

# PRODUCTION OF VALUE- ADDED FABRICS ON HANDLOOMS

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**Abstract:** Handloom weaving is known to humanity all through its evolutionary journey as one the most essential elements of civilization. The paper explains the weaves and weaving techniques that are being practiced in various handloom clusters of Indian states at present. Complex handloom structures and designs are woven along with different weaving techniques to provide value addition to the ultimate fabrics produced. The shear need for technical up-gradation has been emphasized for the very survival of the sector.

**Keywords:** Handloom, weaving, weaves, designs, patterns, fabrics, Jacquard, Frameloom

## 1. INTRODUCTION

A Weaving is one of the methods of fabric manufacturing where raw materials i.e yarns are interlaced over each other to make the fabric that is compact enough for various purposes like sarees, apparels & home furnishings etc. Handloom is that such device where weaving is performed very systematically so as to achieve variety of designs & yarn combinations in the final woven fabric. Since, this weaving device is operated by human hands/ legs/loins it's called handloom. As per the needs of the society and geographical conditions - diverse types of raw materials provided different types of woven products. In such pursuit of adaptability to environment & needs, the shape of handlooms is also gradually modified & has been into practice. For example, Loin & hanging looms in Northeast region to Framelooms & Pitlooms in West India with the presence of mix of loom structures as per the needs & demands in North & south India. The scattered practice became contagious as the humanity mingles & evolved for more taste of designs, patterns & fusion of traditions in weaving. Similarly, the weaves onto the fabrics are plain, twill & satin and their derivatives as per the pattern & design in the product. The details about weaves and weaving techniques involved according to products will be explained in the upcoming sections.

## 2. Materials & Methods

The most commonly used raw materials in weaving of handloom products are Cotton, Wool and Silk in variety of counts & colours. Buying a dyed mill spun yarn are most convenient options for many weavers than making hand spun yarn and then hand dyed the yarn. Merino wool & desi wool are also used by weavers for various woollen products like shawl, stoles etc. Acrylic have replaced the wool for more production point of view. In North east India, Tussar Silk are used for weaving products like Kheecha and other due to the wide availability of the Tussar silk. Otherwise, Mulberry silk is very common name in Indian handloom industry for weaving of silk products like saree, duppatta, dress materials etc.



**Table 1. Raw Materials**




S.No.	Raw Materials	Counts in practice
1	Cotton	2s, 6s, 10s, 2/10s, 2/20s, 2/40s, 2/60s, 2/80s, 2/100s, 2/32s, 20s, 30s, 40s, 100s
2	Silk	20/22 D, 28/32 D – Mulberry, eri, tussar, Muga silk in diff counts
3	Wool	2/32 Nm, 2/64 Nm

We can broadly describe types of Handlooms practiced in India presently into Framelooms, Pitlooms, Hanging looms & Loins loom. In different regions, as per requirements technical modifications are done to achieve certain type of ease & final products but the basic operations of weaving i.e Primary motions of weaving – Shedding, Picking & Beating are same. Same applies for shedding mechanisms for Dobby & Jacquards which are used as extra attachments for increasing the desired level of complexity in the woven products.

In all case of Framelooms & Pitlooms, lifting of heald frames are performed by pressing of treadles (one of the parts of loom) by the legs/ feet of weavers.

**Table 2. Type of Handloom**

S.No	Type of Handloom	Photographs
1	Frameloom	
2	Pitloom	

3	Loins Loom	
4	Dobby shedding device-attachment onto the loom	
5	Jacquard shedding device-attachment onto the loom	

The weaves are woven onto the ground fabrics which are mostly plain weaves (1 up and 1 down). In some cases, twill- mostly in home furnishings and the combinations of weaves are practiced.

**Table 3. Weave Types**

S.No.	Weave Types	Products in practice
1	Plain	Sarees, Apparels, Home furnishings, dress materials etc
2	Twill	Saree patterns/ borders, home furnishings etc
3	Satin	Running fabrics, Jackets, shirtings., Sarees etc

4	Mockleno, Huckaback & Honey comb	Towel & Home furnishings etc
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The weaving is performed for variety of products and product wise weaving techniques are different that can be very well depicted below.

**Table 4. Weaving Techniques**

S.No.	Weaving Techniques	Type of Handloom	Example of Handloom Products
1	Extra Weft/ Warp on plain weave	Frameloom/ Pitloom	Kutch -shawls, Sarees, Dupattas etc
2	Extra Dots on plain weave	Frameloom/ Pitloom	Tangaliya- shawls, Sarees, Dupattas etc
3	Jacquard motives	Frameloom/ Pitloom	Ashawali Brocades weaves, Banarasi Sarees & dress materials
4	Yarn Tie & Dye	Hanging loom/ Frameloom Pitloom	Single & double Ikat products- Patan patola, Pochampally etc
5	Korvai Technique	Frameloom/ Pitloom	Armoor silk saree of Telangana
6	Extra weft & interlocking	Frameloom/ Pitloom	Himachal & kashmiri shawl etc

Some of the live Products woven in different regions of Indian states presently are as below:

**Table 5. State wise handloom products woven**


S.No.	State	Major Regions	Handloom Products Woven
1	Gujarat	Surendranagar, Kutch, Junagarh, Rajkot, Porbandar, Patan, Mehsana, Gandhinagar & Ahmedabad.	Kutch -shawls, Sarees, Dupattas etc; Tangaliya- shawls, Sarees, Dupattas etc; Ashawali Brocades weaves; Single & double Ikat products like Patan patola & Gujarat ikats and others
2	Telangana	Gadwal, IEEZA region, Siddipet region	Tussar Silk shirtings, gadwal sarees, Siddipet Gollabama Saree, Pitambari Silk sarees & others
3	Kerala	Balaramapuram, Trivandrum, Kasaragod, Kasaragod, Kannur	Balaramapuram Cotton Saree, Kasargod Cotton Saree, Kannur shirtings & others
4	Karnataka	Chitradurga, Udipi-Dakshina Kannada, Bangalore	Molakalmuru Silk Saree, Udupi Saree, Dupion Silk Saree & others
5	Uttar Pradesh	Varanasi and nearby clusters	Brocade Saree, Tanchoi Saree, Butidar Saree & others


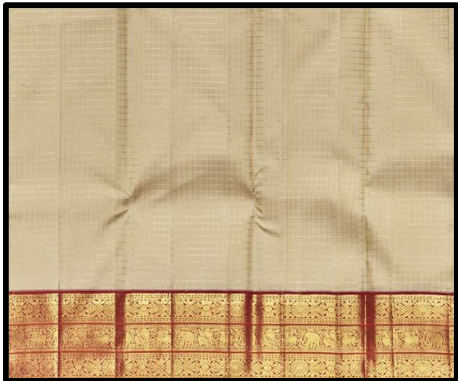
6	Jammu & Kashmir	Changthang region of Ladak, Srinagar, Kanihama of Kashmir	Pashmina shawls, Arabian Rumals, Raffal , kani shawls & others
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### 3. Results & discussions

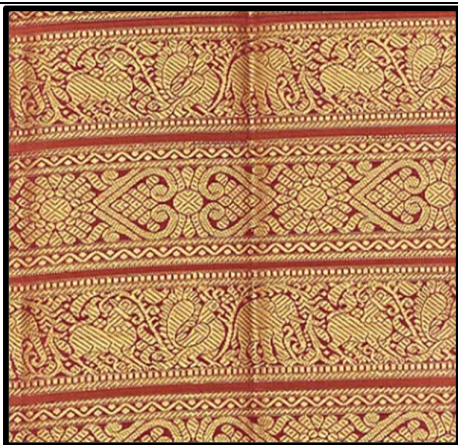


As can be understood that the limited use of raw materials with the limited weaving techniques can give the limited variety of handloom products in specific regions. Also, the market of such products is also limited. The very nature of ease of weaving for the weaver to stick to old type of weave & raw materials, no doubt will survive the tradition & cultural heritage but there should also be perennial need & demand cycle of the products woven by them. The value addition provided by the handloom weavers far surpasses the normal fabrics available in the market. Few of the handloom products below shows value addition by handloom weavers as against the powerloom products available in the market.


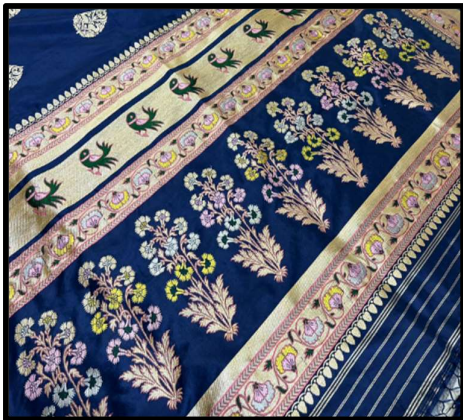
**Table 6. Product price comparisons**

S.No	Photo of the product	Handloom Product	Competitor
1		<p><b>Patan Patola Silk Saree</b></p> <p><b>Raw material-</b> Pure Silk</p> <p><b>Weaving Technique-</b> designs/ motives are made by tie &amp; dye process of yarns, then plain weaving is done on Hanging loom/ frame loom.</p> <p><b>Region-</b> Practiced in Patan district of Gujarat, India</p> <p><b>Specialty-</b> Finest and most colourful double ikat sarees.</p> <p>Patola is a tied &amp; dyed of both warp &amp; weft then weaving is performed. They are very expensive and used to be worn only by the members of the royal and</p>	<p>Normal geometric printed Silk Sarees</p> <p>Price: Approx. Rs. 95,000/-</p>

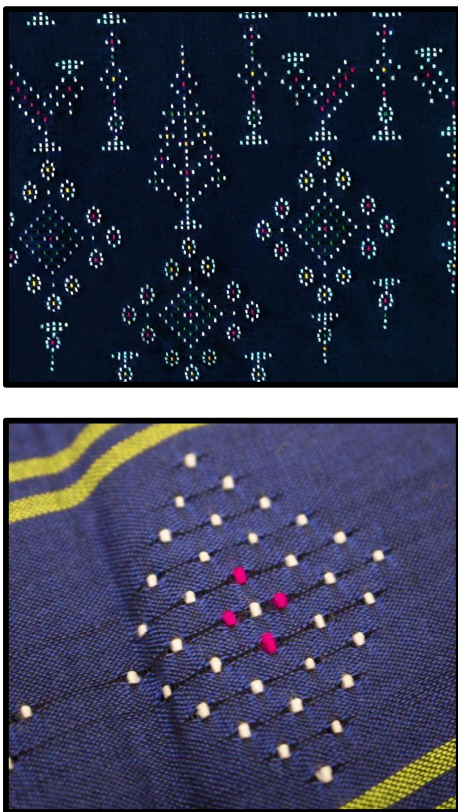
		aristocratic families <b>Price:</b> Approx. Rs. 2.5 Lakhs	
2		<b>Banarasi Brocade Saree</b> <b>Raw Material:</b> Silk, Zari <b>Weaving Technique:</b> Jacquard weaving <b>Region:</b> Varanasi, Uttar Pradesh, India <b>Specialty-</b> Satin weave used in base fabric <p>The Banaras brocade made of silk and zari are heavily designed with intricate floral motifs. Metallic visual effects predominantly appear in the fabric. It has heavy weight due to use of metallic yarn and complex texture.</p> <b>Price:</b> Approx. 3 lakhs	Normal synthetic zari & polyester designed Silk Sarees  <b>Price:</b> Approx. Rs. 50,000/-
3		<b>Kanchipuram Silk Saree</b> <b>Raw Material:</b> Silk, Zari <b>Weaving Technique:</b> Contrast border with koravi technique and pallu with Petni technique <b>Region:</b> Kanchipuram, Tamil Nadu, India <b>Specialty-</b> These sarees are heaviest	Normal Synthetic Patterned silk zari areas  <b>Price:</b> Approx. Rs. 50,000/-

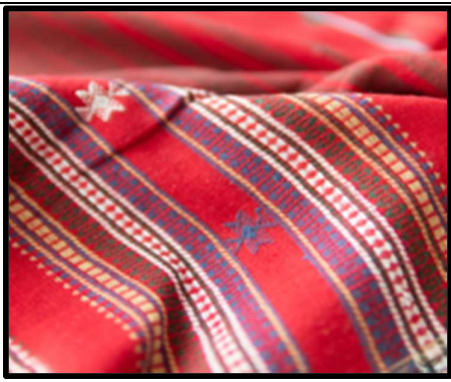





		<p>among all other silk sarees</p> <p>Separate set of warp threads are attached in pallu using petni technique. Trimmings are noticed in joining. Solid borders of contrast colours are woven using ‘Korvi’ technique. Interlocking of threads in the borders is noticed.</p> <p><b>Price:</b> Approx. 2 Lakhs</p>	
4	 	<p><b>Kota Doria Cotton Silk Saree</b></p> <p><b>Raw Material:</b> Cotton, Silk, Zari</p> <p><b>Weaving Technique:</b> Woven on throw shuttle pit loom which creates small square check pattern called as Khat</p> <p><b>Region:</b> Kota, Rajasthan, India</p> <p><b>Specialty-</b> Basic texture of is combination of cotton and silk yarn.</p> <p>Doria (stripe) fabrics in narrow width for turban used to be woven in Kota in earlier days. It is a light weight open textured fabric and soft to touch.</p> <p>Approx.Rs. 65,000/-</p>	<p>Normal Cotton Silk Design Saree</p> <p>Price: Approx. Rs. 10,000/-</p>
5		<p><b>Ashwali Silk Saree</b></p> <p><b>Raw Material:</b> Cotton, Silk, Zari</p>	<p>Normal Zari Silk patterned coloured</p>



	<p><b>Weaving</b>  <b>Technique:</b> Woven on throw shuttle pit loom. The weaving of complicated motifs at pallu is done by Jacquard attachment &amp; overall butti/motif work in the body.</p>	<p>Sarees  Price:  Approx. Rs. 50,000/-</p>
	<p><b>Region:</b> Ridrol, Gandhinagar, Gujarat, India</p> <p><b>Specialty-</b>  Historical records dating back to the 13<sup>th</sup> century have proved that Gujarat was the birth-place of Brocade-weaving in country before the weavers shifted to Banaras in the post-Mughal period. Fine woven brocade textiles were woven in Khambhat, Bharuch, Ahmeabad (Asawal Asawalli sarees), Patan etc. The cosmopolitan population of the State comprising of Turks, Arabs, Persians, Parsis, and Europeans contributed to the development of the textile traditions, particularly introducing the twill and sateen weave to India through Gujarat. Under Mughal patronage (16<sup>th</sup> century) Gujarat had large workshops making gold brocades.</p>	



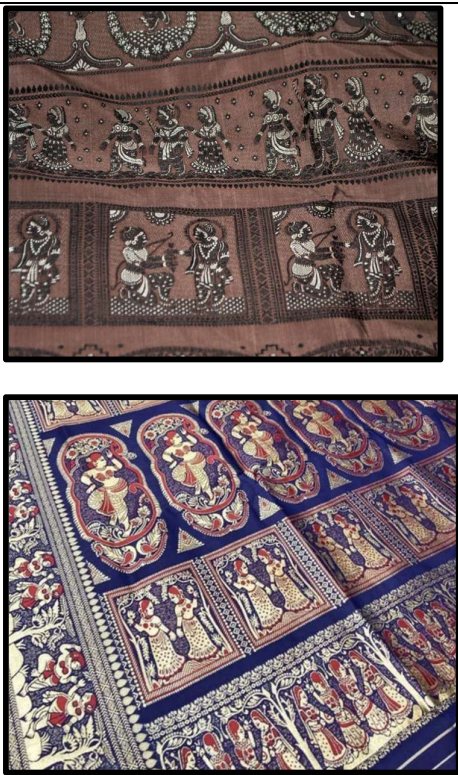
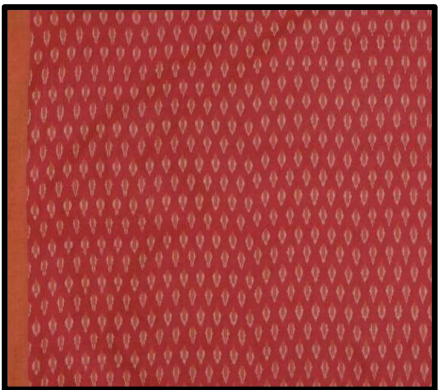
		<p>Later the weavers migrated to Banaras.</p> <p><b>Price:</b> Approx. Rs. 1.5 Lakh</p>	
6		<p><b>Tangaliya Saree</b></p> <p><b>Raw Material-</b> Cotton, Wool, Silk</p> <p><b>Weaving Technique-</b> Plain weaving with motifs in dots by insertion of dots made by hand during each picking</p> <p><b>Region-</b> Prevalent in Surendranagar district of Gujarat, India</p> <p><b>Specialty-</b> Intricate geometric designs with tiny dots of extra weft are twisted around a number of warp threads, giving an effect of bead embroidery to the fabric.</p> <p>Tangaliya weaving, also known as Daana weaving practiced by the Dangasia community. The Tangaliya craft is about 700 years old handloom craft. Marriage of a Shepherd boy to a Weaver girl furthered this craft in coming generations.</p> <p><b>Price:</b> Approx. Rs. 90,000/-</p>	<p>Normal Silk dotted designed embroidered Sarees</p> <p><b>Price:</b> Approx. Rs. 10,000/-</p>
7		<p><b>Kutchi Saree</b></p> <p><b>Raw Material:</b> Cotton, Kala</p>	<p>Normal Machine embroidered</p>

	<p>Cotton, Wool, Silk, Linen</p> <p><b>Weaving Technique:</b> Handloom plain weaving with motifs by extra weft insertion by hand</p>	<p>patterned Sarees</p> <p>Price: Approx.Rs. 15,000/-</p>
	<p><b>Region:</b> Prevalent in Kutch district of Gujarat, India</p> <p><b>Specialty-</b> Motives are created in Extra weft where threads are raised to give design/ patterns.</p> <p>The Kacchi cotton/ wool/ silk sarees are the perfect combination of elegance and subtleness. It is one of the different varieties that can be made with kutch weaving.</p> <p><b>Price:</b> Approx. 2 Lakhs</p>	

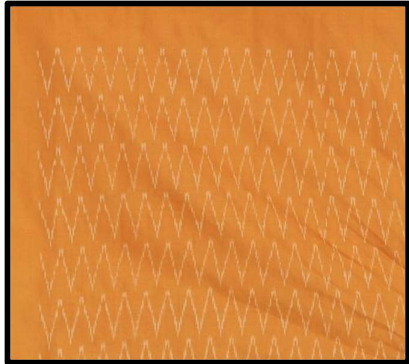
8		<p><b>Paithani Saree</b></p> <p><b>Raw Material:</b> Silk, Zari</p> <p><b>Weaving Technique:</b> Tapestry technique</p> <p><b>Region:</b> Yeola, Maharashtra, India</p> <p><b>Specialty-</b> A heavy weight bright coloured silk saree with zari designing work in body, border and pallu</p> <p>No extra warp or weft is applied for designing. Threads of short lengths in different colours or materials as per pattern across the width of the saree and create design in the weft way.</p> <p><b>Price:</b> Approx. 2 Lakhs</p>	<p>Normal synthetic patterned Sarees</p> <p>Price: Approx.Rs. 30,000/-</p>
9		<p><b>Siddipet Gollabamma saree</b></p> <p><b>Raw Material:</b> Cotton, Silk</p> <p><b>Weaving Technique:</b> These sarees are woven on pit loom and frame loom with extra weft in gollabama motifs and geometrical designs in the border, body and pallu using traditional jala technique.</p> <p><b>Region:</b> Siddipet, Telangana, India</p> <p><b>Specialty-</b> There</p>	<p>Normal Cotton polyester patterned Sarees</p> <p>Price: Approx.Rs. 25,000/-</p>

		<p>will be gollabama motif (milk maid with a milk pot on her head and one pot on her hand), in the border/body/pallu of the sarees.          Legendary tales of King Vikramaditya talk of “Gollabama” as the name of a Queen.</p> <p><b>Price:</b> Approx 1.5 Lakhs</p>	
<p>10</p>		<p><b>Jamdani Cotton Saree</b></p> <p><b>Raw Material:</b> Cotton</p> <p><b>Weaving Technique:</b> Motifs directly woven by weavers while weaving</p> <p><b>Region:</b> Burdwan, West Bengal, India</p> <p><b>Specialty-</b> The extra weft is usually inserted in ratio of two ground thread and one design thread. Weavers of Jamdhani adapted a traditional and indigenous technique which involves throw shuttle and extra weft insertion by needle.</p> <p><b>Price:</b> Approx. 1 Lakh</p>	<p>Striped patterned pallu cotton Saree</p> <p><b>Price:</b> Approx. Rs. 8,000/-</p>
<p>11</p>		<p><b>Baluchari saree</b></p> <p><b>Raw Material:</b> Silk, Zari</p> <p><b>Weaving Technique:</b> Double</p>	<p>Silk jacquard woven synthetic saree</p> <p><b>Price:</b> Approx. Rs.</p>



		<p>jacquards are used fo pallu and borders.</p> <p><b>Region:</b> Murtizapur, West Bengal, India</p> <p><b>Specialty-</b> Construction of long pallu and placement of its design motifs in perfect rectangular closed corners maintain continuity of the designs without break. It is highly decorative silk fabric having extra weft on pallu border and body. The motifs are mainly derived from social and religious customs, animals, lifestyles of people.</p> <p><b>Price:</b> Approx. 2 Lakhs</p>	<p>45,000/-</p>
<p>12</p>		<p><b>Pochampally saree</b></p> <p><b>Raw Material:</b> Cotton, Silk</p> <p><b>Weaving Technique:</b> designs/ motives are made by tie &amp; dye process of yarns, then plain weaving is done on Hanging loom/ frame loom.</p> <p><b>Region:</b> Pochampally, Telangana, India</p> <p><b>Specialty-</b> Vibrant colors and reversible cloth with same appearance of</p>	<p>Normal synthetic coloured printed patterned Sarees</p> <p>Price: Approx.Rs. 20,000/-</p>



		<p>designs on both sides. Pochampally is characterized by their bold, geometric motifs, in red, black and white, they were used in as lungis and turbans.</p> <p><b>Price:</b> Approx. 2 Lakhs</p>	
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#### 4. Conclusion

It is clearly seen that the qualities produced on handlooms as on today have higher values than their comparable options available in the market which are produced on power looms. But one has to look for other options also as far as products are concerned for sustainability of handloom sector.

It can be very much concluded that the Handloom sector needs technological interventions that must start from the very nature of the structure of the Handloom to suit variety of products not only of Natural raw materials but variety of other raw materials also. Then the compatibility to venture into markets of consumption unexplored to surpass the qualities difficult to be produced even by power- looms. Also, for survival of handlooms, one should look for diversification in products and materials to be used so that many more options will be available for handlooms. The added- advantage of Handloom weaving being ecofriendly- no air, no water & no noise pollution the sector should rock the whole textile sector.

#### REFERENCES

1. *Woven cloth construction—Marks and Robinson, Textile Institute*
2. *Watsons Textile Design and colour—Z.Groszki, Universal Publishing Corporation, Mumbai*
3. *Book of 4<sup>th</sup> All India Handloom Census by DC (Handlooms), Ministry of Textiles, Govt. of India*
4. [www.handlooms.nic.in](http://www.handlooms.nic.in)
5. *The Handloom (Reservation and Articles for Production) Act, 1985*
6. *Course material under ISDS for Hand loom Weaver (Frame Loom), Textile Committee*
7. [www.indiahandloombrand.gov.in](http://www.indiahandloombrand.gov.in)
8. [www.fibre2fashion.com](http://www.fibre2fashion.com)
9. *Fabric Structure and Design- Text Book by N. Gokarneshan*