



Pattu: The Dying Fabric Making Art of Baltistan

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The traditional Balti dresses were made with a beautiful

material, "Pattu". We conducted a survey regarding the

procedure of pattu making in Baltistan. The data was collected through in-depth interviews of 30 personnel who were associated with pattu making art. Thematic

analysis has been adopted to examine the responses. Pattu fibre was obtained from sheep next convert into yarn and then into the fabric. Pattu was dyed with

the help of leaves and fruits. Pattu was used in garments, caps, shawls and carpets. It is the need of time to work on the revival of this dying art of making

pattu with new innovations to improve the procedure and speed of making fabric. This study will provide knowledge to our new generations about traditional fabric which helps them build a strong bond with the culture. Bringing

the skilled persons from Baltistan on the front line and create economic

Introduction

opportunities for them.

Abstract

In the natural fibres, wool from sheep is one of the oldest textile fibres used by mankind because of wool's exceptional properties and limits supply; it is still recognized as the extremely versatile fibre of the world (Erdogan, Seki, & Selli, 2020). All the way through history, clothes and fabric making has always held significance amongst the people. It reflects the handicraft expertise, artistic imagination, and cultural traits and rituals of people (Manlow, 2007). Textiles represent a vital element of our cultural heritage. The fibre along can tell an intriguing tale of agricultural development, international trade and technological progress (Edwards & Wyeth, 2005). The traditional and cultural values play a dominant role in developing the nation's identity and strong recognition in front of the world (Afzal, 2011). The nations that do not make substantial efforts to preserve their culture and heritage values are left behind with no cultural mark for their upcoming generations.

Wool also plays a significant role in a country's economy as not only is it utilize for clothing, rugs and sweaters but also for technical fabric consumption. Moreover, its demand is increasing because of its chemical and physical properties. It has been reported to be adaptable to the environment because of its natural elements, which make it better than other synthetic fibres _(Hugo & Ross, 2016). It is also more durable and long-lasting _(Russell & Ireland, 2016). From the start of this century, wool contributed to only 1 to 2% of world textile utilization and manufacture, but it is still considered a significant fabric.

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Figure 1: Gilgit-Baltistan Satellite Image (Source (Google Map)

Baltistan is located in the northern region of Pakistan, and it is one of the aesthetically beautiful and natural heritage regions of Pakistan, having the highest mountain peaks such as mighty K-2 and nangaparbat, the killer mountain (Afridi, 1988). The famous land of Baltistan is hemmed in all sides by astounding mountain ranges that stand resembling white giants of un-proportioned heights (Baloch, 2004). In Baltistan, people have seen the survival of many languages, cultures and civilizations that have been lost somewhere in the rapidly changing dynamics of the world. Northern areas of Pakistan have opened a new approach to history for discovering the lost human links and exposing the cultural heritage of the region (Dani, 1989).

Wool is considered as the natural fibre composed of proteins as it comes from the fleece of sheep. Over 200 varieties of fleece are assembled together that are used for the production of wool fabric (Simpson, 2002). It is an evident phenomenon from the dawn of history that wool fibres and products are made from fleece of sheep through human efforts (Wojciechowska, Włochowicz, & Wesełucha-Bir, 1999). Due to the height, the quality of wool found in the Himalayan region is quite superior and upstanding _(Poornima & Gour, 2002). Wool was one of the most commonly consumed fibres from which different fabrics were prepared till the industrial revolution took place. In the current age, wool is viewed as one of the most expensive and luxury fabrics because it incurs high manufacturing and maintenance costs. In ancient times, people used to have their own sheep at their homes which made it easier for them to obtain the fibre in the most cost-effective way. It is a predefined fact that wool is a naturally occurring fibre having numerous exclusive properties that make it one of the earliest fabrics used in history. Particularly, the natural crimps in the wool make the fibres clutch together and create a very smooth wavy yarn. Moreover, it also creates air pockets that work as the natural sheet of insulation, making it very desirable to wear during the winter season. As a fibre, wool is also very strong, sturdy and holds the original form and shape well.

The people living in the Baltistan area are very hardworking and invest continuous efforts in preparing all things by themselves traditionally. The women make the dress by themselves as they have a unique cultural background that does not match and aligns with the fashion followed in other cities and regions of Pakistan. The development of fabric is also a very interesting and unique procedure. This paper is an attempt to create awareness among the new generation about the procedure of preparing the fabric and familiarize them with the cultural heritage of their area. It will further discuss which fabric was traditionally used by the people in Baltistan.

Method

In this research, a qualitative survey method has been employed due to the exploratory nature of the topic. In the underlying study, the researcher has conducted in-depth interviews of the population for gaining access to individual's life experience about making pattu. The data was collected from participants by taking key information. The researcher assembled the documentation by using audiotapes and videotapes.

The population for the study was comprised of old men and women belonging to the age group of above 50 years who used to make the traditional material "Pattu" since their childhood and saw their elders making the fabric. Snowball sampling has been implemented in this study. The sample size was calculated to be 30 men and women that were selected from different regions of Baltistan. Different regions of Baltistan like Skardu, Shigar, Khaplu, Kharmang and Ghanche were visited by the researcher personally to check the availability of samples in selected areas. The females were a bit hesitant and reluctant in the beginning to give the interviews, but they were convinced by the researcher that their identity would be confidential.

Find the skilled people that have worked on the traditional handlooms were the most crucial part of the complete data collection procedure. The men and women in Baltistan were native speakers and used to speak the Balti language; therefore, an interpreter accompanied the researcher as a translator.

In-depth interviews from the sample of the study were taken. The interview questions were semi-structured by nature. A series of open-ended questions related to the research topic was asked by the researcher. An interpretive validity approach was utilized that with concern the participant's was perspective. Furthermore, notes were also taken during the interview, along with the audio recording. The observational technique was employed because it encourages in-depth study of the individuals.

The data were examined using the thematic analysis technique by developing the themes and codes from the obtained data and was evaluated accordingly. All the ethical consideration of APA was followed by the researcher, and personal information of participants were kept confidential.

Result

The traditional Balti fabric Pattu called "Balgos" in the Balti language is becoming extinct, and there are only a few people left that have the knowledge of making this fabric. The whole procedure from extracting fibre to making yarn is fascinating and painstaking. Traditionally, wool was used to make clothes and beddings. Whereas goat and yak hair were used for making rugs as there were no other options for the inhabitants of Baltistan.

Our research helped us to find out different materials used in Baltistan with a special focus on knowing the steps of making Pattu and the uses of pattu.

Types of Material used in Baltistan

The most commonly used materials were phima (namda), pattu (woolen fabric), rasgoss, banat, doublezeen (jeans or denim), silk, cotton, alvan, mohail and marina. These materials were made and processed in Baltistan. Their description is as follows

Phima

Phima is one of the earliest materials used by people at Baltistan to cover the body. In this, the wool is dipped into water and is given pressure in such a manner that the wool joins together, forming a clump and turns into a special form of a fabric that is called phima. In this process, the fleece/wool is subjected to dampness, weight and tenderly beating activity. Layers of fleece/wool are laid at right edges to each other to build up filaments that run the long way and afterward, the process is repeated again in the crisscross manner. Initially, it was used for fabric only later on, floor coverings were also made by this method.

Banat

Banat was made by hairs of lbex and a special goat. The hairs of the goat's underbelly are very soft and delicate, that lies beneath the coarse and thick outer hair. The soft fine wool was separated from the thick coarse hair. Each goat produces only about 3 ounces or 80 grams of

banat wool each year. Whereas, one woven shawl requires wool extracted from at least three goats and it is basically spun by hand. Hand-spinning was the extremely painstaking and time-consuming task. It requires immense patience, dexterity and dedication of experienced and expert weavers. Banat was specially made for the prince and princess of royal families and it was the most expensive and extravagant fabric of the ancient times.

Doublezeen (Jeans or Denim)

People from Shimla, Kashmir and other areas used to bring doublezeen fabric. This is the fabric that we know as denim now days. Three colors of doublezeen were popular, white doublezeen for men and blue doublezeen for women and red doublezeen was used for women's' trousers.

Silk

The earliest evidence of silk was found in 3630 BC at China. The Chinese claim that silk fabric was invented by Lady Hsi-Ling-Shih, the wife of the Yellow Emperor of China in about 3,000 BC. Hsi-Ling-Shi is credited with both introducing sericulture and inventing the loom upon which silk is woven. Chinese even used silk as currency. It was initially used by the emperors of China for their own use and for endowments to others. However, later on after construction of silk route, it was exported from regions although China to other the manufacturing technique was kept secret for a century. As a result of its composition and gloss, silk quickly turned into a prominent extravagant fabric. Being adjacent to China the Chinese merchandisers brought silk for rajas

(Prince) of Baltistan and it was used by the royal families.

Pattu (Balgos)

Pattu was most commonly used fabric in Baltistan. It was equally popular among poor and rich due to its qualities especially warmth. As it was very warm so it was the best choice of fabric to be used in the extreme cold weather of Baltistan. Pattu was made by locally available sheep. In earlier time, the sheep's were present in every household and people use to shear them twice a year to obtain the wool for garments. The best quality of this fabric was its easy availability through sheep's so it was locally manufactured. Being very practical to use, it was popular among the people of all socioeconomic status.

Process of Synthesis of Pattu Fabric

Different steps taken in the process of synthesis of pattu fabric which were following

- Obtaining fiber
- Making the yarn
- Making of the fabric
- Dying of the fabric

Obtaining Fibre

Following steps were involved in the process of obtaining fibre.

Braqpa: First, the sheep were washed so the major impurities may filter out and good wool could be acquired from the sheep. Then the sheep was sheared (the process of removal of fleece from sheep), which is known as braqpa. As shown in figure 2, the sheep is washed and is ready for shearing or braqpa.



Figure 2: Shows Sheep are Washed and Ready for Braqpa (Source: BCDF)

Rdanmw: The wool was then taken to sand on the riverbank, and there it was beaten on the sand to make the wool fibre soft. Sand on the river bank was selected as the site to beat the wool because of no clay or any other sticky particle that could damage the quality of wool.

Rdaphing: The wool was beaten in a very technical way to filter out all impurities on the wool fibre and make it soft, smooth and clear

from dirt. The stick used in rdaphing should be elastic and smooth so the wool might not stick with it while coming out of the heap. When the stick was beaten on the wool, it should not be picked straight rather it should be pulled towards oneself. The stick is known as "Dapshing" which generates a beautiful sound while beating the wool. The process is shown in figure 3.



Figure 3: Females are Rdaphing the Wool (Source Wazir Library)

Danaga: The wool was brought home for making danaga, which means that now wool would be separated by hands, so if any impure particles were left behind, they would be removed completely. Wool was now divided into small portions according to the length of the fibre. The longer hairs were used in ygioo (warp yarns), and the shorter lengths were used in spun (weft yarn). It was now arranged in the basket in a very systematic manner in sets of different lengths to make the next step easier to perform.

Making the Yarn

In yarn making following steps were involved

Phang: This was the initial step of making yarn. In this process, a wooden instrument is used, which has two parts. The upper wooden stick is called phangshing which has a thick centre while both ends are pointed with a disc at one end. The other part, called phangoxia consists of a thick plate with an indentation in the centre so that the phangshing may spin easily on the plate. Set danaga was picked up, and the yarn is produced by spinning it on the phangshing. The wool was grasped in the left hand and the phangshing in the right hand which was the professional way of making the yarn. The phangshing was spinned with a uniform speed by placing its lower tip on phangoxia while the danaga was tied to its upper tip. As it spinned, it started to turn the wool into thread like yarn that was wrapped around the middle of the phang. The process was very beautiful and eye catching to watch. Figure 4 a and b illustrates phangshing along with phangoxia, while in figure 4 c a woman spinning the wool yarn on it (source: Wazir Library).



Figure 4a. 4b & 4c: Shows Phangshing and Phangoxia while in Fig 4 c a Woman is Working on it (*Source: Wazir Library*)

Later on, in 1970s a machine was invented to be used for this process, which made the process easier and less time consuming. Figure $5\ {\rm shows}\ {\rm a}\ {\rm female}\ {\rm is}\ {\rm working}\ {\rm phang}\ ({\rm source:}\ {\rm BCDF}).$



Figure 5: A female is working on phang (source: BCDF).

Throw: After doing the process of phang, the yarn was wrapped in the form of woollen balls. It indicated that the yarn is now ready for the

weaving process. This was known as "Throw". Figure 6 shows that the yarn is ready for weaving.



Figure 6: Shows the Ball ready after Spinning (Source: BCDF)

Making of the Fabric

The balls of the wool were then taken to the "Thakskan" (the spinner). The Thakskan puts

the thread or yarn into thaksha (loom). This was done through the following step:

Ribanma: This was a very interesting procedure; two or more people were involved in this process. One used to take the thread to

the other side and then brought it back; that was how the warp beam was prepared, as shown in figure 7.



Figure 7: shows the process of Ribanma. (Source: BCDF).

Was a Process of Reeling the Yarn on the Loom or Thaksha (see figure 8 for Illustration)



Figure 8: Shows an old Man Working on the Model of Ribanma (Source: BCDF)

Types of Thaksha (Loom)

There were two types of thaqsha in Baltistan. One was called Balti thaqsha and the other one was called Khachay (Kashmiri) thaqsha. There was the difference in size between both because Balti thaqsha was smaller in width while khashay thaqsha was wider. The difference between the two types is obvious in the figure 9.



Figure 9A & B: Shows Men Working on the Balti Thaqsha (Source: BCDF)

Weaving

The fabric was made by two distinct sets of yarns or threads which were interlaced at right angles to each other to form a fabric or cloth. First, the "bgew" (warp) yarn, which was placed longitudinally on the thaksha by ribanma process. This thread is thin as compare to the spul. Second, the "spul" (weft) yarn which crossed the warp yarn at right angle to fill the gaps between the warp to make fabric. Single warp thread was called reng e suktpa which is commonly known as "end" and single weft thread was called phrath e suktpa, which is in general known as "pick".



Figure 10: Shows a Traditional Thaqsha (Source: Author)

After the warp threads were fixed on the thaksha (loom), three main steps were taken for weaving of pattu fabric, which were

i. Laqso bia (Shedding): The bgew (warp) threads were arranged in two groups which overlap each other. A clear space was created between two groups by Laqso bia or shedding process, in which warp threads were separated by pushing strings down by foot this process is known as "kiribang". In this the upper group is moved down and lower group is moved up. Creating a space made the next step easier in which rgom phru or shuttle is passed through the gap, which was created between the two groups. Fig no 11 illustrates the kiribang process.



Figure 11: Shows the Kiribang Process on Thaqsha (Source: Author)

ii. Lain ma (picking): In this process, a wooden rgom phru or shulttle was used on which weft thread was rolled on a reel. The rgom phru shuttle with reel was used to carry the weft thread to pass it through the warp threads in a straight motion as shown in fig no 12 a & b



Figure 12a & b: Shows the Kiribang Process on Thaqsha (Source: Author)

iii. Tia ma (beating up): In this prosess a "tiag shing" wooden reed was used to push the weft up against the fell of cloth. This was very important step in weaving of the pattu fabric. The quality of fabric was very much dependent upon the proper adjustment and setting of this step, as it was related to the looseness and stiffness of the fabric.



Figure 13: Shows a Man Weaving on Thaqsha (Source: Author)

Dying of the Pattu Fabric

As synthetic dyes were not available at that time so, different organic materials were used to give a different color to the pattu fabric. For black colour the soft green outer shell of walnuts were used and black color was usually used for making caps for females. For green colour different leaves were used but usually the fabric was used in its natural colour. Pink and yellow colours were given to the fabric through using flowers having the petals with the same colour. Onions were also used for dying baby pink colour. Those dyes were echo friendly although the process of dying was difficult and laborious but the colours were fast.

Uses of Pattu

Pattu was very famous and used not only for garments but also for making caps, shawls and special rugs called charra.

Garments

Pattu of Baltistan was unique in design and quality. This handcrafted woolen material was warm to wearer which was simply ideal for the climatic condition of the area. For winter season, special sweater "Rugune Gone" (winter cloth) was used which was made up of wool. It was decorated with different handicrafts from the front side. As in most other regions of Himalayas, the men usually dress in woolen material of home manufactured Pattu, their garments being the coats and trousers. Women dress consists of tight fitting Pyjama and a lady's gown. A shirt like a Punjabi kurta was worn as an under cloth. The lining on the gown is sometimes embroidered along the margins. The favorite colors were black, red and blue. Figure 14 shows traditional Balti dress for men and women. This style of winter dress has been abandoning or is very rare in Baltistan now days.



Figure 14: Traditional Dress made by Pattu (Source: Author).

Nating (Caps)

Tradition of wearing cap was very common in Baltistan. The caps were made from Pattu in different styles for both gender and different age groups. Pattu was very warm so the caps made were very popular and practical as well. The caps of men and women were same cone shaped but men wear white color cap and women wear black color. Men used to decorate their caps with flowers while women used to decorate their caps with silver jewelry or flowers. The caps protect them in winter from the cold and in summer from the scorching rays of the sun. Fig no 15 A & B shows the traditional nating or caps of male and female.



Figure 15 A & B: Traditional natings made by Pattu (Source: Author).

The cap shown in figure no 16 is very useful for children in extreme weather as it covers not only head but ears and back of neck as well.



Figure 16: Traditional Nating by Pattu (Source: Author).

Karr (Woollen Shawl)

The woollen shawl made up of pattu was called Karr. It was equally famous among men and women throughout the year. The yarn of

this fabric was thick. The fabric made by this yarn was very warm and was especially well suited for the cold climate of the local area. In figure 17 traditional winter wearing Karr is shown.



Figure 17: Traditional Karr prepared by pattu (Source: Author).

Charra (Carpet)

Charra was the carpet made up of pattu. Wool at that time was easily available for making rugs, mats and carpets. It has the advantage of being durable and strong, which makes it an ideal material for manufacturing carpets. There was an added advantage of being warm as well, which was the requirement of local weather. Charra was made in different sizes and shapes, but the most popular color was black and white.



Figure 18: Traditional Charra made by Pattu Wool (Source: Author).

Discussion

The textile industry has played a central role in the development of past societies _(Good, 2001). It was 90 to 80,000 years back that the archaeologist found sheep skin rugs for the first time, while clay impression of twisted fiber was found 27 thousand years ago (Hardy, 2007).

Although the fabric is very difficult to preserve due to its delicacy in contrast to other hard materials like metals, stoneware or bones, certain environment like desserts, permfrost or bogs facilitates preservation of fabric _(Azemard, et al., 2019). (Gleba, 2011; Good, 2001; Hardy, 2007; Strand et al., 2010).

People then started using different techniques to use fiber to make cloths by weaving them, which was the beginning of the textile industry. It gave endless opportunities to make different products from fabric. The introduction of vegetal fiber along with animal fiber strengthens the industry even more (Bender Jørgensen et al., 2018; Rast-Eicher, 2005). The use of wool can be seen everywhere; it is used from the inexpensive chopped rags or the most expensive textiles (Klepp, Tobiasson, & Laitala, 2017). Knowing the textile of an era gives you more information about the culture of the civilization of that time (Good, 2001). (Gleba, 2011; <u>Good, 2001</u>; Hardy, 2007; Strand et al., 2010). A certain environment like desserts, permafrost or bogs

facilitates preservation of fabric _(Azemard, et al., 2019).

Like every other thing, the time has an impact on the characteristics of wool as well, so passing through different times its physical characteristics might be different from ancient times in the present era, even if taken from the same kind of sheep _(Rast-Eicher, 2016). Wool is an excellent insulator, so is very warm for cold weather that's why not only it is used in the textile industry but in construction as well. Mixing wool in concrete was used for insulation in cold climatic regions _(Alyousef, et al., 2019).

In our neighboring country India as well a lot of work has been done in the technical development of wool _(Ammayappan, Nayak, Ray, & Basu, 2012). Not only in Asia but in western world also wool is an important part of history. In Neolithic era, raw wool was worn by men. They started weaving it through primitive tools by 4000 BC. People soon understood the importance of wool, so started breeding sheep and even made laws to protect the "golden fleece" _(Botkin & Field, 1988). There has been great shift of trading wool from Tibet to India to Tibet to China over the century which has impact on local economy as well _(Sherpa, 2019).

were often used to decorate the clothes of royal families_(Warikoo, 1995). When Raja Ahmed Shah went to Kashmir, he met a trader that brought silk in Kashmir from Fatan China. Being the emperor of Tibet, Raja asked him about the silk; that was the first time some trader brought silk to Baltistan.

The local trade between Baltistan and other regions introduced a new type of material or fabric that was used in their clothing garments (Warikoo, 1995). The trade was similar in nature, and the two routes served were Lah Indus to Skardu valley and Leh Nubra to Chorbut Kaplu valley. Later on, the Kashmir route was also used for trading. Balti traders use to take the products of their farm for sales such as apricot, apricot oil, almonds, barley, teacup of zeher mohra, Quratz Stone vessels for cooking, woolen cloths and coarse shawls and in exchange, they obtained Indian cotton cloths, gold, tea Yarkani, leather wear and silver threads that were often used to decorate clothes of royal families.

The traditional material "Pattu" which was used by people in Baltistan is the same material that was used in the whole region of Ladakh, Kargil, Baltistan, Tibet, and Kashmir (Kazmi, 1985). There was a historical association and connection among Baltistan and Tibet which is more apparent from the similarities of Balti and Tibetan culture and language_(lain, 2006). The traders bought different fabrics the popular fabric of that time was Double Jean (denim) except that Marina, Mohail and kora latha were popular in ordinary families where white latha, Banat, Makhmal, Silk and Kamkhwab were used by the royal and noble families. When Raja Ahmed Shah went to Kashmir, he met a trader that brought silk in Kashmir from Fatan China. Being the emperor of Tibet. Raja, asked him about the silk: that was first time some trader brought silk to Baltistan. Most of the fabric came in Baltistan from China, Ladakh, Sub Continent and Kashmir. The sits on the historic route from Baltistan to Yarkand was very common. from Shigar Valley to Yarkand (Rashid, 2011).

Wool was the major product of the region, and there were two types of wool, Sheep wool and goat wool. Sheep wool was used for clothing purposes, and goat wool or Lena was used for shawls _(Jina, 1997). The woollen fabric material was locally made because, in every home, people used to have hundreds of sheep. There were different qualities of woollen fabric available to people according to the race of sheep and goats. The higher quality pattu fabric was used to be secured for Rajas and noble families. The material used to make the traditional dress is called Pattu or Balgos. The entire process to make the pattu fabric from raw material to the finish product was very interesting and all done locally. The process was started in summer with shearing or Baraqpa of wool from sheep. Once the shearing is done the wool undergo several processes.

For the use except for pattu, different fabrics also came to Baltistan like silk from China, latha and cotton from Kashmir etc. In the end, it can be summarized that the people in Baltistan are very hard working and dedicated despite the fact that process for the production of the fabric was very long, pain staking and time-consuming task. The fabric was up to the requirement of the area as the pattu fabric is very warm and the weather of Baltistan is extremely cold.

The quality of wool from different parts of a single sheep, like belly, neck, head and back may differ in fiber color, thickness and texture. The uniqueness that you get from a single sheep to make a range of products is the key to the success of wool as a textile fabric (Harrowfield, 2014). Sheep's wool is also considered a luxury fibre due to its special qualities and difficult course to obtain and process (Lakshmanan, 2014).

One advantage of wool is that it is a sustainable resource (Chen & Burns, 2006) as wool is taken usually twice a year from a single sheep: an average production per year is around 2.3 and 3.6 kgs of wool per sheep (Fantilli, Sicardi, & Dotti, 2017). The quality not only depends on the part of sheep it is taken from but on the type of sheep as well. The breed of sheep varies in different regions of the world due to different climates and grazing land. Depending on the region of production. the wool has given its names like Chinchow. Sining, Turkistan, Mongolian, Kansu and Hailar. Multiple items like shawls, clothing and carpets are made according to the type of wool. A. H. Rasmussen, 1936 described the process of manufacturing wool in China, and it was similar in technique to pattu making except for minor differences. The wool was sorted into two grades. The more greasy wool was thoroughly rubbed with sand and washed with hot water, and usually packed separately. The coloured wool was always separately packed. The other method of hand cleaning was through bashing the wool on a big wire sieve while standing on a bench. Machines called willows or willeys were also used for cleaning wool. It was made up of a wooden box having long prongs which were used to pass through the wool to separate the wool, and dust was blown away by a fan. The Chinese, being more developed, used to ship wool to America (Rasmussen, 1936) while Baltis used to make things only for local use so it did not develop very much as industry, and despite having the potential to improve economy enormously it was only used as barter trade.

The wool was taken by visiting traders who use to bring even their own servants for sheering the sheep. The wool was traded for things like tobacco, cloths, iron tools and other similar items. The wool was then sold to the big dealers and so on to ultimately reach the big industrial hub.

Coming to the present era, wool is still an important fibre being nature protective (Russell I. M., 2009), diverse in its characteristic and composition and unique qualities which make it the best natural fibre (Laitala, Klepp, & Henery, 2018). That is why it is back in demand not only for clothing but multiple other purposes (McNeil, Sunderland, & Leighs, 2017) and technical uses _(Rossi, Emanuele, Andrea, Elisabetta, & Franco, 2016). Its properties can be enhanced by using different chemicals to make it resistant to fire, crease, and water, insects and microbes (Sunderland, Robert, & Samuel, 2014). It can also be used for decreasing pollution by absorbing heavy metals (Hanzlikova, et al., 2018) and pollutants in the air (Mansour, 2018). So it has been planned to increase sheep population from 1.7 to 2.7 billion in next 30 years (Thornton, 2010). Another advantage of natural wool is its lower cost as compare to synthetic wool (Pekhtasheva, Anatoly, Stefan, & Zaikov, 2011). Greenhouse gas discharge from wool farming or production contributed the maximum proportion of impacts; go along with lower contributions from processing and clothing care _(Wiedemann, et al., 2020). We can learn about the culture, society, technology and economy of the ancient world through textiles

As the rest of the world understands the importance of the wool, it is the need of time to work on the revival of this dying art of making pattu with new innovations to improve the procedure and speed of making fabric. Not only will it be beneficial for the local community, but it can also contribute to enhance the economy of the country, as there is a rich international market is available for handmade and organic items. We can make different items from pattu and export them in the international market through this we not only raise the export of country but it will also help in generating jobs, which will help in the decrease of joblessness in country.

Conclusion

This research paper concludes that pattu making was an important part of making fabric that has been faded fast. Wool fibre is a versatile natural material that was used for making pattu. From the analysis carried out in this article, it can be summarized that people living in Baltistan are quite ambitious and passionate about cultural heritage and values. They used to prepare the fabric by themselves despite encountering the different pains taking and time-consuming situations to keep their cultural values alive. From the arguments and discussion laid down in this paper, it was identified that wool obtained from sheep is one of the imperative sources for preparing the fabric and making the clothes. However, in the current era of rapid industrialization, these practices have been lost in a dynamic market, and people seem to forget about these cultural values in the modern age. Therefore, it is suggested to the government of Pakistan to develop the framework and initiatives for bringing these talented and skilled persons from Baltistan on the front line and create economic opportunities for them.

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Appendix for Words

- Braqpa: Shearing of Sheep's
- Rdanmw: Place where wool will be beaten
- Rdaphing: Making wool soft
- Danaga: Separate of wool by hangs
- **Phang:** Convert the wool into yarn
- Throw: Balls of yarns
- **Ribanma:** preparation of warp beam
- Thakhsha: Loom
- Pattu: Name of a woolen fabric in Balti language
- Bgew: Warp
- Spul: Weft
- Thaqpa: Weaving
- Kiribang: process of shedding
- **Rgom Phru**: Shettle
- Tiag Shing: Wooden reed
- Rugune Gone: Winter cloth