

## **Blanket Manufacturing Unit from Sheep Wool in Uttarakhand**



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## 1. Introduction

The proposed project involves establishing a unit for manufacturing high-quality blankets from locally sourced sheep wool in Uttarakhand. The initiative aims to leverage the abundant availability of wool from the state's hilly districts and traditional weaving skills present in local communities. The unit will transform raw wool into processed yarn and then into soft, warm blankets suitable for cold mountain climates. This approach will provide a value addition chain from wool collection to finished product, thereby generating income and livelihoods in rural areas.

Uttarakhand has a long tradition of sheep rearing, and the cold climate of its high-altitude districts makes wool-based products an essential household need. Currently, most local wool is either sold raw at low prices or remains underutilized due to lack of organized processing units. Establishing a blanket production unit will bridge this gap, create local demand for wool, and enhance income for sheep rearers while producing quality winter goods.

By focusing on quality, design, and sustainability, this unit will be positioned as a producer of premium, eco-friendly wool blankets. This will not only preserve traditional skills but also cater to emerging niche markets in urban India and abroad seeking natural, handcrafted, and warm bedding products.

## 2. Industry Overview

The Indian wool industry is largely unorganized, and Uttarakhand contributes a small but significant share of wool, especially from sheep in districts like Chamoli, Pithoragarh, and Uttarkashi. Most of this wool is coarse, which is ideal for warm blankets, carpets, and heavy winter wear. The domestic market for blankets is large and growing due to urbanization, rising incomes, and colder winters.



The industry has recently witnessed a shift from synthetic to natural fibers as consumers become more conscious about sustainability and durability. Wool blankets, though slightly more expensive, are valued for their warmth, breathability, and long life. The demand for pure wool products is especially high in cold regions, hotels, army establishments, and export markets.

Government initiatives like the National Wool Development Programme (NWDP) and support from Khadi and Village Industries Commission (KVIC) are promoting organized production and processing of wool. This creates a favorable policy environment for setting up a wool blanket unit in Uttarakhand.

### 3. Products and Application

The main product will be warm blankets made from 100% local sheep wool. These will include single-layer traditional blankets, double-layer heavy winter blankets, and designer embroidered blankets for premium customers. Different sizes like single, double, and king size will be manufactured.

These blankets will find applications in households across northern India, especially hill and cold regions. Hotels, resorts, army camps, hospitals, hostels, and government relief agencies are large institutional buyers of wool blankets for winter use. Decorative and handloom-designed blankets can target urban home furnishing markets.

By using natural dyes and ethnic patterns, the unit can produce heritage-style blankets that appeal to tourists and export buyers, adding significant value over plain industrial blankets.

### 4. Desired Qualification

The enterprise can be promoted by individuals having background or interest in textiles, handloom, rural enterprise management, or wool processing. Formal technical qualification is not mandatory, but prior experience in fabric production, weaving, or marketing of wool products will be beneficial.

Entrepreneurs will need to develop understanding of wool processing techniques such as cleaning, carding, spinning, weaving, dyeing, and finishing. Familiarity with quality standards, BIS norms, and eco-label certifications will support access to institutional buyers.



Skills in business administration, workforce management, and marketing will be essential to operate the production unit, maintain quality, and build sustainable sales channels.

## 5. Business Outlook and Trend

The market outlook for wool blankets is positive, especially in northern and northeastern India where winters are long and cold. Growing demand for sustainable natural fibers is pushing customers to shift from synthetic acrylic blankets towards wool-based alternatives. Consumers are increasingly willing to pay more for authentic, durable, and eco-friendly products.

Emerging trends include the revival of handloom-based designs, introduction of natural dyes, and premium heritage branding of traditional wool products. There is also a growing demand from the hospitality sector for high-quality wool blankets that align with eco-tourism and sustainable resort branding.

With rising e-commerce penetration, niche handloom wool blankets are finding national and international markets. Uttarakhand's cultural appeal can be used to market the blankets as authentic mountain crafts.

## 6. Market Potential and Market Issues

The market potential includes bulk sales to hotels, resorts, army establishments, government relief agencies, hospitals, and retail chains. Hill districts and cold climate states like Himachal Pradesh, Jammu & Kashmir, and Sikkim also present good markets. Urban households seeking premium winter bedding products are another growing segment.

Market issues include competition from cheap synthetic blankets, seasonal fluctuations in demand, and the initial challenge of building a brand for authentic wool blankets. Maintaining consistent quality from natural raw materials can also be complex.

These issues can be addressed by securing long-term supply contracts with institutional buyers, diversifying into decorative and designer blankets for off-season sales, and emphasizing eco-friendly branding to stand out in the market.



## 7. Raw Material and Infrastructure

The main raw material is sheep wool sourced from local sheep rearers and cooperative societies in Uttarkashi, Chamoli, Pithoragarh, and Bageshwar districts. Other materials will include cotton lining fabric, natural dyes, embroidery threads, labels, and packaging material.

Infrastructure will include a production shed of around 4000 sq. ft. housing washing and scouring units, carding machines, spinning machines, handlooms or powerlooms, dyeing area, finishing section, and storage. Water supply, electricity (30 HP load), and proper ventilation will be required.

Facilities will also include a testing area for checking weight, shrinkage, and colorfastness to ensure consistent product quality.

## 8. Operational Flow and Flow Chart

Operations will begin with collection and grading of raw wool. The wool will be washed, scoured, and dried to remove impurities. Cleaned wool will be carded and spun into yarn. The yarn will then be woven into blanket fabric using looms. The woven fabric will be dyed, washed, and finished to achieve softness and shrink resistance.

The finished blankets will be checked for weight, size, and quality, then trimmed, labeled, and packed. The production system will integrate traditional skills with mechanized processes to ensure efficiency and authenticity.

### Flow Chart:

**Raw Wool Procurement → Cleaning and Scouring → Carding and Spinning → Weaving on Looms → Dyeing and Finishing → Quality Checking → Packing → Dispatch**



## 9. Target Beneficiaries

The primary beneficiaries will be sheep rearers who will get better prices for their wool through assured local procurement. Women artisans and local youth will get employment in spinning, weaving, dyeing, and finishing.

Hospitality units, army establishments, hospitals, and households will benefit from access to warm, high-quality local blankets. Government agencies involved in disaster relief and winter support can also procure these blankets.

This enterprise will strengthen the rural economy by creating a value chain from wool production to finished goods within the state.

## 10. Suitable Locations

Suitable locations include wool-producing districts such as Chamoli, Pithoragarh, Bageshwar, and Uttarkashi. These locations offer proximity to raw material sources and traditional weaving skills.

For marketing and logistics advantages, production units can also be set up in Haldwani, Rudrapur, Dehradun, or Haridwar where industrial estates and transport connectivity are strong.

Cluster-based production where processing is done centrally and weaving is distributed to local self-help groups can be an effective approach.

## 11. Manpower Requirement

Initially, the unit will require around 35 people including a production manager, 3 supervisors, 15 weavers and loom operators, 6 fiber processing staff, 5 finishers and packers, and 5 sales and administrative staff.

Local women can be trained and engaged in spinning, weaving, and finishing work to promote inclusive employment. Traditional weavers can be integrated to preserve cultural heritage designs.



Skill development and periodic training will be provided in quality standards, safety, and new designs to enhance productivity and product appeal.

## 12. Implementation Schedule

Activity	Timeline (Months)
DPR preparation and registration	0–2
Site selection and infrastructure development	2–4
Machinery procurement and installation	3–6
Recruitment and training of staff	4–6
Raw wool procurement and supplier contracts	5–6
Trial production and quality testing	6–7
Full commercial production	7–9

## 13. Estimated Project Cost

Cost Head	Amount (INR)
Land and building (rental/development)	12,00,000
Machinery and equipment	25,00,000
Raw wool and initial inventory	5,00,000
Utilities, dyeing setup and material handling	3,00,000



Cost Head	Amount (INR)
Training and salaries (first year)	9,00,000
Branding, packaging and marketing	4,00,000
Working capital buffer	2,00,000
Total Estimated Cost	60,00,000

## 14. Means of Finance

The project can be financed through 25% promoter contribution, 60% term loan from banks or SIDBI, and 15% capital subsidy under state handloom and MSME policies. PMEGP and NWDP schemes can be used for subsidies and grants.

Cooperative wool societies and NGOs can be partners for backward linkages. NABARD and KVIC also offer soft loans for rural textile units.

Working capital can be arranged through cash credit limits based on inventory and order book.

## 15. Revenue Streams

Revenue will come from sales to hotels, resorts, hospitals, army establishments, relief agencies, and households. Premium designer blankets can fetch higher prices in urban retail and export markets.

Online sales through e-commerce platforms will provide a continuous revenue stream even outside winter season. Sale of surplus yarn and fabric offcuts to other textile units will add secondary income.

Over time, the brand can be expanded to other woollen products like shawls, throws, and carpets to diversify revenue.





## 16. Profitability Streams

Profitability will come from using locally available wool at low procurement cost and adding high value through design, branding, and quality finishing. Bulk institutional sales will ensure consistent demand and economies of scale.

Decorative handloom blankets sold at premium prices can provide high margins. Minimizing wastage during processing and efficient inventory control will reduce costs and enhance profitability.

Establishing a direct brand presence will help capture higher retail margins compared to wholesale-only operations.

## 17. Break-even Analysis

Parameter	Estimate
Total project cost	60,00,000
Average monthly sales	8,00,000
Average monthly expenses	5,00,000
Monthly net surplus	3,00,000
Break-even period	20–22 months

## 18. Marketing Strategies

Marketing will emphasize the heritage and eco-friendly qualities of the blankets. Collaborations with hotels, resorts, and army establishments will be pursued for bulk orders.



Participation in handloom and craft fairs, trade exhibitions, and tie-ups with handicraft emporiums will build brand visibility. Attractive labeling highlighting local wool, handmade nature, and Uttarakhand origin will be used.

Digital marketing on social media and e-commerce marketplaces will target urban and export consumers who seek authentic handcrafted products.

## 19. Machinery Required and Vendors

Machinery/Equipment	Quantity	Purpose	Suggested Vendors (Uttarakhand)
Wool washing and scouring unit	1	Cleaning raw wool	Rudrapur industrial suppliers
Wool carding machine	1	Aligning and cleaning fibers	Selaqui machinery dealers
Wool spinning machines	3	Converting wool into yarn	Dehradun textile machinery suppliers
Handlooms/Powerlooms	10	Weaving blankets	Almora handloom equipment vendors
Dyeing and finishing setup	1	Coloring and finishing woven fabric	Haridwar industrial suppliers
Cutting and packing equipment	2	Trimming and packing finished blankets	Haldwani MSME suppliers

## 20. Environmental Benefits

The unit will promote sustainable production by using natural wool, which is biodegradable, renewable, and has a low carbon footprint. Local sourcing will reduce transportation emissions and support circular rural economies.



Natural dyes will be used to avoid chemical effluents, and wastewater from dyeing will be treated and reused. Wool waste will be recycled into felt or sold to insulation manufacturers.

By replacing synthetic blankets, this enterprise will reduce plastic-based textile pollution and promote eco-conscious consumer behavior.

## 21. Future Opportunities

Future opportunities include diversifying into shawls, stoles, carpets, and winter wear to use the same wool value chain. Establishing exclusive retail stores and export tie-ups can enhance margins.

Branding the blankets under a Uttarakhand GI tag can create a premium identity. Collaborations with designers can lead to high-value heritage collections for urban and international buyers.

The enterprise can evolve into a cooperative-based wool cluster, integrating production, design, marketing, and training, making Uttarakhand a hub for sustainable wool crafts.

### Disclaimer

Only a few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not imply any recommendation.

