

Geographical Indicator Product of Bangladesh, Jamdani: Possibilities of Community Development for the Weavers of Traditional Cottage Handloom Industry

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Abstract

In Bangladesh, where pre-industrial traditions are still active ‘folk arts or crafts’, but artisans belong to socially and economically marginalized households, as in the lower caste system. Traditionally, they contribute their knowledge of local materials. Their visual and tactile connections to cultural identities and integrity among communities had been profound. Jamdani have been successful in acquiring a Geographical Indicator (GI) Certification but facing threat from the spurious garments production of nearby Narayanganj, the backbone of the country’s economy; RMG. Though, there is a large demand of Jamdani clothes and fabrics for their distinct style only in the fashion houses and boutique shops, they are falling behind for their low rate of production, low wage earning and lack of skilled workers.

Method: The methodology of study will follow an extensive sociological field survey and by explaining proper number of cases, their need and opportunities found in reality and compare it with the facts inscribed in literature review of previous scholars.

Possible findings: This study will focus and derive some propositions for community development and suggest some solutions: introduce automatic or semi-automatic loom, provide training to the weavers and ease the institutional marketing policy. Therefore, an incorporated Jamdani handloom development to implement handloom marketing-documentation is needed to engage with local communities for developing creative solutions and sustainability in local economies. Tangible and intangible resources must be addressed holistically, treated with due respect and carefully unveiled as cultural assets to prevent its extinction.

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1. Introduction

The word Jama (e) in Persian means ‘clothes’ and Jamedan means ‘closet’ or ‘wardrobe,’ while Jamdani in Bengali directly refers to sharee. Some scholars think that the word also means ‘wine cups’ which are very delicate and is comparable to the delicate texture of Muslin. Jamdani is a beautiful revelation of artistic talents of Bangladesh. The Jamdani weavers are cloth producers by inherent because what they are designing the configurations today, once those were created over in muslins by handloom (Ghosh and Akter, 2005: 1-12). The design evidence of Jamdani and Muslin could be referred as cousins. In Persian language means a closet or wardrobe. In the textile history of Bangladesh Jamdani generally refers to the shari, the most popular clothing of Bengali women. Here are the three authoritative definitions of Jamdani from scholars;

1. A kind of cloth in which the flowers are woven and not worked generally Muslin (Hunter, 1808: 539).
2. A Dacca Muslin woven with figures of flowers and other ornaments, (Knight, 1881: 120).
3. A type of brocaded Dacca Muslin, usually flowered decoration (Cannon et al. 2001: 150).

Beyond the definition of Jamdani that highlights flower, there are other intricate issues for understanding its specialty. The patterns are generally geometric and designs can contain items other than flowers, such as plants and living species like fish (Gillow and Barnard, 2008: 186). The range and varieties of Jamdani are quite extensive and numerous, but there seems to be three basic layouts: Jaal, the most intricate, is an all-over design covering the entire ground; Terchi, denotes floral or geometric diagonal; and Buti is a combination of individual floral motifs and springs scattered across the fabric (Ghuznavi, 2006: 47). “*The Jamdani or loom-figured muslins, from the exquisite delicacy of manipulation which many of them display, may be considered the chef-d’oeuvre of the Indian weaver. Their complicated designs have always constituted the most expensive productions of the Dacca loom*” (Watson, 1866: 79). It seems that in terms of design, Jamdani was not a static weaving practice. Over times the floral designs gave way to a diverse pool of designs, focusing on local flowers and plants, signifying local orientation (Ghuznavi, 2006: 48) (Figure 1). Designs are drawn from the natural environment of Dhaka in particular.



Fig 1 Typical floral Jamdani pattern (Source: Author)

Following is a list that reflects this enormous diversity of designs used by the Jamdani weavers (Sayeedur, 1993). The patterns are inspired from folk motifs and shown below: (Table. 1) (Jahan,

2013: 33-38). (Figures 2, 3)

Table 1 Surviving patterns of Jamdani (Jahan, 2013: 35)

Pattern (Bangla Name)	Meaning in English
Angti	Ring
Angur	Grapes
Baghnoli	Tiger claws or paws
Beli	Jasmine
Dalim	Pomegranate
Dubla	Tender grass
Ganda	Marigold
Golap	Rose
Kalmilata	creeper
Kakra	Crab
Kochu	Arum
Kola	Banana
Korola	Bitter goard
Moyur	Peacock
Motordana	Peas
Paan pata	Betel leaf
Pona	Small fish
Sabudana	Barley
Shankha	Conch Shell
Shap	Snake

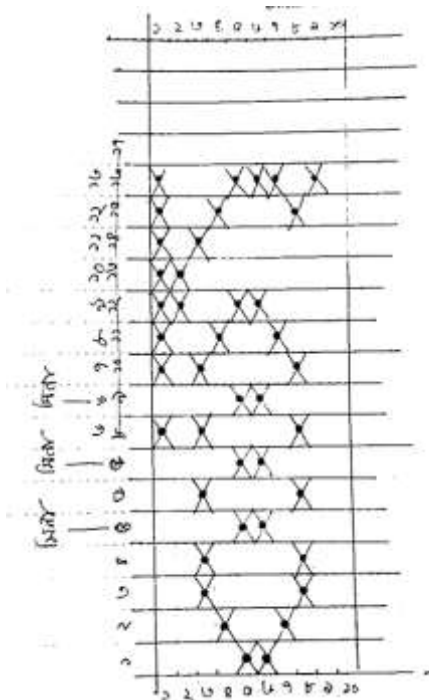


Fig 2 Plot for weaving a Jamdani pattern, on 10X,13Y grid (Source: Omar Faruque)

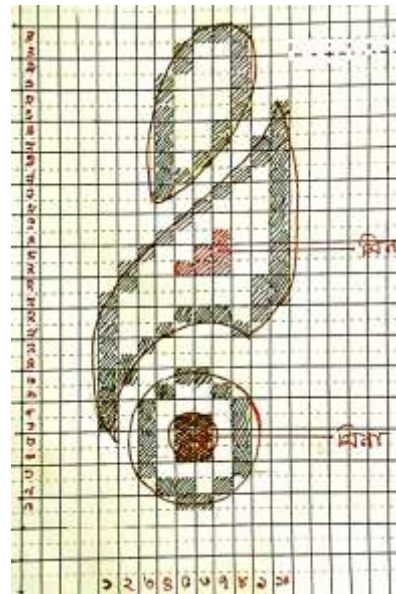


Fig 3 Plot for weaving a Jamdani pattern, on 10X,16Y or 32 numbers of ½ Y grid (Source: Omar Faruque)

Nearly 40 equipment are used for making a Jamdani piece, some notable equipment are: Taant (Loom), dokti (sley), Maal dori (rope), Maku (shuttle), Chakku (scissor), Noksha (Design Bobbin),

Chata (Bamboo Stick), Tolpao (paddle), Biter Bhaar (Weight), Shana (yarn holder), Muni (yarn tighter), Nachni dori (dancing rope), Narod (beam and yarn holder) (CPD, 2014). The Jamdani making process comprises a few layers of different professional expertise. Some of these are involved with preparatory phase and some with weavers; the division of labor is done in 7 steps: (Table 2) (Figures 4-12).

Table 2 Steps of Jamdani

Step 1	Coloring of Yarns
Step 2	Pari, The yarns are mixed with the rice starch (sizing process), and set in the wheel
Step 3	Tana Hata (Warping)
Step 4	Shana Gatha (Denting)
Step 5	Tanani (Beaming)
Step 6	Ba Gathani (Drafting)
Step 7	Paya Fela (To set up the loom for preparing Jamdani)



Fig 4 Chakku, equipment for weaving



Fig 5 Spinning wheel



Fig 6 Chata (Bamboo stick) in Jamdani handloom



Fig 7 Paya fela, the feet technique of handloom



Fig 8 Muni, yarn tighter in the loom



Fig 9 Tana Hata (Warping)



Fig 10 Dyeing and coloring of cotton



Fig 11 Tanani (Beaming)



Fig 12 Ba Gathani (Drafting)

In contemporary lifestyle we find them in the form of saris with a great variety of patterns donned with geometrical motifs designed on simple frame or pit looms. During the weaving process a paper pattern is kept beneath which acts as a trace to set up the design onto the sari. Generally two weavers weave together for a single Jamdani sari (Craft Artisans, 2017).

2. Background

Bengal had an old reputation for cotton textile production the center being at Dacca. Later, it also reached a place of prominence through their dexterity in the weaving of finer cotton textile. In his book 'Arthasastra' Kautilya mentioned that Bengal was very famous for weaving industry. During 73 BC Pliny also praised highly about the silky elegance and finesse of the muslin clothes (Mallick, 1986: 361). He wrote: "The muslins of Dacca were known to the Greeks under the name of Gangetika. Thus it may be safely concluded that in India subcontinent arts of cotton spinning and cotton weaving were in a high state of proficiency two thousand years ago while cotton weaving was only about to get introduced in England during the seventeenth century" (Laha, 1925: 98). In 1496 AD Poet Bipradas from Orissa state, in today's India had praised highly in his composition 'Mansamangal', that then cotton textile woven in Bengal. He mentioned the name of Saptagram. In Sixteenth Century several European traders used to visit Saptagram with loads of items in their ships and exchanged them for cotton clothes and several other products from Bengal (Figure 13) (Basumati, 1925: 836). Therefore in the Bengal civilization during the ancient and Middle Ages, weaving industry had influenced so much that its eminence over other trade practices was unquestionable. It also got a place in Victorian Albert Museum of London and Guimet Museum in Paris. Jamdani was produced in two out of eight Aarongs of the then Dhaka (Dr. Hameeda, 2018).



Fig 13 Carpus cotton 1828, Calcutta (Source: www.drikgalleryblog.com)

3. Ethnical Group

The passage of time has brought about a change in the weaves, patterns and designs but the importance of handloom community still remains the same. There was hardly a village where weavers do not exist weaving out the traditional beauty of the region in the past. The skills and

activities are kept alive through generation after generation. They are the class named 'Basak'. They are basically from labor caste known as Kayastha. This is a non-uniform functional group of Hindus, considered to be members of the scribe caste, and have traditionally acted as craft trade (Arnold et al. 2011: 403–404). Bengal weavers were divided into different classes like Ashwina or original weaver, who are again divided into five classes Bardhamani, Barnakul, Modhyokul, Madaran, Uttorkul. Banga all of them lived in East Bengal, today's Bangladesh. It is well known by Basak weavers that belongs to the Balarami caste are the best. 20 miles north to Dacca city is Dhamradhu where there was a settlement of about 250 Banga weavers. The weavers at Dacca are divided into two sectors; Boro Bhagia or Jhapania and Choto Bhagia or Kayet weaver. Another group was found in Dacca named Mogi (Sodhganga, 2017). Blended with myths, faiths, symbols and artistic imagination, the cloth created appealed dynamism to its fabric. The Jamdani reflect the rustic culture of crafting villages while the embroidery pattern exhibits the creativity of those ancient artisans. Through the fulcrum of beliefs, skills and aspirations tends to stream creation, production, transaction and fulfillment, they are still bearing a legacy.

4. Problem Statement and Research Rationale

This study is going to be organized as inter-disciplinary approach to addressing the issues of livelihood, regional cohesion, social welfare, local economy, sustainable management and traditional craft skills, and to design creative ways to generate economic opportunities. The relevant outcomes and appropriate approaches developed out of this research could even serve to develop internationally applicable models, policies and approaches to sustainable management of heritage based community. In order to succeed, three critical elements that underwrite proper functioning of any traditional craft need to be adapted: Artistic, Scientific and Economic sustainability. Heritage-linked creative economies are self-sustaining because it's strategic asset for national culture. It also strengthens local distinctiveness, supports employment for local generations and contributes to national GDP.

4.1. Craft Value

The creative class, weaver is a very capacious grouping of many different kinds of professional, managerial and traditional workers. If nourished, it can substitute income generation, create job opportunity and export wages while promoting social inclusion, cultural multiplicity and human development. Culturally, the artisan sector has in the past seen its peak of sophistication, as for instance the Dhakai Muslin, was acquired through generations of masterly craft practices and became hallmarks of the world class quality. Jamdani could be an opportunity for Bangladesh to gain that pride again.

4.2. Economic Value

Despite all odds, and compared to 1,600 Jamdani weaver families in the year 2000, the number increased around 15,000 including 3,000 families in 2013 with 15,500 weaving units and it is estimated that about 2,000 pieces of Jamdani saris are being produced per week. The price of saris ranges between Tk. 5,000-40,000 while specially made saris may cost maximum Tk. 150,000. In the fiscal year 2010-11, Bangladesh's leading Jamdani export market was India which was worth of USD 6.12 million against USD 1.49 million of fiscal year 2008-09 (Suman, 2013). The total export of Jamdani saris to subcontinent, Europe, Middle East and North America jumped from USD 4.84 million in 2008-09 to USD 10.41 million in 2010-11. The total spot order in Dhaka trade fair in

2011 alone was worth of Tk. 120 million (Financial express, 2012). Today, about 40 percent of the internal demand for textiles is supplied by the various handloom productions including Jamdani industry. (Ahmad, 2012) Since almost 100% of various types of hand loom units including Jamdani are situated in Demra, Narayanganj, Narshingdi, Shahzadpur, Pabna and Tangail (Chaiti et al. 2013: 3) and the competition in these industries are comparatively low and it contributes more than 10 billion taka (Ojonika, 2017) annually to the national exchequer as value addition. These six places cater to the needs of the entire country and also West Bengal of India. That is, compared to the demand for the products, the numbers of suppliers are very few and almost all of them get a good trade during the festivals. But there is some competition among these six places as customers perceive quality of products on the basis of region. For example, products from Shahzadpur or Tangail, Demra, Narayanganj are perceived to be superior to the products than other places (Figure 14).



Fig 14 Expensive Jamdani Sari in shopping mall, Dhaka (source: Dhaka international trade fair 2011)

5. Research Question

As for the societal aspect, the industry is not harming the natural environment as it is a manual industry with less use of chemical lubricants. On the other hand, Garments Entrepreneurs are careless about the waste disposal system which ultimately contaminating environment, which is the vital part of this research's rationale. The development of Hand loom industry has made a big impact on the rural societies from remote past and how it is still sustaining only in this region, not anywhere else is a subject to be investigated. Places like Demra and Modonpur were historically commercial nucleuses of such trade. For example, in Demra, many adjacent businesses have already developed by highlighting the Jamdani Hand loom industry. Unemployment could be reduced to a great extent which was previously a great social problem and also now sustaining in this region. This curse gave birth to a number of anti-social circumstances like hijack, loot, robbery, rape etc. in this area and generated evil impression on the society in last two decades. If most people can easily get jobs and earn money with dignity, the popularity of craft based vocational education and literacy rate might bloom in this weaver community. Proper government regulations are still absent for weaver community and revival of Jamdani tradition. Comparison between today's garments sector will clarify how decisions would be made for future survival.

5.1. Objectives

Based on the analysis of traditional crafting practice with their historical values this study is an evaluation of weaving tradition and community context of Bangladesh and the study has five main objectives to ascertain these:

1. The primary focus of the study is to define the effects of craft based livelihood on rural lifestyle as well as the creative inheritance and the environmental quality which responsible for weaving only in this area by utilizing landscape resources according to local plantation and climatic factors.
2. To ascertain the causes of existing ineffective and struggling practice of traditional values and how they deteriorating surrounding environment by creating hinders day by day.
3. To investigate the possible options to introduce modern technics to preserve the geographical indicator product of Bangladesh.
4. To provide some recommendations for concerned authorities to ensure better integration for Jamdani weaver community, and supporting handloom practice for sustainability and enhancing intangible values.
5. To make the people conscious about Jamdani as thousand years' pastoral practice along with modern day demands and enhance acceptability to local and international users with proper advertising.

5.2. Scope

This study is emphasized on the synthesis of symbolic patterns, aesthetics and weavers' crafting practice from different parts of Bangladesh regardless of any timeline. Common issues of trade based community; social and cultural aspects which shaped the common plot of traditional practice and heritage were highlighted. Besides, how regional microclimate influenced the practice of weaving, indigenous materials and how weaving technology was implemented- were also discussed. Economic effect of production and trading pattern has also been analyzed. The research scope was based on three broad approaches:

1. To establish a Theoretical framework for analysis (based on literature review)
2. Deriving results from Empirical basis (based on analysis of the study)
3. Extensive survey is done based on this study which can eventually guide to generate some sustainable principles to modernize the weaving practices without doing any harm to Jamdani's original aesthetics and usage.

5.3. Limitations

1. The trending trades and income level in any particular economic aspects was identified under broad category, detailing of individual status was ignored in the study due to limitation of time.
2. Only the selected important segment of weaving village was taken into consideration, other potential areas were excluded from the study.
3. Only the simple tools and portable equipment for quantitative survey analysis was introduced. More contemporary survey tools will give exact situation for the explanation.
4. Different time of the different seasons might give us more précised overview. For example, this survey was only conducted in winter time, could be prioritized if conducted in the festival times like Bangla New Year, Durga puja and two Eid holidays.

6. Methodology

To document the geographical indicator features of the weaving of Jamdani at Demra, this research was conducted between September-December 2017. Data was collected through focused group discussions, one-to-one interviews and informal discussions with photographs that portray the whole production process and techniques: from pre-production preparation, designing to marketing, etc. At the same time, a general perception on the socioeconomic condition of weaving industry was assembled from the study through profound surveillance. The study methodology consists of the following four steps:

Step 1: Selection of the study and survey area.	The study focuses and appreciates the Jamdani craft practice founded in Demra, one of the closest districts of capital city Dhaka which tends to stretch toward its direction. The selected distinct part of village Demra is still known as the core rural area while the surroundings are on an advance phase of that rapid urbanization. Survey sites were Demra and Noapara Jamdani wholesale market where concentration over a field survey carried out for documentation of production and existing structures. Physical features of built form and the determinants which shaped the form-space as influential factors were also assessed to know their possible threats.
Step 2: Data Collection In this research, user involvement tool is incorporated with data collection as participating users at a prearranged context should be the main source of information. (Groat, 2001). The process includes two steps.	<p>a) User perception investigation: Total 7 industries were surveyed during this research period. Users were interviewed with some simple questionnaire and equipment. The survey included questions dealing with family history, occupational information, legal issues of ownership, business pattern, climatic adverseness, and sociological aspects and other issues related with craft based community. The collected data from oral survey were accumulated to have a brief understanding of the prevailing context why this specific Jamdani style emerged and still contextual.</p> <p>b) Literature study For the lack of scholarly apparatuses, literature survey did played an effective role in this research. Some legal documents were collected to know the weaving data and information provided by scholars of previous studies were followed for recording the analysis.</p>
Step 3: Analysis	All the available data from the survey were meticulously analyzed to make this study, which documented and revealed this particular heritage from a view point of the intangible value.
Step 4: Deriving results, identifying challenges, suggestions and recommendations	Will construct the concluding remarks of the study

7. Literature Review

7.1. History of Jamdani Craft

Jamdani weavers have a genuine sagacity, superior knowledge of fabric which has driven them since centuries to intertwine and that's why this tradition is still in practice today. Historically, an entire social class was entirely dedicated for this and the level of artistry and intricacy achieved by Bengal's ancient Muslin and Jamdani fabrics are unparalleled and unique. Such cultural heritage found only in this region of the world, bestowed with such natural blessings. It's a craft of the finest possible weaving in human history and it possesses a huge part of our indigenous culture. These weavers' skills evolved over thousands of years and Jamdani was such valuable fabric of consumption that attracted international trade via maritime Silk Road in the past. The parameters and related variables for the evolution of weaving craft are structured in sequence listed below.

This study might identify Jamdani broadly as 'folk arts or crafts', exists in abundance. This is not going to be categorized as non-professional activity. Some professions satisfy the needs of the larger community, practiced by artisans of various denominations – potters, metal-smiths, leather workers, basket and bamboo workers, tailors, wood-workers, weavers. They work within an in-social communication nexus, refer to the artisans manufacture of utilitarian items, an interdependent network of activities that provide functions and services within local communities with its limited vocabularies and skill-demands, but with a remarkable breadth of sensibility and imagery and also regional and other variation. Some of the products find ways to the larger markets through the intervention of intermediaries. The subject of cottage industry of Jamdani lies in this background. They belong to socially and economically marginalized households, as in the caste system, 'lower' and 'out' castes were assigned the responsibility of essential manufactures, functions and services for the community and named the class of Bosak, means who ties the knot. For thousand years it was a critical and essential element for the village economy and its self-sufficiency.

When the number of artisans grew, in larger size of social grouping they established a neighborhood of their own which is very significant. Their visual and tactile connections with the land and with cultural ideas and identities help to define a sense of people and the place. Such artisan sector has in the past seen its enlightenment and peak of sophistication, as for instance the Dhaka Muslin (Banu and Reza, 2015). This was acquired through generations of masterly craft practices, which have become hallmarks of quality and superiority in handmade items. There was millions of Muslin artisans produced functional goods, which are related to the local life, tradition and culture but unfortunately extinct now as like its cotton (Tushar, 2006: 1-2).

Most importantly, a society in which folk arts are alive is a more colorful and creative society than one in which art activity is confined to a privileged few (Subramanyan, 1987: 57). Question is how far Jamdani reached? One example is Pocahontas, also known as Rebecca Rolfe (1595-1617), a female Native American from Virginia who was a negotiator with the English settlers. As one Rev. Whittaker narrates about an English delegates' meeting with Pocahontas, "He was dressed in a simple tunic of white muslin from the looms of Dacca" (Lossing, 1902: 99). As late as early 19th century, at a time when textile trade was at its lowest ebb in Dhaka, Muslins were still being used in Arabia's major cities like Jeddah and Makkah, even Iraq and parts of Mediterranean coastal countries. Earlier Dhaka Muslin had a monopoly in various trading zones of Asia, Europe and North Africa (Karim, 1965: 130). It may also be noted that the last influential Mughal Emperor Aurangzeb, was fond of Jamdani, for which he offered Rupees 250 per piece (Taylor, 1851: 48). The Greeks also used these finest cotton clothes from Bengal (Gilroy, 1845: 334). Kautilya's

Arthashastra (Book of Economy) mentioned the fine cotton clothes of Eastern Bengal were the best. It is also suggested that during the time of Ptolemy textile products of this region had a good reputation in Roman Empire and ancient Egypt. Arab geographer Sulaiman from 9th century, Moroccan world traveler Ibn Batutta of the 14th century, some Chinese authors of the 15th century, and Mughal imperial author Abul Fazl of the 16th century highly praised the Muslin of Bangladesh (Karim, 1965: 3-5). (Figure 15, 16)



Fig 15 Mughal princes wearing muslin, 1665
(source: Berlin Museum Island)



Fig 16 Maria Antoinette wearing muslin in 18th century (source: Wikipedia)

It is also evident in the writings of explorer Tome Pires, who was in India around 1510 AD described that people of Bengal who were very efficacious wholesalers and a large number of Middle Eastern wholesalers like Persians, Turks and Arabs established trade in the entire region (Peres, 2005: 88). Among them, merchants from Armenia lived in Dhaka for clothing trade and were very powerful landlords (Figure 17). But in the map of year 1735, one British cotton sweatshop was shown on Dhaka's Buriganga river shore area probably to strive with the traditional craft (Atiqullah and Khan, 1965: 6). This European business made the prestigious muslin craft vanished, as their cruelty is still evident in this region. For information, Dhaka municipality's almanac export of cotton goods and chattels during the 18th century through the British East India Company alone amounted nearly 30, 00,000 Indian Rupees. Again, Great Exhibition displayed Jamdani Scarfs in London in 1862; which means the value of this craft already reached to the rest of the world by greater waterway navigation (Iqbal, 2014: 19). The river system of the Delta greatly facilitated the supply of raw cotton, distribution and marketing of finished products. All the markets (called Aarongs) were, therefore, on the river banks (Allen, 1912: 7; Hossain, 2010: 141-144).

7.2. Geographical Indicator (GI) Concept

Cotton production was abundant in agricultural field around the zone between the Old Brahmaputra and Meghna Rivers. Here the earth is loamy and comprehends maximum moisture and warmth (Talukdar, 1987: 57). European voyagers advocated that the cotton produced naturally was of a superior sort and its fiber was called Desi (Hunter, 1877: 84). So, it's clear that river Shitolakhya and its geo-climatic settings with perfect environment confirmed Jamdani production only here which is not possible in any other province of India subcontinent (Ahmed, 2017: 48). Steps of weaving which were reliant on the veracious level of humidity and moisture, otherwise lack of humidity could be a cause of warp breakage, thus Jamdani was only possible to produce and maintain in this region (Basu, 1955: 75).

The definition of GI could be understood better by Section 2.9 of the Geographical Indications of Goods (Registration and Protection) Act, 2013 (hereinafter GI Act) runs as: "Geographical indication of goods means an indication of agricultural or natural or manufactured goods which identifies its originating country or territory, or a region or locality of that country or territory, where a given quality, reputation or other characteristic of the goods is essentially attributable to its geographical origin and in case where such goods are manufactured goods, one of the activities of either production or processing or preparation of the goods concerned conceivably takes place in such territory, region or locality."

Any GI should have three qualifications:

- Special characteristics or reputation attributable to its origin
- Territoriality (town, region or country)
- Traceability as scientifically proven (Islam and Habib, 2013: 66).

For information, World Intellectual Property Organization (WIPO) defines a Geographical Indication (GI) as "A sign used on goods that have a specific geographical origin and possess qualities, reputation or characteristics that are essentially attributable to that place of origin." Currently, there are at least 111 countries where GIs are recognized as a separate type of intellectual property with 'sui generis' protection act of GIs. Those are mainly agricultural products, which typically have qualities that are influenced by specific local geographical factors such as climate and soil. However, GIs are being increasingly used for natural or manufactured products such as handicrafts. GIs also serve as a tool to preserve heritage, traditional knowledge, cultural and artistic expressions. Social benefit, certain characteristics are the requirements to preserve the certification of GI goods (Bhattacharya, 2014: 3-6). However, one of the first GI systems is the one used in France from the early part of the 20th century known as- Appellation d'origine Contrôlée (AOC). World Trade Organization (WTO) first included Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement under the multilateral international framework of trade dealing with the protection of GIs in 1995. Based on the agreement, different countries were given direction to prepare their own national laws based on that.

Paris Convention for the Protection of Industrial Property, (revised at Stockholm on July 14, 1967, 21 UST 1583, 828 UNTS 305 and enforced on 26 April 1970) where article 1(2) states: "The protection of industrial property has as its object patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source or appellation of origin, and the repression of unfair competition". Later, article 2(1) of the Lisbon Agreement clarified "appellation of origin" that means the geographical denomination of a country, region, or locality, which serves to designate a product originating therein, its quality. Article 3 of this agreement contemplates wide protection for appellation of origin enumerating that "protection shall be ensured against any

usurpation or imitation, even if the true origin of the product is indicated or if the appellation is used in translated form or accompanied by terms such as “kind,” “type,” “make,” “imitation”, or the like” (Islam and Habib, 2013: 52-54).

Geographical Consideration: Jamdani has to be a unique name whose geographical location indicator must be Dhaka. In other words, Dhaka and Jamdani are synonymous. Greater Dhaka region was the earliest and sole site of Jamdani production; so Jamdani is automatically entitled to GI tag of Dhaka and does not need an additional description. Dhaka had many physical reincarnations in different historical periods, and we are not sure if Jamdani existed at a time when this region was yet to be named Dhaka. The origin of Jamdani could be traced back to the craftsmanship of Bengali mercantile community of the world renowned Sonargaon riverport in the 15th century (Iqbal, 2011: 38). The climate of Demra region is another justifying factor. Tropical monsoon with predominantly hot and humid summer and a relatively cold winter is perfect for Jamdani production. Topography of the land is characterized as plane land. Silt mixed black and greyish soil is noticed in the site because of the layered comprising of adjacent river delta (Figure 18). PH-value of the soil is 5.6 to 6.5 which proved perfect for Jamdani washing and dying (Hoque, 1984: 34). The region is within the monsoon climate zone, with annual average highest temperatures of 23⁰ C from August to October, peak time for cultivating cottons (Dhakaweather, 2017). All above evidences suggests that Dhaka region was, and still is, it's only true center of production and will be in future as well.



Fig 18 Jamdani production is only possible for the presence of Shitalakshya River

Legal Consideration: To register Jamdani as a heritage product, it should be legalized from at least two vantage points. Firstly, the location and context is perfect for production of raw cotton. Secondly, ecological conditions for production of Jamdani itself are potential (Iftekhar, 2014: 12-19). The operational process of GI law can be done through the effective drafting of the implementing rules. Such provisions will prevent fraud whilst seeking protection, ensure effective monitoring and ease enforcement of the GI law. It must be done through an association or the cooperative and the operationalization process relates to the substantive partnership amongst a number of actors, e.g. government, producers and the enterprises since no individual can register for a product (Bhattacharya, 2014: 3-6). Jamdani Development Board, nominated as state

stakeholder, has been successful in acquiring a Geographical Indicator (GI) Certification that is seen as a weapon against extinction and enhancement of social awareness eventually.

Institutional Consideration: The process for the registration is done under the trade mark (TM) law. Because, private trademarks can be owned individually or by a group of people, GI products are perpetual collective rights owned by the concerned communities. TM can be transferred or assigned to another right holder but in GI products rights belongs to a nation. GI product may be protected by refusing or invalidating TMs that consist whole or part of a possible GI product which can mislead consumers about the real geographic origin of the goods. This kind of confusion may be erased in the member countries by persuading Article 22(3) of the TRIPS Agreement (Nation, 2011: 82). When GI is registered, government determines the quality and protection of that GI product under collective or certification mark to regime the risk of being genericize (Islam and Habib, 2013: 60). GI products can never become generic once registered and serves the functions of distinctiveness and consumer assurance as to quality (Caenegem, 2003: 699). Government of Bangladesh passed the ‘Geographical Indicative Products (Registration and Protection) Act in the National Parliament on 5 November 2013. The Bangladesh government has to sign the Lisbon Agreement and Madrid Agreement in 2014. As a result, Jamdani Weaving listed as the Intangible Cultural Heritage of Bangladesh by the UNESCO in December 2013 and it was a great achievement for this country (Ghuznavi, 2014: 2).

8. Findings from Field Survey Questionnaire

The survey was conducted in Tarabo union in Narayanganj from 12 February to 16 February, 2020. For each question, 10 different persons of average age 35 had been selected carefully as respondents and they all were local by residence status (Table 3). It is evident that, 80% of the survey responded that this is the birthplace of Jamdani weaving and is the main factor of Genus Loci. 70% also recognizes that the River Shitolakshya is a vital fact of this geographical index crafting practice (Figures 19, 20). In the field survey, 100% respondents valued this as an identical craft tradition. This tradition is belongs such communal environment which was not possible without social cooperation as 90% believed so. Government of Bangladesh has already taken some good steps regarding some burning questions like land allotment particularly for the weaver community. 90% people gave their consent for such initiative. Again, 80% think Government has eased the loan policy, mainly the microcredit for the weaver society. Other factors like social awareness and advertising in media had constituted 30% of survey answer. The major problem they are facing today is weather conditions. 60% of survey opinion indicated natural calamities such as rain and lack of sunny days. The weaving off season is monsoon period stretches from May to September. According to the 70% respondents, the major problem is electricity supply and for load shedding, the production stopped at night. Some other problems include wage discrimination, high cost of production, and long duration of manual production, less investment, etc. The most significant finding of this research spotted an alarming future for this craft practice. 80% people don't want their children to come in this profession, from weaving to wholesale trade or shop keeping in a posh mall-they just don't want to involve their next generations. While only 30% people think their children should not choose profession as a consequence of responsibility. It is found that a lot of people from North Bengal are learning the skill but still working with minimum wage. The local people are at decision making stages but not in weaving.

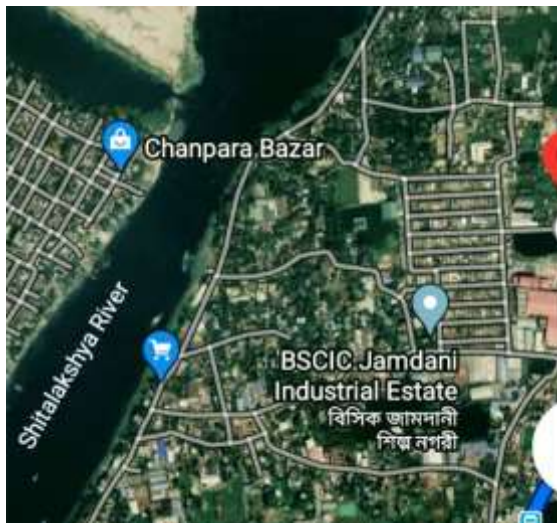


Fig 19 Wholesale market of Jamdani products in Demra region (source: Google Earth)



Fig 20 Factories of Jamdani production in Tarabo village (source: Google Earth)

Table 3: Questionnaire Survey

Serial no:	
Personal Data:	a) Interviewee's name: b) Address: c) Age: d) Religion: e) Occupation: f) Sex: Male / Female g) Resident status: Migrant / Local
1. What is the 'Cultural Value' of Jamdani?	a) Craft b) Hereditary c) Community d) Others:
2. Mention most current problems in the Jamdani industry? (On priority basis)	a) b) c)
3. What are the most significant initiatives taken by the Government so far?	a) b) c)
4. Can you maintain livelihoods with the earnings of Jamdani weaving?	Answer:
5. Do you want your children to get involved with this profession? Why?	Answer:
6. If not; how will Jamdani craft survive in near future?	Answer:
7. Suppose, you were given chance to improve your community, what will you do first?	Answer:
8. Anything I missed? Please provide your own opinion:	Answer:
Signature and Date:	

For future betterment of the craft, 90% of them said that the Jamdani production needs to be increased as to satisfy today's demand. On the other hand, 60% of people are interested to form a weaver welfare organization with the power of legislation of their own. 30% of the respondents demanded an easier loan policy for the weavers. The survey questionnaire also left some options for the respondents to give their own view regarding future plan and one surprising proposal came out, to tackle the uncertain future the community suggests a lifelong pension for the weavers after the age of retirement, generally at age of 65 here in Bangladesh (Miyan, 2017: 13). The survey respondents are satisfied with suppliers and distributors of raw materials. They said that main raw materials for hand looms are yarn, dye and other chemicals. Cotton for yarn is provided by government but dyes and other chemicals are generally supplied by independent private retailers and suppliers. The prices for these are more or less constant and it depends on certain market mechanisms.

And finally, a shocking reality came out by conducted survey. These people, once were the backbone of the village's economy, are abandoning their traditional occupations for survival. Some have already lost or on the way of losing their livelihoods. For their uncertain careers, most of these weavers have changed their livelihood. Their most attractive destination is RMG sector. Other options are also available like collecting fuel oils and selling them in black market, making cigarettes, pulling rickshaws, or hawking beside the roads, leather workers, metal workers, shoe makers and so on. On the other hand, those who cling on desperately from their dedication for this inherited profession are amongst the poorest of the poor in the society (Figures 21-26).

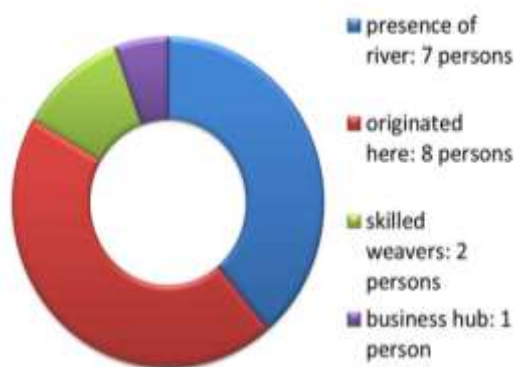


Fig 21 Why Jamdani originated in this region?

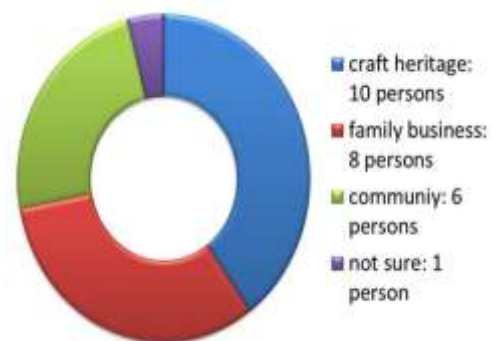


Fig 22 What is the value of Jamdani?

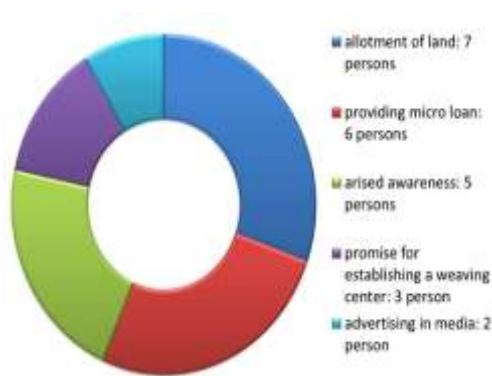


Fig 23 Effective government initiatives

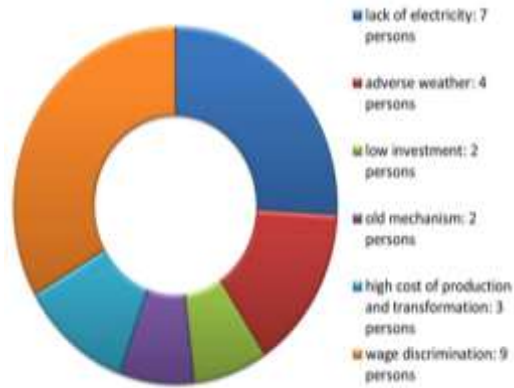


Fig 24 Current major problems

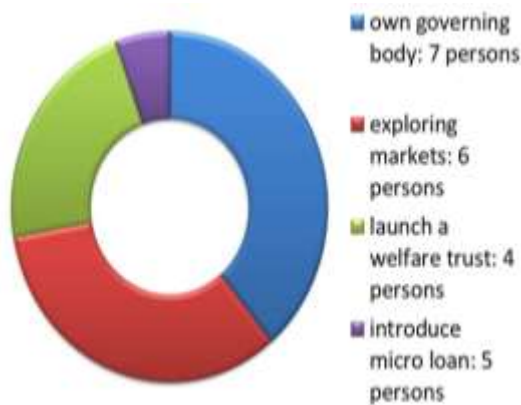


Fig 25 Future demands

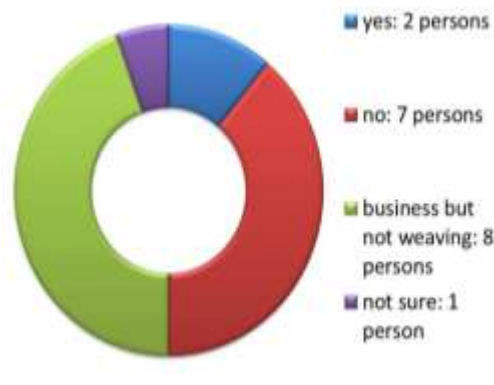


Fig 26 Next generation get involved

9. Analysis

9.1. Social Structure

Staggeringly it is noted that in Demra and Tarabo region, the craft of weaving sustains more than half of its population, almost 226,679 people in Area: 22.4 km² resulting a Density of 10,129/km² during the census of 2011 (BBS, 2012; Census, 2012). The handloom workshops of these weavers are generally concentrated in the outer periphery of the villages. The physical survey found that production of Jamdani is traditionally a family business. Here entire families are skilled in the production of the fabric and typically, different family members engage in different activities like dying, weaving and designing, which justified all of them as a single crafting community. Different members of the family get involved in different stages of Jamdani production. Master weavers' sons/nephews work as helpers and learn the family business. Through generations there has not been any change in the pattern of hereditary and division of labor. In some cases, it is found that a master weaver is the owner of a weaving unit who seldom sits on the loom. The sons or daughters of the master weavers (Mahajans) are hardly present on the units because they have fear for becoming socially down-graded (CPD, 2014). Fortunately, most of the weavers are still living just

above the poverty line and hence have appropriate resources to even purchase raw materials related to production.

9.2. Gender Inequality

Young women with relatively low skills comprise a high share of employees in the weaving industry, which is often one of the few accepted forms of predetermined labor for women in developing country like Bangladesh. In this country, women represent on average 68 per cent of the workforce in the clothing industry, 45 per cent in textiles (Fontana, 2013: 12-34). Informal and home-based household work is more common among women than men. Long and unpredictable working hours and safety concerns make it difficult for women to combine family responsibilities with work (Figure 27). Low wages, weak collective bargaining opportunities and lack of equal pay for work of equal value can make women vulnerable to exploitation inside and outside the workplace. Poor or non-existent maternity protection and various forms of violence, abuse and harassment are still present. They are less prioritized in weaver society as they work with low wages, lacking education and have less knowledge about marketing and designing. Many initiatives are badly needed to improve female workers situation.



Fig 27 Women at work, Jamdani weaving

10. Discussion

10.1. Opportunities

1. Jamdani should be showcased in the national and foreign museums. Research work needs to be continued side-by-side. Bangladesh's embassies all around the world should start diplomacy with giving pieces of Jamdani to the heads of the states to create global awareness. A very positive and favorable aspect for Bangladesh in the international business is the only country in South Asia that has a positive relation with each and every other neighboring state in this region. And as there is a big demand for Jamdani, improved trade exchange would be very useful to grow our market of

hand loom products in a competitive world. For better and ease of export, development of the internal road network and business communication system needs to be upgraded.

Besides, since most of the GI goods have their origin in rural areas, increased business under the GI Act will enhance the income of the Jamdani weaver community and contribute for rural development (Das, 2009: 35). As a developing country with strong agricultural sector, GI law can be an important public policy tool for economic development and better livelihood of skilled craft practitioners (Rangnekar, 2010: 77–80).

2. Nobel Prize winner Grameen Bank Model can solve the problem with micro credit loan for improving financial situations of the weavers. Foreign investment is also needed to be attracted and there is huge opportunity of that because Bangladesh has vast population which can provide cheap labor if they are trained well. In fact, skilled workers of Bangladesh in terms of delicate hand works are historically praised all over the world. For training and human resource employment, strong NGO base of Bangladesh will definitely be helpful for this labor sector to cope with the possible huge demand for Jamdani products in local and international market.

3. Advantage of Jamdani production is, its cheap raw materials are available all year round and simple machineries are used rather than imported heavy equipment of garments industry. The industry is not harming the natural environment that much as it is more or less a manual industry with less use of chemicals and lubricants.

4. The Jamdani hand loom industry has made a big impact on the rural societies in north Bengal. Areas like Shahzadpur, Pabna, Belkuchi, Ullahpara have developed into business sub hubs oriented to Jamdani industry and marketing. For the example of Shahzadpur area in Sirajganj district, many side businesses have also developed centering this handloom industry (Rahman, 2013: 14). Unemployment has been reduced to a great extent in these areas; such marketing model could be implemented in less progressive areas of the country like south Bengal. This has made positive change on the society as a whole and the number of anti-social activities like hijack, loot, robbery etc. has reduced a lot in the last two decades.

5. There are still huge group of customers who value the Bengali costume heritage. There is huge demand of Jamdani clothes and fabrics for the craft's distinct style and Jamdani is quite popular for fusion and fashion experiment among the top fashion houses like Rang, Aarong, Deshal etc. Normally, customers buy those hand loom products which have delicate knit works, are artistic, exquisite and elegant in contemporary lifestyle. Demand for products is influenced by seasons. Generally during Eid, Puja and wedding season (last quarter of the year), the demand for hand loom products go up exponentially, which have great share in country's revenue as festival economy.

10.2. Challenges

1. Due to lack of emphasis, subsidy and education on creative skills and heritage-linked economy; several craftspeople, domain experts and entrepreneurs are not harnessing their full potential. Consistent and sustainable investment sources are absent despite market demands. Unwillingness for adopting advanced technology, less government investment, high interest rate of banks to start a new business and most importantly, political instability actually hampers all kind of action and development plan. In an adverse situation, this potential sector had never been organized under a proper framework of development planning.

2. Moreover, the proven climate, cotton and water- which all were suitable for Jamdani weaving, do not exist in their best conditions anymore. Whether if such type of question arises then how issues with authenticity and integrity will be dealt regarding the GI registration? That might go against Bangladesh for showing indifference in taking proper action.

3. Another fact is, elderly people have retired and no skillful generation is preparing to face challenge of upcoming future. The younger generation has been really losing touch of their traditional and cultural heritage, becoming less and less devoted and concerned. They are migrating to urban areas and shifting professions. If it continues then we will not find enough manpower to run its production.

4. Weavers are suffering from inadequate payment and lower social status, and it demoralizes them if markets seek original excellence and distinctiveness of the craft. The weavers have to work for almost 60 hours per week (Rahman, 2013: 14). The conditions inside the working units are very poor, there are not even ceiling fans and proper ventilation while summer is very hot and humid in Bangladesh (Figure 21). Compared to the preciseness and difficulty of work and less facility, the wage that they earn is also very insufficient. Most of them get within the range of Tk 2,500 – Tk 3,500 monthly without any additional allowances like lunch money, health allowance etc (Chaiti et al. 2013: 3).

5. Garments industry of Bangladesh is the world's second largest production house for readymade clothing. This new economic and industrial order introduced in the decades of 80's (Pri.org, 2014) and backed by big budget and aggressive marketing by the patronization of both the government and private sector. Influx at industrial unit made clothing, successful adaptation of contemporary and cheaper imported goods into the total system as huge mass production and most importantly, monopoly of elites- all ensured its triumph. During that period, the employment in the RMG industry of Bangladesh increased by 40%. For any RMG workers, the basic is minimum Tk 7,000 for monthly salary and they have better working environment too (Harley and Faiz, 2007: 17-23). Here they need not to perform delicate tasks like the weavers or these sectors do not count their expertise or skill levels as weavers, vice versa. The fresh workers in the job market are rushing for the secured and less industrious job like RMG sector with better wage system. That's why Jamdani marketing spots and production houses are generally in shortage of skilled workers.

6. Current production of Jamdani is very complex to manage because multiple actors of various sizes need to serve geographically dispersed locations while production includes numerous steps and activities that must be performed in sequence but within a limited time frame (Fernandez-Stark, et al. 2011: 1-12). Furthermore, such industries are characterized by high volatility with low predictability (Bruce and Daly, 2006: 329–344) with low profit margins (Bruce et al. 2004: 151–170).

7. In the modern age, the clothing trend of the country is being largely westernized. Globalization help bring the countries together into one single nation, foreign cultures are spreading rapidly and gradually making their presence felt in the choice of apparels among Bangladeshi consumers. Western outfits have penetrated the Bangladeshi market a lot and has adversely affecting the local craft like Jamdani, which are being dissipated and blunted over time.

10.3. Recommendations

1. Minimum wage for Jamdani weaving should be equal to RMG sector as it is less prone to quick shifts in production locations, production is capital intensive, handling processes require access to large amounts of energy and natural resources and in fact, generally require a more skilled workforce. Jamdani industries were not governed by a global trade agreement in Bangladesh (GGD forum, 2014) it's time to introduce such concept in this country.

2. Authorities should be under the same umbrella and an effective incorporation between Ministry of textiles and jute with Ministry of industry is necessary for that. Bangladesh Handloom Board (BHB) was established in 1977 as a Statutory Public Sector Organization under the

administrative control of the Ministry of Textiles and Jute (BHB website, 1996). Though the board continues to work for the development of the industry and took some responsibilities including render weaving services and supply working capital to the weavers, increase the popularity of handloom fabrics and extend possible markets. But most of the rural based entrepreneurs are unaware of it, even existence of the body. As a result, they are not able to reap the benefits out of it. Additionally, the Geographical Indications Unit at the Department of Patent, Design and Trademarks under the Ministry of Industry is now acting as the superintendent authority in Bangladesh for GI registration. There shall be a seal of the Geographical Indications Wing of this office and the seal must include words “Registrar of Geographical Indications, Bangladesh.” Impressions of such seal shall be judicially noticed and admitted in evidence (GI act, 2013).

3. Another important thing is, we all know that Yarn is the primary raw material and made out of fibers such as cotton. In most of the cases, yarns are homemade and produced side by side in the hand loom units. Cotton generally supplied through a government regulatory organization named Cotton Development Board; because almost all of the cotton cultivation in Bangladesh are monitored by the government. In fact, increasing investment from private sector will be effective as government solutions will not be sufficient to handle all the problems thus some sectors could be distributed for privatization. For micro and small scale enterprises, government should offer special package of incentives where management and monitoring should be shared by each stake holders. Agencies could be then invited in a specified framework of private - public partnership. This will uphold a joint hand of weavers- workers – entrepreneurs, indeed.

4. Jamdani is lagging behind in terms of technology. Most of the handloom units are installed over mud base and made up of manual wooden machines. Functioning of these machines take a lot of time and their productivity is also low. Many improved technologies have been discovered and are also used in the urban units of Narayanganj which could be introduced at Demra with experimental basis. But at present working units, where other favorable factors are present, it is not able to use full potential of the market. The productivity could be increased if use of advanced technological machineries increased. If not equipped enough, they should introduce automatic or semi-automatic loom to come out of low rate of production.

5. For promoting various patronizations and creating proper platform based on institutional marketing system, a Jamdani handloom marketing-come-display center could be launching at Demra region. Establishment of common facility center is now demand of time. The main aim of such project should be transforming Demra area as economic landscape through creative clusters, cultural organizations, designer groups and craft guilds in specific places. Besides, a training center will also be established under the overall master plan of development. It has to be designed to combine training, product development, upgraded marketing policy and research on product types, dyeing technology and printing, documentation and publication for further research on Jamdani products.

11. Conclusion

It is heartening that the Government has taken very important step to conserve Muslin’s ancestor Jamdani after a long run. Such master plan should have proper framework and program contents for further development of the weaving craft in order to ensure social and economic security. Regular dialogue should be arranged to bring together legal experts, relevant government officials, eminent fashion designers, trade, textiles and craft experts, academics and representatives from the media and the civil society. This study suggests geographical index, GI should help to blend various craft cultures as an educational platform. At the present situation, cloths of traditional Jamdani designs

are gradually losing their efficiency to meet ever increasing market demand with modern zest, contemporary designs and customer's preferences, which is actually disturbing for its tangible values. To train the poor and marginal handloom weavers in a sustainable manner, 'Innovation and Redesign' of traditional lifestyle could be revived by keeping in the mind; that the preference of the consumers may bring new life of craft study and as well as community development. On the other hand, if trained to cope with next era challenges, a large number of expatriate skilled handloom weavers may arrive in the next generations to continue our national pride. The Jamdani weavers all over the crafting settlements in Demra community will be frontline warriors for that achievement, there is no doubt.

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