



Cover Page



WITH HOPE AND STRUGGLE: THE WEAVERS OF BARABANKI IN THE DIGITAL WORLD

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Abstract

Handloom weaving is one of the most ancient and culturally rich crafts of India. It has historically been an important source of livelihood and played a symbolic role in India's struggle for independence through Mahatma Gandhi's promotion of the charkha as a symbol of self-reliance. However, with industrialisation and the emergence of machine-based textile production, the traditional handloom sector has faced significant challenges.

The present study explores the impact of digitalization and technological change on the weaving communities of Barabanki district in Uttar Pradesh. It examines how digital tools, e-commerce platforms, and government initiatives influence the livelihoods, production methods, and market access of weavers. The study is based on field observations and interactions with weaving communities and contextualised through existing academic research.

Findings indicate that while digitalization offers new opportunities such as expanded markets, improved design tools, and better branding, many weavers still face barriers such as low digital literacy, lack of awareness of government schemes, dependence on middlemen, and limited access to financial resources. The study suggests the need for targeted digital literacy programs, better institutional support, and systematic documentation of traditional weaving practices to ensure sustainable development of the sector.

Keywords: Handloom, Digitalization, Weavers, Traditional Craft, E-commerce

Of the many handicrafts in India, handloom is one of the most ancient and rich expressions. In traditional Indian society, it has also been an important source of income and has had a significant role in India's struggle for independence as a symbol of self-reliance, especially promoted by Mahatma Gandhi. The charkha became a popular instrument which was utilized even in political meetings and went to adorn the early representation in the national flag it was seen as a challenge to modernity and industrialization, where human labor was gradually being replaced by machines. In a largely populated poor country this was a challenge. The Industrial Revolution had badly impacted the poor and especially the handloom. The new digital techniques and highly productive machines create more challenges in this area which had in a way always used simpler techniques of mathematics and geometry with physics for getting smooth uniform repetitions in its design component.

The present paper tries to observe within a limited world how digitalization and awareness with some state support, have been impacting the lives and markets of those involved in craft through tradition in one of the largest states of the country close to its capital. In India the handloom is not only an economic activity but is part of its cultural Identity and closely relates to its social structure, traditional knowledge, and history. Every area has a different style of weaving in India, Varanasi, Chanderi, Telangana, Orissa, Hyderabad, Tamil Nadu, West Bengal all have their different weaves from Jamdani, Ekat, Mashru, Patola which uses different materials including thread, yarns and fabric to create intricate patterns with much complexity of requiring skill and dexterity learnt through practice of generations. Handloom is used for weaving and furnishing fabric for different purposes. Many have argued that civilizations are importantly marked by their weaving pattern and there is much culture which is woven around the loom in terms of music and stories. It is worthwhile for us to see that as we look at sustainability, ecological friendliness, gender justice, social equality and the opportunities created by global access to markets how do the worlds of weaving communities engage in tough times especially after the pandemic, where many who had moved to some other diversified fields have come back to their family crafts. The paper makes a sincere



Cover Page



2 2 7 7 - 7 8 8 1



attempt to get insights from the ground with reference to other available studies. The roots of Indian handloom go deep, and we have reliable Accounts of the Greek historian Megasthenes in 3000 BC who visited Chandragupta Maurya's court, talking about the exquisite fine Indian muslin. Ancient Rome, Egypt, Persia, and China prized Indian handspun when the Indian silk weaving flourished especially during the Gupta period. The patronage of royals in the 13th to the 17th century led to the flourishing of designs in brocade and muslin. The terrible policy of British East India Company which took cotton from India to make machine cotton in Manchester disallowing local development led to mass unemployment among artisans as is well recorded. As mentioned the Swadeshi movement Used the spinning wheel as a symbol of resistance and self-reliance and post-independence the government established the all India Handloom Board in 1952 and passed act to express its commitment to support the sector.

The new age of digital technology has largely transformed modes of production and markets. There are new challenges and opportunities which transforming the sector. There are e-markets, digital designing tools, digital archiving and branding opportunities. These have revived the handloom and reoriented its capabilities according to markets. How ever in a hugely diverse country there are challenges of technical inequality, diminishing spells and competition with machine made fabric. As we look at small and cottage industries, we see handloom as a significant sector in which there has been an attempt to digital employment through a digital cluster development programme (DCDP), which is meant to provide Internet connectivity and digital literacy to weavers. There have been studies to study the process and impact in Chanderi, Nuapatna and Barpoli by scholars which form the background of my work in the Barabanki district of Uttar Pradesh. Shilpi Zain, Sriparna Basu and Bishakha Majumdar in 2017 interviewed around 55 persons and found considerable enhancement in income and social status of the weavers. Another study, which studied the possibilities of combining consumer choices with e-commerce in Orissa showed that most consumers buy handloom for special accessories (57%) quality, price, design, comfort and beauty with exclusively have a special impact. Spearman's rank testing clarified that traditional design, and trust with ease are important motivational elements. Factor analysis showed that in online purchases, the transparency of information, ease of return policy and timely grievance redressal with good pricing are different important elements. E-commerce enhances the market and reduces the cost by direct customer connect but absence of knowledge in weavers, not enough contact and government support are barriers (Santosh Kumar Tarai, K. Shailja 2020) close study of an online handloom brand by Maithi Mohan using qualitative methods showed from the company rose to a revenue earning of USD 200, 000, But it was a niche market where the other big competitors were Suta, Taneria and Nalli with big investment backups (Rima Khurana, Rakesh Gupta 2025)

Studies on computer-aided designs, digital looms, electronic jacquard machines, inventory management and e-commerce have also shown how productivity is enhanced and burden of labor with quality control is achieved with reduced cost and greater market competitiveness. Automation and techniques ably used considerably reduce supply order time with design innovation and market expansion (Pradanya Bapu Rao Abhyanker 2023). Artificial intelligence and information technology are creating new opportunities and challenges. There is competition with power loom, limited markets and many financial hurdles for the poor weavers whose traditional skills are also on the decline. Dr. Manas Ranjan Bhoumik 2024 in his work sees promise in Atal Innovation Mission (AIM), Atal Thinking Lab (ATL) which are meant to support institutionally with innovation and digital literacy.

My own reading and field observations are attempts to see the impact of modern technology on traditional skills, to see the impact of digitalization on culture and to see how balances are possible between preservation and innovation.

I have tried to understand the process of traditional weaving from selection of thread to dyeing, washing stretching, weaving, finishing and rolling. I specifically closely see the weaving in Barabanki where the early weaving was primarily done in pit looms, gradually moving to fly shuttle and throw shuttle weaving. Gradually, these are being replaced by power looms. The weavers of Barabanki had organized themselves soon after India gained freedom in 1947. They began with weaving of lungi (A male garment unstitched mainly in checks), but then diversified to scarves, stoles, shawls now claiming a large market worth 150 crores of which 95% is export. Barabanki district has six blocks where around 16 villages are very active in handloom production. Zaidpur, Ahmadpur, Bhawanipur, Rampur, Sahadatganj, Bansa, Saidanpur, Patauli, and



Cover Page



Hasanpur are the main villages with 1300 handlooms and 900 powerlooms. Computer assistance and e-commerce were supported by the government in many areas, including Chanderi in Madhya Pradesh. Uttar Pradesh government is also supporting weaving through several schemes including one district one product (ODOP) and G.I. tag, which takes it to the level of national intellectual property. There is hope that some of the traditional designs will be preserved with their stories through video documentation, photographs and digital textile mapping. This is an area not yet worked upon, sociologists and anthropologists need to be engaged in retrieving stories and personal accounts of men and women engaged in this fascinating and transforming area of living through craft. It would be interesting to see questions of gender, caste, class and education transforming in the lives of both producers and consumers of handloom. I am trying to partially work on this area in my research on innovation and challenges.

While interviewing and interacting with both women and men in the weaving clusters I gathered that there is much export to European countries like Germany, Italy, England, and to Dubai, Japan, Saudi Arabia and Bangladesh, where there is design-specific demand unlike the domestic market. I tried to understand limits due to lack of digital and general literacy, funds, security and changing tastes of new generation. Largely the community of weavers is traditional and family-based and they are fairly deft in understanding of weaving techniques, assessment of quality of thread, design, motifs and patterns with color combination. The respondents (mainly men) were well aware of the fact that their markets are largely foreign, where profit margins are bigger. They also understood need for collaboration and updating the design with customer feedback. They were conscious of diminishing demand but they understood that they had some stable demands of scarfs like Arafat rumaal and Thakur ki mooch. There is huge dependence on middlemen for both procurement of raw material as well as for sale. The Bunker Seva Kendra is not able to provide regular supply the weavers at large have received support in of financing does setting up of the power loom or handloom. But little or no awareness of any other scheme for support. Interestingly many respondents soberly admitted that the new generation is also coming to the traditional occupation as it is providing stable income. As I interacted with weavers and used questionnaires to gather information in the village clusters of weavers. I was pleasantly surprised to see candid understanding of the socio-cultural economic reality of their profession in the new age. Many of these were illiterate while others had an intermediate degree. Almost all had mobiles and used it to gather information.

Many of the habitations have irregular electric supply and do not use computers. There is practically no training of design and no awareness of any digital literacy program among the weavers. They largely depend on ad hoc system of looking at popular demand in domestic market while foreign clients send them specific designs through agents or on computer. Not many see this as a challenge.

The dependence is largely on local intermediary for supply of raw materials, availability of funds, and selling in the market nearly 80% respondents are unaware of government schemes and have not registered as artisans. The digital public infrastructure open credit enablement network (OCEN) has not been tapped by anyone. There is a strong need for a block-level digital literacy program for weavers.

Responses from the weaving community threw up the following key challenges:

1. Absence of awareness about government schemes.
2. Low levels of digital literacy.
3. No training beyond traditional craft.
4. Dependence on Mediator for raw material, finance & marketing.
5. Dwindling interest of young persons as customers in the new age.
6. Fear amongst community in terms of risks in digital transactions.
7. Limited access to state finance.

There is much possibility of innovation in design and expansion of markets through digitalization. New apps are able to simplify and break down new designs into clear steps which can be used by local weavers. Market research on consumer choices can be done using quick digital questionnaires. Market trends and availability of funds can also be made available



Cover Page



without cost of transport. However, we found that a focused, aggressive campaign in a mission mode action in the handloom sector of Barabanki is needed along with a research and documentation effort to preserve the craft and bring in sustainable development of the region.

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