by these measures. The principal challenge to the execution of developmental initiatives is the deficiency of adequate information regarding handicraft units and the number of artisans. The government's promotional efforts have proven ineffective due to insufficient dissemination of information, as reported by the media. Regrettably, by the time this issue was acknowledged, it was too late for these retailers to engage with and benefit from the initiatives. Although numerous training centres exist to assist artisans in enhancing their skills and competencies, the absence of collaboration among various agencies in the implementation of social and welfare policies for artisans impedes their development, leading to economic and manpower losses.

7.6 Limited Market Accessibility and Efforts

Manufacturers depend on intermediaries to distribute their products, which limits their direct engageme-

nt with consumers. This reliance confines them to the manufacturing process and restricts market access. Consequently, they often lack crucial knowledge about potential contacts, customer acquisition, retention strategies, and how to develop a strong customer base, as their primary focus is on craftsmanship. Market segmentation is insufficient, and producers without regional ties or those living outside the geographical indication (GI) areas place considerable pressure on the legitimate producer community. Additionally, neither the government nor value chain partners have invested significantly in marketing efforts to promote handicraft products.

Artisans face considerable challenges owing to escalating costs of production inputs and diminishing returns on investments. Many artisans procure inadequate income to fulfill their fundamental needs, consequently entrapping them in a perpetual cycle of debt. In certain instances, the manufacturing cost of a product can surpass its derived benefits. Although artisans receive modest remuneration for their labour, intermediaries gain substantial profits from retailing these products. In recent years, various governmental measures, such as demonetization and the implementation of the Goods and Services Tax (GST), have further exacerbated their circumstances. Consequently, artisans continue to shoulder additional burdens. The numerous small partners within the industry have failed to unite or consolidate their resources to effectively address the prevailing business and political challenges, thereby contributing to the ongoing decline of the industry. Moreover, artisans frequently lack suitable venues to display their works. Retail chains may offer identical products at diverse prices, employing various marketing strategies. The Indian handicraft sector suffers from an inefficient marketing information system. Handicraft products are seldom promoted via television or other advertising media, resulting in inconsistent branding. Consequently, the sector encounters substantial difficulties in market penetration compared to competitors. Large-scale industries utilize standardized criteria for product pricing; however, the handicraft sector relies predominantly on customer negotiation, lacking uniform pricing standards.

7.7 Lack of Technology and Inadequate Infrastructure

The artisans depend on obsolete equipment and traditional craft production techniques, which considerably influence both the quality and quantity of their manufacturing output. Insufficient infrastructure, such as power and transportation networks, impedes the entire supply chain from production to retail. Numerous artisans are situated in rural regions, thereby restricting their access to main markets and their connectivity to urban centers. The handicraft industry encounters considerable obstacles due to antiquated manufacturing processes and licensing issues. Artisans also face challenges from irregular power outages, which limit their working hours. Despite governmental efforts to resolve these issues, the measures taken have been inadequate. In recent years, the problem of frequent and prolonged power outages has deteriorated further, with the government's decision to raise electricity rates exacerbating the difficulties experienced by these artisans.

7.8 Health Issues

Artisans and their families face various health problems. Most of the production work takes place in poorly lit and poorly ventilated spaces. The handicraft industry is a high-risk job, as artisans suffer from occupational illnesses like respiratory problems, accidents, vision issues, neurological disorders, and skin conditions. They also lack access to adequate medical care, and sometimes, artisans are unaware of the health issues they face.

8. Promote and Develop the Craft Industry in Chhattisgarh

8.1 Expeditious Implementation of GI legislation

Developing nations have not yet integrated Geographical Indication (GI) legislation into their legal frameworks. GIs are essential for economic, social, cultural, and environmental sustainability. However, unprotected GIs entail several disadvantages. For instance, GIs possess a substantial market reputation nationally and internationally that could be exploited by unscrupulous traders in the absence of proper protection. Specifically, individual producers or companies manufacturing similar products to unprotected GIs may register these products as trademarks, potentially acquiring the right to prohibit the use of the GI. Should policymakers delay the enactment of GI legislation, mass-produced goods may rapidly dominate the handicraft sector, thereby endangering traditional handicraft artisans. Furthermore, there exists an increased risk of ancestral knowledge and cultural practices fading away, leading to significant and irreparable cultural losses. Continued inaction by authorities could adversely affect local communities engaged in traditional crafts and threaten the preservation of their cultural heritage.

8.2 Streamlining the Registration Procedure

The Geographical Indications (GI) registration process is reportedly challenging for small handicraft manufacturers, necessitating fees and documentation. Nonetheless, the majority of handicraft producers in developing nations operate on a small scale with limited resources; hence, they are unable to register their items independently and absorb the associated costs. In the Indian context, GI registration presents considerable financial and logistical challenges for small-scale businesses. Furthermore, the majority of handicraft manufacturers contend they cannot afford the costs of registering and maintaining intellectual property protection. They must allocate excessive time to follow up across numerous registration processes. Although they may have the financial capacity to implement IP protection, they lack the resources to cover the legal expenses required for a successful lawsuit against competitors who replicate or infringe on their IP assets. Moreover, it is essential to recognise that many handicraft manufacturers face financial constraints and possess limited knowledge. Consequently, the GI registration process, along with its associated costs, must be streamlined and minimised to the greatest extent feasible. The streamlining of the registration process and the reduction in fees will enable local producers to register their products promptly and potentially reap the benefits. Furthermore, handicraft producers are unable to navigate the registration processes independently; therefore, they require facilitation, support, and assistance from various stakeholders, including the government, non-governmental organisations, and foreign agencies. Not all handicraft products should be eligible for GI protection. Protection under the GI legal framework should be limited to products with established markets, thereby conserving resources, saving time, and enhancing efficiency.

8.3 Safeguarding Against Counterfeit or Inferior Products

The registration of items under the Geographical Indication does not ensure protection against mass-produced or counterfeit replicas. Government and other pertinent law enforcement authorities must implement essential measures to regulate the manufacturing and sale of such imitations, thereby enabling original producers to attain maximum profits and recognition. Furthermore, to fully harness the potential of GIs, manufacturers must recognise that consumers associate GI-labelled items with their respective origins. Consequently, legislation should safeguard GI producers from ambiguous terminology that resembles GIs. Additionally, producers require protections against unscrupulous traders who market inferior products (free-riders) or fail to adhere to GI standards, even in cases where consumer confusion is absent. These free-riders, analogous to unregistered geographical indications

(GIs), may be registered as trademarks or may become generic terms, thereby diminishing the distinctiveness of the GI. Moreover, the production of such free-riders using substandard materials could also threaten the reputation of the markets designated by the GI.

8.4 Meticulous Scrutiny of Intermediaries

Intermediaries often leverage their position to maximize benefits after GI recognition. They usually issue production orders for crafts on behalf of buyers, wholesalers, and retailers, and also set wages and prices for their goods, gaining significant influence within the community. Additionally, these intermediaries have strong purchasing power and financial stability, acting as links between producers and the market to expand their control over local producers. The GI recognition helped differentiate authentic products from inauthentic ones. The certification of Kota Doria Sarees as a GI mainly benefited master weavers who also sell their products, while the benefits for most craft producers (weavers) were limited. To enhance market recognition and visibility, manufacturers need direct connections with consumers, buyers, distributors, and retailers, so they can independently secure work orders without relying on intermediaries. Support from government, NGOs, and other organizations can help poor and unorganized producers access a fair share of the additional revenue created by GI recognition.

8.5 Adoption of National GI Logo and One Village, One Product (OVOP)

The OVOP concept was developed in Japan to boost rural community development. It was later adopted by several countries to reduce rural depopulation, fight poverty, and support micro and small enterprises. Different nations have renamed this concept; for example, in India, it's called “One District One Product.” Thailand has successfully implemented this idea, helping many artisan villagers with support from local and national governments. The OVOP trend is seen as a way to leverage a community's entrepreneurial skills by using its unique local resources and talents, in which local products are rebranded and local human resources are developed. It's important to highlight and promote items at the village and district levels. Many crafts are unique to specific areas, such as the brass craft (Dhokra craft) and the wooden and terracotta clay crafts of Chhattisgarh, which have received the GI badge. As a result, locals should be encouraged to choose a distinctive craft from their village or region, to be promoted and sold to increase sales and gain national and international recognition. Furthermore, it is crucial to create specific standards for the use of the national logo; for example, India has recently released the "guidelines for permitting the use of Geographical Indication (GI) Logo and Tagline." The national emblem and slogan will help consumers identify and verify authenticity. These important government actions greatly enhance the products' reputation, leading to economic benefits for producers and other stakeholders along the value chain.

9. Analysis

Table 1: Demographic profile of the artisans. N=120

Demographic items	Categories	Frequency n=120	Percentage (%)
Gender of Respondents	Male	93	77.5%
	Female	27	22.5%
Education	Illiterate	49	40.8%
	Below Primary (0-V)	18	15.0%
	UP to the Middle Class	21	17.5%
	Secondary	24	20.0%

	Higher Secondary	8	6.7%
	University Level	0	0.0%
Legal status	Own craft workshop	88	73.3%
	Working under Master artisans	32	26.7%
Income from craft	30,000 to 40,000	11	9.2%
	41,000 to 50,000	19	15.8%
	51,000 to 60,000	38	31.7%
	61,000 to 70,000	32	26.7%
	Above 70,000	20	16.7%
Working experience in the craft sector	01-10 Years	14	11.7%
	10-20 Years	35	29.2%
	20-30 Years	39	32.5%
	30-40 Years	13	10.8%
	40-50 Years	13	10.8%
	Above- 50 years	6	5.0%

The demographic patterns of the respondents indicate structural characteristics that influence the livelihood dynamics of Dhokra artisans in Chhattisgarh. The sector continues to be male-dominated, mirroring conventional gender norms that limit women's involvement in essential production roles. Insufficient educational achievement, characterised by elevated illiteracy rates and restricted access to schooling, impedes artisans' capacity to engage with formal markets, credit systems, and governmental programs, thereby exacerbating their vulnerability in an evolving craft economy. While most manage their own workshops, the existence of artisans employed by master artisans signifies enduring internal hierarchies that affect autonomy and negotiating power. Income levels are modest, with the majority of artisans earning between ₹51,000 and ₹70,000 per year, indicating that the craft offers subsistence rather than reliable economic security. The significant presence of artisans with over 20 years of experience indicates robust traditional knowledge systems; however, the minimal involvement of younger individuals suggests a waning interest in the craft, attributed to unpredictable income and broader opportunities elsewhere. Collectively, these demographic insights indicate a community rich in skill and cultural heritage yet characterised by educational deficiencies, income instability, gender disparities, and generational divides, elements that highlight the necessity for focused interventions in market access, financial literacy, technology integration, and youth-oriented capacity development to enhance the long-term viability of the craft.

Table 2: Cross Tabulation: Gender vs. Income from Craft

Yearly Income Bracket (₹)	Male	Percentage of Males	Female	Percentage of Females	Total Number of Artisans
30,000–40,000	6	6.5%	5	18.5%	11
41,000–50,000	13	14.0%	6	22.2%	19
51,000–60,000	30	32.3%	8	29.6%	38

61,000–70,000	26	28.0%	6	22.2%	32
Above 70,000	18	19.4%	2	7.4%	20
Total	93	100%	27	100%	120

The income distribution by gender reveals notable disparities among artisans. Male artisans more often fall into higher income brackets, with 32.3% earning between ₹51,000 and ₹60,000, 28.0% between ₹61,000 and ₹70,000, and 19.4% exceeding ₹70,000. In contrast, female artisans are more common in lower-income ranges: 18.5% earn between ₹30,000 and ₹40,000, and 22.2% between ₹41,000 and ₹50,000. Meanwhile, only 6.5% and 14.0% of male artisans are in these brackets. Although similar proportions of men (32.3%) and women (29.6%) are in the ₹51,000–₹60,000 group, men's dominance in higher-income brackets and women's prevalence in lower ones point to a gender income gap, reflecting unequal access to market networks, capital, and decision-making roles. The low presence of women (7.4%) in the above ₹70,000 category highlights systemic barriers limiting their progress in the craft economy. This pattern indicates that while both genders participate in the sector, men typically benefit more from higher-value opportunities, emphasizing the importance of gender-sensitive strategies in skills development, market access, and financial support.

10. Discussion

10.1 Primary Livelihood Sources of Artisans.

The allocation of livelihood sources shows that craftwork is the main means of income for most artisans. The chart indicates that 74% rely primarily on craft production for their livelihood, emphasizing the economic importance of traditional craft skills within their families. However, 26% of artisans depend on other income sources, highlighting a growing need for additional earnings due to fluctuating market demand, inconsistent craft sales revenue, and limited access to trustworthy markets. This shift toward diverse livelihood strategies demonstrates increased vulnerability in the craft sector, where income instability forces some artisans to seek non-craft jobs. The data highlights the resilience of craft-based livelihoods alongside the economic pressures that drive artisans to seek supplementary work.

Figure 2: Livelihood Source of Artisans

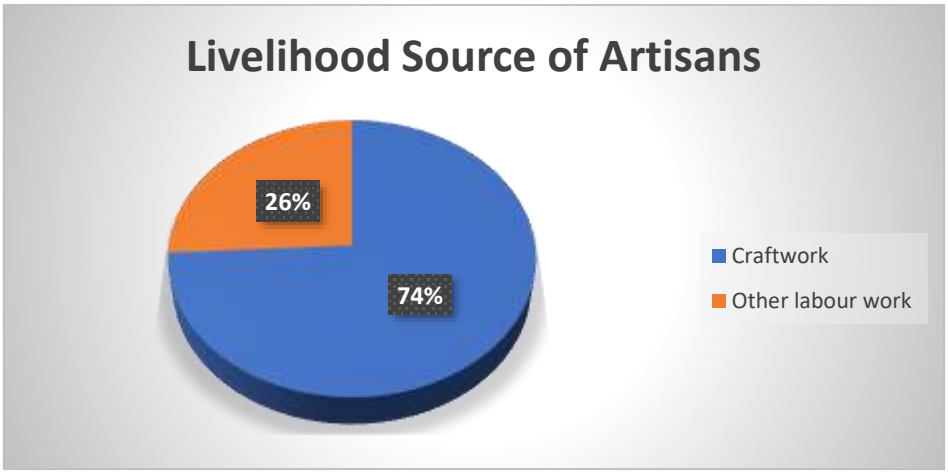


Table 3: Making crafts and using technology and education cross-tabulation

Education Level	With Technology	(%)	Semi-Technology	(%)	Traditional Equipment	(%)	Total	Total in %
Illiterate (49)	4	8.2%	18	36.7%	27	55.1%	49	100
Below Primary (18)	3	16.7%	9	50.0%	6	33.3%	18	100
Up to Middle Class (21)	5	23.8%	11	52.4%	5	23.8%	21	100
Secondary (24)	8	33.3%	11	45.8%	5	20.8%	24	100
Higher Secondary (8)	6	75.0%	2	25.0%	0	0.0%	8	100
University Level (0)	0	0	0	—	0	—	0	0
Total	26	-	52	—	43	—	120	-

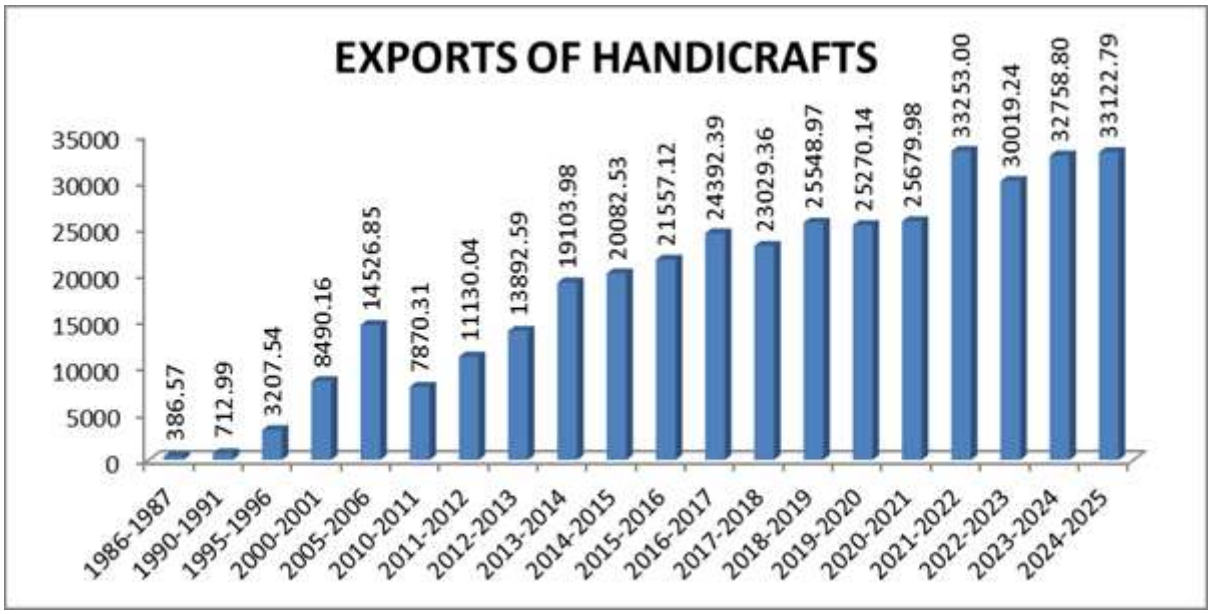
The cross-tabulation of education level and technological adoption in craft production reveals a clear and consistent correlation, demonstrating that higher educational attainment notably enhances artisans' ability to use modern tools. Illiterate artisans mostly rely on traditional equipment (55.1%) and have minimal engagement with technology (8.2%), showing how limited literacy restricts their participation. As education advances, there is a steady increase in the use of technology. Artisans with intermediate education employ a variety of production techniques: 23.8% use technology, and 52.4% use semi-technological methods, indicating a gradual move toward modernization. This trend is more evident among artisans with secondary education, where about one-third utilize technology, and reliance on traditional tools alone drops to 20.8%. A significant change occurs among artisans with higher secondary education: 75% use technology, and none depend solely on traditional tools, indicating a strong shift toward innovation and efficiency. Overall, the pattern underscores education as a key driver for technological integration, enabling artisans to modernize their production, boost productivity, and stay competitive in evolving craft markets.

11. Export of the handicraft industry in India

The integrity of a nation is reflected in its trade balance of imports and exports. It demonstrates how much a nation values its customs and cultural heritage. In addition to being an artistic skill, handicrafts serve as a legitimate source of income for small-scale enterprises. Exports are essential for connecting international markets and advancing the global economy. (Jamir, 2020). They help balance trade, employment, poverty reduction, foreign investment, and profits (Al-Hyari et al., 2012). Handicrafts are carefully made objects, produced with minimal mechanical aid and rich in tradition. Furthermore, India has greatly valued producing and exporting these crafts. Despite the growth of many collections, several notable works have been shared worldwide (Yadav et al., 2021).

Export trends demonstrate a consistent annual increase. Data from the Export Promotion Council for Handicrafts (EPCH) show that handicraft exports, excluding hand-knotted carpets, grew from Rs. 386.57 crores in 1986–1987, the year of the Council's establishment to Rs. 32,758.80 crores in 2023–2024, and further to Rs. 33,122.79 crores in 2024–2025 (EPCH, 2025). Indian exports commenced in 1986–1987 and have experienced significant growth through 2025, reflecting their augmented global prominence and recognition over the past thirty-five years. Following India's economic liberalization in 1991, the global market became accessible to all nations, resulting in increased exports of indigenous and cultural products. The data indicate that the export rate increased after the implementation of liberalization, privatization, and globalization (LPG) policies in 1991. However, the COVID-19 pandemic and associated lockdowns disrupted global activities, adversely affecting the handicraft industry (Yadav et al., 2022).

Figure 3: Exports of Handicrafts from India



12. Handicrafts of Chhattisgarh

12.1 Bell metal (Dhokra)

Dhokra art originates from the district of Kondagaon in Chhattisgarh. Crafted from brass, it produces sculptures characterized by a grey gold appearance. The tribes of Bastar, known as the Ghadwas, and those of Raigarh, called the Jharas, employ the lost wax casting technique, also referred to as hollow casting, to create their works. Each piece is handcrafted, with these two crafts exhibiting distinct styles. The traditional Dhokra technique is accessible for learning but demands precision, resulting in intricate and detailed creations suitable for both everyday use and spiritual practices. As one of the most renowned crafts of Chhattisgarh, Dhokra art has achieved global recognition, attracting visitors from around the world and promoting the state's cultural heritage internationally.

Figure 4: Bell Metal Craft

12.2 Bamboo Craft

The bamboo craft traditions of Chhattisgarh's tribes are celebrated for their practicality and artistry. The artisans of Bastar create a variety of products, including attractive furniture, mats, baskets, and household and office tools. Bamboo is plentiful in Chhattisgarh, and local tribes engage in crafting items like table mats, wall hangings, baskets, lamps, hunting gear, and fishing traps, mainly using forest resources. Bamboo thickets are common, and the tribes actively utilize their natural environment for craftsmanship. The diverse bamboo articles they produce serve both everyday and decorative purposes. Notable bamboo items include farming tools, fishing traps, hunting implements, and baskets.

Figure 5: Bamboo Craft

12.3 Wrought Iron (Loha Shilp)

Loha Shilp, a craft from Chhattisgarh, involves creating dark, raw metal objects and figurines using wrought iron. The primary material is often recycled scrap iron. Typical products include lamps, candle stands, musician effigies, toys, figurines, and deities. This craft stems from the tribes' reverence for nature. Artisans forge salvaged scrap iron in furnaces, shaping it with tongs, resulting in seamless finishes. Wrought iron crafts are known for their durability and artistic finesse.

Figure 6: Wrought Iron (Loha Shilp)

12.4 Terracotta

Terracotta is intrinsically linked to the traditions and customs of Chhattisgarh. Terracotta figures depict various stages of human existence and are crafted by hand or on a potter's wheel. This art is particularly renowned in the districts of Kondagaon, Ambikapur, and Raigarh. The potters in this field continue to utilise the traditional technique of crafting terracotta. Clay is collected from riverbanks, fragmented, kneaded, and moulded into artistic forms.

Figure 7: Terracotta Craft

12.5 Wall Painting

Pithora paintings represent a traditional folk art form from Chhattisgarh. These wall paintings are believed to bring good luck and protect spirits from harm. Their intricate designs and vibrant colors have gained international recognition. Traditional wall paintings in the state are linked to rituals, with floors and walls painted using various colors; almost every depiction is connected to a ritual. Pithora paintings are a common traditional art form that originated in the tribal areas of Central India, now part of Madhya Pradesh and Chhattisgarh, and they often depict offerings to the gods. These paintings are typically created during occasions such as marriages, childbirth, and other events of wish fulfillment. Most of these artworks feature a horse, as sacrificing one was considered auspicious. In many tribal homes, Pithora paintings can be found. They are colorful and created using natural dyes.

Figure 8: Wall Painting

12.6 Wood Carving

Woodcraft is a highly esteemed handicraft in Chhattisgarh, renowned nationwide. The tribes of Chhattisgarh initially used wood for construction and subsequently for carving and carpentry. Consequently, the Badhais community cultivated expertise in woodworking. Currently, Chhattisgarh is renowned for its wood carvings, which feature elaborate designs on doors, pillars, ceiling frames, and furniture throughout the state. Kondagaon is renowned for its life-sized depictions of deities.

Figure 9: Wood Carving

12.7 Tumba

Tumba craft is a relatively obscure but unique traditional art form from Chhattisgarh, mostly practiced in the Bastar region. It draws inspiration from the everyday lives of indigenous tribal communities that have historically used dried and hollowed gourd shells (locally known as tumba) as natural containers for storing water, salfi (a traditional palm drink), and other liquids. This practical use gradually developed into an expressive art form. Tumba craft not only demonstrates the community's artistic

ingenuity but also highlights Chhattisgarh's sustainable, eco-friendly approach to traditional craftsmanship, where nature, culture, and creativity work in harmony.

Figure 10: Tumba

12.8 Cotton Fabrics

Cotton textiles are a renowned and striking handicraft created by indigenous communities in Chhattisgarh. They are made from Kosa thread, sourced from a specific forest worm, and are both hand-printed and hand-woven by tribes that can trace their lineage to the 14th-century weaver, saint, and poet Kabir. Hand printing is generally done using natural vegetable dyes extracted from local plants by all individuals in the jungles of Chhattisgarh. Cotton saris, also known as Chhattisgarh Kosa Sarees, are used for draping and as dress materials. Cotton fabrics are one of the famous and attractive handicrafts made by the tribals of Bastar. These are made from Kosa thread, crafted from a type of worm found in the forest, and are hand-woven and hand-printed by tribes that trace their lineage back to the 14th-century weaver, saint, and poet Kabir. Hand printing is generally performed with natural vegetable dyes derived from trees in Bastar's forests. These fabrics include cotton saris, known as Bastar Kosa Sarees, as well as dress materials and drapes.

Figure 11: Cotton Fabrics

Table 4: Number of GIs registered as handicrafts in Chhattisgarh

State	Year	Application No.	Goods as per Sec-2 (F) of the GI Act 1999	Name of Handicraft product
Chhattisgarh	2008-2009	83	Handicraft	Bastar Dhokra
Chhattisgarh	2008-2009	84	Handicraft	Bastar Wooden Craft
Chhattisgarh	2008-2009	82	Handicraft	Bastar Iron Craft
Chhattisgarh	2010-2011	172	Handicraft	Champa Silk Saree and Fabrics

Chhattisgarh's GI register includes four recognized handicrafts: Bastar Dhokra, Bastar Wooden Craft, Bastar Iron Craft (2008-09), and Champa (Kosa) silk sarees and fabrics (2010-11). These registrations officially confirm the products' geographic origin and traditional production methods, providing a legal basis for differentiating products based on provenance. Research on India's GI system shows that such legal recognition can improve product authentication, create market differentiation, and, under the right conditions, support premium pricing and better market access for producer communities. Studies focused on handicrafts indicate that GI protection only results in meaningful livelihood and cultural preservation benefits when backed by active supply-side investments, producer organizations, quality control, design improvements, traceability, and direct market linkages. Without these, legal recognition may remain symbolic or be exploited by intermediaries. In Chhattisgarh, the 2008-11 GI registrations provide both a valuable institutional asset and a policy opportunity. To turn this legal right into real benefits for Bastar Dhokra and Kosa silk artisans, stakeholders should focus on collaborative governance, branding, and capacity-building initiatives that ensure producers retain control over the GI benefits and connect traditional crafts to higher-value domestic and export markets.

13. Conclusion

GI tags remain a relatively new concept for Indian artisans, despite their extensive range of products that could qualify as geographical indicators. The increasing number of Geographical Indications (GI) registrations in India is a positive trend with substantial economic and cultural potential. In Chhattisgarh, the study shows that other handicrafts need GI tags to maintain their unique identity and the traditional craft's origin, which is tied to the craft's birthplace and helps protect their authenticity and values. Without a GI tag, the art and craft of Chhattisgarh risk disappearing, leading to significant cultural and economic loss. While India's exports of handicrafts are growing annually, the low rate of GI registration is mainly due to a lack of awareness about its importance. The study also finds that Bell metal art has held GI status for nearly 15 years, but artisans remain unaware and do not benefit from it. This indicates a disconnect between government policy and artisan involvement. Some recommendations are provided to address these issues.

14. Suggestions

G – Geographical Linkage and Origin-Based Uniqueness
I – Intellectual Property Protection under the GI Act
T – Trade Advantages and Market Differentiation
A – Artisan Livelihood Enhancement and Market Access, and Value Addition
G – Governance, Quality Control, and Post-GI Monitoring

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