

## The Impact of Backstrap Loom on Ethnic Community: A Study on Rangamati Hill District

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### Abstract

The research region for this study is the Rangapani village in Bangladesh's Rangamati hill district, which is densely populated by women weavers. The social and economic aspects of traditional ethnic apparel known as "Bain" in Rangamati Hill district's Rangapani villages are the focus of this study. The study also demonstrates how Chakma culture's traditional dress, Pinon-Khadi, has significant economic and social influence. This research relies on primary data. Data was gathered using a structured questionnaire and a field survey interview method. Respondents were chosen at random, and 75 houses of backstrap loom weavers were surveyed in order to collect data.

According to the data collected, at least 20% of weavers are in very poor economic positions, with fewer livelihood options. 77.3 percent of weaving-dependent families have no other source of income. Weavers have fewer options for supporting their families if they do not weave because 66.7 percent only have a primary education. This study also indicated that roughly 16% of families had excellent financial situations, earning more than 40,000 taka per month and having various sources of income. Approximately 25.3 percent of those most likely involved in the loom clothing business in tourist areas changed their eating habits over time. Previously, 69.3 percent of weavers received NGO assistance, while 30.7 percent received no assistance from NGOs or government agencies. They anticipate government assistance in starting a business or expanding an existing one. As a result, the government should start funding programs to help them.

**Keywords:** Backstrap loom, culture, Pinon-Khadi, socio-economic condition, tradition.

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### I. Introduction and Background of the study

There are over 370 million indigenous and tribal peoples in the world, each with their own culture, tradition, clothing, and eating habits. In Bangladesh, more than 45 indigenous communities live, primarily in the Chittagong Hill Tracts but also in the Sylhet, Rajshahi, and Mymensingh divisions. In these divisions, there are the Chakma, Marma, Tripura, Tanchangya, Mr., Santals, Khasia, Jaintia tribes, and so on. The Chakma people make up the bulk of the indigenous population in the Chittagong hill region's three hill districts. Backstrap looming, also known as Bain in Chakma culture, is a very authentic and ancient method of weaving fabrics. Tribal people use the backstrap loom, which is a simple horizontal loom. The weaver stretches her warp between two sticks. The backstrap loom is a significant aspect of Chakma culture, and women of all social strata wear it at weddings, religious ceremonies, and festivals. The loom is used by Chakma women to weave yarn into clothing. In traditional Chakma society, girls and women were forced to learn to weave alongside learning to undertake domestic tasks in the past. Traditional Chakma backstrap loom designs have a hidden charm. They also employ simple materials that are brightly colored. Wool and rayon are used. They used to grow raw materials for their garments using "Jum" horticulture decades ago. Many women in Rangapani village, Rangamati district, rely on the backstrap loom for their livelihoods. Brands such as Baintextile, Banani Textile, Boyan Textile, and others specialize in indigenous backstrap looms and handloom crafts, which are very popular with tourists.

The culture and sustainable development of East Timor Women Australia (ETWA) are centered on traditional textiles and weaving as a medium for cultural preservation and poverty reduction at the same time (White, 2010). Political, geographical, economic, climatic, cultural, custom, scientific, and technological advancements, as well as the impact of the British and Christian missionaries, all influenced the changes in Mizo attire (Khangte, 2011-13). Traditional Indian handloom, on the other hand, is highly regarded in the worldwide

market and is in high demand in local marketplaces in the Bargarh District of Odisha. Financial restrictions, difficulty obtaining up-to-date machinery, bad working conditions, meager wages, and hence the lack of state backing confront the weavers (Das, 2015). Though the handloom industry in Andhra Pradesh plays an important role in preserving the country's heritage and culture and thus plays a vital role in the country's economy, the sector continues to face a number of challenges, including obsolete technology, an unorganized production system, low productivity, insufficient capital, a limited product range, and weak marketing links. This research examines how men and women's labor distribution patterns affect their interpersonal and economic relationships. It also demonstrates that in a certain area, only one religious group exists, which has an impact on dress creation (Naga and Rao, 2014). Furthermore, small backstrap loom business owners in the Rangamati district experience financial difficulties (Jaim, 2015).

Despite the lack of profit, the Chakma tribe fights to preserve their culture. This cultural heritage endures in the face of low capital equipment and low substitution, and for the majority of Chakma women in rural areas, the back strap loom is their only source of income to satisfy domestic requirements (Debnath, 2019). Weavers in Indonesia are facing an ecological crisis; their intellectual awareness is not translating into enough actual action, but they continue to weave (Ingram, 2019). Despite long-standing economic distress, gender inequality, and racial discrimination, Piegorsch (2009) recounted how an ergonomic bench was built for indigenous weavers in Guatemala. Because there is little market for weaving in Taiwan today as a result of changing society and the conventions established by their forefathers are rapidly vanishing, they aim to protect and conserve such cultural characteristics. As a result, the number of skilled weavers in the area is dwindling (Hwang and Huang, 2019). According to backstrap loom tradition (Chakma and Zaman, 2009), Bangladesh has at least 888,115 weavers, including 472,367 male weavers and 415,748 female weavers. Van Etten (2010) discussed how to improve the quality of life in Cochabamba's disadvantaged communities. This ethnographic study examines the relationship between cultural preservation and economic growth. Dewan (2002) investigated the rebirth of weaving in the Chittagong hill tracts, focusing on how indigenous groups might develop a wider application for the craft and push it to its creative boundaries. She demonstrates how the textile crafts of the savage indigenous people are comparable. Christou (1997) conducted an anthropological study of the SadanToraja's loom and weaving in Tobarana, Indonesia. The purpose of the study was to document the complete weaving process, as well as the loom's technical aspects and weaving techniques. A study on the livelihood sustainability of handloom weavers in Sualkuchi, Assam, revealed the livelihood processes, associated issues, and challenges with handloom weaving as a source of income in Sualkuchi, as well as the coping mechanisms used by the handloom weavers in light of the sustainable livelihood framework (Anand,2017). According to the existing literature, little research has been done on the socioeconomic state of Rangapani village in the Rangamati district. Little progress has been made despite several projects aimed at improving the social and economic conditions of weaving villages. They were more vulnerable due to a lack of organizational structure, financial disincentives, poor infrastructure, backdated looms, archaic weaving methods, educational obstacles, and a lack of proper marketing facilities, among other factors. As a result, the current study intends to investigate the socio-economic profiles of the weaving community in Rangapani village, Rangamati district.

This research focuses on the backstrap loom weavers' economic, cultural, and educational conditions, as well as the different changes in tribal dress from the past to the present in Bangladesh's Rangamati district. The current state of weaver families and their occupational concerns are depicted in this study. In previous studies, the researchers only looked at Bain designs and technological disadvantages, but this one focuses on elements causing Chakma dressing changes that aren't related to the state of the weavers.

### **1.1. Research questions**

- What is the socioeconomic and cultural situation of backstrap loom weavers, and what factors affect Chakma dressing changes?
- What impact do the massive changes have on backstrap looms and their socio-cultural lives?

### **1.2. Objective of the Study**

- i. To explore the economic condition of backstrap loom weavers.
- ii. To study the social condition of backstrap loom weavers.

## **II. Methodology and Research Design**

This research is being carried out in the Rangamati district. This research relies heavily on primary data gathered in the study region of Rangapani village in the Rangamati hill district. Data was acquired from 75 backstrap loom weavers who were chosen at random. The questionnaire was created to obtain information about

age, gender, education, married status, children's education, household information, rituals, habits, festive income and expenditure, and other topics in an organized way.

**2.1. From an economic perspective, variables for measuring socio-economic conditions:**

1. Educational Status, 2. The shade of House, 3. Drinking-Water Source, 4. Drain and Latrine Facilities, 5. Estimated Family Income, 6. Any Family Member Have Any Job, 7. Any Other Source of Income, 8. Estimated Family Expenses, 9. Savings, 10. Income from Loom Consider As, 11. Income from Loom Enough or Not, 12. Any Agriculture Land, 13. Type of Dyeing, 14. Type of dyeing Dispose, 15. Any change in Design pattern over time, 16. Any change in food habit, 17. Any change in Culture or language, 18. Any support from the Government, 19. Any support from NGO, 20. Any physical pain.

For the study, the sample size is determined using the following Solvin's formula:

$$\begin{aligned}n &= N / (1 + Ne^2) \\ &= 100 / \{1 + 100 * (0.05)^2\} \\ &= 75 \text{ (Approximately)}\end{aligned}$$

Where,

n = Sample size

N = Population size

$e^2$  = 95% confidence level the margin of error is 0.05

At the given conditions, the sample size is approximately 75. In addition, I have taken all the sample size.

**2. Result Analysis and Discussion**

**2.1. Socio-economic conditions of Backstrap Loom Weaver's Primary Data Analysis**

**2.1.1. Social Status of the backstrap loom weavers**

The educational status of this location is the first social status variable. Approximately 66.7 percent of the people in this area have completed at least primary school. 17.3 percent have finished secondary school. In addition, approximately 16.0 percent of the population has completed secondary school. As a result, it appears that the parents have generally completed basic school and are attempting to teach their children. Following data gathering and analysis, we can determine that the majority of Rangapani's weavers are primarily educated. Aside from education, some females weave for extra money or to supplement their pocket money. Despite their advanced education, the daughters of certain family's weave shawls to keep the custom alive. Ragapani village women provide for their families' everyday needs as well as the cost of their children's education by looming bain. The villagers of Rangapani village are unconcerned about their children's education. There are a large number of pupils that did not finish their SSC exams, particularly the male students. We can tell from this data that the majority of loom-weaving women are unconcerned about their higher education. They believe that education has little bearing on their incomes or weaving ability. The only educational institution in the Rangapani area is Moanoghor School. Since its beginnings in 1974, it has played a critical role in advancing the Jumma people's education, heritage, and culture in the Chittagong Hill Tracts. The school, which is funded entirely by donations from individuals and organizations, primarily serves pupils from low-income households and children who have been affected by the Chittagong Hill Tracts conflict. As previously said, most weavers' earnings are exclusively dependent on the loom. Due to their poor income, the majority of them fall behind on their daily costs. They can set aside a small amount of their earnings for savings and house improvements.

Tin-shade homes are home to 49.35% of weavers, according to the data. Because of their low income, the majority of the funds for these homes come from cooperative societies or non-governmental organizations (NGOs), which they must repay in instalments. This emphasizes their financial predicament. The remaining 41% of weavers reside in partially constructed homes. Rangamati is a hill district rich in wells, springs, rivers, and lakes, according to the study, which considers drinking water sources. There are also sufficient tube wells to provide pure water in these places. For drinking, they rely on groundwater. A tube well or a motor is used to pump this groundwater. They are irrigated with surface water and groundwater. Back in the day, they used to drink water from wells and springs. Over time, the government and non-governmental organizations (NGOs) have installed a number of deep tube wells to provide clean, potable water to the residents of the area. About 66.7 percent of people get their drinking water from a tube well, while at least 33.3 percent get their drinking water from line water. The majority of the homes in this area have tube wells. As a result, the community is self-sufficient in terms of water supply. In this area, the quality of the water is excellent. The majority of these weavers, according to data on electricity, latrine, and drain facilities, live in the vicinity of Rangapani village, where the municipal government is located. As a result, as citizens of the municipality, the participants receive advanced civic advantages. A good drainage system is in place, which helps with waste disposal and water control. They have a well-developed sanitation system that protects their health while also preventing pollution in the environment. Everyone has access to energy, and waste is disposed of in the same manner. A 33-kV transmission line from Chittagong to the area was just installed. As a result, the area has no load shedding.

We can see the social status of the Backstrap loom weavers by the following bar diagram:

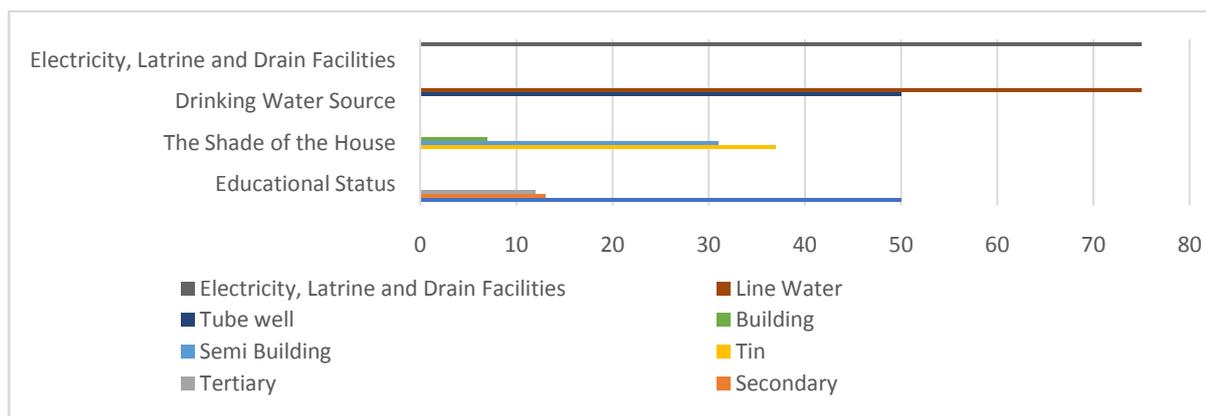


Figure 1: Social status of the Backstrap loom weavers in Rangapani village of Rangamati hill district.

### 2.1.2. Economic Status of the backstrap loom weavers

The variable here is used to calculate family income. Around 20% of the population earns less than \$10,000 per year, and 14.7% earn less than tk.20,000. At least 49.3% of people have an income of less than \$30,000, while the remaining 16% have an income of less than \$40,000. A family with an additional source of income, such as a job, a business, or agricultural land, has a higher monthly income than others. In addition, due to the number of earning family members, income varies. The majority of the women in the family work in the backstrap loom industry.

**Table 1: Estimated Family Income of Rangapani Village Community**

Income Range	Frequency	Percent	Cumulative Percent
Below 10000	15	20.0	20.0
Below 20000	11	14.7	34.7
Below 30000	37	49.3	84.0
Below 40000	12	16.0	100.0
Total	75	100.0	

Almost every member of the family contributes to the family's total wages. In their spare time, girls who attend school or college assist their mothers with minor household tasks and Bain-related chores. The family's young sons assist their parents in fieldwork and also drive CNG to supplement the family's income. They grow seasonal vegetables and fruits and raise cattle, fish, and other livestock. Only a small percentage of the population works for the government. The majority of them work as elementary school teachers or police officers. They also work for organizations such as Brac, Khabaja, Green Hill, ASHIKA, Ekti Bari, EktiKhamar, Tungya, CIPD (Centre for Integrated Program and Development), Progressive Rangamati, and others. The majority of people working in business work in cooperatives, local businesses, fishing in Kaptai Lake, and the shipping industry. Some are once again assisting the family in avoiding being affiliated with tourism. The people of Rangapani, on the other hand, have a proclivity for starting small businesses. In terms of self-reliance, this is a favorable trait. There are a large number of grocers in the retail sector. A limited number of family members were also discovered to be working in the lumber industry. Around 70.7 percent of people work in the business world, while the remaining 29.3 percent work in other fields. The cost of living in Rangamati is extremely expensive. And there is a scarcity of these items in the Rangapani area. As a result, household expenses are sometimes out of reach. That is why they must work really hard to pay for this expense.

According to statistics, 18.7% of people spend less than \$10,000. Another 18.7% of people spend less than \$15,000. At least 50.7 percent of family spending is under \$30,000. The people of Rangapani village have a low standard of living. As a result of their poverty, this expenditure has become a hardship for them. Weaving takes a long time and provides a poor income because it is their primary source of revenue. The average monthly cost of a 50% weaver is less than twenty thousand dollars. In comparison, 49.3% of households earn less than \$30,000 per year. After paying for living expenses, loan repayments, and other expenses, they have

very little money to save. The good news is that the weaving families here have a tendency to preserve money. As a result, 73.3 percent of them are aware of their savings, while the remaining 26.6 percent do not save due to a lack of a bank account or for other reasons. Looming is the primary source of income for many women in the Rangapani area. As a result, it is also the primary source of income for their family. Looming only accounts for 22.7 percent of weavers' income, while the remaining 77.3 percent regard loom income as a household expense. The majority of women weave on looms to supplement their family's income. Earnings from looming are used as pocket money by high school and college students. The additional money from the loom is frequently used by housewives to purchase hobby items. However, there are still families that rely solely on the loom for their livelihood. For a happy life, both professional and financial happiness are necessary. According to 84 percent of the participants, the income from this job is sufficient to cover their family's needs as well as all other expenses. However, the remaining 34% believe that this career will not be sufficient to support their household demands. As a result, they have turned to fallow lands, seasonal businesses, and cooperative groups to supplement their income. Approximately 64.0 percent of weavers said their loom revenue is enough to cover household expenses, while the remaining 34.0 percent said no, the money is insufficient. Rangamati is Bangladesh's largest district by area. The area is mountainous and surrounded by water from the lake. Agricultural production is reliant on Jum farming. Seasonal crops, in addition to paddy, are grown here. Mango, ginger, and jackfruit grown in this region are in high demand throughout the country.

**Table 2: Any Agricultural Land**

Response	Frequency	Percent	Cumulative Percent
Yes	66	88.0	88.0
No	9	12.0	100.0
Total	75	100.0	

According to the data, 88 percent of weavers own cultivable land, and 90 percent of them work in agriculture. As a result, this land can be considered their secondary source of income. Those without land must rely on modest businesses and fishing in Kaptai Lake. Weavers don't spend a lot of time on the ground. Their family looks after the property. Cotton for weaving is also grown on this property. The first and most critical stage in fabric preparation is dyeing. The dyeing process necessitates the use of unique raw materials such as wax, cotton, thread, and bamboo. The majority of these goods are created in the comfort of one's own home. However, some items must be procured from the local market. According to the research, 18.3% of weavers do not have the necessary skills to produce raw materials. All of their raw ingredients are purchased from the market. Others create it on their own. The dyeing procedure takes one to one and a half weeks to complete. To avoid environmental damage, the weavers take particular precautions while disposing of dyeing waste. Statistics show that 61.3 percent of people flush their trash down the toilet. The remainder throw their trash into the river. As a result, the surrounding area is kept clean. About 18.7% of weavers dump dyeing waste into rivers, while the remaining 81.3 percent dispose of dyeing waste through household drains. Drainage management and cleaning are overseen directly by the local government. Weaving has been a part of our culture for ages. Its design has evolved significantly over time. Each of the Chakmas' popular design patterns has a separate name. The names of several of these are derived from flowers. JhoraPhul, JongliPajon, Manipuri Flower, Edo-datPhul, Begun BijiPhul, and others are examples.

Over the last decade, each motif has evolved. All patterns are saved in an Alam sampler. In each alam, 96 to 115 designs are currently conserved. Alam is regarded as one of the Chakma tradition's most prominent monuments. Rangapani residents are familiar with the Chittagong Hill Tracts' traditional cuisine. Jum is grown in the hills, and paddy is grown in the foothills. Various fruits are grown in the area. The majority of the people here refuse to eat anything else. Adolescents are the only ones who have an inclination to eat fast food. According to the findings, 74.7 percent of those polled stated that their eating habits had not altered. The remaining 25.3 percent cited personal reasons for their change in eating habits. They've boosted their use of soybean oil in place of traditional spices, and they've shifted their focus to readily available packaged goods. They are, however, mindful of the potential health dangers, and everyone works and exercises accordingly. Inter-communal marriage is becoming more common in this area, as it is in other regions of the country. It is one of the most important causes of social transformation in this area. Families' cultural behavior and beliefs are being influenced by these unions. On the other hand, 47.6% of those polled indicated that such marriages have influenced their way of life. Participants thought the person in question was going through a psychological transformation and was becoming more conservative in his or her social behavior. Various customary behaviors, such as looming after marriage, are socially hampered for women in particular. This has a bad effect on the area. Despite the fact that weaving is an important aspect of traditional culture, the government has taken no special measures to safeguard it. Despite the fact that it is depicted as an important part of the hill people's lives, there is no government initiative to protect, expand, or develop it. Tourists are really interested in these Rangamati loom goods. As a result, the items are essential not just as cultural artifacts, but also as profitable

sources for small businesses. The handloom industry should be included in the wide range of SME activities. Given the sector's potential, the government must develop a proper financing instrument.

**Table 3: Supports received from NGO**

Frequency	Percent	Cumulative Percent
52	69.3	69.3
23	30.7	100
75	100	

Rangamati has 42 government-registered non-governmental organizations. According to the research, 69.3 percent of respondents who took part said they took a loan from those NGOs with an average interest rate of 8%. Children in those communities are also taught to weave by these NGOs. Monoghar recently provided BDT 48,000 in vocational training to five dropped-out females in traditional weaving and water supply repair. Looming is a job that takes a long time to complete. A complete pinon set needs 3 to 4 weeks of undivided attention and unrelenting effort. It is possible to say that it consumes their daily job capacity. Furthermore, they sit and weave knots all day. The survey participants were all found to have a variety of negative effects, including back pain and migraines. Some weavers get numerous diseases as they age as a result of their overwork. That is why they require healthy eating habits, appropriate medication, and regular physical activity. Because the data is gathered from a primary source, I'm having some difficulties obtaining data because of the COVID-19 pandemic scenario. Due to time constraints, the study was conducted with a small sample size. It's exclusively available to backstrap loom weavers in a single village. Furthermore, there are several challenges encountered during the data collection process. The first responders aren't very forthcoming with information about themselves.

### III. Conclusion

The study of Rangamati district's Rangapani village provides an in-depth look into the working lives of backstrap loom weavers and the influence of backstrap looms on ethnic people. Local brands are buying their wares and reselling them at a premium. Chakma's profitable fabric design approach and visualization have continued to drive demand in the modern fabric market. Both the local and tourist markets are drawn to the weaving's unusual style and colorful pattern. Because the loom weavers lack a comprehensive understanding of business or the ability to sell on international platforms, they wholesale at low costs, whereas local brands sell at high prices in those showrooms. Due to a lack of funds, they occasionally go to the city's bazaar market on weekday market days to sell things at a lower price. On the one hand, they are making a lot of money, yet the loom weavers are still trying to make a living. Furthermore, they face political obstacles and struggle to manage low-interest loans. These issues are preventing them from expanding their business. They are affected physically by the traditional weaving method. They have bodily problems such as back discomfort, muscle soreness, and refractive defects in their eyes, among other things. Due to a lack of funds, they occasionally go to the city's bazaar market on weekday market days to sell things at a lower price. On the one hand, they are making a lot of money, yet the loom weavers are still trying to make a living. Furthermore, they face political obstacles and struggle to manage low-interest loans. These issues are preventing them from expanding their business. They are affected physically by the traditional weaving method. They have bodily problems such as back discomfort, muscle soreness, and refractive defects in their eyes, among other things.

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