



# Operational Dynamics and Practices in Handloom Sector: A Study on Master Weavers of Aizawl.

<sup>1</sup>Meena Lalrindiki Sailo, <sup>2</sup> Prof. Laldinliana

<sup>1</sup>Scholar, <sup>2</sup>Professor

<sup>1</sup>Department of Commerce,

<sup>1</sup>Mizoram University, Aizawl, India

**Abstract:** The rich tapestry of India's cultural heritage is closely interwoven with its traditional handloom industry. As the second-largest employment generator after agriculture, the handloom sector occupies a vital place in India's textile economy. Across various states and regions, the unique products crafted by weavers are not merely utilitarian goods but also expressions of cultural identity. In the broader context, understanding the role of handloom sector requires a focused examination of the actors who sustain it particularly the master weavers. Across the country, dominance of master weavers has significantly limited the presence and functioning of weavers' cooperatives. These master weavers oversee varied modes of operation and are instrumental in upholding the quality, authenticity, and marketability of handloom products. However, despite their pivotal role, many independent weavers struggle to sustain themselves in the industry, competing within the same markets as their better-resourced counterparts and facing systemic barriers.

This paper aims to explore and analyse the business operations and dimensions of master weavers in Aizawl, with particular attention to the socio-economic environment that supports or hinders long-term sustainability in the sector. Utilizing a self-designed, structured questionnaire, the study examines variables such as family involvement in the business, loom ownership and operation, government support, product specialization, frequently used designs or motifs, and the duration of business activity. The findings highlight the resilience and adaptability of master weavers or textile entrepreneurs. This paper ultimately seeks to contribute to a deeper understanding of the sustainability and growth potential of the handloom sector in Aizawl, positioning it as a viable contributor to local employment and regional economic development.

**Keyword:** Handloom, master weavers, employment, textile entrepreneur, sustainable livelihood.

## 1.1 INTRODUCTION

The handloom sector in India is more than an economic enterprise—it is a cultural legacy, a symbol of national identity, and a vital source of livelihood for millions. Often described as the “treasure of the nation,” this industry protects, preserves, and promotes India's ancient textile traditions through creativity, originality, and craftsmanship. As one of the largest household-based, cottage industries in the country, handloom weaving offers employment to both rural and urban populations, particularly women, and contributes significantly to India's economy (Goswami & Jain, 2014).

Historically, the handloom movement played a pivotal role in India's freedom struggle, championed by Mahatma Gandhi through the Khadi movement, which emphasized self-reliance and indigenous production. While the sector today faces growing competition from mechanized power looms and global textile imports, its deep cultural roots and unique regional identities have sustained its relevance. Each Indian state weaves a distinct narrative through its traditional motifs, fabrics, and weaving techniques—closely aligned with the local climate, customs, and community aesthetics.

Despite external pressures, India remains the world's largest producer of handlooms, contributing approximately 95% of global handloom output and ranking second in cotton exports (Ministry of Textiles, 2023). The sector is not only a cornerstone of rural economic resilience but also a leading force in ethical and sustainable fashion worldwide.

At the heart of this industry are master weavers—individuals who not only possess extraordinary artistic skill but also serve as entrepreneurs, employers, financiers, and guardians of cultural heritage. Many master weavers have established communal weaving sheds in recent years where hired weavers can perform production tasks (Syamasundari, 2006).

Master weavers manage the entire production chain, from providing yarn and loans to grassroots weavers, to overseeing design, quality control, and market linkage. It may be rightly projected that master weavers are critical to promoting handmade textiles and handlooms and their revival (Master Weavers Organisation, 2016).

The master weaver gives the weaver the pattern and frequently yarn that is ready (after finishing all pre-loom activities). They are in charge of dyeing, warping, and sizing the yarn, leaving the weaver with nothing to do but weave on the loom. Along with raw materials and patterns, the master weaver also provides looms for the weavers. The master weaver collects the finished goods, sells them and frequently makes funds available to weavers in need. Because of this option for quick financing, weavers may decide to work with the master weaver for lower pay (Anumala and Samala, 2017). In states like Mizoram, where 10,705 looms, 17,298 weavers, and 10,240 allied workers rely on handloom as a primary source of income master weavers are integral to sustaining community livelihoods. Their role becomes even more pronounced in urban clusters like Aizawl, where handloom textiles are not limited to ceremonial use but are part of everyday attire, especially among women.

This article investigates the operational dynamics of master weavers in Aizawl, Mizoram. By exploring their methods of business management, labor coordination, financial systems, and market engagement, the study aims to provide a deeper understanding of how

these cultural entrepreneurs maintain resilience and adapt in an increasingly competitive textile economy. Ultimately, it contributes to the broader discourse on sustainable development, decentralized industry, and the preservation of intangible cultural heritage in India.

### 1.2 Significance of the study

The handloom sector in India is more than an economic enterprise—it is a cultural legacy, a symbol of national identity, and a vital source of livelihood for millions. Often described as the “treasure of the nation,” this industry protects, preserves, and promotes India’s ancient textile traditions through creativity, originality, and craftsmanship. As one of the largest household-based, cottage industries in the country, handloom weaving offers employment to both rural and urban populations, particularly women, and contributes significantly to India’s economy (Goswami & Jain, 2014).

Historically, the handloom movement played a pivotal role in India’s freedom struggle, championed by Mahatma Gandhi through the Khadi movement, which emphasized self-reliance and indigenous production. While the sector today faces growing competition from mechanized power looms and global textile imports, its deep cultural roots and unique regional identities have sustained its relevance. Each Indian state weaves a distinct narrative through its traditional motifs, fabrics, and weaving techniques—closely aligned with the local climate, customs, and community aesthetics.

Despite external pressures, India remains the world’s largest producer of handlooms, contributing approximately 95% of global handloom output and ranking second in cotton exports (Ministry of Textiles, 2023). The sector is not only a cornerstone of rural economic resilience but also a leading force in ethical and sustainable fashion worldwide.

At the heart of this industry are master weavers—individuals who not only possess extraordinary artistic skill but also serve as entrepreneurs, employers, financiers, and guardians of cultural heritage. Many master weavers have established communal weaving sheds in recent years where hired weavers can perform production tasks (Syamasundari, 2006).

Master weavers manage the entire production chain, from providing yarn and loans to grassroots weavers, to overseeing design, quality control, and market linkage. It may be rightly projected that master weavers are critical to promoting handmade textiles and handlooms and their revival (Master Weavers Organisation, 2016).

The master weaver gives the weaver the pattern and frequently yarn that is ready (after finishing all pre-loom activities). They are in charge of dyeing, warping, and sizing the yarn, leaving the weaver with nothing to do but weave on the loom. Along with raw materials and patterns, the master weaver also provides looms for the weavers. The master weaver collects the finished goods, sells them and frequently makes funds available to weavers in need. Because of this option for quick financing, weavers may decide to work with the master weaver for lower pay (Anumala and Samala, 2017). In states like Mizoram, where 10,705 looms, 17,298 weavers, and 10,240 allied workers rely on handloom as a primary source of income master weavers are integral to sustaining community livelihoods. Their role becomes even more pronounced in urban clusters like Aizawl, where handloom textiles are not limited to ceremonial use but are part of everyday attire, especially among women.

This article investigates the operational dynamics of master weavers in Aizawl, Mizoram. By exploring their methods of business management, labor coordination, financial systems, and market engagement, the study aims to provide a deeper understanding of how these cultural entrepreneurs maintain resilience and adapt in an increasingly competitive textile economy. Ultimately, it contributes to the broader discourse on sustainable development, decentralized industry, and the preservation of intangible cultural heritage in India.

### 1.3 Review of Literature

Bagavatula (2010) highlighted in his study on the Working of Entrepreneurs in a Competitive Low Technology Industry: The Case of Master Weavers in the Handloom Industry in Andhra Pradesh that textile entrepreneurs (also known as master weavers) have played an essential role in making handloom extremely competitive. It is challenging for master weavers to get money back from the textile merchants. To get their money back, they must make multiple visits to the stores and endless phone calls. They must also proceed cautiously throughout this recovery process because if a master weaver is too assertive, the store owner can reverse course and decline to buy more goods. Every master weaver has a tale to share about how store owners avoid payments for extended periods of time while citing weak economic cycles, thus locking up thousands of rupees in capital as bad debt. The store owners may even file an insolvency petition in extreme circumstances, in which the master weaver loses the majority of his capital. Fourth, many weavers demand that their master weavers switch to more expensive looms, necessitating the initial infusion of capital that cannot be employed in the production cycle and where profits will appear only later.

Ramswamy and Kumar (2010) noted that most of the cluster's entrepreneurs are tribal women who have chosen to be entrepreneurs, regardless of how many looms they own. It analyses some crucial aspects of marketing of the micro artisan enterprises in terms of share of different products in total sales, distribution channels, payment for sales, sales promotion techniques, and extent of participation of sample enterprises in exhibitions and fairs. The researchers have offered suggestions for improving the marketing practices of the enterprises through cluster intervention initiatives to enable the cluster to sustain and grow.

Ramswamy and Kumar (2011) studied various entrepreneurial aspects of the traditionally run micro handloom enterprises in the Thenzawl cluster, a remote tribal cluster predominantly run by women entrepreneurs located in Mizoram. They suggested that development activities be undertaken in the cluster to enable the enterprises to sustain and grow. They also examined the relationship between cluster processes and entrepreneurship and concluded that clusters played a significant role in entrepreneurial growth in Thenzawl.

Singha (2019) conducted a detailed study on handloom production and marketing for exports in Manipur. His findings reveal that while traditional weaving practices are deeply rooted, the sector suffers from outdated production techniques, poor marketing infrastructure, and limited access to global markets. He recommends targeted government interventions and cooperative strengthening to improve operational efficiency.

Jain (2019) notes that demographic profiling is key to understanding sectoral strengths and vulnerabilities. Existing data from the Office of the Development Commissioner (Handlooms) provide macro-level statistics but lack depth in human capital assessment.

Sharma and Ranjan (2021) highlight that though India is backed by a rich culture, by far the handloom and handicraft sector remains largely unorganized and faces a number of challenges such as low income, lack of formal support, and vulnerability to market disruptions. The study emphasizes the impact of the COVID-19 pandemic, which exacerbated the financial instability of artisans and weavers.

Bradwaj et al. (2024), in their study, highlight the vital role of the handloom sector in Himachal Pradesh, primarily located in rural areas due to 89.97% of the population residing there. A majority of weavers are women (45.09%), and 18.87% are men, with significant caste-wise participation 41.75% from the general category, 32.08% SCs, 15.94% STs, and 10.21% OBCs. Awareness of government



schemes is low, with only 3.63% of workers having higher education. Most weavers earn less than ₹5,000 annually, with no one earning above ₹25,000. Key promoters include state-run corporations and cooperatives. The government is the primary loan provider, and average working days are similar across rural and urban areas.

1.4 Statement of the Problem

Although master weavers have long played a pivotal role in sustaining the Indian handloom industry, particularly in states like Mizoram, there remains a significant gap in academic and policy-focused research concerning their operational dynamics. Much of the existing literature has concentrated on the challenges faced by individual weavers or the functioning of cooperatives (Bhagavatula, 2010; Syamasundari & Niranjana, 2006), often overlooking the entrepreneurial, managerial, and innovative roles master weavers play within the broader value chain. Despite limited governmental support and growing competition from mechanized power looms, many master weavers continue to thrive through adaptive strategies, creative designs, and localized business models. The government of India estimates that of the 21,765 registered Primary Weavers' Cooperative Societies, which cover only around 15 percent of the weavers in the country, only 50 percent are serviceable, and that too only partially. About 85 percent of weavers in the country work outside the cooperative fold, either under master weavers or independently (Bankers Institute of Rural Development, Lucknow, "Study Report on Problems and Prospects of Handloom Sector in Employment Generation in the Globally Competitive Environment," 2016), which again contributes to the necessity to find the reason behind the weavers wanting to work under master weavers.

Understanding their operational mechanisms can offer critical insights not only for individual artisans and struggling cooperatives but also for policymakers, development agencies, and stakeholders seeking to enhance the resilience and global competitiveness of India's handloom sector. By uncovering these dynamics, this research aims to inform more targeted interventions, skill development programs, and strategic frameworks that can elevate the handloom industry beyond national borders and integrate its rich cultural tapestry into the global artisanal economy (Ministry of Textiles, 2019; Jain, 2019).

1.5 Research Gap

For the purpose of the research, Aizawl, the capital of Mizoram, is considered for data collection. No other districts were considered. This paper consists of missing values in certain variables, like the number of looms operated by master weavers, which is shown in the discussion part. The type of missing data can be likely missing at random after conducting Little's missing completely random test using SPSS.

1.6 Objective

To examine the fundamental operational dynamics of master weavers in Aizawl.

1.7 Methodology

Research Design

For the purpose of the study, a descriptive research design was adopted to explore the operational dynamics and practices of master weavers in Aizawl.

Area of the study

The research was conducted in Aizawl, the capital city of Mizoram, where handloom weaving is a culturally embedded and economically significant activity. Aizawl was selected due to its concentration of active master weavers and established weaving clusters.

Population and Sampling

The target population comprises registered and unregistered master weavers operating in Aizawl. A total of 172 master weavers were selected using the snowball sampling technique.

2.1 Results And Discussion

Duration of Business

The duration of a business, especially in the informal and traditional sectors like handloom, plays a critical role in shaping its operational capacity, market credibility, and strategic decision-making. Longer-established enterprises often benefit from accumulated knowledge, stronger social capital, and better resource mobilization, enabling them to adapt and sustain themselves in volatile markets. According to Jain (2019), longer business duration among artisan-led enterprises in India correlates with higher operational efficiency, as experienced entrepreneurs are more likely to adopt innovations in production and marketing while preserving traditional methods. This is particularly relevant in the handloom sector, where generational continuity helps sustain both technical skills and community trust.

Table 1.1 Business duration of master weavers

Sl no.	Duration	Frequency	Percentage
1.	5-10	68	39.5
2.	11-15	61	35.5
3.	More than 16	43	25.0
No. of cases		172	100

(Source: Primary Source)

As shown in Table 1.1, the largest proportion of master weavers (39.5 %) reported having operated their business for 5 to 10 years, followed by 35.5 per cent in the 11–15 year range. Additionally, 25 % of respondents indicated that they had been in the business for more than 16 years. Field interactions further revealed that among this latter group, a notable number of master weavers had sustained their enterprises for over 50 years, tracing their operations back to their grandparents' generation. This illustrates that for many families, handloom weaving is not only a livelihood but a generational legacy, deeply embedded in their cultural and economic identity. The presence of multi-generational weavers in the sample not only confirms the rootedness of the craft in Mizo society but also reinforces the idea that handloom is a cultural heritage industry, where business longevity enhances both market credibility and craftsmanship. These long-standing enterprises benefit from accumulated know-how, stable supplier and customer relationships, and stronger community standing, all of which are critical for navigating competition and modern market pressures.

The figure below is the visual presentation Business duration of master weavers

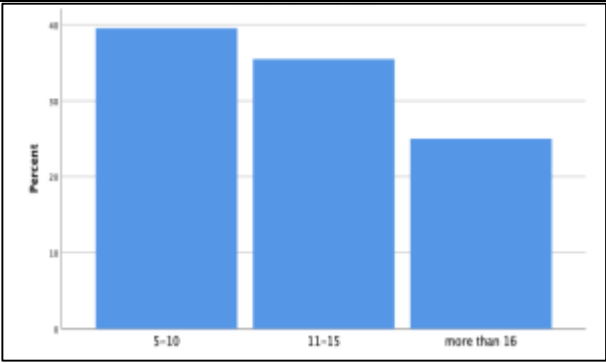


Figure 1.1 Business Duration of master weaver

2.2 Looms Operated by Master Weavers.

Loom ownership and operation are central indicators of entrepreneurial control and production capacity in the handloom sector. Among master weavers, the number and type of looms operated not only reflect economic status but also determine the scale of employment, output, and design capability. The nature of loom ownership—whether traditional frame looms, pit looms, or upgraded fly shuttle variants—significantly influences the efficiency and specialization of weaving operations. Bhagavatula (2010) argues that the ability to invest in and manage multiple looms sets master weavers apart from individual artisans and cooperative members. In Mizoram, handloom activity is largely home-based, but many master weavers operate multiple looms within family-run or hired units, which enhances their capacity to meet both local and external market demands (Ramswamy & Kumar, 2011) A study by Anumala and Samala (2017) observed that master weavers who operated more than 10 looms provided consistent work to 8–12 wage weavers, indicating that loom ownership is a crucial determinant of rural employment generation. Based on the primary data collected, the study reveals that master weavers operating a larger number of looms tend to produce a wider range of products, indicating greater diversification, capacity for innovation, and responsiveness to market demands.

The following presents the number of looms managed or operated by master weavers, categorized into five distinct brackets based on ownership. The minimum number of looms evaluated for the study is five.

Table 1.2 Looms operated by master weavers

Sl no.	Looms Operate	Frequency	Per Cent
1.	5-15	72	52.9
2.	16-25	43	31.6
3.	26-35	6	4.4
4.	36-45	13	9.6
5.	More than 46	2	1.2
	Total	136	79.1
	Missing System	36	20.9
	Total	172	100

(Source: Primary Source)

The study revealed that a significant proportion of textile entrepreneurs, or master weavers (52.9%), operated between 5-15 looms, suggesting a modest scale of operations. Previous research indicates that most master weavers generate an income in the range of ₹20,000 to ₹40,000 per month, which implies that earning a sustainable livelihood does not necessarily require ownership of a large number of looms. While loom ownership remains a key aspect of operational capacity, it is equally important to maintain regular production schedules and uphold contractual relationships with weavers.

Interestingly, these looms are not always housed within the master weavers' own premises. Instead, in many cases, they are located and operated at the households of contracted weavers. The study found that approximately 20% of the sample respondents provided lodging and dedicated workspaces (weaving sheds) for their contracted weavers, highlighting their role as employment facilitators within the cluster.

As seen in Table 1.2, 31.6% of master weavers operated 16 to 25 looms, while 4.4% reported ownership of 26 to 35 looms, and a small fraction operated more than 36 looms. Field interactions during data collection revealed that those managing a larger number of looms were typically the ones who provided lodging facilities and centralized weaving sheds, particularly in cluster-based settings across Mizoram. This operational structure reflects a more institutionalized form of enterprise among higher-capacity master weavers. Missing values identified in this variable consist of 20.9%. This percentage is not considered to limit the generalizability of findings related to operational scale. However, the remaining 136 valid responses provide a sufficiently robust sample for descriptive analysis.

The figure below is the visual presentation of looms operated by master weavers

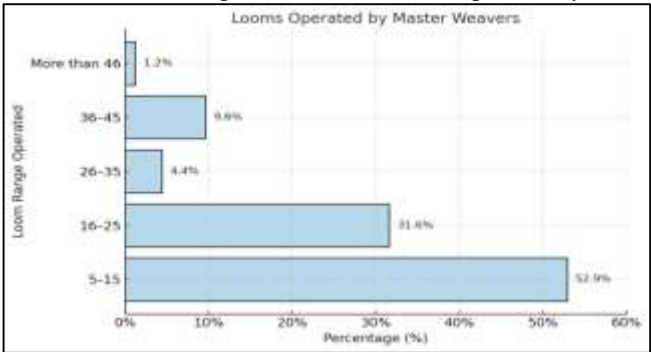


Figure 1.2 Looms operated by master weavers

2.3 Mater Weavers Assisted by family members in managing handloom business.

Family involvement plays a crucial role in the structure and sustainability of handloom enterprises in India, particularly those led by master weavers. These businesses are often household-based micro-enterprises; his form of embedded support not only reduces labor costs but also enhances continuity and transmission of traditional skills across generations (Patel & Thomas, 2021). A recent study by Bradwaj et al. (2024) emphasizes that family-based division of labor allows master weavers to scale their production without formal employment contracts. Jain (2019) also notes that the longer the duration of the enterprise, the more embedded the family becomes in its day-to-day operations. the The chart below indicates whether master weavers receive assistance from family members in operating or managing their handloom business.

Table 1.3 Master weavers assisted by family members in managing handloom business

Sl no.	Assisted	Frequency	Per Cent
1.	Yes	139	80.8
2.	No	33	19.2
	Total	172	100.0

(Source: Primary Source)

The data presented in Table 1.3 highlights the extent of family involvement in the handloom enterprises managed by master weavers. A significant majority—80.8% of respondents reported receiving active assistance from family members in managing various aspects of their business operations. In this context, “family” refers to any member residing in the same household as the master weaver. The remaining respondents, comprising just under 20%, indicated no direct physical assistance. However, insights gathered during fieldwork suggest that a lack of physical involvement does not equate to an absence of support. Many of these master weavers expressed that their family members—particularly children or younger adults—were still pursuing their education. As a result, the weavers intentionally refrain from involving them in business activities to prioritize their academic development. Nevertheless, these master weavers hold a long-term vision of passing on the business to the next generation, reaffirming the perception of handloom weaving as a heritage occupation passed down through family lines.

In conclusion, master weavers who benefit from familial support—whether through labor, management, or emotional encouragement—tend to demonstrate greater business resilience, market outreach, product diversification, and production efficiency. This emphasizes the critical role of family in sustaining and scaling traditional handloom enterprises in contemporary times. The figure below is the visual presentation of master weavers assisted by family members in managing handloom business.

The figure below is the visual presentation of Master weavers assisted by family members in managing handloom business

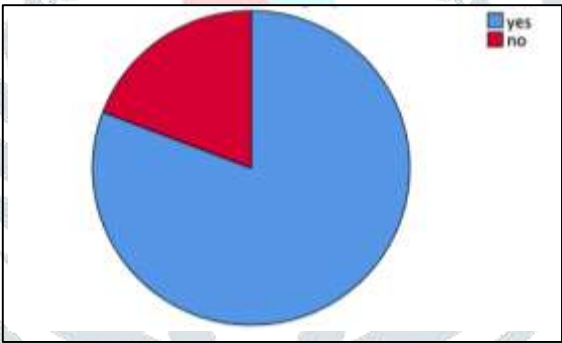


Figure 1.3 Master weavers assisted by family members in managing handloom business.

2.4 Institutional Assistance

Institutional assistance played a crucial role in the upliftment and development of textile entrepreneurs, as it is one of the largest unorganized sectors in the country. The number of schemes can have a great impact on the sector's players. Out of the various financial assistance programs, MUDRA loans, credit guarantees, and working capital subsidies under the National Handloom Development Programme (NHDP) enabled master weavers to invest in loom upgrades, pay advance wages to hired weavers, and manage order fluctuations more efficiently (Sinha and Dubey, 2022). The findings revealed that those who utilized both financial and material support experienced better business stability and lower dropout rates in their production networks. Bhuyan and Rahman (2021) found that master weavers who accessed subsidized yarn reported greater consistency in production planning, as well as improved margins, especially in regions where transportation and raw material costs are otherwise high.

Table 1.4 Institutional assistance of master weavers

Sl no.	Institutional Assistance	Frequency	Per Cent
1.	Yes	78	45.3
2.	No	94	54.7
	Total	172	100

(Source: Primary Source)

The data presented in Table 1.4 illustrates the extent of institutional assistance in the form of financial assistance alone accessed by master weavers among the sampled respondents. Table 1.4 highlights that 54.7% of the sampled respondents have not accessed any form of institutional assistance. From interactions made with the sample respondents, some deliberately choose not to engage with government schemes, preferring to operate independently—reflecting strong entrepreneurial traits and self-reliance among these master weavers. Conversely, 45.3% reported receiving assistance, indicating that government interventions have reached a notable segment of receptive beneficiaries. The limited overall uptake may be due to lack of awareness, procedural complexities, or limited outreach. These findings suggest the need for better dissemination and simplified access to ensure broader inclusion of master weavers in formal support systems.

The figure below is the visual presentation of institutional assistance of master weavers



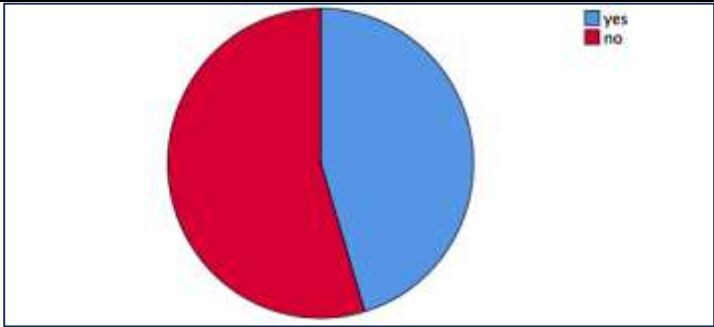


Figure 1.4 Institutional assistance of master weavers

2.5 Area of Expertise of Master Weavers

The success and sustainability of the handloom sector in India heavily rely on the multifaceted expertise of master weavers, who serve not only as skilled artisans but also as entrepreneurs, trainers, and production coordinators. Their areas of expertise often extend beyond weaving to include design innovation, yarn procurement, dyeing, quality control, marketing, and labor management, making them central figures in the functioning of localized textile economies (Bhagavatula, 2010). A study by Sinha and Dubey (2022) highlights that master weavers who diversify their roles—particularly into design development and supply chain coordination—tend to show greater business resilience and product innovation. Therefore, understanding and supporting the diverse skill sets within this group is essential for enhancing the competitiveness and cultural preservation of the handloom industry.

Table 1.5 Area of expertise of master weavers

Sl no.	Area of Expertise	Frequency	Per Cent
1.	Puan (wrap around skirt)	145	84.3
2.	Household	20	11.6
3.	Accessories	7	4.1
Total		172	100

(Source: Primary Source)

Table 1.5 shows that 84.3% of master weavers specialize in designing and producing traditional puans, reflecting the strong cultural significance and daily wear of this garment in Mizo society. The high demand creates a competitive market, highlighting the need for ongoing innovation. Additionally, 11.6% focus on household handloom products like tablecloths and pillow covers, many of which are exported beyond the state and even internationally. A smaller segment (2.1%) specializes in accessories such as bags, shawls, and neckties, reflecting a shift toward product diversification and modern design trends.

The figure below is the visual presentation area of expertise of master weavers

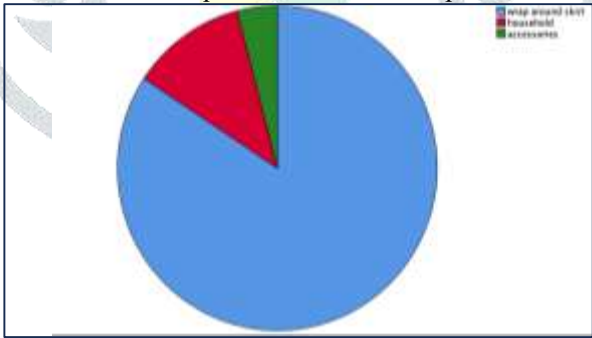


Figure 1.5 Area of expertise of master weavers

Additionally, the majority of sample respondents indicated that they incorporate both traditional Mizo motifs and contemporary design elements in their products. This fusion reflects a growing trend toward innovation through cultural adaptation, where new design concepts are integrated with indigenous patterns and symbols. By blending heritage aesthetics with modern sensibilities, master weavers are not only preserving cultural identity but also expanding the appeal of handloom products to broader and more diverse markets. This approach supports both sustainability and market competitiveness, demonstrating the sector’s potential for continuous renewal while staying rooted in tradition.

3. Conclusion

This study analyse the operational dynamics of master weavers in Aizawl to understand handloom enterprises structure and functioning . The findings disclose the deeply rooted cultural tradition, family collaboration, and adaptive management practices in the handloom sector in the studied area.

Majority of master weavers operate looms between 5 -15 looms, which indicate a manageable scale that supports realiable production. interestingly , numerous looms are administered outside the master weaver’s household often within the premises of contract weavers demonstrating a decentralized, trust-based production model that sustains trade.

In the context of handloom sector family support is a crucial factor as it signifies the sustainability and success of the business, the findings reveal that over 80% of respondents receive assistance in managing operations. This not only reduces labor costs but also promotes intergenerational skill transfer, ensuring the continuity of traditional knowledge and business sustainability.

Meanwhile 45.3% of master weavers have accessed institutional support such as financial aid, a larger portion remains either unaware of or isolate from formal assistance these can be due to certain reasons such as long paper and documentation process or wanting for self-reliant. The findings highlights the need for greater awareness, simplified processes, and more inclusive outreach.

As in the case of specialization, most master weavers focus on traditional Puan production, closely tied to Mizo cultural identity. However, diversification into household textiles and accessories is evident, particularly among weavers accessing wider markets and procuring higher education or degrees. Number of master weavers also blend traditional motifs with contemporary design elements, reflecting creativity and market adaptability.

Overall, the operational practices of master weavers in Aizawl reflect a balance of tradition, innovation, and resilience. The proficiency of these master weavers able to manage decentralized labor, adapt to limited institutional aid, and incorporate cultural identity into production makes them essential drivers of both economic and cultural sustainability in Mizoram's handloom sector. Augmenting their framework is vital for long-term growth and preservation of this artisanal heritage.

## Suggestions

1. Capacity Building and Innovation Training: Organize regular workshops on design thinking, digital marketing, and product innovation to help master weavers stay competitive in both domestic and international markets.
2. Streamlined Access to Government Schemes by developing simplified, multilingual informational materials and local facilitation centres to improve awareness and access to yarn subsidies, loans, and insurance schemes.
3. Youth Engagement and Curriculum Integration Encourage younger generations to engage in the handloom sector by integrating handloom-based modules in educational institutions (especially design and vocational colleges), with practical exposure.
4. Cluster-Based Infrastructure Support for the development of common weaving sheds and dyeing units in handloom clusters to support large-scale production and reduce operational burdens on individual master weavers.
5. Documentation of Traditional Knowledge by initiating community-driven projects to document traditional motifs, patterns, and weaving techniques, ensuring their preservation and potential commercial application.

## References:

- [1].Armistead, C. G., and Mapes, J. (1993). The impact of supply chain integration on operating performance, *Logistics Information Management*,6, 9-14.
- [2].Ramswamy, R., & Kumar,N.V.R.J. (2010). Socio-Cultural profile of Tribal Entrepreneurs in Handloom Cluster: A case study of Thenzawl. *Small Enterprises Development, Management & Extension Journal*, 37(3), 73-85.
- [3].Akoijam,S. (2012). Handloom Cluster Development Program: A Case Study. *Prabandhan Indian Journal of Management*, 5(8), 37-45.
- [4].Apparao,T., & Rao,V. (2012). Livelihood Insecurity and Coping Strategies of Handloom Weavers: A Comparative Study, *Studies of Tribes and Tribals*,10(1),65-72.
- [5].Anand, N., & Grover, N.(2015). *Measuring retail supply chain performance, Benchmarking*. An International Journal, 22(1),135 - 166.
- [6].Anumala, K. (2021). *Examining the relationship between supply chain management practices and production performance in Indian handloom industry*. International Journal of System Dynamics Applications, 10(2).
- [7].Anumala, K., & Samala,N. (2017). *Impact of Supply Chain Management Practices on Product Quality in Indian Handloom industry with reference to master weavers*. International Journal of Advanced Research, 5.
- [8].Ballou, R. H., Gillbert, S. M., and Mukherjee, A. (2000). *New Managerial Challenge from Supply Chain Opportunities*. Industrial Marketing Management, 29, 7-18.
- [9].Bhagavatula, S.(2010). *The Working of Entrepreneurs in a Competitive Low Technology Industry: The Case of Master Weavers in the Handloom Industry*. IIM Bangalore Research 321.
- [10]. Bhambri, G., & Rani, K. (2021). *Policies and Programmes of Government of India for Rising Export of Textile Products & Fabrics & It's Impact-especially in Haryana*. International Journal of Management , 2(1), 839-848.
- [11]. Callejón, M., & Segarra, A. (1999). *Business Dynamics and Efficiency in Industries and Regions: The Case of Spain*. Small Business Economics, 13(1), 253-271.
- [12]. Claycomb, C., Droge, C., and Germain, R. (1999). *The Effect of Just-in-Time with Customers on Organizational Design and Performance*. International Journal of Logistics Management, 10(1), 37-58.
- [13]. Das, R. (2015). Cluster Development Initiative For Poverty Alleviation : A Case Study. *Journal of Rural Development* ,34(3), 391-403.
- [14]. Goswami, R., & Jain, R. (2014). Strategy for Sustainable Development of Handloom Industry. *Global Journal of Finance and Management*, 6(2), 93-98.
- [15]. Government of India (2018), Office of the D.C (Handlooms), Ministry of Textiles, Government of India, New Delhi.
- [16]. Government of Mizoram, (2019), Achievement of Handloom Section, Commerce & Industries Department, Khatla, Aizawl.
- [17]. Government of Mizoram (2021). Commerce & Industries Department Report 2020-21, Government of Mizoram.
- [18]. Habeeb, S., & Ahmad, N. (2018). Handloom: Indian Heritage in need of Innovation and Revival for Economic transformation. *Ramanujan International Journal of Business and Research*, 3(1), 119–126.
- [19]. Kanungo, A.S., & Biswal. (2020).Socio-economic condition, welfare schemes, and occupational structure of 'pattachitra' artisans in Odisha, India. *Creative Industries Journal*, 14(1),81-106.
- [20]. Ministry of Textiles (2011). The Report of the Steering Committee on Handlooms and Handicrafts Constituted for the Twelfth Five Year Plan, Planning Commission., Government of India, New Delhi.
- [21]. Ministry of Textiles (2015). Note on Handloom sector, Ministry of Textiles, Government of India, New Delhi.
- [22]. Sharma, R., & Ranjan, J. (2021). *Challenges and problems faced by the Indian handloom and handicraft industry*. International Journal of Management Issues and Research.
- [23]. Singha, R. (2019). *Management in the handloom sector: A study of handloom production and marketing for exports*.