

Strengthening Community-based Adaptation through the Marketing of Handloom Industry: A Study with Reference to Bodo Handloom

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ABSTRACT

Handloom weaving is one of the most important elements of the socio-cultural and economic life of any community. It not only contributes in livelihood, it also represents the tradition, cultural identity of the particular community and the relationship of that community with their surroundings. However, in the era of modernization, competition from powerlooms and inadequate adoption of modern marketing practices creates challenges for the handloom weavers. The current study is based on a particular community, i.e., the Bodo community, the largest ethnic group of a north eastern state of India, Assam. Bodos also settle in neighbouring countries of India, Nepal and Bangladesh. The present study explores the traditional designs/Agor depicted in the Bodo handloom products and investigates the contribution of modern Marketing practices in handloom Industry in strengthening community-based adaptation and sustainable livelihoods among Bodo handloom weavers. The study follows both descriptive and exploratory research design, which is based on primary data. The primary data were collected from 50 handloom weavers and handloom enterprises of Bodoland, Assam, through personal interviews. The findings of the study reveal that the Agor or designs the Bodo community depicts in their handloom products are inspired by the nature and things they use in their daily life. They depict motifs of flora and fauna, some of these designs are Mwswow hathai agor, Khangkhrai agor, Bema agor, Thamphwi agor, Sun bibar agor, Dingkhiya bijwo agor, Pharwo megon agor etc.

Keywords: Handloom, Agor, Community-based Adaptation, Sustainable Livelihood

INTRODUCTION

Community-based adaptation has become an important approach in today's era for strengthening the capacity of communities to respond to today's changing social, economic,

market and environmental conditions. Community-based adaptation emphasises local communities use their knowledge and skills for tackling the emerging problems, which represents that the communities possess valuable indigenous knowledge that can help them respond to changing circumstances and sustain their livelihood. The Bodo community, majority residing in the Northeast India has a rich tradition of handloom weaving, in which traditional textiles represent their cultural identity. Traditional textiles of Bodo community include different kinds of designs that are related to patterns of things they use in their daily life, flora and fauna. Designs are mainly called as 'Agor' in the Bodo language. So, for the indigenous communities like Bodo community, the community-based adaptation is closely associated with the sustainability of their traditional practices and livelihood system. The concept of sustainable livelihood is a very important part of community-based adaptation. A livelihood can be called sustainable when it is capable of fulfilling current needs and withstands shocks without reducing options for the future generations. For communities depending on traditional practices, strengthening livelihood opportunities can improve their capacity to deal with changing environment in today's era of modernisation.

The handloom sector is considered as the second largest economic activity of India. The handloom industry provides source of livelihood for many communities in India. Handloom production includes traditional knowledge and skills, cultural expressions of a particular community. Different communities have their unique skills and techniques of weaving and also have different kind of designs representing their culture. The handloom weavers, particularly the weavers belonging to socially marginalised sections like Scheduled Tribes such as Bodo people can face challenges due to the technology upgradation, digitalisation, changes in customer preferences, changes in availability of resources, competition from powerloom and machine-made products, increasing production costs, limited market access and inadequate adoption of modern marketing practices. These challenges can affect the economic sustainability of weaving households and may also effect the transmission of traditional weaving knowledge to younger generations. In this context, strengthening the community's existing traditional knowledges, practices and skills by introducing appropriate innovations can serve as an important foundation for community-based adaptation without losing cultural identity.

The preservation of the traditional Agor and its continuation are very important for the economic sustainability of handloom weaving. If handloom weaving does not provide adequate livelihood opportunities, younger generations will become less interested in acquiring traditional weaving skills. Therefore, strengthening the market for Bodo handloom products will not only contribute to income generation but also help the preservation and transmission of indigenous knowledge.

STATEMENT OF THE PROBLEM

Due to modernisation, changing market needs, and digitalisation, it has become important to investigate the community-based adaptation of the different communities and how their traditional skills and indigenous knowledge can be strengthened to deal with the emerging problems. Though, Handloom weaving helps the communities preserve their tradition and cultural heritage, it also serves as a source of livelihood for the tribal people mainly residing in rural areas of northeast India. So, it is necessary to have economic sustainability in handloom weaving. If there will be no economic sustainability in the handloom weaving, future generation will be less interested in it.

Traditional Bodo textiles incorporate unique Agor that reflects cultural knowledge, community identity and elements of the surrounding environment. However, the sustainability of this traditional occupation is increasingly influenced by changes in consumer preferences, competition from machine-made products, changing market conditions, rising production costs and limited access to wider markets. Limited branding, inadequate product promotion, dependence on intermediaries and insufficient digital marketing can restrict the ability of handloom weavers to reach mass consumers, which results in the continuation of traditional weaving as a livelihood more challenging. At the same time, traditional Agor are valuable cultural resources that can potentially distinguish Bodo handloom products in competitive markets. However, there is a need to understand how these designs are represented, what they signify and how they can be appropriately presented to contemporary consumers. Modern marketing provides opportunities through social media, digital platforms, branding, storytelling, exhibitions and product diversification. Nevertheless, the extent to which these practices contribute to livelihood resilience and community-based adaptation among Bodo handloom weavers requires greater attention.

Therefore, there is a need to study about the traditional agor of handloom products of Bodo community and modern marketing practices to strengthen community-based adaptation.

Review of Literature

Basumatary and Khawzawl, (2024) explored relationship between Bodo folklore and the practice of weaving with the intention of providing insight into the culturally significant fabric that has been influenced by women's expertise. Weaving is an important form of cultural expression through which Bodo women keep and hand down cultural knowledge, values, beliefs and traditions from one generation to another. The authors note that weaving is more than just a way to make clothes; it also holds stories, images, feelings, and cultural meanings. Through folk songs, stories, proverbs, and riddles, the study specifically talks about how women keep the weaving tradition alive. What it talks about is how traditional Bodo agor (designs) are connected to things in nature, like birds, animals, trees, and flowers.

Narzary and Boro, (2024) studied the traditional knowledge of weaving design of the Bodo people and the categories of Bodo agor. There are motifs of man-made objects, nature, flora and fauna that the Bodo people depict in their handloom products. Motifs of man-made objects include *sorthea agor*, *jong agor* and *thakhamala agor*. This habit of depicting motifs related to the nature into their handloom products reflects a deep connection towards their surroundings and the creativity of the Bodo community.

Goyary and Chanu, (2024) examined the marketing practices of handloom-based enterprises in terms of product, place, price and promotion. The clothes woven by the handloom weavers across different states of Northeast India vary widely from each other as they largely deal in traditional attires. A few number of the weavers sell their goods outside the state; the majority sell in weekly or daily markets. However, the weavers sell their goods directly to the local market because of lack of facilities to supply outside the nation, and they are unaware of internet platforms.

Brahma and Lahary, (2025) explored Bodo traditional textile designs and their connection to ecological themes. The study highlighted that Bodo textile designs represent not only aesthetic and cultural identity but also traditional ecological knowledge and the community's close relationship with nature. Using a descriptive-analytical approach, the authors examined textiles such as *Dokhona*, *Fasra* and *Aronai* and identified several ecological motifs derived from native flora. The researchers examined the role of Bodo traditional textile design in promoting biodiversity conservation, ecological balance, and sustainable livelihoods, where the study identified motifs such as *Dingkhiya bilai Agor* (fern leaf), *Phami bibar Agor* (lotus), *Lewa Agor* (creeper), *Bwigri bibar Agor* (jujube flower), and *Thaigir bibar Agor* (elephant apple flower). These designs are associated with biodiversity, seasonal changes, traditional knowledge, cultural practices and ecological consciousness. These motifs serve as more than decorative elements; they preserve cultural memory and communicate the Bodo community's relationship with its natural surroundings. Furthermore, the researchers also analysed the techniques, material used in Bodo traditional textiles, assessing significance and sustainability, and explored challenges and opportunities for the preservation and revitalization of Bodo traditional textile design practices in the era of modernization, globalization, and environmental change. The study highlights the sustainable aspects of Bodo textile production, including using locally sourced materials and natural dyes.

Mushahary, (2025) investigated the origin of the Bodo community and highlighted their traditional weaving patterns, and also explored the traditional designs and motifs of Bodo community and its changes over a period. In the findings, it is revealed that Bodo people are maintaining their age-old traditional process of weaving from centuries and also the weaving process among them is continuing from generation to generation. Bodo people weaves the designs inspired from their surroundings like *pharwo megon agor*, *dingkhiya agor*, and *hajw agor*.

Paliwal and Kaur, (2025) Artificial Intelligence can support a more sustainable, inclusive, and competitive handloom fashion ecosystem. Its biggest impacts are in waste reduction, defect detection, sustainable use of materials, demand forecasting, inventory control, digital design, branding, market access, traceability, skills development, and cultural archiving. It does not allow us to see AI as a substitute for craftsmanship. Rather its value is in enhancing human creativity, enabling artisan agency and increasing access to information and markets. Future research should focus on participatory system design, culturally relevant data sets, region-specific sustainability metrics, transparent algorithms, and long-term field research. The success of AI integration will rely on the ability of the artisans to keep control of their knowledge, designs, narratives and economic value. The key challenge, then, is not only the adoption of advanced technology, but the establishment of an ecosystem in which innovation, cultural integrity, environmental responsibility and social equity complement each other.

Yadav and Jena, (2025) investigated drivers and barriers affecting e-commerce adoption among handloom weavers through the use of Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT is very useful in examining factors influencing e-commerce adoption among the handloom weavers because UTAUT incorporates social and psychological elements, enhancing its predictive and explanatory power. There are nine factors influencing adoption of e-commerce, and these factors are effort expectancy, social influence, performance expectancy, children's support, relative advantages, institutional support, behavioural beliefs, and perceived risk. These variables may influence actual adoption of e-commerce among handloom weavers negatively or positively. The adoption will impact the "Business performance" of handloom weavers in two ways: market performance and financial performance.

RESEARCH GAP

The existing study reviewed (Basumatary and Khawzawl, 2024), (Narzary and Boro, 2024) (Brahma and Lahary, 2025) (Mushahary, 2025) mainly focused on the traditional knowledge, traditional designs, category of Bodo agor, the origin of the Bodo community, traditional weaving patterns, documented the ecological themes embedded in Bodo traditional textile designs and highlighted their significance for cultural heritage, ecological consciousness and sustainable livelihoods but their study does not examine how these ecological designs and associated traditional knowledge can be strategically marketed in contemporary markets. (Goyary and Chanu, 2024) focused on the marketing practices of handloom-based enterprises with regard to product, place, price and promotion, and where and how the handloom weavers sell their products. (Paliwal and Kaur, 2025) studied how Artificial Intelligence can support a more sustainable, inclusive, and competitive handloom fashion ecosystem in the era of modernisation by contributing in waste reduction, defect detection, sustainable material use, demand forecasting,

inventory control, digital design, branding, market access, traceability, skills development, and cultural archiving. (Yadav and Jena, 2025) investigated drivers and barriers that affects the adoption e-commerce among handloom weavers by using the Unified Theory of Acceptance and Use of Technology (UTAUT).

Though, there are literatures studied about economic importance of handloom activities and the livelihood contribution of weaving among rural and tribal communities. Yet, comparatively a few research has examined handloom marketing as a mechanism for strengthening community-based adaptation. The community-based adaptation is generally means the ability of local communities to respond to social, economic and environmental changes by utilizing their local knowledge, resources, skills and traditional practices. Traditional handloom weaving in Bodo communities can potentially contribute to such adaptation through livelihoods, indigenous knowledge, women's participation and cultural and ecological links. But, the relationship between marketing of handloom products and community-based adaptation is underexplored. Furthermore, limited attention has been given to how traditional Bodo designs or Agor depicting elements of nature, biodiversity, animals, insects, plants and other cultural symbols can be incorporated into contemporary handloom products and effectively communicated and marketed to consumers. There is therefore a need to examine whether the commercialization and marketing of these culturally and ecologically significant designs can create economic opportunities while simultaneously supporting cultural preservation, sustainable livelihoods and community resilience.

Thus, the current study attempts to fill this gap by examining the traditional designs/ Agor depicted in selected Bodo handloom products and exploring how their marketing can contribute to strengthening community-based adaptation and sustainable livelihoods among Bodo handloom weavers.

OBJECTIVES

1. To explore the traditional designs/Agor depicted in the Bodo handloom products.
2. To investigate the contribution of modern Marketing practices in handloom Industry in strengthening community-based adaptation and sustainable livelihoods among Bodo handloom weavers.

RESEARCH METHODOLOGY

The present study followed both qualitative and qualitative research approach, and the study is based on primary data. The present study is descriptive and exploratory in nature. The primary data were collected from 50 Bodo handloom weavers and handloom enterprises of Bodoland Territorial Region, Assam. Personal interviews was carried out to collect the data from the respondents. A convenience sampling technique was used to select the 50 Bodo handloom weavers.

FINDINGS AND DISCUSSIONS

Traditional designs/Agor Depicted in the Bodo Handloom Products

The study found that traditional Agor constitutes an important component of Bodo handloom products. Traditional Agor depicted in handloom products of the Bodo community represents their cultural identity and indigenous knowledge. These agor reflects the elements of nature and the relationship of the Bodo community with their surrounding environment. The Bodo people depict the Agor inspired from their surroundings, which includes patterns of nature-based designs. The motifs do not only represent the creativity and relationship with nature, but also represents the traditional knowledge and cultural significance of those particular motifs. The Agor that the Bodo community depict in their handloom products, which are found during the field survey, are: Khangkhrai agor, Bema agor, Dingkhiya bijwo agor, Sunbibar Agor, Pharwo megon Agor, Thamphwi Agor, Laao begor Agor, Mwswo hathai Agor, Gudam Agor, Hagra bijwo Agor, Khangkhrikola Agor.

Table 1: Traditional Bodo Agor

Name of Design	Image of Design
<i>Khangkhrai Agor:</i> Khangkhrai means crab, and the Khangkhrai Agor represents the design of crab. Though crab is a edible species the Bodo handloom weavers use this as an agor in their handloom products. This depiction of the water species as an agor in the handloom products by the Bodo handloom weavers reflect the creativity and connection with their surroundings.	 Fig. 1: Khangkhrai Agor
<i>Sunbibar Agor:</i> Sunbibar means the sunflower, and Sunbibar agor represents the design of sunflower, which the Bodo weavers depicts in their handloom products. The Sunbibar Agor demonstrates the connection between Bodo handloom design and the natural environment, where the form of a flower becomes a source of inspiration for textile design.	 Fig. 2: Sunbibar Agor

Pharwo megon Agor: Pharwo megon means the eye of a pigeon. As the Pharwo megon Agor is inspired by the appearance of the eye of a pigeon, it demonstrates how specific visual features of birds can be abstracted and reproduced as textile motifs. The use of a bird-related motif reflects the close observation of the natural world embedded within traditional design knowledge of Bodo people. Instead of reproducing the entire bird, the design focuses on a particular feature—the eye—and converts it into a decorative textile pattern.

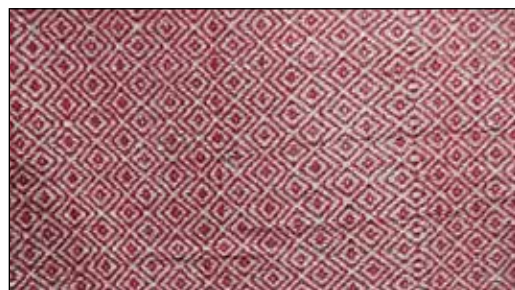


Fig. 3: Pharwo megon Agor

Thamphwi Agor: Thamphwi Agor represents the design of housefly. Its presence in traditional handloom design illustrates that motifs may be derived not only from visually attractive elements such as flowers and plants but also from small insects commonly observed in everyday surroundings. It reflects the ability of traditional Bodo handloom weavers to translate observed natural forms into textile designs.

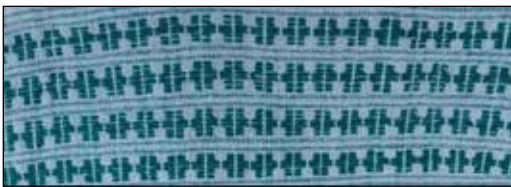
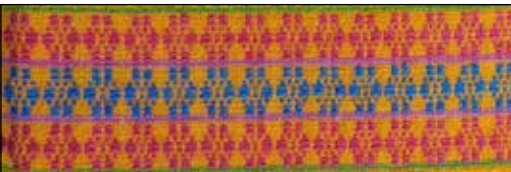


Fig. 4: Thamphwi Agor

Laaobegor Agor: The Laao Begor Agor represents the design inspired by the shape of bottle gourd seeds. It demonstrates the influence of everyday agricultural and plant knowledge on Bodo textile traditions. It also indicates that the traditional design inspiration can originate from small and commonly observed elements of plants.



Fig. 5: Laao begor Agor

Mwswo hathai Agor: Mwswo hathai Agor is inspired by the appearance or arrangement of the cow teeth. The motif represents another example of how traditional Bodo textile designs draw inspiration from animals and their physical characteristics.	 Fig. 6: Mwswo Hathai Agor
Gudam Agor: Gudam Agor represents a button-like form incorporated into the Bodo handloom design. Unlike motifs that are directly inspired by plants or animals, Gudam Agor demonstrates how objects associated with everyday material culture can also become sources of textile inspiration.	 Fig. 7: Gudam Agor
Hagra bijwo Agor: Hagra bijwo Agor is inspired by the form of Durva grass. The motif demonstrates how commonly observed vegetation can become a source of traditional textile design and reflects the close relationship between the community and its surrounding plant environment.	 Fig. 8: Hagra Bijwo Agor
Khangkhrikola Agor: Khangkhrikola Agor is inspired by the appearance of the spiny gourd. The Khangkhrikola Agor reflects the connection between Bodo handloom and local plant and food resources and demonstrates how agricultural biodiversity can be represented through textile design.	 Fig. 9: Khangkhrikola Agor

Source: Field Survey

P.C: Sabitri Bala Goyary.

Contribution of Modern Marketing Practices in Handloom Industry in Strengthening Community-based Adaptation and Sustainable Livelihoods among Bodo Handloom Weavers

The study found that modern marketing practices have the potential to strengthen the adaptive capacity and livelihood opportunities of Bodo handloom weavers by connecting

traditional production with changing market conditions. The study establishes a connection between traditional Bodo knowledge and modern marketing. Traditional Agor provide the cultural foundation, while modern marketing provides the mechanism through which this cultural resource can be converted into wider market opportunities. The modern marketing practices respondents use to market their handloom products are Digital and Social Media Marketing, Branding and Product Identity, Exhibitions and Direct Marketing. These modern marketing practices contributes in Women's Economic Participation, Sustainable Livelihoods, helps in strengthening Community-Based Adaptation, and Preservation of Traditional Knowledge.

Table 2: Use of Digital and Social Media Marketing Practice by Bodo Handloom Weavers and Handloom Enterprises

Response	Frequency(f)	Percentage (%)
Yes	35	70
No	15	30
Total	50	100

Source: Primary data collected by researcher

Digital and Social Media Marketing

The findings revealed that 70% of Bodo handloom weavers and Handloom enterprises of the respondents use digital and social media marketing to market their handloom products. The use of social media provides opportunities for weavers and handloom entrepreneurs to display their products beyond their immediate local markets, which reduce excessive dependence on local customers and intermediaries. Platforms such as Facebook, Instagram and WhatsApp facilitates product promotion, customer communication and direct interaction with potential buyers.

Table 3: Use of Branding and Product Identity Practice by Bodo Handloom Weavers and Handloom Enterprises

Response	Frequency(f)	Percentage (%)
Yes	12	24
No	38	76
Total	50	100

Source: Primary data collected by researcher

Branding and Product Identity

It is found that only 24% of the respondents use the branding and product identity practice to market their handloom products, and other respondents are unaware of this

practice. It is found that Branding strengthens the identity of Bodo handloom products. Communicating the Bodo origin, traditional weaving technique, Agor, craftsmanship and cultural significance differentiates the products from mass-produced textiles.

Table 4: Use of Exhibitions and Direct Marketing practice by Bodo Handloom Weavers and Handloom Enterprises

Response	Frequency(f)	Percentage (%)
Yes	19	38
No	31	62
Total	50	100

Source: Primary data collected by researcher

Exhibitions and Direct Marketing

The findings revealed, as per the table-4 shows, that only 38% of the respondents use Exhibitions and direct marketing practices. Participation in exhibitions, fairs and cultural events provides opportunities for direct interaction between weavers and consumers. Direct marketing improves product visibility and potentially reduces dependence on intermediaries. This helps them adapt to changing market conditions by expanding their customer base, and direct interaction with buyers helps them in modifying products according to changing demand. Exhibitions provide opportunities to display traditional Agor and helps in increasing consumer awareness of Bodo cultural heritage by explaining meaning and story behind each design.

The modern marketing practices followed by the Bodo handloom weavers and handloom enterprises, such as Digital and Social Media Marketing, Branding and Product Identity, Exhibitions and Direct Marketing, contribute to Sustainable livelihoods, strengthen community-based adaptation, help in preservation of traditional knowledge, and women's economic participation.

Contribution to Sustainable Livelihoods

Modern marketing practices contributes to sustain livelihoods by offering more market prospects and enhancing the visibility of handloom items. Increased market access helps the Handloom weavers earn more income which helps them to continue weaving as a livelihood. But the sustainable livelihoods are not just about the greater sales but also about the fair pricing, availability of raw materials, production costs, regular demand and continuity of weaving skills.

Contribution to Community-Based Adaptation

The present study revealed that the modern marketing practices supports community-based adaptation by enabling Bodo handloom weavers to respond to shifting market

conditions while using their existing traditional knowledge and skills carried out from generation to generation.

Preservation of Traditional Knowledge

The study also reveals that the economic sustainability of handloom contributes to the continuation of traditional weaving knowledge and skills, traditional agor that the Bodo handloom weavers depict in their handloom products. Because when the traditional designs are of commercial value, the younger generations of the community will be more motivated to learn and preserve traditional weaving methods and the traditional designs.

Women's Economic Participation

Since women play a significant role in Bodo handloom production as they weave to help financially to their family, strengthening marketing opportunities potentially enhances their participation in income-generating activities. Greater involvement in product development, pricing, promotion and direct selling further strengthen their position within the handloom value chain.

CONCLUSION

Community-based adaptation provides a useful framework for understanding how local communities can respond to changing economic, social and environmental conditions by building upon their own knowledge, skills, resources and institutions. In the case of handloom weaving of the Bodo communities, traditional weaving and Agor constitute important cultural and livelihood resources that contribute to this adaptive capacity. The study demonstrates that Bodo handloom should not be viewed only as a traditional craft or source of income. It represents a combination of cultural identity, indigenous knowledge, craftsmanship and livelihood potential. Traditional Agor provide Bodo handloom with a distinctive cultural identity and can serve as an important basis for product differentiation. At the same time, traditional knowledge alone is not sufficient to ensure the economic sustainability of the handloom sector in changing markets. Modern marketing practices such as social media marketing, digital selling, branding, exhibits and direct marketing help to link conventional products to modern day consumers. The main point of the study is that marketing can be a method for community-based adaptation, when it enhances the capacity of Bodo handloom communities to respond to changing markets while retaining their traditional knowledge and cultural identity. Thus, sustainable marketing of Bodo handloom should be directed not only toward increasing sales but also toward ensuring fair returns to weavers, documenting traditional designs, encouraging younger generations to continue weaving, strengthening women's participation and promoting the cultural story behind each product. Therefore, via improving the marketing of Bodo handloom we may promote economic resilience and cultural sustainability. The future of

the Bodo handloom sector lies in forging a balanced relationship between tradition and innovation – where traditional Agor and indigenous knowledge form the core and modern marketing practices help these products reach wider markets and generate sustainable livelihood opportunities.

REFERENCES

- Basumatary, R., & Khawzawl, T. L. (2024). Folklore of the Himalayan Foothills: Weaving Traditions in Bodo Folklore. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 16(2).
- Brahma, K., & Lahary, B. (2025). Ecological Themes in the Bodo Traditional Textile Designs. *Sotsiologicheskii Zhurnal*, 15(4), 60-65.
- Goyary, S. B., & Chanu, A. I. (2024). Marketing of Small Business with Regard to Handloom Sector. *REST Journal on Banking, Accounting and Business*, 3(3), 80-84. DOI: <https://doi.org/10.46632/jbab/3/3/13>
- Mushahary, E. (2025). The Patterns and Techniques of Weaving Among the Bodo Tribe of Assam. *International Journal of Multidisciplinary Educational Research*, 14 (11(2)), 94-97.
- Narzary, S., & Boro, I. (2024). An Introduction to the Bodo Agor (Weaving Design). *Educational Administration: Theory and Practice*, 30(1), 4115-4117.
- Paliwal, P., & Kaur, A. (2025). Artificial Intelligence in Handloom Fashion: Advancing Sustainability, Empowerment, and Cultural Revival. *Journal of Emerging Computer Research and Applications*, 59-64.
- Yadav, S., & Jena, B. B. (2025). Building a Conceptual Framework to Study Factors Influencing E-commerce Adoption by Handloom Weavers. *NIFT Journal of Fashion*, 4, 184-2023.