

Research Paper

Factors Affecting Handloom Weaving Practices among Women Weavers of Assam

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ABSTRACT

Handloom weaving practices plays an important role in the livelihood generation of the women weavers of Assam. The present study was conducted to find out the factors affecting handloom weaving practices among the women weavers of Lakhimpur District of Assam. Data were collected through a pre-tested interview schedule. Handloom weaving practices were prevalent in different types of looms in the handloom industry. The involvement of the weavers in the handloom practices of Assam were mostly women and was found working from 2 years to above 15 years. The weavers weave almost all the products from traditional mekhela chaddar to furnishing materials. It was also found that the income of the weavers is an influencing factor for their involvement. The factors affecting the performance and productivity of the handloom products were due to the arising health-related issues among the weavers. Body pain was found very high among the weavers. Therefore, an improvement in the working environment, as well as compatibility of the weaver and the loom, would help to mitigate the pain and discomfort among the weavers. This would further increase the productivity, performance and income of the weavers.

HIGHLIGHTS

- ① Commercial handloom practices in Assam are prevalent basically in the throw-shuttle looms and fly-shuttle handlooms using dobby and jacquard.
- ① The weavers are found to involve for more than 15 years in the handloom industry.
- ① Health-related issues are the factors affecting the handloom practices among the women weavers ultimately decreasing the productivity with absentees.

Keywords: Handloom, health hazards, women weavers.

The handloom industry is a rural-based cottage industry, which not only provides the basic necessities of life but also plays a vital role in the economic growth of the country through its contribution to employment generation, industrial output, and export earnings. In Assam, the age-old association of women with the weaving industry is considered an important qualification of the girl for marriage. Handloom is a weaving device operated wholly or partly by hand which is used to weave cloth. Commercial weavers are professional weavers whose main occupation is weaving. Out of the total handloom households of India, Assam

represents around 40.37 percent of total weavers; women weavers comprise 53.89 percent out of the total women weavers of India (Fourth Handloom Census of India 2019-20). Furthermore, in the contribution of 15 percent of the cloth production in the handloom sector to the overall economy of India large workforce participation is women (www.ibef.com, 2021). Goswami (2005) rightly stressed that empowering women in the handloom sector would

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likely build livelihood development and cushion their financial management through employment. Even though the wage structure of the workers engaged in handloom activities are influenced by various factors such as age, productivity, gender, work experience, efficiency of the worker and education, the participation of the women was found high (Bortamuly and Goswami, 2012).

Handloom woven products are growing in popularity and are admired by people not only in India but also around the globe due to their distinct crafts, styles and their ways of weaving. It has not only inspired many weavers to involve in this occupation but also adopted the techniques to increased consumer demands. Even to this day, many of the families in rural and tribal areas of Assam have been saved from economic hardship by the skills of the womenfolk in the craft of weaving (Mazumdar, 1987; Chakravorty *et al.* 2010). The practising of handloom weaving help in providing support to the rural economy. It is also reported that weaving practices engage weavers to meet the requirements of their family, consumer demands, and new fashion trends as well as to revive and continue the age-old glorious tradition of handloom weaving (Prayas, 2015; Advantage Assam, 2017; Handloom Census, 2019).

The work organisation in the handloom industry is often based on the uniqueness, quality of the product, and production. The nature of the job compels the weavers to complete the task within the defined time limit. This work procedure of the industry affects workers through work-related health problems due to the length of exposure, work and rest cycles, work pressure, job designs, climatic conditions, etc. In addition to the work method, the employees or the workers do not possess any other benefits apart from the wages of the product. The wages depend on the product item and the productivity of the weaver. Therefore, their income is not fixed for round the year. These conditions led the workers to put more effort into making more products, results in health-related issues and physical discomfort. Keeping above facts in mind, the present study was conducted with the following objectives:

- ♦ To identify the commercial weaving practices in Assam.

- ♦ To study the factors affecting the women weavers in commercial weaving practices.

MATERIALS AND METHODS

For the present study, the women workers were selected through a multistage sampling design. Initially, two sub-division of Lakhimpur district, Assam were selected purposively. After that, 6 weaving units were selected from each sub-division to make a total of 12 weaving units. These weaving units are registered under primary weavers' cooperative society and Self-Help-Group. Finally, the data was collected from a total of 180 workers of 12 weaving units. Data was collected with the help of a pre-tested interview schedule. The weavers selected for the study had a minimum of 2 years of experience.

Statistical analysis was done by using frequency, percentage, mean, weightage score and ranking. For weightage score, the rating was done as 'very often'-1, 'Often'-2, 'Sometimes'-3, 'Never'-4. After that, the mean score was calculated and ranking was done accordingly.

RESULTS AND DISCUSSION

Commercial weaving practices

Commercial handloom production is run under various organisations. For the present study, the commercial weavers of Primary Weavers Cooperative Society (PWCS) and Self-Help-Groups were selected. The study revealed that the handloom weavers' cooperative society was introduced in the state under the Assam Co-operative Societies act 1949, Act-1 of 1951 for the development of the handloom activities in an organised way. It was found that the requirement of minimum members of primary weaver's co-operative society (PWCS) is 100 weavers, managed under Director, Handloom and textile, Assam and the Self-Help-Group (SHG) working under Director of handloom and textile, cluster project was of 20-25 weavers. The working environment of the commercial weavers is shown in Fig. 1(a, b).

Types of looms used in commercial weaving

In Assam, different types of handlooms were prevalent among the weavers as a throw-shuttle loom, loin-loom, frame-loom using dobby and



(a) Women weavers at Primary weaver’s co-operative society (b) Women weavers Self- Help-Group under cluster project

Fig. 1: Commercial weaving practices in Assam

jacquard, and rarely pit-loom. The frame looms and loin looms account for 78% and 21% of industries, respectively in northeast India. (Ministry of Textile, 2011). The handlooms which were mostly used for commercial production are the throw-shuttle loom using dobby, frame-loom using dobby, and frame-loom using jacquard.

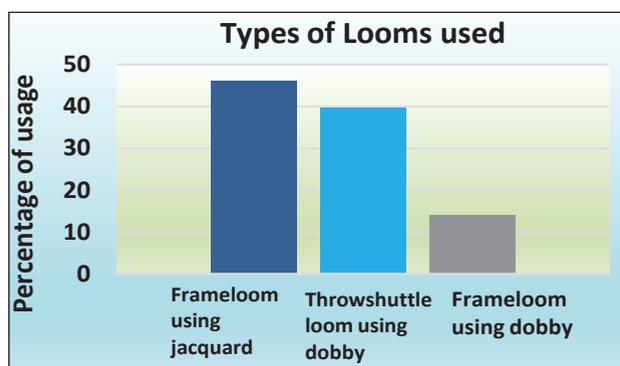


Fig. 2: Types of looms used by the commercial weavers



Fig 3: Handloom unit with different types of handlooms and weaving process

In the present study, a total of 780 weavers was found in 12 weaving units (6 Primary Weavers Cooperative Society and 6 Self-Help-Groups). In these weaving units, three types of weaving looms were preferred. From the data presented in Fig. 2,

it was found that 46.15 percent of weavers used frame-loom using jacquard, 39.74 percent used throw-shuttle loom using dobby and only 14.10 percent weavers used frame-loom using dobby. This may be due to the fact that handloom units prefer jacquard looms for commercial production as it gives faster productivity than the other two looms.

Types of woven items produced

The commercial weavers weave various products to capture the market on demand of the consumers. The various products woven found were mekhela-chaddar, gamocha, sari, dress materials, bed sheets, shawls, curtains, etc. From the data presented in Table 1, it was seen that Mekhela-chaddar (cotton/blend) was the highly woven product (cent percent) compared to other products among the commercial weavers of Assam. More than sixty percent of the respondents were found to weave silk mekhela-chaddar followed by 53.33 percent for shawls, 50.55 percent for saris, 45.55 percent for silk saris, and 40.55 percent for dress materials. Most rarely woven products were bedsheets (30 percent), curtains 28 percent, and others 25 percent. This may be due to the fact that consumers preferred ethnic traditional dresses compared to furnishing materials.

Table 1: Distribution of the respondents according to involvement in the production of woven items

Sl. No.	Products	No. of respondents	Percentage
1	Mekhela-Chaddar (cotton/blend)	180	100.00
2	Mekhela-chaddar (silk)	109	60.55
3	Gamocha	55	30.55
4	Sari (cotton/blend)	91	50.55

5	Sari (silk)	82	45.55
6	Dress- material	73	40.55
7	Bedsheet	54	30.00
8	Shawls	96	53.33
9	Curtains	51	28.33
10	Others	45	25.00

Years of Involvement of the women weavers

Weaving is a craft that is dominated by the women workforce in the north-eastern region as compared to the other states of India where weaving is mostly done by men.

Table 2: Women weavers according to years of involvement

Age	Years of involvement				Total
	Below 5	5-10	10-15	15 above	
>25	18 (56.25)	14 (43.75)	—	—	32
26-35	21 (31.34)	30 (44.77)	16 (23.88)	—	67
36-45	2 (4.54)	22 (50)	20 (45.45)	—	44
46-55	—	4 (16)	15 (60)	6 (24)	25
55 <	—	2 (16.66)	5 (41.66)	5 (41.66)	12
Total	41 (22.77)	72 (40)	56 (31.11)	11 (6.11)	180

Data presented in Table 2. shows that 40 percent of women weavers were found to be engaged in the performance of various activities related to handloom weaving for 5 to 10 years which was followed by 31.11 percent of the respondents for 10 to 15 years, 22.77 percent were engaged below 5 years and 6.11 percent of the respondent for above 15 years belonging to different age groups. Moreover, it was revealed that 60 percent of the respondents who had been engaged in the handloom industry for 10 to 15 years belonged to the age group of 46 to 55 years, 56.25 percent of the respondents below 25 years were found to engage below 5 years which shows the utter necessity of family responsibility. The involvement of the weavers working for more than 15 years belonged to the age groups of 46-55 and above 55 years, this shows the longer period of involvement of the women workforce.

Monthly Income of the respondents

An overview of Fig. 4 shows that the monthly income of 54.44 percent of women weavers earned ₹ 5,000/- to 10,000/- per month, followed by 28.33 percent of weavers above ₹ 10,000/- and only 17.22 percent of weavers were found to earn below ₹

5,000/- . This finding is in conformity with the study of Singh *et al.* (2016) that 11.25 percent of weavers earned between 70001 to 10000, 33.75 percent earned between ₹ 5,001/- to ₹ 7,000/- and 55 percent earned upto ₹ 5,000/- .

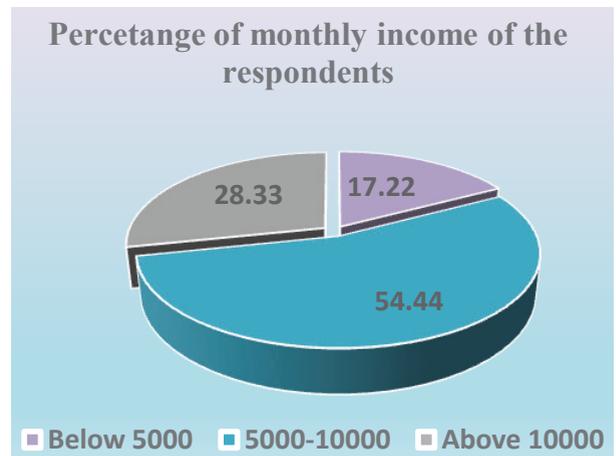


Fig. 4: Percentage of Monthly income of the respondents

Health hazards faced by the women weavers

Multiple exposures to occupational hazards act as contributing risk factors in the occupational health of the women weavers. According to the ICMR- National Institute of Occupational Health (2014), a working condition can lead to contracting occupational diseases.

Table 3 reveals that the majority of the respondents ‘very often’ suffered from body pain with 18.33 percent followed by numbness of finger 9.4 per cent and tingling of fingers 2 per cent in the handloom industry.

In the present study, a sizable number of respondents ‘often’ faced health hazards are fatigue with 49.44 per cent, followed by body pain 37.77 per cent, irritation in the eyes 20 per cent, numbness of fingers 19.4 per cent, dizziness 16.66 per cent, headache 10 per cent, cramps in the body 12.77 per cent, cough 8.88 per cent, tingling of fingers 12.22 per cent, skin irritation 7.22 per cent, and dust allergy 2.7 per cent.

Further analyses revealed that the health hazards faced ‘sometimes’ by the women weavers were cough, dizziness, irritation in the eyes, watering eyes, numbness in the finger, headache, body pain, hearing problem, cramps in the body, blurred vision, tingling of fingers, skin irritation, chest pain and

Table 3: Health hazards faced by the respondents in handloom weaving activities

Health hazards	Very often (4)	Often (3)	Sometimes (2)	Never (1)	Mean	Rank
Chest pain	—	—	18 (10)	162 (90)	1.1	XIV
Shortness of breath	—	—	13 (7.2)	167 (92.77)	1.07	XV
Cough	—	16 (8.88)	122 (67.77)	40 (22.22)	1.84	IV
Dust allergy	—	5 (2.7)	43 (23.88)	132 (73.33)	1.29	XI
Headache	—	18 (10)	51 (28.33)	111 (61.66)	1.48	VII
Dizziness	—	30 (16.66)	75 (41.66)	75 (41.66)	1.75	V
Fatigue	—	89 (49.44)	91 (50.55)	—	2.49	II
Irritation in the eyes	—	36 (20)	52 (28.88)	82 (45.55)	1.63	VI
Watered eyes	—	—	39 (21.66)	131 (72.77)	1.16	XII
Blurred vision	—	—	20 (11.11)	160 (88.88)	1.11	XIII
Skin irritation	—	13 (7.22)	43 (23.88)	124 (68.88)	1.38	X
Cut wound	—	—	—	180 (100)	1	XVI
Burn	—	—	—	180 (100)	1	XVI
Numbness of finger	17 (9.4)	35 (19.4)	51 (28.33)	77 (42.77)	1.95	III
Tingling of finger	2 (1.11)	22 (12.22)	36 (20)	120 (66.66)	1.47	VIII
Hearing problem	—	—	29 (16.11)	151 (83.88)	1.16	XIV
Cramps in the body	—	23 (12.77)	31 (17.22)	122 (67.77)	1.40	IX
Body pain	33 (18.33)	68 (37.77)	79 (43.88)	—	2.74	I

Figures in the parenthesis indicate percentage.

shortness of breath. This may be because, while performing the task the workers are exposed to various conditions of the workplace as seating arrangement, environmental conditions, yarn processing before weaving, duration of work, etc.

It was evident from Table 3 that the highest hazard score was given to body pain and ranked I with a mean score of 2.74 followed by fatigue 2.49 ranked II and numbness of finger 1.95 ranked III by the women weavers in the handloom weaving activities. The findings of the present study are similar to the study of Sarkar (2016) that pain in the body parts was one of the common problems encountered among the female handloom weaver.

The findings of the present study revealed that the commercial handloom practices were prevalent in different types of weaving in Assam, mostly in throw-shuttle handlooms and fly-shuttle handlooms. In these handlooms, dobby and jacquard were fixed in the loom for motif formation and were embellished with various designs in the fabric with a unique motif formation. The variation in the designs of the product capture the market demands. Primary weavers' cooperative society and self-help group are organisations where the involvement of

women weavers was found high. A study conducted by Baishya (2019) reported that participation of nearly eighty-nine percent of women weavers in the self-help group not only increased their monthly income and production in handloom products but also improved their standard of living.

The weavers were found to weave various products out of which the traditional wear as mekhela chaddar was found to be woven by cent percent of weavers. This occupation has not only given financial support to the weavers but also made them economically independent. The weavers were also able to look after their household work along with this profession. This age-old household craft has brought a sense of pride, dignity and social status among the weavers. Even though, income is found as a deciding factor that influences the involvement of the weavers in handloom weaving to support the financial conditions of the family (Kalita, 2019) it was also seen that the weavers are facing various health hazards in the long run. These hazards would affect the handloom production reduce the productivity and income source which would ultimately hamper their socio-economic status.

The majority of the weavers were found to involve for more than 5 to 6 hours daily in awkward posture so arising health-related was found (Bori and Bhattacharyya, 2020). Therefore, to mitigate the health issues an improvement in the working environment would help in suggesting the remedial measures for the commercial weavers.

CONCLUSION

Commercial weaving practices have involved many women weavers as a full-time profession. This occupation has given economic security to the women weavers. But long-time involvement in this weaving activity has affected the health condition of the workers due to which a decline in production and income was found. Therefore, adequate measures have to be taken to increase the working condition as well as the occupational well-being of the workers.

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