

IMPACT OF MIGRATION ON GEOGRAPHICAL INDICATION PROTECTION: ISSUES AND CONCERN

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Abstract

Geographical Indication (GI) is a subject matter of intellectual property, in which the goods originating from a specific geographical location is protected because of its certain quality or reputation which is essentially attributable to its geographical origin. This paper is a qualitative study of impact of migration on GI protected goods, and the author will try to analyze whether migration pose some impact regarding the GI protection of such goods. Migration is an ancient phenomenon, either voluntary or non-voluntary, which has immense impact on socio-cultural identity of human civilization. Many of the GI protected agricultural or non-agricultural goods are found to have their origin in other country or geographical location, hence migration may have an impact on its transfer; but communities in the current location nurture them to build the geography-linked characteristics and sanctity of the goods to qualify for GI protection. So, this paper current geographical location, without denying the impact of migration, but emphasizing on local resonance. This study will be limited to the analysis of few handicraft goods protected under GI in India or other South-East Asian Countries.

I Introduction

GEOGRAPHICAL INDICATION (GI) is a subject matter of intellectual property (IP), in which the goods originating from a specific geographical location is protected because of its certain quality or reputation which is essentially attributable to its geographical origin.¹ The basis of providing protection for intellectual property rights (IPR) under GI regime is rooted with the link between the specific geographical location and the goods in concern. The impact of that geographical location, either in the form of geographical factors like raw materials and their link with soil, climate, rainfall or other precipitation, wind etc., or in the form of human factor; on the quality, reputation, or other characteristics. To qualify for the GI protection, quality, reputation, or other characteristics of the goods should be essentially attributable to its geographical location. Now geographical factors are inherent for the concern geographical location; but the human factors mainly the knowledge and skills behind the production of the goods are largely dependent on the social variables of the producer community. History, culture, customs, heritage etc. are the social variables, which in turn may be affected by migration of the people. This article is a qualitative study of impact of migration on GI protected goods, and the author will try to

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1 Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS), Art. 22.

analyze whether migration pose some issues or concern regarding the GI protection of such goods.

Definition of GI and importance of human factors

Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) defines GI as “*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 other characteristic of the good is essentially attributable to its geographical origin*”² [Emphasis added]. Indian Geographical Indications of Goods (Registration and Protection) Act, 1999 (GI Act, 1999) provided similar definition, which says GI is “*an indication which identifies such goods as agricultural goods, natural goods or manufactured goods as originating, or manufactured in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristic of such goods is essentially attributable to its geographical origin and in case where such goods are manufactured goods one of the activities of either the production or of processing or preparation of the goods concerned takes place in such territory, region or locality, as the case may be*”³ [Emphasis added]. Both of this definition unanimously emphasizes on the ‘*given quality, reputation and other characteristic of such goods is essentially attributable to its geographical origin*’; but the factors from the ‘*geographical origin,*’ namely the geographical factors and human factors, which are attributing for the ‘*given quality, reputation and other characteristic of such goods,*’ are not specified in these definitions. On the other hand, such factors are specifically mentioned in the definitions of ‘Appellations of Origin’ (AO)⁴ in the other international agreements, like the Lisbon Agreement for the Protection of Appellations of Origin and their International Registration, 1958 (Lisbon Agreement) and Geneva Act of the Lisbon Agreement on Appellation of Origin and Geographical Indications, 2015 (Geneva Act). The protection of ‘Appellations of Origin’ is provided for the goods “*whose quality or characteristics are due exclusively or essentially to the geographical environment, including natural and human factors*”⁵ [Emphasis added]. This definition shows a balanced approach of emphasizing on the fact that goods are result of the interaction between natural and human factors. Goods, whichever qualifies for the protection of GI, be it agricultural or non-agricultural, would essentially be produced by the interaction of natural and human factors; though the percentage of attribution of these factors on ‘quality’, ‘reputation’ and ‘other characteristics’ may vary. It can be put in this way that, for agricultural goods the attribution of natural geographical factors is more; whereas, for non-agricultural goods the attribution of human factors are more. The interaction between

2 TRIPS Agreement, art. 22.1

3 Indian GI Act, 1999, s.2(1)(e).

4 Appellation of Origin is a specialized form of geographical indication mentioned in the Lisbon Agreement and Geneva Act.

5 Art. 2.1 of Lisbon Agreement, 1958 and art. 2(1)(i) of Geneva Act, 2015.

human and natural factors is mentioned by many researchers as ‘terroir.’ The word ‘terroir’ is a French word, which is translated as “terrain, soil, land, ground, or earth”; but culturally speaking it is understood as the product of interacting natural and human factors.⁶ The final goods are results of the natural input and human skills originated or developed by the people of the local community of a specific geographical region; which is addressed in the definition of AO in the Lisbon Agreement and Geneva Act. This interpretation is specifically important for the non-agricultural handicraft goods. This is the cornerstone behind the research done for this paper, as impact of migration is huge on the ‘human skills.’

Migration and human skills behind non-agricultural GI goods

Migration is an ancient phenomenon, either voluntary or non-voluntary, which has immense impact on socio-cultural identity of human civilization. The earliest fossil of *Homo sapiens* (modern human) found in Africa (in Ethiopia) which is 200,000 years old; and according to the Map of Human Migration it can be said that some group of early human being left Africa (about 60,000 – 70,000 years ago) to reach Australia (about 50,000 years ago), Middle East and Central Asia (about 35,000 years ago); and America (about 15,000 years ago).⁷ There are many theories about the cause of migration (which are beyond the scope of this article), but everyone agrees that migration results increased interaction among communities and hence causes heterogeneity and diversity. With time, human migration was urged due to inquisitiveness to discover new places in the world; and thereafter due to trade. Every time migrant people carry the knowledge, skills, technology, and socio-cultural attributes, which enriched the human civilization in many ways.

Many of the GI protected agricultural or non-agricultural goods are found to have their origin in other country or geographical location, hence migration may have an impact on its transfer; but communities in the current location nurture them to build the geography-linked characteristics and sanctity of the goods to qualify for GI protection. So, this research will study the importance of characteristics and reputation in relation to current geographical location, without denying the impact of migration, but emphasizing on local resonance.

Limitation of the scope of research

In India 313 of the protected GI goods are handicrafts (Total is 342, but the author excludes 29 logos of already protected GI) out of total 614 (Total is 643, but the

6 S. Bowen and A. G. Valenzuela-Zapata, “Geographical indications, terroir, and socioeconomic and ecological sustainability: The case of tequila” JRS (2009), *available at* :<https://www.researchgate.net/publication/223814613> (last visited on May 12, 2025).

7 Map of Human Migration, National Geographic (2019), *available at* :<https://genographic.nationalgeographic.com/human-journey/> (last visited on 1 May 2024).

author excludes 29 logos of already protected GI); amounting to 50.9% of the total protected GI.⁸ If the specifications of those 314 handicraft GI applications are studied, it is found that many of the goods are originating elsewhere, and then internalized with time in a specific geographical location of India. From the specifications it is evident that the producers are not denying that the goods have their origin in somewhere else, but the communities involved with the production had gradually evolved the skills in such a way that the final goods have their specific ‘quality’, ‘characteristics’, and ‘reputation.’

This paper aimed at the study of impact of migration on the handicrafts GI goods protected or in the process of protection in India. Study of all 313 handicrafts GI goods is out of the scope of this paper. Hence, this study will be limited to the analysis of few handicraft goods protected under GI in India and compared with some same or similar GI or non-GI goods from other Asian Countries.

Following are the goods encompassed in this research –

Handicrafts produced by Resist dyeing technique :

- i. Wax resist method Batik – Batik of Indonesia (Protected GI in Indonesia and recognised as Cultural Heritage by UNESCO) and Malaysia (also protected as GI/trademark in Malaysia), Batik of Ujjain and Shantiniketan (Ujjain Batik is protected as GI in India and Shantiniketan Batik is in process of GI protection) and its migration from Egypt or other parts of Africa;
- ii. Tie and Dye – Bandhani of Gujarat (Jamnagari Bandhani is a protected GI in India and Kutch Bandhani is in process of GI protection), Rajasthan (Jodhpur Bandhej is in process of GI protection in India), Odisha (Sambalpuri Bandha is a protected GI, but it is an Ikat weaving), Shibori of Japan, Adire of Nigeria;
- iii. Ikat – Pochampally Ikat and Telian Rumal (protected GIs in India), Orissa Ikat, Sambalpuri Bandha and Khandua Saree (Odisha’s protected GIs in India), Patan Patola and Rajkot Patola of Gujarat (both are protected GI in India).

Jamdani Saree of Bangadesb and India – Uppada Jamdani (Protected GI in India) and Fulia Jamdani (GI application under process in India) and its migration from Dhakai Jamdani (protected GI in Bangladesh)

Carpets – Kashmiri hand-knotted carpet, Hand-made carpet of Bhadohi, Gwalior Hand-made carpet, (all of these are protected GI in India) and Arunachal Pradesh Hand-made carpet (is in process of GI protection in India) and comparison with

8 Refer to the State-wise Registration details of GI Applications, as updated in the GI Portal of Dept. of Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Govt. of India as on Dec. 22, 2024, *available at:* https://ipindia.gov.in/writereaddata/Portal/Images/pdf/GI_Application_Register_List_14-07-2022.pdf (last visited on May 22, 2024).

carpets of Iran (Well-known as Persian Carpet, is a protected GI in Iran), China and Tibet.

II Migration of resist dyeing techniques and GI protection

Resist dyeing technique is deep-rooted in the culture and heritage of the handicraft and fabric production of world. Dyeing of fabric provides rich colours and patterns, but once the dark shade of colour is pronounced, the lighter shades will not show up. Resist dyeing technique allow lighter colours to show up by ‘blocking’ certain areas of the fabric by various methods, and hence, such dyeing is termed as ‘resist dyeing.’⁹ Resist dyeing produce textiles having unique and colourful designs. Three main categories of resist dyeing technique is known – chemical resist, mechanical resist, and Ikat.¹⁰ Chemical resisting is done by using paste or wax, Batik is one of the most important examples of chemical resist dyeing, which is famous in India and other South-East Asian countries like Indonesia and Malaysia; also adire from Nigeria is another example. Mechanical resisting is done by tying off sections of cloths before treating with the dye, hence it is also called ‘tie-n-dye’ method.;¹¹ ‘bandhani’ or ‘bandhej’ textiles of India and ‘Shibori’ from Japan are important examples of ‘tie-n-dye’ textile. Ikat is a specialized form of ‘tie-n-dye’ which involves repeated wrapping and binding of yarn as a resist before treating them with dyes, resulting in variety of intricate designs.¹² Origin and migration of these techniques is tried to be traced here with historical references and then the GI specifications is analyzed to get the special ‘quality’ and ‘characteristics’ of each one in relation with their specific geographic location causing specific ‘reputation.’

Migration of batik and GI protection in many countries

The word ‘batik’ is originated from the Javanese word ‘ambatik’; a combination of two words ‘amba’ means ‘to write’ and ‘titik’ meaning ‘little dots or to make dots’;¹³ the word also thought to be derived from the Javanese word ‘tritik’ – which used to describe a ‘resist dyeing process where tying and sewing of parts of the cloth is done before dyeing’.¹⁴

There are many theories regarding the origin of wax-resist dyeing or batik. Origin of Batik can be traced back in Central Asia, Middle East, Far East and India; and also

9 Hume S., “Resist: A World of Resist Dye Technique”, Kent Museum, Jun 9, 2013, *available at*: <https://www.kent.edu/museum/resist-world-resist-dye-techniques> (last visited on May 22, 2024).

10 *Ibid.*

11 *Ibid.*

12 *Ibid.*

13 Rahmah M., “The protection of “Batik” craft under Geographical Indication: The strategy for developing creative industry in Indonesia” 7 WIPO-WTO Colloquium Paper 31 (2016).

14 Steelyana E., “Batik, a beautiful cultural heritage that preserve culture and support economic development in Indonesia” 3 *Binus Business Review* 116 (2012).

parts of Africa mainly in Egypt and Nigeria.¹⁵ According to some researchers wax-resist dyeing was known to Turks as far as 2nd Century BC; proof says that wax-resist dyeing was used in 700-750 AD in Central Asia and then spread to China, Malay Peninsula and India; and from there to Africa and Europe;¹⁶ or batik spread to China through migration and trade channels during the Chinese Tang Dynasty in 618-906 BC from Eastern Turkic steps.¹⁷ Other researcher believes that wax-resist dyeing was practiced in Egypt as early as 1st Century BC; they derive this conclusion from the write up of “*Historia Naturalis*” by Roman Scholar Pilius, in which he mentioned that Egyptians used to process the fabric with wax before dyeing; and wax resist designed cloths which are excavated from graves in Egypt suggests the same.¹⁸ People of Sui Dynasty (581-618 AD) introduced silk batik in China; silk batik screens are discovered in Nara, Japan (710-794 AD), but these are probably made by Chinese people; and batik is practiced by Yoruba tribes of southern Nigeria and Senegal for over a millennium. According to some Chinese trade records, batik was introduced from China to Malay Archipelago, India and Persia in 17th Century.¹⁹ So, it is difficult to conclude whether ‘batik’ originated from Egypt, or from China, or from Turkey; and spread to the rest of the places; but these places are historically have strong connection with Batik, and spread of ‘batik’ to India, Malaysia, Indonesia, other South-East Asian Countries and parts of Africa happened later, where this technology is evolved and practiced by the local people. Each country had developed the designs and motifs used in their respective ‘batik’ according to the culture of that specific country and cultural interaction with other countries; which resulted in unique and different expressions of their own.²⁰

Batik of Indonesia and Malaysia: IP protection

Batik is a national icon for Indonesia, and Indonesian Batik is awarded as cultural heritage from UNESCO on October 2, 2009.²¹ Batik Industry is found throughout Indonesia, namely in Java in Cirebon, Pekalongan, Banyumas, Yogyakarta, Solo, Mojokerto and outside Java in Samarinda-Borneo, Padang, Palembang-Sumatra,

15 Gaffney D., “The History of Batik, Batik Guild Website Update (2023), *available at* :<https://www.batikguild.org.uk/batik/history>, (last visited on May 25, 2024).

16 Yayan, G. and Ertürk, F.E., “Art education and batik”, 1 *JLS* 555 (2012).

17 Harris, J., *5000 Years of Textile*, British Museum Press, London (1993).

18 Gumuser T., “Modern Interpretations of Traditional Wax Batik Technique in Textile Arts: A Local Case Study in Turkey” 2 *New Design Ideas* 20 (2018).

19 Noor A.S.A.A. and Noor A.M., “Protecting Batik as National Heritage: A Malaysian Legal Analysis” 7 *BDLJ* 249 (2022), *available at*: <https://bildbd.com/index.php/blj/issue/view/19>, (last visited on June 15, 2024).

20 Ercivan, G.B., “The transition process of modern textile designs and applications from the reserved dyed textiles” 1 *Journal of Art, Design and Science* 87 (2017).

21 Steelyana E., “Batik, a beautiful cultural heritage that reserve culture and support economic development in Indonesia” 3 *BINUS Business Review* 116 (2012).

Toraja-Sulawesi, Papua and even Nusa Tenggara.²² Indonesian researchers believed that ‘batik’ reached Java during 7th Century AD.²³ Sir Thomas Stamford Raffles in his book “History of Java” (1817) described the local production of batik cloths as the key component of Javanese culture.²⁴ Batik cloths have immense ceremonial and cultural role in Indonesia, it is a valuable part of royal ceremonies, first pregnancy ceremony (Naloni mitoni in Javanese) for females, batik is part of the National Airlines uniform.²⁵ In Malaysia batik cloths are prepared since Malay empire of Srivijaya (7th – 13th Centuries and Majapahit (1293-1500)).²⁶

Batik industry of Malaysia was introduced by Javanese batik-producers, and in Malaysia the traditional costume ‘batik sarong’ is part of Malaysian culture.²⁷ There are two kinds of practice prevalent in Indonesian and Malaysian batik industry – hand-drawn batik (batik *tjanting*), which is dominant in Indonesia; and batik stamp (batik *terap/ blok*) which is dominant in Malaysia.²⁸ There are hundreds of motifs used for the batik in Indonesia and Malaysia, both are influenced by Islamic tradition; but Indonesian motifs have deep philosophical meaning and usually not-so-bright colours are used like brown, gold and black; whereas Malaysian motifs are usually plant and floral designs using bright colours like green, pink, red or purple.²⁹

Batik’s motif patterns and varieties had been strongly influenced by the traditional cultural art of Indonesia and Malaysia; for example, the element of flower and geometric designs are influenced by Arabic writing, some decorative types are symbolic forms that come from natural and cosmologic symbols; thus, symbolic structure of

22 *Ibid.* See also Steelyana, E., and Patriana, R., “Perseverance of socio cultural and economics for Batik” *Yogyakarta*, Faculty of Economics and Communication, Accounting Department, Bina Nusantara University (2010).

23 Rahmah M., “The protection of “Batik” craft under Geographical Indication: The strategy for developing creative industry in Indonesia” 7 *WIPO-WTO Colloquium Paper* 31 (2016).

24 Glarner Tuch Gespräche. Kunst, Geschichte des Glarner, and Europäischen Zeugdrucks, “The Early Production of Javanese Batik Imitations in Europe (1815– 1840)” at 49-58. Edited by Reto Jenny. Comptoir von Daniel Jenny et Cie., Ennenda (Glarus).

25 Steelyana E., “Batik, a beautiful cultural heritage that reserve culture and support economic development in Indinesia” 3 *BINUS Business Review* 116 (2012).

26 Legino R., “Malaysian Batik Sarongs: A study of Tradition and Change” (2012), *available at*: <https://core.ac.uk/download/pdf/15626199.pdf> (last visited on June 15, 2024).

27 Shaharuddin S.I.S. *et al.*, “A Review on the Malaysian and Indonesian Batik production challenges and innovations in the 21st Century”, *Sage Journals* (2021), *available at*: <https://journals.sagepub.com/doi/full/10.1177/21582440211040128>, (last visited on June 15, 2024).

28 *Ibid.*

29 Website update, “Indonesian batik vs Malaysian batik”, Infobatik, Dec 2020, *available at*: <https://www.infobatik.com/en/indonesian-batik-vs-malaysian-batik/> (last visited on 15 June 2024), also see Saddhono K., et al., “The Study of Philosophical Meaning of Batik and Kimono Motifs to Foster Collaborative Creative Industry” 10 *ASS* 52 (2014) *available at*: <http://dx.doi.org/10.5539/ass.v10n9p52> (last visited on June 15, 2024).

the traditional batik of Malaysia and Indonesia is a combination of cultural, evaluative, cognitive and expressive symbol.³⁰ Batik is the national pride for both Indonesia and Malaysia. Indonesian batik is protected as ‘Cultural Heritage’ by UNESCO since 2009 (mentioned earlier).

GI law in Indonesia is enacted in 2016³¹ and Yogyakarta Batik Tulis Nitik is a protected GI in Nov 2019.³² In Malaysia GI Act is enacted in 2022³³ and two batik items, Sabah Batik and Terengganu Batik, are protected under this Act until November 2022.³⁴

Indian Batik GI: Ujjain Batik and Shantiniketan Batik

Origin of Indian batik is a controversy. Some researchers believe that batik originated in India and brought to Java (Indonesia) from India.³⁵ Batik design found in frescoes in the Ajanta Cave can be a proof of that belief (Figure 3). It is also believed that the batik textile production in India was lost with time, later revived in 20th Century. Currently Ujjain Batik is a protected GI, which received its GI certificate on March 31, 2023,³⁶ and GI Application is submitted for Shantiniketan Batik in April 2022.³⁷ Batik art is also practiced in a small village of Mundra in Kutch, Gujarat, where artisans of traditional communities make batik cloths for daily usage; but that is not protected by GI nor applied for GI yet.³⁸

30 Saddhono K., *et al*, “The Study of Philosophical Meaning of Batik and Kimono Motifs to Foster Collaborative Creative Industry” 10 ASS 52 (2014), *available at*: <http://dx.doi.org/10.5539/ass.v10n9p52>, (last visited on June 15 2025).

31 Law on Trademark and GI, Law No 20 of 2016.

32 See Official List of Indonesian GI, Directorate General Intellectual Property Rights (DGIP/ Ditjen HKI) under the Ministry of Law and Human Rights of Republic of Indonesia, *available at*: <https://indonesianig.id/tenant/id/yogyakarta-batik-tulis-nitik?ref=MjIwMTIxNjFFQTUyREU3QkUyNQ> (last visited on June 25, 2025).

33 Geographical indications Act, 2022 of Malaysia.

34 See the list of GI in the Official Portal of Intellectual Property Corporation of Malaysia, *available at*: <https://www.myipo.gov.my/en/statistic-application-registration/#toggle-id-1> (last visited on June 24, 2025).

35 Chattopadhyaya, K., *Indian handicrafts*, (Allied Publishers, New Delhi, 1963. See also The GI Application of Shantiniketan Batik, GI Application Number 865, submitted to Indian GI Registry on April 11, 2022, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/865> (last visited on June 21, 2024).

36 Ujjain Batik, GI Application No. 700, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/700> (last visited on June 22, 2024).

37 Shantiniketan Batik, GI Application No. 865, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/865> (last visited on June 24, 2024).

38 Website Update, “Batik Printing – Mundra, Gatha”, *available at*: <https://gaatha.org/Craft-of-India/batik-printing-mundra/> (last visited on June 21, 2024).

Ujjain Batik is claimed to be an ancient art of Madhya Pradesh, but unfortunately its GI application is not supported by enough historical documents.³⁹ Ujjain batik is a form of wax writing, in which a part of the cloth is covered with a coat of wax and then the cloth is dyed, waxed areas keep their original color and when the wax is removed the contrast between the dyed and undyed areas makes the pattern. Cotton and silk fabrics are used for Ujjain Batik. Tjanting (pen like tool or stylus) tools, made of coconut husk, are used for spreading the melted wax; wooden blocks are also carved for specific design, which used to be dipped in the molten wax to print the design on the cloth. Waxing, then repeated colouring and de-waxing done to get the final design.⁴⁰ The designs of Ujjain batik is inspired from legends of Vedas, Puranas, Nature, Archaeological finds, Architecture, Sculpture, Paintings, religious believes, environment, culture, history, and daily life activities; thousands of motifs are used by artisans – among them Bhairavgarhi Buta; Bohrani Buta; Ahmedabadi Buta; Dhoti ka Buta; Laggad Bela; Gulli; Nareliya; Chowkari; Dhoti ki Kinar; Kamalgatta; Bari Bela; Shahtut; Mendal; Chakari are mentioned here.⁴¹ Usually repetitive designs are made by white or light colours on the bright background colours. Sometimes some human or animal figures are also made.

Shantiniketan Batik is having a very specific history of origin; Noble Loriete poet Kobiguru Rabinadrath Tagore visited to Java and Bali in 1927 and get highly inspired by their batik; other members of his accompanied group bought batik fabrics and tools; and Surendranath Kar also took practical lessons to learn batik technique from local artisans.⁴²

While back in Shantiniketan Visva-Bharati University, Kar started batik classes in Kala Bhavana for the then students; among his students two sister's (Gouri Bhanja and Jamuna Sen) role was especially important for development of specific Shantiniketan style batik craft.⁴³ The Kala Bhavana students then taught local artisans, Javanese batik tool the wax-pen was replaced by a brush, which is used here for application of melted wax. Majority of Shantiniketan batik designs re highly influenced

39 GI Journal No. 166 dated Nov 30, 2022, GI Application Number 700 (Ujjain Batik Print), at 122, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/700> (last visited on June 24, 2024).

40 *Id.* at 124.

41 GI Journal No. 166 dated Nov. 30, 2022, GI Application Number 700 (Ujjain Batik Print) at 121, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/700> (last visited on June 21, 2024).

42 Wronska-Friend M., “Batik of Java: Global Inspiration” *Textile Society of America Symposium Proceedings*, (2018) at 12, *available at*: <https://digitalcommons.edu/tsaconf>, this document submitted as References and Documents along with GI Application Number 865, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/865> (last visited on June 24 2024).

43 *Id.* at 13.

by typical aesthetic style of Kala Bhavana and spiritual relationship between human and nature;⁴⁴ use of bright colours like red, orange, yellow, brown, black etc. are common; and human figures are figures of deities are also common (see Figure 5). Another unique approach of Shantiniketan batik is the material, the batik goods produced in Shantiniketan are not only cloths (cotton and silk) but also leather goods like handbags, purses, wallets, folders, coin boxes, jewellery boxes, wrist watch straps etc.⁴⁵

Migration of tie-n-dye technique and GI protection in many countries

Tie-n-Dye technique, as is already mentioned, is the mechanical resist form of dyeing, which is deep-rooted in human history and culture of many countries. Author will limit the scope of discussion to the Bandhani/Bandhej/Bandha handicrafts of India, Shibori art of Japan, and Adire of Nigeria.

Origin of tie-n-dye technique

There is difference of opinion regarding origin of Tie-n-Dye technique. Some researchers linked with internationally reputed museums believe that earliest sample of Tie-n-Dye is found in the Peruvian pieces (called ‘plangi’), which is dated back to pre-columbian times in 1st century CE; other notion is the vivid painting of ‘bandhej’ cloth on the wall painting of Ajanta caves (dated back to 6th-7th century); it is also believed that Indian ‘bandhani’ was traced back to the remnants of Indus Valley Civilization in the city of Mohenjo-Daro; and some researchers believe that Japanese Tie-n-Dye art ‘Shibori’ is practiced for 6000 years.⁴⁶ According to Chinese researchers, the Tie-n-Dye technique was practiced in ancient China since 3rd century BC and during Tang dynasty it prospered and developed to a great height; it can be said that many fragments of Tie-n-Dye cloths of that period had been excavated in China.⁴⁷ There are also many images found in ancient caves in China proving the Tie-n-Dye art of Tang Dynasty, such as ‘Flying Apsaras of Dunhuang’ in Cave 320 and ‘The Hanging House Chatting’ in Cave 85 of Mogao Grottoes in Gansu Province.⁴⁸ So the practice of Tie-n-Dye technique is found in the human history from time immemorial in many countries since ancient times, like in China, Japan, India, or America.

44 *Ibid.*

45 GI Application Number 865 at 4, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/865> (last visited on 21 June 2024).

46 Acharya P.A. and Samani V.S., “Review study on detailing traditional motifs and techniques of Bandhani and its changes of Saurashtra region” 3 *IJHS* 377 (2017).

47 Sun Y. & Liu M., “An Inductive Study on the Application of Tie-dye in Tang Dynasty” 572 *Advances in Social Science, Education & Humanities Research*, Atlantis Press, 135 (2021), *available at*: <http://creativecommons.org/licenses/by-nc/4.0/> (last visited on June 21, 2025).

48 *Id.* at 136.

Tie-n-dye in literature of India

Other than the fossil sample of 'bandhani' cloth from Indus Valley Civilization,⁴⁹ many ancient Indian literature has mention about 'bandhani' cloths in various ways; such as Harshcharit, a 7th century Sanskrit book from Bana Bhatta about the life of King Harsha Vardhan has a mention about a cloth called '*aspulakabandha*', literally tie-dye; also the Jain scripture of 14 Century depicts a picture of Lord Mahavir wearing tie-n-dye cloth.⁵⁰ In the book titled 'Indian Folk Arts and Crafts' the author mentioned about tie-n-dye cloths as the traditional attire of many tribal communities, such as many communities of Gujarat and Rajasthan, Bhils, Rathwa community and nomadic Rabaris and Bharwards.⁵¹

Different tie-n-dye fabrics of India: GI goods

Different Tie-n-Dye art form is practiced all over India, specifically in the states of Gujarat, Rajasthan, and Odisha. The Tie-n-Dye technique in India is called 'Bandhani' or 'Bandhej' or 'Bandha'; all these words are derived from the Sanskrit word 'bandh' meaning 'to tie'. Sambalpuri Bandha saree and fabrics (from Odisha state) is the first Tie-n-Dye handicraft to get the GI protection in India,⁵² followed by the Jamnagari Bandhani from Gujarat;⁵³ Kutch Bandhani from Gujarat;⁵⁴ and Jodhpur Bandhej from Rajasthan.⁵⁵ Among all these Tie-n-Dye handicrafts, Sambalpuri bandha has a distinct character according to its specific designs and the range of goods produced (it is actually an Ikat, but because; whereas Bandhani/Bandhej from Gujarat and Rajasthan has many similarities in terms origin, motifs and design, and range of products, with some differences in the design which make them unique. Following is the comparative study of these factors for all Indian Tie-n-Dye handicrafts.

Sambalpuri Bandha Saree and Fabrics of Odisha:⁵⁶

- i. Historical origin: This art was introduced by Bhutia Community, who were linked with Prithvi Raj Chowhan; after the fall of Chowhan dynasty these Tie-

49 *Id.* at 378. see also Ahiwasi D, Range avam chape vastra, (Shri Shankar Press, Varanasi, 1976); Mathur K. Crafts and craftsman (Pointer Publishers, Jaipur, 2000).

50 *Id.* at 378.

51 Dhamija J, *Indian Folk Arts and Crafts* (National Book Trust, Delhi, 2002).

52 Application of Sambalpuri Bandha, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/208> (last visited on June 22, 2024).

53 Application of Jamnagari Bandhani, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/221> (last visited on June 22, 2024).

54 Application of Kutch Bandhani, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/751> (last visited on June 24, 2024).

55 Application of Jodhpur Bandhej, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/756> (last visited on June 30, 2024).

56 Application of Sambalpuri Bandha, Application Number 208, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/208> (last visited on June 25, 2024).

n-Dye weavers fled to Odisha in 1192 and later settled in and around Sambalpur district. They were and known as ‘Meher Tanti.’

- ii. Process of making: First step is to bleach, then warping of yarns (done by peg warping method using wooden pegs); yarns then dyed in different colours at different places by tying the place tightly by thread/thick leaf/rubber strip where no dyeing is required, and then dipping the yarns in dye bath.
- iii. Materials used: Mainly cotton, but silk or tussar fabric is also used.

Jodhpur Bandhej Craft of Rajasthan:⁵⁷

- i. Historical origin: Jodhpur was founded in Rao Jodha in 1459. It was not sure when the Tie-n-Dye art started in Rajasthan, but the Khattri community started this art. Now Muslim and Kayamkhani casts are mainly involved in this process; other than these bhistis and other casts are also involved in this process of Bandhej.
- ii. Process of making: Fabric is folded and printed with design by using the wooden block ‘geru’, and before dyeing the fabric is tied tightly with a thread at several points, thus producing a variety of patterns are made depending on the way the cloth is tied. This art of tying involves the use of a long finger nail, beads or grain.
- iii. Materials used: Pure cotton, chiffon, organeja, silk, crape, Maslin, and related mix fabrics are used.

Jamnagari and Kutch Bandhani of Gujarat:⁵⁸

- (i) Historical origin: Traditionally it is practiced in Kachchh region of Gujarat by the Khatri community people. It is believed that the tie & dye technique was introduced some centuries back by a fakir from Sindh. However, there is no historical reference about the exact time or period. One Gujarat text of the 15th century confirms that Mandvi in Kachchh was renowned for its dyeing odhanis at that time.
- (ii) Process of making: The textile is folded into four or more layers for tying. The rangara (colourer) now marks the lay-out on the Fabric. He has a specialist geru (a burnt-sienna mixed with water) into which he first dips a cord used for delineating the geru using simple printing blocks of wood. The weak imprints

57 Application of Jodhpur Bandhej, Application Number 751, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/751> (last visited on June 24, 2024).

58 Application of Jamnagari Bandhani, Application Number 221, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/221> (last visited on June 24, 2024), Application of Kutch Bandhani, Application Number 208, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/756> (last visited on 21 June 2024).

and the joints between one motif and another are traced with a split of bamboo, the point of which is dipped into the colour. Tying then done by using thumb and the forefinger of the right hand and thread run through a fine millet-stem bobbin.

(iii) Materials used: Cotton, silk, wool fabrics are used. The Vankar community weaves woolen lodki (women's Veil cloth), which are used by the Rabaris.

Different tie-n-dye fabrics from other countries

Tie-n-Dye fabrics are produced by Yoruba people of Southwestern Nigeria in West Africa, the local name for such cloths are 'Adire' which literally means 'tied and dyed'; as a distinctive textile it has emerged in the city of Abeokuta in the 19th century.⁵⁹ Though 'adire' is a traditional Tie-n-Dye art of Yoruba community, but different forms of resist-dyeing technique emerged in Africa by adaptation with time, these are - Adire Oniko, Alebere (stitch resist), Adire Eleko (starch resist) and Adire Eleso (pebbles resist), and Adire Batik (wax resist).⁶⁰ Tie-n-Dye art is practiced in Ghana among other parts of Africa, and it is found that raffia (fibers from banana leaf) is used for sewing and wrapping, instead of thread, where dye resistance is required.⁶¹ Tie-n-dyed fabrics with designs poised of large or small circles were found throughout West-Africa, not only in Nigeria, but also among the people of Senegal and Gambia; in Gambia and Senegal a marble effect was produced by crumpling the fabric and binding it loosely before immersion in a dye bath; and in Senegal, geometric patterns were embroidered on cloths which, after dyeing, were unpicked to reveal very finely rendered designs against the dyed background.⁶² In Japan the Tie-n-Dye fabrics are called 'shibori', the word 'shibori' is originated from the Japanese word '*shiboru*' which means 'to wring, squeeze or press'; this art form refers to a variety of resist-dyeing technique in which a three dimensional effect is given by folding, crumpling, stitching, plaiting, or plucking and twisting of the cloth before dyeing.⁶³ Later on the pressure is applied on the fabric by binding or clamping of knotting to keep the three dimensional

59 Zakaree S., "Adire Textile: A Cultural Heritage and Entrepreneurial Craft in England" 1 IJSBER 11 (2013).

60 Gausa S., "Tie-Dye (Adire) among the Jukun people" African Studies Quarterly, (2015), available at: <https://www.researchgate.net/publication/336955537> (last visited on June 22, 2024).

61 Ghartey K.E. et al, "Socio-Cultural Challenges of Small and Medium-Scale Batik and Tie-Dye Industry in Ghana" 8 JTST 133 (2022), available at: <https://www.scirp.org/journal/jtst> (last visited on June 22, 2024).

62 Acharya P.A. and Samani V.S., "Review study on detailing traditional motifs and techniques of Bandhani and its changes of Saurashtra region" 3 IJHS 377 (2017).

63 Article, "The Stitch-Resist Shibori Process", Craftmark, available at: <http://www.craftmark.org/cms/public/uploads/1595674563.pdf> (last visited on June 21, 2024).

effect intact during the dyeing process, which produces a blurry-edged design or crisp but small all-over design.⁶⁴

III Migration of Ikat and GI protection in many Countries

What is Ikat?

Ikat is another form of resist dyeing technique and it is practiced in many countries around the world since ages. The term ‘ikat’ is originated from the Indonesian word ‘mengikat’ means ‘to tie.’⁶⁵ It is a special form of Tie-n-Dye technique in which yarns are tied and dyed before weaving instead of doing Tie-n-Dye of the fabric,⁶⁶ hence the Sambalpuri Bandha is technically an Ikat not a ‘Bandhani’ or ‘Bandhej’ in true sense, which is also mentioned in the Application of Sambalpuri Bandha, Application No 208.⁶⁷ There are three types of Ikat based on the types of yarns dyed; namely Warp Ikat – in which only warp yarns are dyed using Ikat technique and weft yarns are dyed in solid colours (found in Kalimantan, Sulawesi and Sumatra of Indonesia); Weft Ikat – in which weft or weaving yarns are dyed by Ikat technique (Found in Thailand and South Sumatra & Bali of Indonesia); and Double Ikat – in which both warp and weft threads are dyed by resist-dyeing prior to weaving (found in Indian, Japan and Indonesia).⁶⁸

Origin and migration of Ikat

Earliest sample of Ikat found at the Horyuji Temple in Nara, Japan was dated back to 552-644 AD and is linked with China; other warp ikat cloths of 8th Century were also excavated from Dulan, Quinghai, China;⁶⁹ It is known that China was connected by trade routes to many places of middle East and Central Asia. Many fragments of

64 Wada Y.I., “New Twist on Shibori: How an Old Tradition Survives in the New World When Japanese Wooden Poles Are Replaced by American PVC Pipes” *Textile Society of America Symposium Proceedings 1051* (1994), available at: <https://digitalcommons.unl.edu/tsaconf/1051> (last visited on June 21, 2024).

65 Poonam Sagar, *The Story of Ikat – the ties that bind and weave into a beautiful Fuzzy tapestry, IndoIndians* (2019), available at: <https://www.indoindians.com/the-story-of-ikat-the-ties-that-bind-and-weave-into-a-beautiful-fuzzy-tapestry/> (last visited on June 30, 2024).

66 *Ibid.*

67 Application for Sambalpuri Bandha, Application Number 208, GI Journal No. 44, 2012, pp. 22-24, available at: <https://search.ipindia.gov.in/GIRPublic/Application/Details/208> (last visited on June 30, 2024).

68 *Supra* note 65.

69 Zhao F. and Nosch M. (Eds), *Textiles and Clothing along the Silk Roads Chapter 16 (UNESCO and China National Silk Museum, 2022)* Gyul E., *Ikat of Central and West Asia, 277*, available at: <https://unesdoc.unesco.org/ark:/48223/pf0000382993.locale=en> (last visited on June 30, 2024).

cotton Ikat were also excavated in Israel, Yemen, Arabian Peninsula, and Ikat cloths are found in Ajanta wall painting in India.⁷⁰ Many textile researchers and experts had mentioned about the trade connections between Southeast Asia and Middle East.⁷¹ Silk Road trade connections and other trade routes of the ancient world, the spread of Islam, military expansion of Mongols and Arabs helped the migration of Ikat throughout the world.

Ikat GI goods in India

Ikat technique is a traditional art form of India, practiced in three regions in India, namely state of Odisha, state of Andhra Pradesh and Telangana, and state of Gujarat; producing unique handicraft goods, which are protected under GI.

Regarding tradition of Gujarat Ikat (famous as 'Patola') – different researchers had mentioned about existence of Patola of Gujarat in 4th Century (as cited by Thomas Motte), in 5th Century (as cited by Moti Chandra) and in 11th Century (as cited by R. N. Mehta).⁷² In Gujarat traditional patola were weaved in Patan, which is an ancient town founded by Vanraj Chavda in 745 AD; and during King Kumarapal Patan become famous for Patola weaving.⁷³ Original Patola weavers are Selvi families, brought to Patan by King Kumarapal around 1175 AD from Jalna, Mahasashtra, by defeating king of Jalna. Ikat in Odisha has a long tradition – (i) poet Jaydev had offered Ikat woven fabrics with lyrics of the famous 'Gita Govinda' to Lord Jagannath, Balavadra & Devi Subhadra in 12th Century AD; and (ii) list of fabrics mentioned in Jyotiris Vara's Maithili text of Vara Ratnakar (written in 14th Century AD) has 'bandha' fabrics, such as 'Surya Vandha' and 'Gaja Vandha,' while 'gaja' (elephant) is popular design in Ikat of Nuapatna.⁷⁴ Tradition of Ikat in Andhra Pradesh and Telangana is rather new, according to the proof of origin produced in GI Application for Pochampally Ikat or Telia Rumal is showing the history from 19th Century, but the Telia Rumal became very famous among the Muslim people and huge export of this Rumal

70 *Id.*, at 280.

71 *Ibid.*

72 Khandual A., and Behera S., "Tie & Dye Textiles in Fashion Domain" 5 IJERT 650 (2017) *available at*: <https://www.ijert.org/research/tie-dye-textiles-in-fashion-domain-IJERTV6IS050356.pdf> (last visited on June 30, 2024).

73 Application of Patan Patola, Application Number 232, in GI Journal Number 50, 2013, p.14, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/232> (last visited on June 30, 2024).

74 Application of Orissa Ikat, Application Number 22, in GI Journal Number 12, 2006, pp. 15-16, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/22> (last visited on June 30, 2024).

happened to Persian Gulf, Middle East, Aden, East Africa, Singapore, Burma and Myanmar.⁷⁵

Currently Patan Patola and Rajkot Patola from Gujarat; Orissa Ikat, Khandua Saree, and Sambalpuri Bandha from Odisha (Sambalpuri Bandha is already discussed); and Pochampally Ikat from Andhra Pradesh and Telia Rumal from Telangana is protected as GI in India. Following are some comparison among them.

Ikat of Gujarat – Patan Patola and Rajkot Patola:⁷⁶

- (i) Historical origin: Traditional Patan Patola is double Ikat, weaved by Selvi families, brought to Patan by King Kumarapal around 1175 AD. Rajkot Patola weaving started about 60 years before, these are single Ikat saree and dress material, weaving taught by one Selvi Patola weaver invited to Rajkot by Rashtriyashala.
- (ii) Process of making: Skeins of raw silk are opened and laid on a reel and wound on long-stemmed, umbrella-shaped hand reels (Partis). Approx. eight threads, (as per the design) are plied together by lightly twisting them and feeding them onto another hand reel (Dhora process). The 8-ply thread is dipped in a water trough, shaken and rewound in its wet state into hank. Degumming is done by soaking the hanks in boiling water mixed with soda ash and oily soap with coconut oil for 1 min and hung up for drying. Graphs with design are prepared, for body, pallu, and border. Warps (rectangular frame with pegs protruding) and wefts (horizontal wooden beam with vertical pegs) are prepared, then knots are tied on warps and wefts with exact measurement. Since the Patola designs have several colours, the warps and wefts must be resisted & dyed repeatedly. Yarns are partially wrapped and dyed for the first dyeing, then certain portions must be opened for the next dyeing. Dyed yarns are then used for weaving.
- (iii) Materials used: Raw silk for Patan Patola (Double Ikat) and Rajkot Patola (Single Ikat)

Ikat of Odisha – Orissa Ikat and Khandua saree:⁷⁷

- (i) Historical origin: Literature of Odisha proves that this art form is practiced in this state since 12th / 14th Century, though it is not clear the traditional weavers migrated in this geographical location from any other place.

75 Application of Telia Rumal, Application Number 599, in GI Journal Number 129, 2020, p.23, available at: <https://search.ipindia.gov.in/GIRPublic/Application/Details/599> (last visited on June 30, 2024).

76 Application of Patan Patola, Application Number 232, available at: <https://search.ipindia.gov.in/GIRPublic/Application/Details/232> (last visited on 30 June 2024). Application of Rajkot Patola, Application Number 380, available at: <https://search.ipindia.gov.in/GIRPublic/Application/Details/380> (last visited on June 30, 2024).

77 Application of Orissa Ikat, Application Number 22, available at: <https://search.ipindia.gov.in/GIRPublic/Application/Details/22> (last visited on June 30, 2024); Application of Khandua Saree, Application Number 136, available at: <https://search.ipindia.gov.in/GIRPublic/Application/Details/136> (last visited on June 30, 2024).

- (ii) Process of making: First step of making is the grouping of threads before they are tied and dyed, usually for making a design a group of 10 threads are grouped and repeated warp-wise, keeping uniform tension and specific length and width according to the design. Main part is tying the threads in proper position, which is done tightly and properly by leaf of Kewda; followed by dyeing, and the number of tying depends on the number of colours. Dyeing done lighter to deeper shades. Last step is the weaving using handloom and dyed yarns.
- (iii) Materials used: Orissa Ikat - Cotton or silk; Khandua saree & fabric – cotton, silk, tussar, or jute.

*Ikat of Telengana – Pochampally Ikat and Telia Rumal:*⁷⁸

- (i) Historical origin: History of Ikat in Andhra and Telangana is not far-fetched, it started somewhere in 19th Century, ‘Chirala’ ((a palce near Guntur) is the earliest known centre for Pochampally Ikat, and was famous for making ‘Telia Rumal’ or ‘Chowkas’ (meaning diamond within a square). Now Padmashali community is involved
- (ii) Process of making: Cotton yarns are divided in 10 bundles, and dipped in fresh sheep dung solution (having castor seed powder ash, water and Gingili oil) for 24 hours, then washed for 15 minutes, squeezed and sundried. This process is called ‘mordanting’, is repeated for 16 days, and it gives the oily nature to the fabric (the ‘Telia’ means ‘oily’). The yarn is then wound onto cones or cylinders in preparation for making the warp, and the rumals or other cloths are weaved by double Ikat technique. Similar process followed for Pochampally Ikat.
- (iii) Materials used: Cotton for Telia rumal. Cotton, or silk, or mixed for Pochampally Ikat.

Ikat from other countries

Ikat is practiced in many other Asian countries and other parts of the world, some of them are mentioned here: (i) *Ulos* cloth is made in North Sumatra of Indonesia by Ikat weaving technique, yarns are tied in some parts and then dyed, the tie used in making *Ulos* is called *Ikat Lungsi* technique, where binding process is being carried out on the warp yarns; the motifs are inspired by the local environment, such as whirlpool

78 Application of Pochampally Ikat, Application Number 4, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/4> (last visited on June 30, 2024); Application of Telia Rumal, Application Number 599, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/599> (last visited on June 30, 2024).

from the lake Toba, Kecombrang flowers, open coffee, and Gorga designs;⁷⁹ (ii) Weft Ikat silk tubeskirts are traditional outfit in Thailand, weft Ikat style textile is believed to be the symbols of Thai identity, it is promoted by Thailand Government as well as by Thai royal family;⁸⁰ (iii) In Japan, Ikat is called Kasuri, where threads are bundled and portions of the thread bundles are tied with the dye-resistant materials (tree bark/plastic tape) so that dye would not penetrate in the yarn, the edges of dyed and un-dyed part of the fabric remains blurred giving a ‘splashing’ effect to the fabric; some designs of kasuri include fine dot pattern or ‘mosquito kasuri’, different geometric patterns, and picture kasuri or e-gasuri (mostly by combination of warp and weft kasuri);⁸¹ (iv) Ikat weaving was traditionally practiced in Philippines, specifically in Mindanao and Borneo, Abaca ikat weaving is a specialization in Philippines, and from there Ikat is introduced in Mexico by following the trading route;⁸² (v) Ikat is known as ‘hol’ in Vietnam, and traditional Ikat skirts wore by Cambodian women are called ‘Sampot Hol’, Ikat fabrics are commonly used to make wall hangings for Pagodas and home furnishing;⁸³ (vi) Ikat was practiced in Yemen since 8th – 9th Century, it was mostly simple warp Ikat stripes made on cotton, and it was from Yemen that is claimed to introduce Ikat in Africa.⁸⁴

IV Carpet weaving, migration, and GI protection

Carpet weaving in Persia and Turkey

Carpet weaving is historically linked with the traditional Bedouin tribal people of Arabia, Persia and Anatolia, which was playing the central role in their nomadic life, used as tent, floor covering, wall curtains, blanket *etc.*; these carpets are linked with Turkish carpet and Persian carpet.⁸⁵ The earliest sample of hand-made carpet is recently discovered from the tomb of a Scythian Prince from Pazyryk in Altai

79 Jiniputri A.R. *et al*, Preservation of Traditional Ikat Ulos by Motif Design Development and Natural Dye Utilization in Muara District, North Tapanuli, (Atlantis Press, Advances in Social Science, Education and Humanities Research, 2021), *available at*: <http://creativecommons.org/licenses/by-nc/4.0/> (last visited on June 30, 2024).

80 McIntosh L., Thai Textiles: The Changing Roles of Ethnic Textiles in Thailand, Textile Society of America Symposium Proceedings 823 (2000), *available at*: <https://digitalcommons.unl.edu/tsaconf/823> (last visited on June 30, 2024).

81 Krauss J., Ikat, Kasuri and E-Gasuri Background and Technique, E-Gasuri, *available at*: <http://e-gasuri.com/exhibit/krauss-presentation.pdf> (last visited on June 30, 2024).

82 Yulo E.C., The Austronesian Origins of Tie-Dye (Ikat) Weaving, (AcademiaEdu, 2015), *available at*: https://www.academia.edu/es/64246710/THE_AUSTRONESIAN_ORIGINS_OF_TIE_DYE_IKAT_WEAVING_v_4_0 (last visited on June 30, 2024).

83 *Ibid.*

84 *Ibid.*

85 Saoud R., The Muslim Carpet and the Origin of Carpeting 2 (Foundation for Science Technology and Civilisation, 2004), *available at*: <https://muslimheritage.com/uploads/Carpet.pdf> (last visited on June 30, 2024).

Mountains in Southern Siberia, (dated back to 6th Century BC), this ‘Pazyryk carpet’ is Persian in origin, which is kept in Hermitage Museum in Leningrad, Russia.⁸⁶ Persian (Iranian) traditional carpet and rug is an internationally famous art, which is deeply influenced by the Islamic and Chinese styles and motifs. Islamic influence prohibited the use of human or animal figures and encouraged to produce simplistic designs.⁸⁷ One of the best examples is an Iranian Islam-influenced motif called Eslimi (arabesque motif), which is connected to the Parthian Kingdom (247 B.C.- 224 A.D.), and the Sassanid era (224-651 A.D.); which shows the use of spiral shapes representing infinite movement, that illustrates the order of nature and depicts the monotheistic thinking of Islam.⁸⁸

On the other hand, Chinese influence is obvious on the Persian art, because of the long relationship between China and Iran; Chinese artistic influence can be traced back to the reign of King Fereydon (mentioned by Ferdowsi in ‘*Shahnameh*’ in 977-1010 CE), who had sent his son to China and Tibet to study Buddhism; stronger influence happened during Mongol invasion in Iran in 13th Century followed by Ilkhanid and Timurid era.⁸⁹ Chinese style decorative motifs like dragon forms and floral ornaments, mainly the Lotus flower, were included in Iranian carpets; interestingly the lotus motif was originated as a decorative element in Egypt and Syria, then transported to India and from there traveled to China with the Buddhist religion.⁹⁰ Persian (Iranian) carpet use beautiful geometric patterns as the base of motifs and different types of floral designs are found on such geometric base, with use of bright colours [see Figure 6(b)].⁹¹ The geometric designs include star, octagon, triangle, rosettes etc, and these are organized around a large central medallion.⁹² Iranian carpets from 14 areas of Iran (carpet of Ardakan, Elam, Turkmen Jargalan ang Bojnoord, Kudish of Northern Khorasan, Char Mahal o Bakhtiyari, Sardrood of Estern Azarbaijan, Sistan o Baluchestan, Qashqai of Fars, Gabbeh of Fars, Lorestan, Mood

86 Article, “2500-year-old Iranian Carpet kept in Russia’s Hermitage Museum”, *Mena Carpet News*, 5(16), 2017), available at: <https://kohantextilejournal.com/wp-content/uploads/2021/08/Mena-Carpet-News-No.16.pdf> (last visited on June 30, 2024).

87 Islami, A. Ali, *Islamic Scout*, (Besat Boniad Publication, Tehran, 2005).

88 Razavi, H. Fazlolah and Azarpad Hassan, *Iran’s carpet*, (Tehran Institute for Humanities and Cultural Studies, Tehran, 2004).

89 Abouali L. and Kaner J., “The Evolution of Iranian Carpet Designs with the Influence of Islam and Chinese art; Ilkhanid, Timurid, Safavid” 3 *JHCAR* 3 (2020), available at: <https://www.researchgate.net/publication/340340298> (last visited on June 30, 2024).

90 Afrogh, M, *Semiology of Iranian carpet* (Mirdasht Publication, Tehran, 2014).

91 Abouali L. and Kaner J., *The Evolution of Iranian Carpet Designs with the Influence of Islam and Chinese art; Ilkhanid, Timurid, Safavid*, 3 *JHCAR* 4 (2020), available at: <https://www.researchgate.net/publication/340340298> (last visited on June 30, 2024).

92 Saoud R., *The Muslim Carpet and the Origin of Carpeting*, (Foundation for Science Technology and Civilisation, 2004, at 5), available at: <https://muslimheritage.com/uploads/Carpet.pdf> (last visited on June 30, 2024).

of Birjand, Quhistan, Varamin and Koliaie Sanqez of Kermanshah) was recently registered as GI by WIPO.⁹³

Turkish carpets can give some competition to Persian carpets for their popularity. Carpet and rug weaving is a traditional art-form in the Anatolian-Turkish culture; but Turkish carpets are generally produced by placing symmetrical knots, known as Turkish Knots or Ghiordes knots.⁹⁴ Oldest surviving Turkish carpet is from 5th Century and made by Turkish style double knot. The designs include geometric pattern (like Persian carpets) and twisting branches, leaves, and flowers such as tulips, carnations and hyacinths.⁹⁵

Carpet weaving in Tibet

The history of Tibetan carpet weaving is not very much documented until 19th centuries, but researchers believe that it is an ancient folk art practiced for ages in Tibet; it can be said that by 11 century this art was widespread in Tibet⁹⁶ and this art was highly influenced by the Chinese culture.⁹⁷ Later on during 20th century the Tibetan refugees brought this art-form to Nepal and some states of India like Dharamshala, Himachal Pradesh and Arunachal Pradesh.⁹⁸ Carpet manufacturing was one of the most important livelihood provision for Tibetan refugees, and this Tibetan exile carpet industry can be said to be one successful example of ‘rehabilitative commercialization.’ As far as known, Tibetan carpets are not yet registered as GI.⁹⁹

Tibetan Thangka is part of their religious belief and rituals, and thus the designs are thus chosen according to Buddhist symbols; on the other hand, the designs of the carpets are having geometric, floral, and spiral motifs, and unlike other carpets discussed earlier the central medallion is not usually found.

93 Article, “The Worldwide registration of handmade carpet of 14 areas in Iran” 5 *MCN* 16 (2017), available at: <https://kohantextilejournal.com/wp-content/uploads/2021/08/Mena-Carpet-News-No.16.pdf> (last visited on June 30, 2024).

94 Yousuf A., “Woven tale of Kashmiri and Turkish carpets”, Daily Sabah, Oct 2021, available at: https://www.dailysabah.com/arts/woven-tale-of-kashmiri-and-turkish-carpets/news?gallery_image=undefined#big (last visited on June 30, 2024).

95 Website Article, “Turkish Carpet Information Sheet”, Centre for South Asian and Middle Eastern Studies, University of Illinois at Urbana Campaign, available at: https://csames.illinois.edu/system/files/2020-12/Turkish_Carpet_Information_Sheet.pdf (last visited on June 30, 2024).

96 Meyers, D, Temple, “Household, Horseback: Rugs of the Tibetan Plateau”, Washington, DC: Textile Museum, 1984.

97 Denwood, P, *The Tibetan Carpet* (Aris and Phillips, Warminster, 1974).

98 McGuckin E., “Tibetan Carpets: Form of Folk Art to Global Community” 2 *JMC* 5 (1997), available at: <https://www.researchgate.net/publication/249632088> (last visited on June 30, 2024).

99 Cohen, E., “Authenticity and Commoditization in Tourism” 15 *ATR* 371 (1988).

Indian carpets: Hand-made carpets from Kashmir, Bhadohi, Gwalior, and Arunachal Pradesh

India has distinctive history of carpet weaving. Four of the hand-made carpets are currently coming under GI protection – hand-made carpets from Kashmir, Bhadohi, Gwalior, and Arunachal Pradesh. Following is comparison of origin and characteristics different Indian carpets.

*Hand-made Carpet from Kashmir:*¹⁰⁰

- (i) Historical origin: Carpet weavers from Persia came to Kashmir with famous Sufi Saint and scholar, Hazrat Mir Syed Ali Hamdani (1341 -1385 AD). Later on with patronage of Sultan of Kashmir Zain-ul-Abadin (15th Century) and Govenner Ahmed Beg Khan (17th Century) Kashmiri carpet industry flourished.
- (ii) Process of making: Hand-knotted carpets, usually four types of Knots are used – (i) Persian, Senneh or asymmetrical knot (ii) Turkish, Ghiordes or symmetrical knot, (iii) Jufti knot like first two but worked over 4 warps instead of 2, and (iv) Spanish or single-warp symmetrical knot.
- (iii) Materials used: Silk-on-silk, Silk and Cotton, Wool and Cotton and Silk, Wool and Cotton

*Hand-made Carpet from Bhadohi:*¹⁰¹

- (iv) Historical origin: The hand-knotted carpet weaving in Bhadohi Region was found to exist during Maurya, Gupta, and the Mughals, but it is flourished tremendously as Akbar brought carpet weavers to Agra.
- (v) Process of making: Hand-knotted carpets, Carpet weaving is done through a looping of the wool around cotton warp, after every row the thick weft tharri and thin weft lathi is passed. The looping/knotting is done by keeping the design in front or back of the loom.
- (vi) Materials used: Cotton, wool and silk.

*Hand-made Carpet from Gwalior:*¹⁰²

- (i) Historical origin: The history of carpet weaving in India dates to the 16th century (1580 AD), when Mughal Emperor Akbar brought some Persian carpet weavers to his palace in Agra. During the Mutiny of 1857 the carpet weavers fled from Agra, probably came to Gwalior to start carpet weaving there.

100 Application of Hand Made Carpet of Kashmir, Application No. 527, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/527> (last visited on June 30, 2024).

101 Application of Hand Made Carpet of Bhadohi, Application No. 148, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/148> (last visited on June 30, 2024).

102 Application of Hand Made Carpet of Gwalior, Application No. 708, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/708> (last visited on June 30, 2024).

- (ii) Process of making: The designs of Hand-knotted carpets are sketched on a graph paper by the craftsmen, with the help of a basic grid as the reference. Colors and shades are also detailed out on this paper. Weaver uses single knot, so it is very light weight and it can be folded easily.
- (iii) Materials used: Woolen based carpet: wool is used for Tana (warp) and Bana (weft); Cotton based carpet: cotton is warp and wool for weft; Silk carpet: cotton is warp and silk for weft.

*Hand-made Carpet from Arunachal Pradesh.*¹⁰³

- (i) Historical origin: This hand-knotted carpets are influenced by Tibetan Carpet. As per Buddhist literature, the art of carpet-making goes back to 500 BC. Among the North Eastern States, only Arunachal Pradesh has a long tradition of this craft. In Arunachal Pradesh Tibetan refugees started the carpet weaving.
- (ii) Process of making: Use unique traditional knots, in which rugs are woven by wrapping in continuous length of yarn over a rod laid across the wraps; after the rod is wrapped for its entire length a knife is slid along the rod cutting the wrapped yarn into two rows of pile tuft.
- (iii) Materials used: The basic raw material of carpet-making is wool, extracted both from the sheep (highland sheep's wool of Arunachal Pradesh called changpen) and the yak.

V Jamdani from India and Bangladesh: Division of India, Migration and GI Protection

History of Jamdani from Indian & Bangladesh: Dhakai Jamdani, Fulia Jamdani and Uppada Jamdani

Undivided Bengal had a rich heritage of handloom weaving, which was part of the cultural heritage of Bengal. Bengal weavers were famous for their soft, transparent cotton muslins for ages, and also for many other coarser varieties of traditional cotton and silk sarees, these are called Jamdani; Districts of Tangail and Dhaka of undivided Bengal was mainly famous of this art.¹⁰⁴ The word 'jamdani' originated

103 Application of Hand Made Carpet of Arunachal Pradesh, Application No. 848, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/848> (last visited on June 30, 2024).

104 Application for Fulia Jamdani Sarees, Application No. 892, FCR Reply Part 2 dated 20 Dec 2022 – Annexure VI in pp. 19-42 (Documentary Evidence for Historical Proof of the Origin of the Product), p.24, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/892> (last visited on June 30, 2024).

from the Persian word ‘Jama(e)’ which means ‘cloths’;¹⁰⁵ in other opinion the origin of the word ‘Jamdani’ is linked with Persian words ‘Jam’ means ‘flower’ and ‘dani’ means ‘vase’.¹⁰⁶ Different ancient and mediaeval literature has mention of reputation and grace of Muslin/Jamdani, like Kautilya’s Arthashastra (Book of Economy), writing of Arab geographer Sulaiman in the 9th Century, Moroccan traveler Ibn Batutta in the 14th century, some Chinese authors in the 15th Century, and Mughal imperial author Abul Fazl in the 16th Century highly praised the Muslin of Bangladesh.¹⁰⁷

After partition of India in 1947, Bengal divided into two parts, East Bengal or East Pakistan (now independent country Bangladesh) and West Bengal, a state of Indian Republic.¹⁰⁸ After partition, Dhaka continued the treasured art of ‘Muslin’/‘Jamdani’ weaving – famous as Dhakai Jamdani, which is declared as Intangible Cultural Heritage of Humanity of Bangladesh by the United Nations Educational, Scientific and Cultural Organization (UNESCO);¹⁰⁹ some weavers from East Bengal came to West Bengal and settled in Fulia region and continued the tradition of weaving Jamdani Sarees popular as Fulia Jamdani Saree.¹¹⁰ Dhakai Jamdani is a protected GI since Nov 2016 in Bangladesh¹¹¹ under the national GI legislation known as Geographical Indicative Products (Registration and Protection) Act 2013.¹¹² Fulia Jamdani saree is currently applied for GI in India in May 2022 and the application is in Pre-Examination phase now.¹¹³ In India another type of Jamdani is famous from the state of Andhra Pradesh, known as Uppada Jamdani, and this is a protected GI in India.¹¹⁴ It is believed that Uppada Jamdani is the traditional weaving technique for over 300 years, patroned by the Maharajas of Pithapuram, Venkatagiri & Bobili; initially Uppada Jamdani Sarees

105 Report, Protecting Bangladesh’s Geographical Indication Interests: The case of Jamdani, Centre for Policy Dialogue (CPD) and National Crafts Council of Bangladesh (NCCB), 2017, at 12, *available at*: https://cpd.org.bd/wp-content/uploads/2017/01/Protecting-Bangladesh%E2%80%99s-GI-Interests_The-Case-of-Jamdani-2014.pdf (last visited on June 30, 2024).

106 Rashid S., “Jamdani: The Traditional Art of Weaving” 5 RG 4 (2020), *available at*: <https://www.researchgate.net/publication/342882292> (last visited on June 30, 2024).

107 *Id.* at 19.

108 *Supra* note 106, at 24.

109 *Supra* note 107, at 4.

110 Application for Fulia Jamdani Sarees, Application No. 892, at 3, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/892> (last visited on June 30, 2024).

111 Zahur M., “Challenges for ‘Jamdani Saree’ and Bangladesh Ilish’ the two registered GI from Bangladesh in post-registration epoch” 8 WIPO-WTO Colloquium Papers 4 (2018), *available at*: https://cpd.org.bd/wp-content/uploads/2017/01/Protecting-Bangladesh%E2%80%99s-GI-Interests_The-Case-of-Jamdani-2014.pdf (last visited on June 30, 2024).

112 *Supra* note 107, at 4

113 *Supra* note 112, at 4

114 Application for Uppada Jamdani Sarees, Application No. 122, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/122> (last visited on June 30, 2024).

were prepared by using 100% gold and silver 'Jari' for the use of women of Royal families; but nowadays this kind of sarees are made by using 52% silver or gold and women from every strata of society used to use such sarees.¹¹⁵

Comparison between Jamdani GI in India and Bangladesh

*Dhakai Jamdani:*¹¹⁶

- (i) Historical origin: Dhakai Jamdani existed in Dhaka region of Bengal from time immemorial, but it was particularly flourished under Mughal rulers of India. Persian connection to Bengal was even before Mughal period, and it was mentioned by traveler Odorado Barbosa (1516-1521 AD) that Arab & Persian women used white cotton clothes with Jamdani design.
- (ii) Process of making: Rice starch (maarih) is prepared and mix with yarn, natai is prepared through chorki, and then dried. Processed yarn then goes through noli (prin) machine and tana. Two persons walk through 20 bamboo sticks with noli & yarns – process called tana hata. Shana is another important part of weaving which is used to produce high quality Jamdani.
- (iii) Materials used: Dhakai Jamdani usually prepared by using special quality cotton, collected from the local Bengal delta area. Specific soil ecology of siliceous and calcareous earth mixed with iron and location of rivers were responsible for the specific cotton quality. Dhakai Jamdani are very soft, delicate and light.

*Fulia Jamdani:*¹¹⁷

- (i) Historical origin: After partition of India in 1947, about 125 weavers family of Tangail Subdivision of Mymensingh district of East Bengal came to West Bengal and settled in Fulia region and continued the tradition of weaving Jamdani Sarees popular as Fulia Jamdani Saree. The co-operation of local weavers first formed in 1973 as 'Fulia Tangail Shari Bayan Silpa Samity'; later on with increased numbers of weavers three co-operative societies formed under West Bengal

115 Application for Uppada Jamdani Sarees, Application No. 122, GI Journal No. 27, at 63, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/122> (last visited on June 30, 2024).

116 Zahur M., "Challenges for 'Jamdani Saree' and Bangladesh Ilish' the two registered GI from Bangladesh in post-registration epoch" 8 WIPO-WTO Colloquium Papers 4 (2018), *available at*: https://cpd.org.bd/wp-content/uploads/2017/01/Protecting-Bangladesh%E2%80%99s-GI-Interests_The-Case-of-Jamdani-2014.pdf (last visited on 30 June 2024).; Report, Protecting Bangladesh's Geographical Indication Interests: The case of Jamdani, Centre for Policy Dialogue (CPD) & National Crafts Council of Bangladesh (NCCB), 2017, *available at*: https://cpd.org.bd/wp-content/uploads/2017/01/Protecting-Bangladesh%E2%80%99s-GI-Interests_The-Case-of-Jamdani-2014.pdf (last visited on June 30, 2024).

117 Application for Fulia Jamdani, Application No. 892, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/892> (last visited on June 30, 2024).

Co-operative Society Act with the help of State Handloom Department and Cooperative department in 1977.

- (ii) Process of making: Hand woven, sometimes selection of warp thread for insertion of extra-weft for getting extra-weft design is done. Before weaving the yarn is processed by pre-bleaching, bleaching, vat dyeing, and sun drying, yarn then bundled, and then bobbing and warping done, lastly denting and weaving of design is done by using handloom. Weavers use the pit looming process, and a fine needle-like spindle/shuttle to weave.
- (iii) Materials used: The basic fabric that is used for Fulia Jamdani sarees is unbleached cotton yarn and the design is woven with the use of bleached cotton yarns. This gives the cloth a dark-and-light effect. Fulia Jamdani also woven on silk, tussar, khadi/maslin, as well as on muga silk. This fabric is known for softness, lightness, and extra durability.

Uppada Jamdani.¹¹⁸

- (i) Historical origin: Uppada Jamdani weaving in south India dates back to the 17th Century AD with special patronage from kings of Chitrada Samasthanam whose capital was Pithapuram, and the kings of Venkatagiri & Bobili. Unfortunately, with the fall of the kingdom, this art-form led to a decline. In 1985, the Weavers' Service Center, Vijayawada conducted a training programme for the Uppada weavers in the Jamdhani style of weaving and since then the art has flourished again in this region.
- (ii) Process of making: Hand woven without using any mechanical device, such as doby or jacquard. Before production the degumming of silk and purification of cotton is a must. Silk or cotton yarn then twisted, air dried dyed in different colours, and air dried again. Warping and winding of yarn done, followed by weaving of the design.
- (iii) Materials used: Woven on cotton, silk, tussar, or mercerized cotton or combination of any two or more. Degummed silk and purified cotton Uppada are very soft in texture.

VI Analysis of findings

Findings of this research is analyzed and it shows that the importance of migration as the starting point of a specific art form in a specific geographical location is as important as its evolution of 'human factors' by the local artisans over time by changing many aspects of that art form, by which such art form gains its reputation linking itself with that specific geographical location, hence the goods become qualified to get GI protection. Following points are noted during the analysis:

118 Application for Uppada Jamdani, Application No. 122, *available at*: <https://search.ipindia.gov.in/GIRPublic/Application/Details/122> (last visited on June 30, 2024).

Migration of artisans from other places to India – many of our 18 Indian GI has their original artisans migrated from foreign countries or from one part of India to the other.

- (i) Indian Royal patronage – Original Patola weavers are Selvi families, brought to Patan by King Kumarapal around 1175 AD from Jalna, Mahasashtra, by defeating king of Jalna. Patronage of Sultan of Kashmir Zain-ul-Abadin (15th Century) and Governor Ahmed Beg Khan (17th Century) causes Kashmiri carpet industry to flourish. Regarding origin of carpet weaving in Uttar Pradesh (Bhadohi region) and Madhya Pradesh (Gwalior region) it is said that, Mughal Emperor Akbar brought some Persian carpet weavers to his palace in Agra in 16th century, they settled in different places in Uttar Pradesh and Madhya Pradesh initiating famous carpet industry in those places.
- (ii) Other influence – Bandhani artisans were migrated to western India (Kachchh region of Gujarat) by initiative of a Fakir from Sindh and that is the starting point of Bandhani in Gujarat & Rajasthan. Carpet weavers from Persia came to Kashmir with famous Sufi Saint and scholar, Hazrat Mir Syed Ali Hamdani (1341 -1385 AD).

Migration of artisans from one geographical location to other due to political turmoil

- (i) Bhulia comminty, the original artisans of Sambalpuri Bandha, fled from northern India to Odisha after fall of Chowhan dynasty, settled there and started famous Sambalpuri bandha ikat.
- (ii) Tibetan carpet weavers are forced to leave Tibet and they started carpet weaving in exile in India; and Tibetan exile carpet industry can be said to be one successful example of ‘rehabilitative commercialization.’ Applicant for Arunachal Pradesh Handmade Carpet GI is Choephelling Tibetan Service Cooperative Society Ltd, which is the association of Tibetan artisans settled in Choephelling Tibetan Settlement in Miao area of Changlang district of Arunachal Pradesh.
- (iii) Undivided Bengal had a rich heritage of handloom weaving, Dhakai (Dhaka was part of undivided Bengal) Jamdani is famous for ages. But after partition in 1947 some Jamdani weavers from East Bengal (Bangladesh) came to West Bengal and settled in Fulia region and continued the tradition of weaving Jamdani Sarees, popular as Fulia Jamdani Saree

Artisans not migrated but contributed to give the know-how / technology –

As in case of Shantiniketan batik, this technology came to Shantiniketan by the initiative of Kobiguru Rabinadrath Tagore, no artisans migrated in this case but Mr. Surendranath Kar had learnt the technique from local Javanese artisans, from whom his followers and other local artisans learnt the technology.

Internalisation of the art and development thereon

- (i) Innovation in technology – Indian Ikats are showing excellent innovation in traditional technology. Pre-treatment of raw silk (by Dhora process, preparing hank, degumming *etc.*) and preparation of warps and wefts with pegs make the Patola weaving very distinctive than other Ikats; similarly specified grouping of threads and tying them using Kewda leaf makes Orissa Ikat unique; and the ‘mordanting’ of yarns by using fresh sheep dung solution, having castor seed powder ash, and Gingili oil gives the specific dazzling look and oily odour to the Telia Ruml. In Jamdani Designs cannot be felt separately on the surface of the cloth, the design blends into the cloth; also, the design is clearly visible and distinguishable on the reverse side. Weavers of Handmade carpet of Gwalior uses single knot, which makes the carpet light weight and it can be folded easily.
- (ii) Innovation in overall design – Batik from Indonesia or Malaysia is multi-coloured but Ujjain Batik mostly having a single bright base colour and designs made in other single lighter colour (often white or crème) (See Figure 4). Shantiniketan Batik on the other hand used to be multi-coloured with predominance of bright colours like red, orange, yellow, brown, and black; the designs are sometime floral but the artistic floral designs and use of ‘kalka’ (a specific curvilinear motif used in different form by the artists of Kala Bhavan) made the designs of Shantiniketan batik distinctively different from floral designs of other batiks. Kashmiri Hand-knotted carpets are started by Persian artisans, but currently Kashmiri artisans use four types of Knots are used – (i) Persian, Senneh or asymmetrical knot (ii) Turkish, Ghiordes or symmetrical knot, (iii) Jufti knot like first two but worked over 4 warps instead of 2, and (iv) Spanish or single-warp symmetrical knots;
- (iii) Keeping traditional format but innovation in detailing of the design – Motifs of Gujarat Bandhani and Jodhpur Bhandhani are similar, designs are made by using ‘dots’ where the fabric is dyed; but tiny knots producing “*Bheendi*” (tiny dots in millions) and called “*Laheria*” (designs producing waves) are typical of Gujarat Bandhani, which makes it distinctive from Jodhpur Bandhani. Central Medallion and geometric formats (quadrangle, rectangle, circle, rhombus etc) are common in carpet designs, but Central Medallion is often missing in Tibetan and Gwalior carpets, even sometimes in Kashmiri carpets. Floral designs are very distinctive and unique when compared to each other in carpets of Kashmir, Dhadohi, Gwalior. Motifs of Indonesian and Malaysian batiks are highly influenced by Islamic culture and Arabic writing, floral and geometric designs are example of that, but newer designs include motifs taken from natural and cosmologic elements.
- (iv) Innovation in designs and connecting them with myth and mythology – original batik designs were abstract or geometrical, but many designs used in Ujjain and

Shantiniketan batik are inspired by myth and mythology, like stories of Vedas, Puranas, and Epics like Ramayana and Mahabharata, it includes human structures of Gods and Goddesses. Fulia jamdani has designs depicting stories of mythology and epics, also the human figures of gods. Designs of carpets of Arunachal Pradesh are influenced by Chinese and Tibetan myths and stories, like figure of an imaginary bird in flying pose; a pair of peacocks; or dragons facing each other.

- (v) Innovation in designs and connecting them with nature and environment – Geometric and floral designs are common in handicrafts, but incorporating designs from local nature and environment give uniqueness to Indian handicrafts, like animal motifs of parrot, elephant, flowers, baskets, etc are found in Patan patola; deuli (temple), shankha (conch), phulla (flower), machha (fish), lahari lata (creeper), ghagra, hansha (swan), Ghagara (long skirt) and letters (calligraphy) are unique for Orissa Ikat and Sambalpuri Bandha; twisting branches, leaves, and local flowers like tulip, carnation and hyacinth are seen in designs of Persian Carpet; diverse floral designs with influence of local flora and fauna is unique for Dhakai Jamdani, like fruit motifs of anjur and dalim, flower motifs like ganda, vegetable motifs like paan, motordana, and sabudana, animal motifs like Bagher paa (paw of tiger), kakra (crab), moyur (peacock), saap (snake), pona (small fish), and motifs influenced by regular items like shankha, and angti (ring); Ujjain batik use designs are inspired by environment, culture, history, and daily life activities – among them Bhairavgarhi Buta; Bohrani Buta; Ahmedabadi Buta; Dhوتي ka Buta; Laggad Bela; Gulli; Nareliya; Chowkari; Dhوتي ki Kinar; Kamalgatta; Bari Bela; Shahtut; Mendal; Chakari are common; Designs of chandrakala (moon), Shikari (hunter), Dungar Shahi (mountain), Laddu Jilebi (famous sweets) are common in Jodhpur Bandhej and Popat (parrot), Dholki (drum), Pankh (wing), and Chowmukh (four heads) are common in Gujarat Bandhani.
- (vi) Symbolism in designs, mixing tradition with current concept - Element of flower and geometric designs of batiks are influenced by Arabic writing, some decorative types are symbolic forms that come from natural and cosmologic symbols; thus, symbolic structure of the traditional batik of Malaysia and Indonesia is a combination of cultural, evaluative, cognitive, and expressive symbol. Carpets of Arunachal Pradesh use symbolic designs, like giant tiger (symbol of power and balanced mind) and swastika (symbol of eternal happiness). One special category of Sambalpuri Bandha is the ‘Saktapar’ (hard border) saree with chequer board pattern and brocaded border of ‘rudraksha’ bead design. For Jodhpur Bandhej, each season required a special colour of the turban and the veil; basanti (lemon yellow) for Vasant (spring) and Haryali Amawasia for the

rainy season (sage green and pink turbans); pink and saffron are auspicious colours for marriages in Rajasthan.

- (vii) Internalisation by accommodating religion and culture – Batik is the national icon of Indonesia, it is inherent part of cultural ceremonies like Royal ceremonies, marriage and pregnancy ceremonies etc. Malaysian traditional attire ‘batik sarong’ is a part of Malaysian culture. Bandhani cloths of Gujarat and Rajasthan are intimately linked with local culture, Bnadhani Pagadi (turban) is a symbol of pride and the colour combination and designs of the Pagadi cloths are different for different traditional communities; Bandhani Saree or Ghaghra-Choli are traditional dress for marriages and for religious rituals. Persian carpet is used in Mosques during mass prayer ceremonies; and Tibetan Thangka is part of their religious belief and rituals, and thus the designs are thus chosen according to Buddhist symbols. Orissa Ikat cloths are linked with the religious rituals, and used to be offered to Lord Jagannath; similarly, Telia Rumal is offered at Dargah by Muslims, used as veil by Princesses of Nizam of Hyderabad, used as a turban cloth by Arabs, and wore as a ‘lungi’ by fishermen of Coastal Andhra and Telangana during fishing to lure the fishes by the typical oily smell of the Rumal.
- (viii) Innovation in choosing the base material/fabric – Shantiniketan batik is famous for its application over leather. Wool fabrics are used for Gujarat Bandhani work to produce woolen lodki (women’s Veil cloth), which are used by the *Rabaris*. Jodhpur Bandhej is using chiffon, organeja, crape, Maslin fabrics other than traditional cotton and silk. Tassar and Jute fibers are used for preparing Orissa Ikat.
- (ix) Innovation in the range of products - Shantiniketan batik produces a range of leather goods like handbags, purses, wallets, folders, coin boxes, jewellery boxes, wrist watch straps etc. covered with batik design all over them. Varied range of products are made by Gujarat and Jodhpur Bandhani artisans like saree, dress materials, veil, dupatta, shawl, and most importantly the cloth for head gear or turban (called ‘Pagadi’). Patan Patola artisans made bed cover, table cover, dupattas, handkerchiefs, lace, etc other than sarees and dress materials.

VII Conclusion

Aim of this research was to study GI goods to find the importance of characteristics and reputation in relation to respective geographical location, keeping in mind the fact that the artisans or the knowhow has migrated from elsewhere, but over certain time period the impact of local resonance prevails and give its typical characteristic as well as reputation which is linked now with the current geographical location. 18 Indian GI goods (either already protected or applied for protection) are inspected very closely in this research; for all of them the art forms or artisans are migrated

from different geographic locations. Many times, source is known, but in few cases the sources are un-known, but historical evidence was not found beyond a certain period, hence, it can be concluded that the artisans are migrated but there is lack of proof to establish that.

GI as analysed in above is a unique type of intellectual property protection given based on certain quality, reputation or other characteristic of the good is essentially attributable to its geographical origin. It is also shown in that section that human factors are as important as natural factors, mainly in case of handicrafts. There are multiple reasons behind the migration of artisans or the technological know-how from one place to the other, which is obviously important as that is the starting point of certain specific art form producing specific GI goods. But after migration, the artisans blended themselves with the local people, social / cultural / religious / ritualistic beliefs and practices inevitably inspire them due to continuous interaction with the local communities. Ultimately, over time, though basics of the knowhow and design may remain unaltered but certain detailed features of technical, procedural, and design aspects gets transformed to give rise a newer variety of goods from the current geographical location with specific characteristics and reputation. Again, over time, people identify such goods with such specific characteristics and reputation from current geographical location; and history of migration used to get forgotten. This research concludes with this opinion that, impact of migration, most of the times, is as important as the local resonance and contribution, for production of specific characteristics and reputation linked with a specific geographical location, for which the goods get protected under GI regime.

This research's focus is GI related to handicraft goods. GI, by terminology connected with geographical origin. The uniqueness and sanctity of GI based on Geographical Origin. So, the goods are not only the pride for that geographical area but also part and parcel of culture. In the case of handicraft, in true sense, geographic origin is a bit questionable. Previously this research already discussed different factors for migration and how migration influences today's different handicraft. Due to migration, assimilation of culture and dissemination of knowledge has taken a current presentation of GI and it happens with the time. Some know-how, design is still similar to true origin but local resonance has given a new identity to these handicraft goods. As the concluding remark, it can be said that human factor and reputation is the main factor for Handicraft GI and that reputation is now associated with specific geographical location, may be that location in true sense not the origin. That is why, Handicraft GI is having another layer of uniqueness.