Venkatagiri Handloom Weaving: Traditions, Techniques and Contemporary Challenges

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ABSTRACT

The Venkatagiri handloom tradition in Andhra Pradesh stands as a monumental Indian artisanal craft comprising delicate cotton and silk sarees with elaborate zari borders and Jamdani supplementary weft motifs. The paper aims to analyze in depth the socio-cultural milieu of the craft, its history dating back to royal patronage, raw materials and tools, and weaving techniques particular to this region. It also offers a critical line of discussion about the present-day challenges faced due to labour shortage, increased raw material prices, and market competition posed by powerlooms, alongside developments which include digital marketing, design collaboration, and cooperative development to promote the craft. Drawing from socio-economic studies and sectoral innovation approaches, this paper argues for a middle road between conservation and modernization for the future sustenance of the Venkatagiri handlooms in the global artisanal economy.

Keywords**:** Venkatagiri Handlooms, Profile, History, Raw Materials, Weaving and Challenges.

Introduction

India's handloom weaving is not just a profession; it is a way of transmitting culture and keeping it alive through the ages. As per government data and studies conducted on the handloom sector, millions of rural artisans, mostly women, depend on handloom weaving for their livelihood and for preserving heritage designs (One District One Product, Tirupati, Andhra Pradesh, 2025; Bhowmik, 2021). The fabric, splendidly fine in weave and light in weight, adorned with zari and Jamdani motifs, has been given Geographical Indication status.

Venkatagiri weaving from Andhra Pradesh is highly famed for such qualities, thereby distinguishing it from other fabrics in the country and signifying its cultural worth (Vishwas Dohale, 2022; Mamidipudi, 2018).

However, this age-old craft stands threatened owing to globalization-induced market pressures, a dwindling artisan base, and competition from synthetic and powerloom products (One District One Product, Tirupati, Andhra Pradesh, 2025; M. K. P. Naik, 2024). Against this backdrop, the present study attempts an overall evaluation of the traditional Venkatagiri weaving system, bringing out the profile, history, technicality, and contemporary dynamics of the craft while simultaneously pointing to revival and sustainable development.

Objectives

• To understand the socio-cultural context of Venkatagiri handloom sarees, analyzing their historical origins under royal patronage and their continuing significance in Andhra Pradesh.
• To study and document the raw materials, tools, and traditional techniques of Venkatagiri weaving, focusing on how Jamdani motifs and zari borders characterize the craft.
• To discuss an effective balance between conservation and modernization for the sustainable future of Venkatagiri sarees, as well as to explore the marketing strategies and challenges involved.

Methodology

Research Design

The research design used was qualitative and descriptive to investigate the socio-economic status, traditional methods, and problems of Venkatagiri handloom weavers. Primary and secondary sources of data were used in a systematic way so that a comprehensive approach could be taken to understanding the weaving system.

Sampling Technique

With the help of the District Handloom Office, Tirupati, a purposive sampling method was used to identify 50 weavers. Only the most experienced artisans whose expertise in weaving was long-term and who had more than one loom and national-level recognition were included in the sample. This narrow sampling guaranteed that the study obtained detailed and genuine insight into the socio-economic realities of the Venkatagiri weaving community and the modern challenges they have to deal with.

Tools of Data Collection

Semi-structured interviews were employed based on a pre-designed interview schedule that provided flexibility to explore further into the socio-economic status, weaving practices, challenges, and the future prospects of the sampled master weavers. Moreover, direct observation was used to record the processes of weaving, motifs, raw materials, tools, and properties of fabrics in the natural environment of the Venkatagiri clusters.

Secondary Data Collection

A variety of reliable sources provided secondary data, helping to supplement the primary findings and give historical and contextual background. Such sources included government reports like the Handloom Census and policy documents, scholarly articles, books, and dissertations on handloom weaving and cultural heritage, as well as the records of the Geographical Indication (GI) status of Venkatagiri sarees. In combination, these sources provided information about the socio-economic context of the weaving population, the development of traditional activities, and the larger issues and opportunities of the handloom sector in general.

Profile and Cultural Heritage

Venkatagiri, a town in the Tirupati district of Andhra Pradesh, is home predominantly to thread-weaving communities such as the Padmashali and Devanga castes, where weaving is a hereditary occupation and cultural legacy (One District One Product, Tirupati, Andhra Pradesh, 2025). The sarees manifest regional symbolism with motifs like mango, peacock, temple arches, and floral patterns often inspired by religious iconography and fertility symbolism deeply embedded in South Indian aesthetics (Vishwas Dohale, 2022; Mamidipudi, 2018).

The award of the Geographical Indication tag (GI tag) in 2011 provides legal recognition to its unique fabric construction and patterning, helping to shield the craft from mass-produced imitation and fostering consumer trust linked to provenance (Vishwas Dohale, 2022). The artisan communities' social fabric remains intertwined with the craft, wherein weaving constitutes both livelihood and a mode of cultural expression (Hazarika, 2018; Rai, 2022).

Historical Evolution of the Craft

Historical scholarship traces Venkatagiri weaving's origins to the early eighteenth century under the patronage of the Velugoti dynasty rulers, who commissioned fine cotton garments for nobility and temple rituals (Mamidipudi, 2018; Mamidipudi, 2022). The colonial and post-colonial eras witnessed shifting demand patterns, with expansion into aristocratic markets in South India and governmental efforts via cooperatives and handloom boards supporting the sector's organization (Vishwas Dohale, 2022; Mamidipudi, 2022).

Despite pressures from mechanized textile industries since the nineteenth century, Venkatagiri weavers retained core handloom techniques, reflecting adaptability through incremental technological and material innovations rather than wholesale mechanization (Mamidipudi, 2018; Roy, 2002). The late twentieth century introduced synthetic zari and blended yarns, adapting to market constraints while maintaining artisanal quality (Mamidipudi, 2018; Katpadi Mohammed, 2020). However, increasing competition from powerlooms and large-scale textile manufacturing since the 1990s challenged the sector's economic viability, necessitating renewed strategic interventions (One District One Product, Tirupati, Andhra Pradesh, 2025; M. K. P. Naik, 2024).

Raw Materials and Tools

Venkatagiri weavers primarily employ fine cotton yarns ranging from 80s to 120s count for their lightweight and breathable fabric, with mulberry silk selectively used in borders and pallu for premium varieties. The zari threads, historically silver and gold, are now often copper-based or polyester-coated to reduce costs without compromising lustre.

The yarn sizing conventionally uses rice starch, which strengthens yarn tension and durability during weaving. The weavers mainly carry out their work on the pit loom — a type of loom where the weaver sits in a pit and the loom is embedded in the ground for ergonomic advantage and tension precision. They also use tools like charkhas for winding, shuttles for weft alignment, heddles and reeds for warp alignment, and hand-rolled bobbins for the supplementary weft insertion of Jamdani motifs. The handwork and finesse of Venkatagiri sarees, which depend on these traditional tools, have made them unique.

Weaving Process and Techniques

Pre-Weaving Process

The traditional Venkatagiri cotton weaving process involves several stages. Pre-dyed cotton hanks are procured from Chirala or Coimbatore, which are reputed for their dyeing expertise. The yarn is prepared for weaving by rewinding it on smaller bobbins (either wood or plastic) using a hand-operated winding machine so that it remains user-friendly and tangle-free.

The **asu process** refers to measuring and winding yarn onto the traditional asu frame in a particular pattern, which determines the number of threads and the length of the warp. In ball warping, the threads are collected in a cylindrical shape to maintain even tension and ensure thread alignment.

Street sizing is a distinctive step in Venkatagiri and similar weaving clusters. In this process, the yarn is stretched along a street or open space between two fixed poles. A starch solution is poured uniformly over the stretched threads, and the yarn is allowed to dry in the sun. This sizing strengthens the yarn, reduces friction during weaving, and reduces yarn breakage.

Piecing is a stage where the new warp is connected to the existing warp ends from previous weaving cycles. Street warping is the stage where the entire warp is laid out again to check the correct alignment of the design and the spacing between the threads. The warp then undergoes dressing, where it is carefully wound onto the loom's warp beam, ensuring equal tension across the width.

In the case of silk weaving, warp preparation is a traditional craft involving skilled artisans working manually at ground level. The process begins with the purchase of dyed silk yarn of superior quality from Bangalore. The yarn is unwound in the form of hanks, followed by drum warping, where the yarn is laid on a rotating drum and wound in layers according to the required saree length and pattern.

Each warp thread is carefully counted and arranged so that the final product is free from defects. The yarn from the drum is wound onto the warp beam, after which the yarn undergoes street sizing. However, in silk weaving, sizing is usually minimal, though a light starch solution may be applied manually to reinforce the fibre.

The warp is inserted into the loom by passing the threads through the heddles and reed using manual methods suited to the particular loom. This operation requires concentration and

patience because the final fabric quality and smoothness depend on the spacing and tension of each thread. Meanwhile, the weft yarns, whether cotton, silk, or zari, are wound onto pirns and inspected for tension before being loaded into the shuttle.

Warping and Loom Setup

Weavers arrange the warp yarns on a drum and transfer them to the pit loom with precise tension control to maintain the dimensional stability of the saree fabric.

Base Weaving

Plain weave predominantly forms the saree body, woven over 6–10 days depending on complexity and yarn blend. The rhythm and pace depend on artisan dexterity and motif intricacy.

Jamdani Supplementary Weft Weaving

One of the characteristic features of the Jamdani technique is the hand insertion of extra weft threads to form motifs such as floral, peacock, mango, and temple designs. Weavers use extra shuttles to interlace these motifs float-wise with the base weft, requiring concentrated effort and precise skill. A single motif insertion can take hours, extending the total production duration to two months or more per saree.

Finishing

Post-weaving processes include washing to remove starch, calendaring to enhance sheen and hand feel, hemming edges, and securing zari ends. Quality is frequently managed by cooperative societies or intermediaries before formal marketing.

Contemporary Challenges and Innovations

Challenges

• **Labour Attrition:** Increasing out-migration of youth due to low wages and lack of social security endangers skill transmission, as confirmed by empirical data on handloom household vulnerabilities.

• **Raw Material Costs:** Volatile prices of silk and zari strain artisan profitability, especially for small-scale producers.

• **Market Access and Intermediaries:** The artisan's share of value is significantly diminished by intermediaries dominating distribution, restricting direct consumer linkage.

• **Competition from Powerlooms:** Mechanized production floods local and urban markets with cheaper synthetic alternatives that imitate handloom aesthetics but undermine artisans' economic sustainability.

Innovations

• **Digital Marketplaces:** Platforms such as GoCoop and Amazon Karigar enable weavers to bypass intermediaries and gain larger returns and wider market reach.
• **Design Collaborations:** Collaboration with design institutes such as the National Institute of Fashion Technology (NIFT) encourages product diversification (scarves, stoles, home textiles) while preserving traditional motifs.
• **Cooperative Empowerment and Skill Development:** Cluster development programmes led by the state provide training in technical skills, quality assurance, and business management.
• **Sustainable Practices:** The adoption of organic cotton, natural dyes, and eco-friendly packaging aligns with the global slow-fashion movement.
• **Selective Technological Upgradation:** The use of dobby or jacquard attachments on handlooms simplifies production while preserving handmade character.
• **Supply Chain Mitigation:** During the pandemic, the implementation of a "make-to-order" strategy helped minimize inventory risks and encouraged flexible supply chain practices.

These innovations collectively highlight the socio-technological adaptability of handloom weaving, countering the notion that it is static or outdated.

Conclusion and Future Perspectives

Venkatagiri handloom weaving is a powerful carrier of cultural heritage, artisan excellence, and economic sustenance for weaving communities. The craft's survival in present-day industrial competition requires integrated stakeholder approaches that combine heritage preservation with market-driven innovation.

Strengthening cooperatives, providing direct digital marketing avenues, introducing appropriate social security measures for artisans, and exploring green materials and designs are essential for ensuring future resilience. Further studies focusing on gender roles, climate-smart weaving, and comparative Geographical Indication frameworks would offer deeper insight.

Preserving Venkatagiri weaving is both a cultural and developmental necessity, requiring policy frameworks grounded in artisan welfare, technological integration, and consumer awareness within a rapidly evolving global economy.

Acknowledgment

The authors gratefully acknowledge that the funding for this publication was provided under the project funded by Pradhan Mantri Uchchatar Shiksha Abhiyan (PM-USHA) **under the** Multi-disciplinary Education and Research Universities (MERU) Grant **sanctioned to** Sri Padmavati Mahila Visvavidyalayam, Tirupati.

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