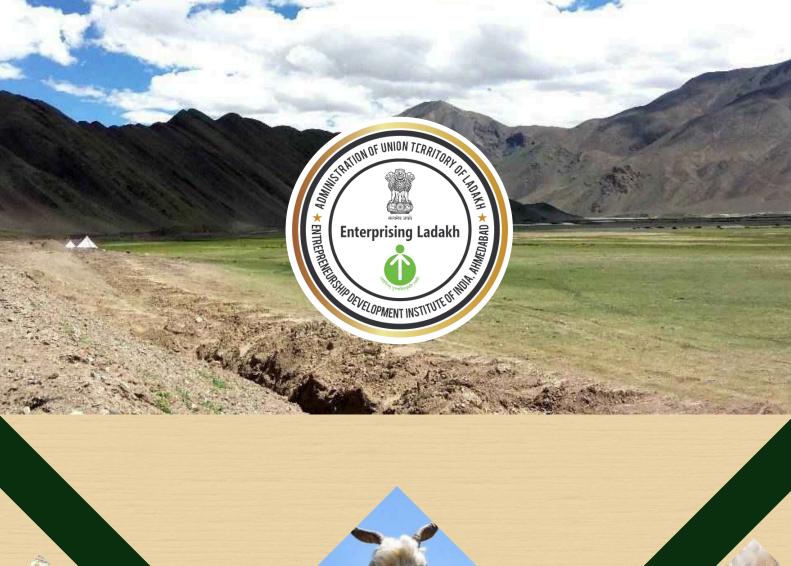


# **Pashmina Wool Production**





# PASHMINA WOOL PRODUCTION

#### 1. INTRODUCTION

Pashmina is one of the world's most luxurious and valuable natural fibers, traditionally hand-processed from the undercoat of the Changthangi goat in the high-altitude Himalayan region, especially Ladakh. Known for its softness, warmth, and light weight, Pashmina wool is the foundation for making world-renowned shawls, stoles, scarves, and other high-end fashion accessories.

Ladakh is the original homeland of the Changthangi goat, the rare and high-altitude breed that produces the world-famous Pashmina fiber. The region's harsh climatic conditions, with temperatures often dipping below -30°C, naturally support the growth of fine undercoat wool that makes Ladakhi Pashmina globally renowned for its softness and warmth. However, despite being the primary source of raw Pashmina, Ladakh lacks local processing and value addition infrastructure. As a result, most of the raw wool is transported to Kashmir or other parts of India for spinning, weaving, and finishing, leading to missed opportunities for local employment, economic growth, and artisan skill development. Establishing a Pashmina wool production unit in Ladakh would not only enable backward and forward integration (from goat herding to finished product) but also retain the economic value within the region. It would empower nomadic herders (Changpas), support youth-led entrepreneurship, preserve traditional knowledge, and strengthen Ladakh's position in the global luxury wool market. Moreover, localized production reduces transport-related wool degradation and ensures better quality control and certification, making it a crucial step toward sustainable and inclusive development in the high-altitude Himalayan economy.

This project focuses on establishing a structured Pashmina wool production unit — covering procurement, dehairing, cleaning, spinning, and basic yarn finishing — while promoting sustainable livelihood for pastoral communities and ensuring global-standard quality output.

#### 2. INDUSTRY OVERVIEW

#### a. Origin and Uniqueness:

Pashmina wool is one of the finest natural fibers in the world, derived from the undercoat of the Changthangi (Pashmina) goat, found at high altitudes of Ladakh in the Indian Himalayas. This rare fiber is known for its exceptional softness, warmth, and lightweight texture, making it globally recognized as a luxury material.

#### b. Traditional Handicraft Heritage:

Pashmina weaving is a centuries-old craft practiced in Kashmir and parts of Himachal Pradesh. Skilled artisans hand-spin, weave, and embroider Pashmina shawls, scarves, and stoles — each piece reflecting regional culture, artistry, and tradition. The process is labor-intensive and entirely manual, giving it high aesthetic and cultural value.

#### c. Domestic and Global Demand:

The demand for Pashmina products is strong in domestic and international luxury markets. Countries like the USA, UAE, Japan, and the UK import large volumes of Pashmina apparel and accessories. Domestically, it is popular among high-end urban buyers, gifting segments, and wedding trousseaus.

#### d. Economic Importance:

The Pashmina industry supports thousands of herders, spinners, weavers, and traders in remote regions of Ladakh and Kashmir. It contributes significantly to the rural and artisan economy, especially in the Union Territories of Ladakh and Jammu & Kashmir. It also generates foreign exchange through exports and tourism-related retail.

#### e. Challenges and Authenticity Concerns:

The industry faces challenges like counterfeit products, a lack of standardized pricing, seasonal goat rearing constraints, and youth migration away from traditional crafts. To address these, initiatives like GI (Geographical Indication) tagging, Pashmina certification labs, and government-backed artisan clusters are being promoted.

#### f. Growth Opportunities:

With rising global demand for sustainable, handmade, and ethically sourced fashion, Pashmina can gain by integrating technology, e-commerce, and storytelling. Support for digital marketing, branding, design innovation, and export facilitation can further unlock the potential of the Pashmina wool industry

#### 3. PRODUCT AND ITS APPLICATIONS

Pashmina wool production results in a diverse array of valuable products, both as raw materials and finished goods, catering to high-end fashion and artisan markets. At the primary stage, the production unit yields cleaned and dehaired raw Pashmina fiber, the base material for further processing. This is converted into hand-spun Pashmina yarn—either 100% pure or blended with silk or fine wool—depending on the design requirements. Yarn rolls are supplied to weavers and artisanal units for shawl and garment production. At the same time, some batches are processed into Pashmina felt sheets, which are widely used in crafting handmade accessories and home décor items. An important by-product, the coarse guard hair, is utilized in manufacturing brushes or for felting purposes in the handicrafts sector. These products have broad applications: they are transformed into luxury shawls, stoles, scarves, high-fashion winter garments, and handwoven textiles exported globally. Additionally, the fine fiber and felt derivatives support the production of premium handmade crafts, embroidered accessories, and designer goods, reinforcing Pashmina's legacy as a symbol of artisanal excellence and cultural heritage.

Pashmina wool is transformed into a wide range of high-value luxury products, celebrated worldwide for their unparalleled softness, warmth, and artisanal finesse. The most iconic among

these is the traditional Pashmina shawl, handwoven and often exquisitely hand-embroidered with intricate Kashmiri motifs using techniques like Sozni, Tilla, and Kani. Beyond shawls, Pashmina is skillfully crafted into stoles, mufflers, scarves, and dupattas that appeal to both men and women in the premium fashion segment. The lightweight nature of Pashmina fabric makes it ideal for ethnic wear, formal coats, designer cloaks, jackets, and high-fashion garments for luxury couture brands worldwide. In recent years, its application has extended to sophisticated accessories such as handbags, neck warmers, turbans, head wraps, and even home décor items like cushion covers, wall hangings, and luxury throws. Thanks to its natural insulation, rich texture, and biodegradability, Pashmina suits both winter and all-season luxury wear. With the global shift toward slow fashion and sustainable living, ethically sourced and certified Pashmina products are increasingly sought after by eco-conscious consumers. Additionally, bespoke Pashmina gift sets are in high demand for corporate gifting, bridal collections, and international souvenirs, cementing Pashmina's place as a versatile and culturally rich material across fashion, lifestyle, and heritage sectors.

## 4. DESIRED QUALIFICATION FOR PROMOTERS

To successfully lead and manage a Pashmina wool production enterprise, the promoter should ideally possess a background in textile engineering, wool processing, or fashion design. Such educational or technical experience provides a foundational understanding of fiber quality, yarn standards, fabric behavior, and finishing techniques, essential in producing high-end Pashmina products. Familiarity with the handloom or handicrafts sector is particularly valuable, as the Pashmina industry is deeply rooted in artisanal skills and traditional weaving methods. Promoters should also have a basic understanding of supply chain dynamics, including procurement of raw wool from herders, fiber processing, inventory management, quality control, and product distribution. A genuine interest in ethical fashion, handmade crafts, and sustainability is essential—not only to align with global market trends but also to respect and uplift the local communities involved in traditional Pashmina production. In today's globalized market, experience in digital marketing, e-commerce, or international B2B sales is a strong advantage, helping the promoter connect directly with customers, retailers, and export buyers. The ability to work across design, operations, and marketing with a long-term vision for artisan empowerment and brand positioning will significantly enhance the success of a Pashmina wool venture.

#### 5. BUSINESS OUTLOOK AND TRENDS

The business outlook for the Pashmina wool industry is auspicious, driven by a global shift toward traceable, ethical, and sustainable fashion. With increasing consumer awareness about environmental impact and artisanal livelihoods, there is a strong resurgence of interest in natural fibers like Pashmina, especially handmade and rooted in cultural heritage. The slow fashion movement, which values craftsmanship, durability, and uniqueness over mass production, has further elevated the appeal of authentic Pashmina products in luxury markets worldwide. Additionally, the rise in consumer preference for regionally distinctive, GI-tagged (Geographical Indication) products has brought renewed attention to Ladakh and Kashmir's traditional Pashmina weaving and processing techniques. Buyers are not only seeking high-quality fabric but also the story behind it, making traceability and artisan identity integral to branding and sales.

Supporting this growth are various government initiatives under the Ministry of Textiles, Handicrafts Board, and MSME schemes, which offer financial incentives, design and technology upgrades, and market linkage support. E-commerce platforms, ethical fashion labels, and global trade fairs are also opening new marketing channels, making this an ideal time for entrepreneurs to enter or expand in the Pashmina wool sector.

#### 6. MARKET POTENTIAL AND MARKETING ISSUES

#### **Market Potential:**

- Strong export demand in Europe, Japan, the UAE, and the USA.
- Growing domestic market for premium sustainable yarns.
- B2B supply to fashion brands, designers, and handloom cooperatives.

#### **Marketing Issues:**

- High cost of production affects local affordability.
- Risk of synthetic blends being sold as authentic Pashmina.
- Fragmented sourcing and lack of quality control at the grassroots level.

# 7. RAW MATERIALS REQUIRED

- Raw Pashmina wool (collected from Changthangi goats)
- Clean water (for washing/scouring)
- Mild natural detergents (for degreasing)
- Carding oil (for fiber alignment)
- Natural dyes (optional, in yarn stage)

#### Other requirements:

- Packaging materials (cotton bags, yarn cones)
- Gloves, baskets, work tables, drying racks

#### 8. MANUFACTURING PROCESS

#### 1. Wool Procurement:

The process begins with carefully collecting raw Pashmina wool during the goat molting season, typically from April to June. During this period, Changthangi goats naturally shed their undercoat—a fine, warm fiber that grows to protect them from the extreme cold of Ladakh. The wool is procured either directly from nomadic herders (Changpas) or through cooperative societies that organize and manage goat rearing communities. Timely procurement is essential

to ensure fiber freshness and maintain its superior quality. Proper awareness and fair trade practices are necessary here to support herders and preserve the traditional value chain.

#### 2. Sorting and Grading:

Once collected, the raw fleece undergoes manual sorting to separate fiber grades. This includes carefully removing coarse guard hair, sand, hay, and impurities. Skilled artisans or trained workers differentiate between the ultra-soft undercoat fibers and the stiffer outer coat (guard hair), ensuring that only the finest quality is retained for further processing. Sorting is typically done by hand, as mechanical systems may damage the delicate fibers. Grading is often done based on length, color, and fineness, determining the intended end use—for premium yarn, blended fabric, or felted accessories.

#### 3. Scouring and Cleaning:

The sorted wool is then subjected to a gentle scouring process. This involves washing the raw fiber in warm water mixed with mild, non-chemical soaps or natural cleansers to remove lanolin (a natural grease in raw wool), dirt particles, odor, and embedded dust. Wash must be done under controlled temperatures to avoid felting or fiber damage. After thorough rinsing, the fiber can settle and dry naturally in a dust-free environment. This cleaning step not only enhances fiber hygiene but also brightens its natural off-white or cream tone.

#### 4. Dehairing:

One of the most crucial and delicate steps in Pashmina processing is dehairing. It involves the separation of the fine undercoat—the true Pashmina fiber—from the coarse guard hairs unsuitable for spinning or garment production. This can be done manually through repeated combing or with the help of specialized mechanical dehairing machines designed to handle ultrafine fibers. The goal is to achieve maximum extraction of usable Pashmina wool without fiber breakage. High-quality dehairing enhances the spinning potential, fineness, and softness of the final yarn.

#### 5. Drying and Combing:

Post-dehairing, the fine fibers are dried in the shade to preserve their texture and natural oils. Sunlight is generally avoided to prevent fiber brittleness. After drying, the fibers are gently combed using traditional brushes or hand-combs to align the strands in one direction. This straightening is essential to improve spinning efficiency and uniformity in the yarn. Combed fiber becomes softer, fluffier, and easier to twist into fine threads. This step may be repeated for higher grades of yarn to ensure optimal fiber alignment.

#### 6. Spinning:

The aligned fiber is then spun into yarn either manually using a charkha (traditional spinning wheel) or with the help of semi-automatic machines, depending on the production scale. In hand-spinning, the artisan uses their fingertips to twist and draw the fiber into a continuous thread,

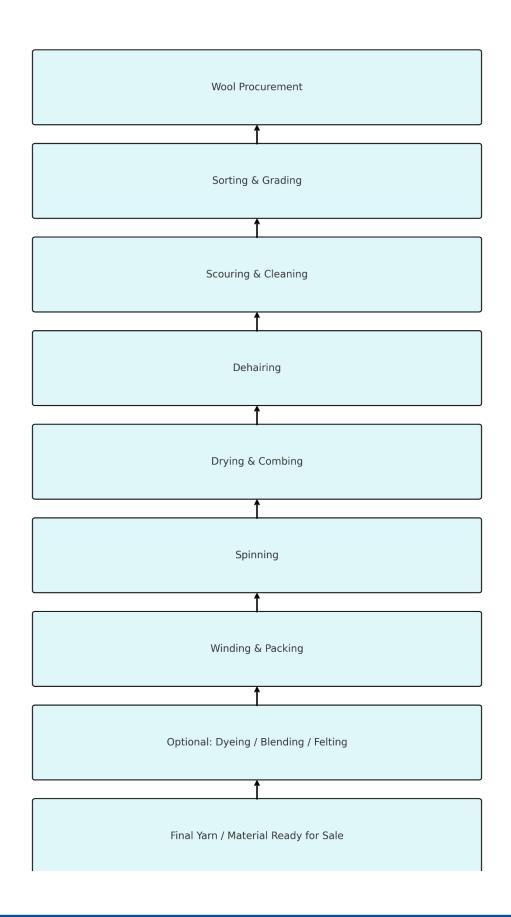
maintaining even tension and thickness throughout. The resulting yarn is known for its delicate feel, softness, and exclusivity. In semi-mechanized spinning, machines replicate this twisting action while maintaining artisanal standards. The yarn produced may be single-ply or multi-ply depending on the end-use and weaving requirements.

#### 7. Winding and Packing:

After spinning, the yarn is carefully wound onto cones, spindles, or made into hanks, depending on the buyer's specifications. Each batch is labeled for traceability, quality grade, and batch number. The yarn is then packed in breathable, dust-free packaging such as cotton or muslin bags to preserve fiber quality during transportation. If the unit offers dyed yarn or blends (such as Pashmina-silk), proper labeling and separation are maintained for quality assurance. These finished yarns are now ready to be sold to weavers, designers, wholesalers, or used in-house to produce final garments or fabrics.

#### (Optional-Steps:)

For added value, additional processes may be integrated into the workflow. Natural dyeing using plant-based or mineral dyes can enhance the appeal of the yarn. Fiber blending with silk or merino wool can offer new textures, sheen, or strength. Felt-making from residual or lower-grade fibers allows the production of accessories like wallets, jewelry, and art panels, ensuring that every part of the raw wool is utilized efficiently.



#### 9. MARKETING STRATEGY

- Tie-ups with shawl makers, export houses, and fashion designers.
- Local branding: "Pure Ladakh Pashmina Yarn".
- Online promotion through Instagram, Etsy, and e-commerce platforms.
- Participation in handicraft and textile fairs (Delhi, Srinagar, Leh).
- Registration under Geographical Indication (GI) tagging for authenticity.

#### 10. RISK FACTORS

- Seasonal availability of raw Pashmina (collected April–June only)
- Labor skill requirement (hand processing is delicate and time-consuming)
- Market price fluctuations
- Threat from counterfeit Pashmina imports

#### 11. ENVIRONMENTAL BENEFITS

- Pashmina production uses natural, biodegradable fiber.
- Supports pastoral nomads practicing traditional grazing systems.
- No chemical inputs are used in processing, making it eco-friendly.

#### 12. FUTURE OPPORTUNITIES

- Expansion into finished goods (shawls, scarves) with local weavers.
- Certification under organic and fair-trade labels.
- Export partnerships with international wool traders and brands.
- Setting up a GI-verified e-commerce platform.

# 13. COST OF PROJECT (Medium Scale)

Particulars	Estimated Cost (₹ Lakhs)
Land/Building Rent & Infrastructure Setup	3.00
Machinery & Equipment	7.00
Raw Material Procurement (1st 6 Months)	8.00
Labor and Staff (Initial Setup Phase)	3.00
Packaging & Branding Setup	1.00
Marketing and Website	1.00
Licenses, Testing, Certifications	0.50
Working Capital	3.50
Contingency and Miscellaneous	1.00

Particulars	<b>Estimated Cost (₹ Lakhs)</b>
Total Estimated Project Cost	28.0 Lakhs

# 14. MEANS OF FINANCE

Source	Amount (₹ Lakhs)	Percentage (%)
Promoter's Capital Investment	11.20	40%
Term Loan from Bank	16.80	60%
Total	28.00	100%

# 15. MANPOWER REQUIREMENT (May vary as per requirement)

Role	Number	Monthly Salary (₹)	Annual Cost (₹)
Production Supervisor	1	20,000	2,40,000
Fiber Cleaners and Sorters	1	15,000	1,80,000
Dehairing Machine Operators	1	18,000	1,44,000
Spinning/Combing Workers	2	15,000	3,60,000
Packing and Logistics Staff	1	14,000	1,68,000
Marketing and Sales Executive	1	18,000	2,16,000
Total	7		13,08,000

# 16. IMPLEMENTATION SCHEDULE

Activity	Timeline
Land & Infrastructure Setup	Month 1
Procurement of Machinery	Month 1–2
Staff Hiring and Training	Month 2
Raw Material Procurement and Setup	Month 2–3
Trial Production and Process Testing	Month 3
Market Launch and Branding	Start of Month 4

# 17. LIST OF MACHINERY AND EQUIPMENT

Equipment	Purpose
Dehairing Machine	Separating fine fibers from guard hair
Fiber Washing Tanks and Racks	For scouring and drying
Carding Machine (Manual/Semi-auto)	Aligning and softening fiber
Hand Spindles or Spinning Wheels	Yarn production
Yarn Winding Machine	Converting yarn into hanks or cones
Dyeing and Drying Setup (Optional)	For colored yarn production
Work Tables and Sorting Trays	Manual processing support
Packaging Table and Tools	Final yarn and fiber packaging

#### 18. REVENUE STREAMS

#### 1. Sale of cleaned, dehaired Pashmina fiber (bulk or to artisans):

This is the primary revenue stream wherein raw Pashmina fleece collected from Changthangi goats is cleaned and dehaired to extract the fine undercoat fibers. These fibers are in high demand among local spinners, weaving clusters, and export-oriented enterprises. The fiber can be sold in bulk to traders or directly to individual artisans and cooperatives, enabling the unit to earn a steady income early in the value chain.

#### 2. Sale of hand-spun yarn to shawl manufacturers:

Once the dehaired fiber is spun into yarn—either through traditional hand-spinning or semi-automated methods—it becomes a high-value input for shawl and stole manufacturers. Many handloom units, especially in Kashmir and Leh, depend on quality yarn for their weaving operations. This stream provides consistent income as the yarn can be supplied in custom thicknesses, colors, and quantities to meet artisan and buyer preferences.

#### 3. Sale of semi-processed felt sheets:

Another valuable product is Pashmina felt, which is made by compressing and matting fibers into thin, durable sheets. These felt sheets are widely used in crafting accessories, handmade notebooks, jewelry bases, and lifestyle products. Selling semi-processed felt opens up a diversified market segment, particularly among handicraft producers and designers who seek raw yet refined materials.

## 4. Customized yarn blends (Pashmina + Silk, Pashmina + Merino):

By blending Pashmina fiber with silk or merino wool, the production unit can cater to fashion designers and weaving brands looking for softness, sheen, or improved strength. These specialty blends are used in premium garments and seasonal collections and fetch higher prices due to their designer appeal. Custom spinning of blends allows the unit to target niche textile studios, boutique brands, and global buyers.

#### 5. Training programs and workshops (Phase 2):

As a long-term revenue strategy, the unit can offer training in fiber processing, yarn spinning, and Pashmina product development. These programs can target aspiring entrepreneurs, craft revivalists, rural women, and international textile students. Workshops not only generate income but also strengthen the local artisan ecosystem and promote the unit's social branding and community engagement.

#### 19. PROFITABILITY CALCULATION

Particulars	Year 1 (₹ Lakh)	Year 2 (₹ Lakh)	Year 3 (₹ Lakh)
Revenue	35.00	55.00	70.00
Operating Expenses	22.00	30.00	36.00
EBITDA	13.00	25.00	34.00
Interest & Depreciation	3.50	3.00	2.50
Net Profit Before Tax	9.50	22.00	31.50
Income Tax (@ @25%)	2.38	5.50	7.87
Net Profit After Tax (PAT)	7.12	16.50	23.63

## 20. BREAK-EVEN ANALYSIS

Particulars	Value
Annual Fixed Cost	₹20.24 Lakhs
Avg Revenue per Kg of Yarn	₹8,000–₹12,000
Avg Yarn Output per Year	~3,000–4,000 kg
Break-Even Revenue Needed	₹28.00–30.00 Lakhs
Break-Even Period	~16–18 months

# 21. GOVERNMENT APPROVALS REQUIRED

- MSME/Udyam Registration
- GST Registration
- Trade License (local municipality)
- Woolmark Certification (for yarn quality, optional)
- GI tagging compliance (if using GI-certified Pashmina)

#### 22. TRAINING CENTRES AND COURSES

- Indian Institute of Carpet Technology (IICT), Bhadohi
- Central Wool Development Board (CWDB), Jodhpur

- Handicrafts and Handloom Export Corporation (HHEC)
- Local Ladakh Handloom Development Centres
- Khadi and Village Industries Board (KVIC)

Topics: Pashmina fiber grading, spinning, fiber cleaning, quality control, export readiness

The Swayam portal (link: https://swayam.gov.in/) can also be accessed for enhanced learning on business commerce, accounting, production, marketing, and areas of entrepreneurship.

Entrepreneurship programs that help run businesses successfully are also available from institutes like the Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

# **Disclaimer**

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