

Product development for traditional crafts of Lahaul

## Contents

Executive summery

Chapter 1 Introduction

Chapter 2 Objectives

Chapter 3 Methodology

Chapter 4 Indian Handloom and carpet Industry

Chapter 5 Documentation of the traditional crafts of Pherba and Chugthu weaving

Chapter 6 The Product Development Process

Chapter 7 Analysis

Chapter 8 Market Information

Chapter 9 Recommendation

Chapter 10 Costing

Conclusion

Annexure

Bibliography

## EXECUTIVE SUMMARY

Handlooms are a part of Indian heritage, they exemplify the richness and diversity of culture and hence the artistry of the weavers.

This sector contributes nearly 23% of the total cloth produced in the country. During the year 1996-97, a total production of 7235 million sq. meters of cloth was achieved. The Handloom Act passed by the parliament in 1985 aims to shield handloom weavers against power loom and textile mill operators by reserving certain textile articles (presently eleven in number) for exclusive production by handlooms.

The objective of this project was to study the endangered crafts of Lahul valley in Himachal Pradesh and to main stream the traditional crafts so that it gains acceptance in the domestic and export market. The primary objective of the research was product development of the given crafts i.e. of Pherba and Chugthu, in Himachal Pradesh and finally to create a range of products.

The research methodology involved the collection of secondary data and exploratory research. The exploratory research being conducted through a structured questionnaire with inputs from manufacturers, retailers, the forecast, journals and internet in order to facilitate the project.

At present there is no market for the given crafts once the product are developed the Pragya team intend to market it through various outlets that are government sponsored  
In order to help the craftsmen and revive their crafts.

The research findings give reason to believe that there is much to do in order to compete with other such product existing in the market. Such products should be marketed with a product push strategy, getting the consumer to notice the products and influencing the purchase decisions.

The potential is, and always has been, tremendous. In spite of the vast resources that have been devoted to it over a long period of time, however, the potential remains only very partially tapped in the project I have tried to give a brief overview of crafts production and attempt to show the potential, as well as to analyze the problems, and to discover why the potential is so far from being realized.

## INTRODUCTION

### CHAPTER 1

The project was sponsored by Pragya, an NGO. Pragya has its offices all over the Himalayas and works towards the preservation of traditional culture and crafts of the Himalayan region.

The legendary beauty of Himachal Pradesh and its people constitute the region's artistic consciousness. This is reflected in art and crafts of the ebullient Himachalis who delight in creating a resplendent range of artifacts that are a spiritual oasis in the wilderness of modern life. Each of these pieces is a fundamental preserve of an individual, a beautiful expression. It proclaims, not just the dexterity of hand and acuity of eye, it goes farther and delves into the innermost recesses of soul.

It is feared that in certain pockets of the crafts of Himachal Pradesh crafts like Yak & Goat hair Floor Coverings and other such crafts have either gone extinct or are on the verge of extinction. The organizations who are into preservation of such crafts are making an all-out effort to revive these skills and inject new blood in these areas.

## INTRODUCTION

The craft industry as a whole, in fact, is flourishing. Last year, India exported \$1.6 billion of products classified as handicrafts and hand-knotted carpets, and this figure does not include the immense exports of products classified as "other" (much of which is handmade by traditional methods). It does not include the domestic market, which is estimated to have been at least \$4 billion in fiscal year 1999-2000.

Firm data is not yet available for this figure. We have arrived at it based on the assumption that the market grew at the same annual rate in 1994-2000 as it did during 1990-1994. The rupee figure

Although the overall picture of the industry is impressive, all is not well within. The millions of artisans who produce these goods truly get the "short end of the stick" and most still struggle with the very basics of existence. There are difficulties up and down the line in the crafts sector, and those at the beginning of the line — the craftsman or craftswoman — must confront the most difficulties with the least resources.

The project was sponsored by Pragya, an NGO. Pragya has its offices all over the Himalayan belt and works towards the preservation of traditional fabrics and crafts in the Himalayan region.

The legendary beauty of Himachal Pradesh and its people constitute the region's artistic consciousness. This is reflected in arts and crafts of the ebullient Himachalis who delight in creating a resplendent range of artifacts that are a spiritual oasis in the wilderness of modern life. Each unique piece is a fundamental preserve of an individual, a heartfelt expression. It proclaims, not just the dexterity of hand and acuteness of eye, it goes farther - it delves into the innermost recesses of Soul.

It is feared that in certain pockets of the crafts of Himachal Pradesh crafts like Yak & Goat hair Floor Coverings and other such crafts have either gone extinct or are on the fast decline-there, hence the organizations who are into preservation of such crafts are making an all-out effort to revive these skills and inject new blood to these areas.

The craft industry as a whole, in fact, is flourishing. Last year, India exported \$1.6 billion of products classified as handicrafts and hand-knotted carpet. , and this figure does not include the immense exports of products classified as "gems and jewelry" (much of which is handmade by traditional artisans). It also does not include the domestic market, which is estimated to have been at least \$4 billion in fiscal year 1999-2000.

Firm data is not yet available for this figure. We have arrived at it based on the assumption that the market grew at the same annual rate in 1994-2000 as it did during 1990-1994. The rupee figure.

Although the overall picture of the industry is impressive, all is not well within. The millions of artisans who produce these goods truly get the "short end of the stick," and most still struggle with the very basics of existence. There are difficulties up and down the line in the crafts sector, and those at the beginning of the line - the craftsman or craftswoman - must confront the most difficulties with the least resources.

## CHAPTER 2 OBJECTIVES:

### PRIMARY RESEARCH:

- To study the process of making handicrafts of Lahul
- To translate the steps of making the given products.

### SECONDARY RESEARCH:

- To study the Indian handicraft industry and woolen industry
- To document the various **OBJECTIVE** handicrafts of India.

### SCOPE:

- The above is strictly limited to Lahul in India.
- The research is limited to the handicrafts of Lahul.
- The product is limited to the handicrafts of Pheris and Lahul.

### LIMITATIONS:

- Due to the development of the handicraft industry in India.
- The sample size is limited to the handicrafts of Lahul.
- Lack of availability of the handicrafts of Lahul and Thana.
- As the access to the handicrafts of Lahul is limited, the derived data is limited.

## **RESEARCH OBJECTIVES:**

### **PRIMARY RESEARCH:**

- To study the process of product development for traditional crafts of Lahul
- To translate the steps of product development into real life for the given products.

### **SECONDARY RESEARCH:**

- To study the Indian handloom industry, existing carpet industry and woolen industry.
- To document the various carpets woven in different parts of India.

### **SCOPE:**

- The above is studied in the context of the Handloom industry in India.
- The research is conducted in Delhi, Kullu, Manali.
- The product development process is limited to the traditional crafts of Pherba and Chugthu.

### **LIMITATIONS:**

- Due to the time restrictions all 8 steps of product development could not be carried out.
- The sample size was restricted to 50.
- Lack of enough secondary data on products such as Pherba and Thanam.
- As the access to the data was limited so, the conclusions derived may be biased to the available data.

## CHAPTER 3 METHODOLOGY

### 1. Secondary data collection

- Information about the carpet industry and its high products in various regions of India.
- Information about the behaviour of the
- Documentation of existing carpet

### 2. Conclusive Research

- Conducting in depth research on the carpet industry in Lahaul to facilitate the development of carpet projects.
- Filling of questionnaires which was administered to a few carpet manufacturers, retailers, buying houses who dealt in hand knotted carpets.
- Research for **METHODOLOGY** forecast information and meeting with the design consultants to help brief on design.

### 3. Exploratory Research

- Research of actual products, their quality, price and information, spends on
- Discussions and meetings with the design consultants.

## RESEARCH METHODOLOGY

### 1. Secondary data collection.

- Information about the carpet industry and woolen products in various regions of India.
- Information about the handloom sector.
- Documentation of crafts of Lahul.

### 2. Conclusive Research:

- Conducting in depth interviews with the crafts men of Lahaul to facilitate the product development process.
- Filling of questionnaires which was administered to a few carpet manufacturers, retailers, buying houses who dealt in hand knotted carpets.
- Research for actual product information i.e. forecast information and meetings with buying representatives to help brief on design.

### 3. Exploratory Research:

- Research of actual product information i.e. forecast information, trends etc.
- Discussion and detailed inputs from design consultants.

CHAPTER 4

Handloom and carpet industry in India is a traditional industry. It has a long history and is an important part of the Indian economy. The industry is characterized by its labor-intensive nature and its reliance on traditional skills and techniques. The industry is also known for its high quality and durability of products. The industry is facing several challenges, including the loss of traditional skills and techniques, the entry of modern machinery, and the competition from other industries. The industry is also facing a decline in demand due to the changing tastes and preferences of consumers. The industry is also facing a decline in the number of workers due to the migration of workers to other industries. The industry is also facing a decline in the number of small-scale producers due to the consolidation of the industry. The industry is also facing a decline in the number of traditional products due to the introduction of modern products. The industry is also facing a decline in the number of traditional markets due to the opening up of the market to international trade. The industry is also facing a decline in the number of traditional workers due to the migration of workers to other industries. The industry is also facing a decline in the number of traditional products due to the introduction of modern products. The industry is also facing a decline in the number of traditional markets due to the opening up of the market to international trade. The industry is also facing a decline in the number of traditional workers due to the migration of workers to other industries.

INDIAN HANDLOOM AND CARPET INDUSTRY

**SECONDARY RESEARCH**

Secondary research is a type of research that involves the collection and analysis of data that has already been collected by others. This type of research is often used to gain a better understanding of a problem or to test a hypothesis. Secondary research can be conducted in a number of ways, including through the use of books, articles, and other published sources. It can also be conducted through the use of interviews, focus groups, and other methods. Secondary research is often used to identify trends, patterns, and relationships in data. It is also used to provide context for primary research. Secondary research is an important part of the research process and can be used to support a wide range of research objectives.

Providing direct and indirect employment to more than 39 lakh weavers, handloom sector is the largest employment activity second only to agriculture in India.

Despite the presence of the powerloom, which is only a few years old along with all its advantages, the handloom industry has been able to withstand the competition. It has done so because of its adaptability on certain fronts. Wave of ethical consumerism and the state's intervention through financial assistance and employment in various developmental schemes have brought about more than tenfold increase in the production of handloom fabrics.

This sector contributes nearly 25% of the total cloth produced in the country. During the year 1996-97, the production of 7235 million sq. metres of cloth was achieved. The Handloom Act passed by the parliament in 1985 aims to shield handloom weavers against powerloom and textile mill operators by reserving certain textile articles (presently eleven in number) for exclusive production by handlooms.

Some major promotional & developmental programmes formulated relate to (a) input support, (b) skill development programmes, (c) modernisation and upgradation of technology, (d) market support, (e) welfare measures etc. In all the schemes emphasis has been laid on assisting handloom weavers directly including upgradation of their skills etc. Handloom is a part of Indian heritage, they exemplify the richness and diversity of culture and thence the artistry of the weaver.

The craft industry as a whole is slowly flourishing. Last year, India exported \$1.6 billion of products classified as handicrafts and hand-knotted carpets, and this figure does not include the immense exports of products classified as "gems and jewelry" (much of which is handmade by traditional artisans). It also does not include the domestic market, which is estimated to have been at least \$4 billion in fiscal year 1999-2000.

Firm data is not yet available for this figure. We have analysed it on the basis of the assumption that the market grew at the same general rate in 1994-2000 as it did during 1994-1999. The same is true. Although the overall picture of the industry is impressive, all is not well within. The millions of artisans who produce these goods truly get the "short end of the stick," and most still struggle with the very basics of existence. They are difficult to get up and down the line in the crafts sector, and those at the bottom of the line make

## HANDLOOM INDUSTRY:

Providing direct and indirect employment to more than 30 lakh weavers, handloom sector is the largest economic activity second only to agriculture in India.

Despite the presence of the powerloom sector in a big way along with all its advantages, the handloom sector has been able to withstand the competition. It has also proved its indispensability on certain fronts. Wave of ethnic revivalism and effective state intervention through financial assistance and implementation of various developmental schemes have brought about more than tenfold increase in the production of handloom fabrics.

This sector contributes nearly 23% of the total cloth produced in the country. During the year 1996-97, a total production of 7235 million sq. metres of cloth was achieved. The Handloom Act passed by the parliament in 1985 aims to shield handloom weavers against powerloom and textile mill operators by reserving certain textile articles (presently eleven in number) for exclusive production by handlooms.

Some major promotional & developmental programmes formulated by the office of the Development Commissioner for Handlooms relate to (a) input support; (b) employment generation programmes; (c) modernisation and upgradation of technology; (d) market support; (e) welfare measures; (f) publicity. In all the schemes emphasis has been laid on assisting handloom weavers directly, including upgradation of their skills etc. Handlooms are a part of Indian heritage, they exemplify the richness and diversity of culture and thence the artistry of the weavers.

The craft industry as a whole, in fact, is flourishing. Last year, India exported \$1.6 billion of products classified as handicrafts and hand-knotted carpets, and this figure does not include the immense exports of products classified as "gems and jewelry" (much of which is handmade by traditional artisans). It also does not include the domestic market, which is estimated to have been at least \$4 billion in fiscal year 1999-2000.

Firm data is not yet available for this figure. We have arrived at it based on the assumption that the market grew at the same annual rate in 1994-2000 as it did during 1990-1994. The rupee figure.

Although the overall picture of the industry is impressive, all is not well within. The millions of artisans who produce these goods truly get the "short end of the stick," and most still struggle with the very basics of existence. There are difficulties up and down the line in the crafts sector, and those at the beginning of the line – the

craftsman or craftswoman – must confront the most difficulties with the least resources.

In spite of the many problems from within and without, it is also important to point out that there are many crafts producers in India who are artists by any definition. They make unique and truly beautiful products that cannot be reproduced by any machine, or by hands other than those possessing that particular skill. There are, for instance, master weavers whose entire production is booked years in advance, and who earn upwards of Rs. 1 lakh (\$2,200) for each piece they produce.

There is also a new generation of young Indian designers, collaborating with traditional crafts producers rather than imposing designs on them, with promising and sometimes quite exciting results.

The single most important summation of this report's findings is that India's craft traditions and living craft skills are rare and irreplaceable resources, living links to the past and a means of preserving cultural meaning into the future. There are circumstances at the present time that seem to offer new opportunity for solving the problems, and for finally unlocking the perennial potential. For 2000 is much higher than that for 1994, but because of the rapid appreciation of the dollar during this period, the dollar equivalents do not show a big change.

Providing direct and indirect employment to more than 30 lakh weavers, handloom sector is the largest economic activity second only to agriculture in India.

Despite the presence of the power loom sector in a big way along with all its advantages, the handloom sector has been able to withstand the competition. It has also proved its indispensability on certain fronts. Wave of ethnic revivalism and effective state intervention through financial assistance and implementation of various developmental schemes have brought about more than tenfold increase in the production of handloom fabrics.

This sector contributes nearly 23% of the total cloth produced in the country. During the year 1996-97, a total production of 7235 million sq. meters of cloth was achieved. The Handloom Act passed by the parliament in 1985 aims to shield handloom weavers against power loom and textile mill operators by reserving certain textile articles (presently eleven in number) for exclusive production by handlooms.

**CARPET INDUSTRY:** and the design, colours and quality of yarn.

The firmness, thickness and appearance of the back of a carpet are considerations in determining the quality of the carpet. The Indian carpet industry is export oriented with the largest

India offers a wide range of carpets that have evolved over the centuries to suit a variety of tastes, climates and budgets. The woolen and silk carpets are more renowned compared to the other materials such as cotton and several vegetable fibers, which are used for making attractive and practically useful mats and durries. In the early stages, the motifs used in the Indian carpets were purely Persian. Later, various other designs were introduced from Afghanistan, Turkey, China, Morocco and France. Gradually, the pile carpet industry was Indianised and assumed a character of its own. Each region developed a distinct style of carpet weaving.

In the mountainous regions of India, from Ladakh through Darjeeling in West Bengal and Sikkim to Manipur, carpets are made of pure wool in glowing colours. The predominant motifs are those of the dragon, snow-lion and lotus. Patterns are also taken from Buddhist iconography with dhawaja (flag), the kalash (water-vessel) and the twin fish being favorites. Carpets from these regions are based on techniques that are as distinct as the motifs. These are essentially Central Asian in tradition. For over 2500 years the patterns reproduced were those of flowers arabesques and rhomboids with an occasional animal design. The patterns have never become outmoded. Some motifs have a profound meaning: the circle signifies eternity, the zigzag water and light, the swastika darkness and the tree happiness and goodness.

### **Carpet Weaving in different states of India**

Kashmir is known for its fine quality carpets, an average piece being made with about 324 knots per square inch. Although the carpet industry here is of Persian origin, Kashmir has developed some of its own designs based on shawl patterns, the traditional paisley, leaves and flowers. Fine quality carpets are also produced in Amritsar (Punjab), Agra (Uttar Pradesh), Jaipur (Rajasthan) and Eluru and Warangal (Andhra Pradesh). The Mirzapur-Bhadohi belt in Uttar Pradesh represents the most important area of carpet weaving in the country as it has the largest concentration of carpet weavers. This area specialises in the lower, medium and low-fine qualities and accounts for nearly 90 per cent of the total production of carpets in India. The quality here ranges between 100 and 200 knots per square inch. The fineness of a carpet is judged from the number

of knots per unit area, and the design, colours and quality of yarn. The firmness, thickness and appearance of the back of a carpet are the important considerations in determining the quality of the carpet. The Indian carpet industry is export oriented with the largest importers being Germany and the USA followed by Switzerland, United Kingdom, Australia and Canada.

### **Woolen Carpets Handicrafts**

The wool used in carpets varies greatly. The best grades of Indian wool are used for medium quality carpets while imported wool blended with Indian high-grade wool is used for superior quality carpets. For fine quality carpets, such as Kashmiri carpets worsted yarn is used. The best quality carpets made with high-grade wool develop a beautiful luster after use and therefore old carpets have special values. Today, however, when customers desire to have that effect immediately, the wool is washed with special chemicals to enhance its natural luster. Traditionalists however maintain that the process not only reduces the life of the carpet but also fails to produce the same luster that comes with age and use.

They also believe that carpets should never be dry-cleaned. Instead, they should be washed with ritha (a kind of hard berry which is ground and then soaked in water to produce a rich lather with which the carpet is brushed).

### **Piled Carpets Handicrafts**

The Indian pile carpet is believed to have originated in the 16th century when the Mughal emperor Akbar invited some Persian carpet weavers to set up a workshop in his palace. They introduced the art of pile carpet weaving in silk and wool. Akbar's successor, Jahangir and later Shah Jahan further encouraged the development of this craft. During Shah Jahan's reign Indian carpets became famous in several countries. Some of the fine pieces of art of those days can be seen today at the Victoria and Albert Museum, London and in other museums in Europe and the United States.

## **Hand Knotted Carpets of Kashmir**

The evolution of carpeting has been affected by social, economical and fashion pressures. Developments in man-made fibers, loom widths and machine efficiencies brought carpets within reach of the mass market. Fashions for seamless square and then seamless close-cover carpet helped introduce wider looms. Investigation into thermal and acoustical requirements led to fitted carpets in public buildings, shops and offices. Ingenious manufacturing solutions proliferated from the 1960's. Tiles, printing, warp printing, needle punched fibers and double faced bonded carpets all increased the ability of the carpet trade to cater for specific areas, price points and the demands of fashion.

The origins of hand-knotted carpets can be traced back more than 2000 years. In India, the hand knotted carpets appeared in the 15th century. In Kashmir it attained a high degree of perfection especially in the 16th and 17th centuries under the Mughal emperors. Wool is the basic material but in Kashmir silk is also commonly used not only for the pile but also for the warp and weft. Sometimes silk or cotton is used for the warp with quality wool pile for weft. The appearance and number of knots on the back of the carpet indicates the quality. Among the hand knotted ones the Bokhara Carpets are one of the finest with about 125-500 knots in a square inch.

The legendary beauty of Himachal Pradesh and its people constitute the region's artistic consciousness. This is reflected in arts and crafts of the ebullient Himachalis who delight in creating a resplendent range of artifacts that are a spiritual oasis in the wilderness of modern life. Each unique piece is a fundamental preserve of an individual, a heartfelt expression. It proclaims, not just the dexterity of hand and acuteness of eye, it goes farther - it delves into the innermost recesses of Soul.

To honor, cherish and promote the handicrafts industry and to accord recognition to their glorious tradition of excellent craftsmanship- Himachal Pradesh Government formed this corporation in 1974.

Today Corporation's Design Development Centre is committed to evolving new designs, which are infused with the innate tradition and spirit of Himachal. Yak & Goat hair floor coverings and other such crafts have either gone extinct or are on the fast decline, the corporation is making all-out efforts to revive these skills and inject new blood to these areas.

It is feared that in certain pockets of the Pradesh crafts like metal craft, ornaments, woodcarvings and Turning. Yak & Goat hair Floor Coverings and other such crafts have either gone extinct or are on the fast decline-there, the Corporation is making an all-out effort to revive these skills and inject new blood to these areas.

The Corporation's Design Development Center is committed to evolving new designs which are infused with the innate tradition and spirit of Himachal. To crown these efforts, the H.P. State Handicrafts & Handloom Corporation has announced State Awards to craftsmen and weavers for their contribution in the field of Handicrafts and Handlooms in Himachal Pradesh.

A DOCUMENTATION OF THE TRADITIONAL  
LAHUL CRAFTS OF PHERBA AND CHUGTRU  
AND THANAM

## CHAPTER 5 AN INTRODUCTION

The sheer harshness of the climate compounded by difficult and near inaccessibility, lacks of resources are not enough to test the ingenuity of man's mind to evolve and adapt means to survive. This can be seen and better understood by studying the life style of the people of the Lahul valley and there is no better example of this than the intricate apparels worn by the people of this region. The men and women have a way of speaking in silence.

Lahul and Spiti district is located amidst the grandeur of the great Himalayan interspersed with beautiful landscapes and predominantly glowing snow-capped peaks, glaciers, lakes and two rivers (Chandra or Chandra-Bhaga and Spiti). The highest mountain peaks range between 5,182 meters and 7,624 meters above sea level. The district is bounded by Kinnaur, Kullu, Kangra and Chamba on the south, south west and north west Jammu and Kashmir and Tibet on the north and east and is located between the latitude of 31 degrees -43' -03" and 3 degrees -15' -25" and longitude of 76 degrees -21' -44" and 78 degrees -40". It has an area of 13,835 square kilometers.

### **A DOCUMENTATION OF THE TRADITIONAL LAHUL CRAFTS OF PHERBA AND CHUGTHU AND THANAM**

The district is mostly rural and therefore its crafts are mostly rural in origin and even its district headquarters is rural. Three important factors play a decisive role in the involvement of crafts of a region, which has inherited and adapted, reflecting the influence of these three factors by having their own peculiar characteristics which distinguishes them from those of the neighboring districts. These three important factors are:

- Climate and Terrain
- Customs and Religion
- Raw Materials and its availability

#### **CLIMATE AND TERRAIN**

There is a great variation in temperature also between different parts of Lahul and around the Roibang pass. Lahul has a heavy snowfall as compared to its neighbour area, Spiti, where only 70 to 75 centimeters of snow are recorded in winter. Lahul has clear and cloudless summers though the strong winds blow almost all year round but it is dry and remarkably healthy. There are few diseases

of any serious nature except a few cases of simple colic, fever or

## LAHAUL : AN INTRODUCTION

The sheer harshness of the climate compounded by difficult and near inaccessibility, lacks of resources are pitted against the ingenuity of man's mind to evolve and adapt means to survive in it. This can be seen and better understood by studying the lives of the people of the Lahul valley and there is no better example of it than the textile apparels worn by the people of this region, for the weft and warp have a way of speaking in silence.

Lahul and Spiti district is located amidst the grandeur of the great Himalayan interspersed with beautiful landscapes and permanently glowing snow capped peaks, glaciers, lakes and two rivers Chenab or Chandra Bhaga and Spiti. The sharp mountain peak's range between 5,182 meters and 7,010 meters above sea level. The district is bounded by Kinnaur, Kullu, Kangra and Chamba on the south, south west and north west Jammu and Kashmir and Tibet on the north and east and is located between the latitude of 31 degrees -45' -03" and 33 degrees -15' -25" and longitude of 76 degrees -21' -44" and 78degrees -40'. It has an area of 13,835 square kilometers, which is the largest in the state and accounts for 24.85 percent area of the state. The district is inhabited by 31,294 persons which is only 0.6 percent of the population of the whole state. The district is entirely rural and there is no urban component in it and even its district headquarters is rural. Three important factors play a decisive role in the involvement of crafts of a region, which has inherited and adapted, reflecting the influence of these three factors by having their own peculiar characteristics which distinguishes them from those of the neighboring districts. These three important factors are:

- Climate and Terrain.
- Customs and Religion.
- Raw Materials and its availability.

### CLIMATE AND TERRAIN:

There is a great variation in temperature also between lower parts of Lahul and around the Rothang pass. Lahul has a heavy snowfall as compared to its neighbour area, Spiti, where only 70 to 75 centimeters of snow are recorded in winter. Lahul has clear and cloudless summers though the strong winds blow almost all year round but it is dry and remarkably healthy. There are few diseases

of any serious nature except a few cases of simple colic, fever or cold.

The name Lahul is used only in Kullu and by Indians, whereas the Lahulis and the Tibetans used to call the valley "Garzha". The term Lahul has probably been derived from the Tibetan 'Lhoyul', "south country" and 'Lhahi-yul', "the country of gods". But the derivation remains uncertain.

The district of Kangra and Kullu in the south, the valleys of Spiti and Kinnaur to the east, Ladakh and Zaskar to the north, and Chamba and Kishtwar to the west surround Lahaul valley. The river Chandra Bagha also known as the Chenab, is the heart of the Lahaul valley. Now there are five different valleys, namely Tod valley, Gahar valley, Gondhla valley, Pattan valley and Mayar valley but geographically it is divided into three valleys, i.e., Chandra valley, Bagha valley and Chandra-Bagha valley.

The valley of the river Chandra is locally called Rangloi. A considerable portion of this valley is just a snow bed near Baralacha pass, and is uninhabited. This region contains mainly high mountain peaks, large glaciers and vast snowfield. After about 72 kilometers of earlier portion of the river, the habitation starts. Khoksar is the first village in the valley. Several villages are situated on the Right Bank of the river Chandra after Khoksar and on the left side of the river there is 'almost a wall-like mountain rising from the bed of the river and going upto the crest. After the village Gondhla and upto Tandi village the mountain slopes become gentler and have fields and grass pastures.

The valley of bagha is locally called gara. Like chandra valley, the earlier region of this valley also presents a deserted look. The river starts from the Southwestern foot of the Baralacha and upto the village Darcha it flows in almost a narrow gorge. This valley becomes wider from Darcha and upto its junction with Chandra at Tandi has most of its population and vegetation. The portion of Bagha valley from the village Darcha to Keylong is locally known as Tod and beyond that Gahar.

The valley of the combined rivers of Chandra and Bagha is called Chandra-Bagha valley, popularly known as Pattan. From the village Tandi to Thiroth village on the boundary of Chamba district the valley is wider, fertile and thickly populated.

#### **CUSTOMS:**

Marriage customs differ greatly from that in North India. The brides family has an upper hand in negotiations; keeping with acknowledged fact that women have to play an important and

decisive part in setting up a family women's importance is recognized most in the custom governing marriage. Marriages are usually settled through intermediaries. The groom elopes with his bride and 'chota shadi' or small wedding takes place. The boy's maternal uncle and aunt play the part of the girl's parents. Now that has to make the initial offer and seek the acceptance for a proposal, with gifts of liquor, money, and jewels to the prospective bride's family. If the acceptance is given then the 'bada shadi' or the main wedding takes place. In these marriages the girl's acceptance is also very important, for if the girl refuses to elope, a strong suitor forcefully carries her away. Family system is predominant among the residents of this district with little variation in different valleys. In Chandra-Bagha (Pattan) valley elementary family system is more in common. In Chandra and Bagha valleys, the Joint family system is very rigid. Under one roof father, sons and brothers, but also uncles and nephews of the same descent, live and sometimes even own property in common. Strong joint family bond is a consequence of polyandry, which still persists in this area. But due to advent of modern civilization in the area, the system is under serious strain. A number of separation cases year after year indicate that a tendency is developing among the people to live separately in nuclear families and own property. Dowry as a custom is widely prevalent and with the new influx of wealth huge amounts of cash and gold exchanges hands, ranging from 10 tolas to 100 tolas depending on the social and financial status of the persons involved. The gifts given in marriage also often exceed a hundred thousand rupees in cash or kind.

A woman in Lahaul for that matter in most of the hill-district of the Himalayas enjoys a unique position. Besides keeping the hearth she contributes equally, if not more, to the outside work. Hence even though the women are held in such a high esteem the lot of the women is tough and hard. They do all the laborious work, such as carrying loads, weeding, harvesting the crops, carrying water etc. In agriculture operations they do all the work except ploughing. Due to hard work and from constant exposure to the strain of physical work and weather, women here soon look much older in appearance than the man does. She also takes leading part in folk songs and is an equal partner in dances with men. In the matter of inheritance of property, Lahuli women have been enjoying more right than her sisters of the other Himalayan region. Both men and women have a marked muscular development, which gives them beautiful look. The men folk are simple although lazy to some extent, living up to the popular belief that the hill people are simple, the men folk are an epitome of simplicity, both in their mental and outward appearance.

The influx of wealth has also seen the arrival of new social problems and the men folk are mostly victim of these, alcoholism being one of them. Earlier drinking was essentially done to counter the cold harsh, weather in winters. Now it has become a habit indulged in the year round.

Customs relating to death are relatively more sober and muted as compared to marriages, with the monk playing a major role in deciding the methods in cremating the dead. The dead are usually cremated but there are rare cases when the body is discarded in the river or left in the mountains for the vultures to feast on them. The ashes of important people are kept in an earthen vessel and buried in a 'Chorten' or a burial mound. Along with the, ashes things of daily use and that of value are also buried, for Buddhists believe in life after death and so providing the dead with things they would need in the next world.

No birth customs are observed besides 'gotsi' when the first son is born the villagers visit that house to offer flowers or 'chhang' a kind of wine made out of millet.

#### **RELIGION:**

The religious influences on Lahaul have often stemmed from political influences; that is, they reflected the religious persuasion of the current ruler. Since Lahul has changed hands among the rulers of Kullu, Chamba, and Ladakh quite frequently, there has been a considerable mixing of religions and beliefs in Lahaul. This is the evident from

The variable Hindu or Buddhist names of Ranas and Thakurs in the same family. Hinduism, Buddhism, Shaivism or lungpe chhos, (as it is called locally), are the three dominating religious faith in Lahaul. The people of different valleys of Lahul practice Hinduism, mixture of Hinduism and Buddhism, and a pure Buddhism. In Pattan valley pure Hinduism exists, in lower part of Chandra and Bagha (Rangloi and Gahar) valleys the mixture of Hinduism and Buddhism is practiced. In Tod valley and Gahar valley Buddhism mixed with Shaivanism is being practiced.

#### **PEOPLE, LANGUAGE:**

The beauty of this valley is different from other parts of the country. The grandeur of its mountains, the serenity of its land and the tranquility of its massive glaciers pouring milky white water through the mountain ranges, cultural diversity, different dialects, different background, all this evokes imagination and awakens curiosity in everyone. As is well known, the entire population of Lahul district is tribal and of course, a major number among them

are Scheduled Cast. There are three types of tribes in the district, which are known as Swangla, Lahula, and Bodhs.

Caste rigidities, social restrictions and untouchability, as prevalent in other parts of the country are also found in this Himalayan region, but they are not very acute, rigorous and prohibitive here. Certain permissiveness is evident in all aspects of the society. Village set-up is, by and large, similar as in other parts of the country. The people such as the Brahmins, Thakurs (Rajputs), Kanets or Bhots, Lohars (ironsmiths), Dagis (carpenters), Hesis (landless labourers or musicians) etc. are found in almost all the villages of agrarian set-up. The only exception is that Brahmins are found only in Chandra-Bagha valley (Pattan).

The people of Lahul are a mixed race of Munda speaking, spread from Bengal and Central India, to the frontiers of Tibet. At later period Tibetan settlers came in from the North and East from Rupshu and Ladakh into the head of Bhaga and from Spiti and Tibet into the head of Chandra valley near Khoksar. Aryans and semi-Aryans also came from the west and south and the Lahaulis at present is the ultimate product of the amalgamation of these different races.

The people of Chamba-Lahul, that is around Triloknath, seem to be either the original inhabitants or the earliest settlers in this area, another group whose history may have reach far back in time are the people of Tod valley. The origin of a majority of people of Tod valley is Tibetan. Besides their features and general looks, the language is more than 90 percent Tibetan, perhaps closer to the one spoken in the southern part of Tibet. The origin of most people in Gahar valley seems to be Baltistani. During 14th and 15th century, many Baltis left for another place to settle down when the Moslems extended their influence over Kashmir. Most of those who left have come to Lahaul and settled in Gahar valley. The settlers of Gondhla and Pattan valley have been much intermixing of different races and bloods. The people of Gondhla valley seem to be a mixture of the people of Malana (a tiny ravine in the Kullu valley at the back of Nagar), Busher, Zanskar and perhaps some from Ladakh as well. The language of Gondhla valley seems to be a mixture of the languages of Malana, Busher, and Chamba -Lahul along with some Tibetan and Zanskari. The reason for this is related with their chief deity of the valley Raja Ghepan. Every third year, Ghepan is taken to Malana to visit and pay his respects to Zamlu, the deity of Malana, who is said to be the elder brother of Raja Ghepan. This clearly indicates relationship between the people of Malana and Lahaul, especially of Gondhla valley. The Pattan valley of Lahaul has the maximum mixture of people. One of the major reasons is that this area has been most vulnerable and it has been tossed around among different



to create and live with beautiful objects has been an intrinsic part of 'Pahari' life and these textiles have lent colour to the hard and drab existence of the inhabitants of Himachal Pradesh. Through the ages, a vital element of 'Pahari' culture has endured in the continuation of this tradition.

### **OCCUPATION:**

People of Lahul are short statured, sturdy and hardworking. Before the start of modern communication the male folks mainly spent their time plying their mules apart from helping the ladies in agricultural operations, Kuth was their main trade, however the trade on mules was their major occupation, While men shuttled from Tibet, Punjab, Calcutta, women attended the agricultural operations like sowing, breeding, and irrigation of barley and buckwheat. With the opening of modern communication systems, the men are seen carrying on their trade by using trucks which have considerably replaced the mules and other pack animals and women are seen working on the fields mainly concentrating on cash crops like seed potatoes, peas and hops which have indeed revolutionised the economy of the valley. With the influx of education, and modernisation the younger generation is coming forward to aspire for government jobs. The entrepreunering people have also been allowed to engage themselves in business activities and tourism industry.

Though almost the entire district is barren, farming is the main source of livelihood in this valley though. So the primary occupation of the people within the valley of Lahaul is agriculture. There is hardly any family, which does not posses some land, even though it might be less than an acre. Only a few families of Blacksmiths and Goldsmiths do not possess any land at all. From the time immemorial these people have learned to be self- reliant and self-sufficient. The farming is totally dependent upon irrigation and thus they are not at the mercy of the rain.

When the snow falls and farm work is not possible, they spin and weave. Every house holds maintains sheep for wool as well as for manure for the fields. Besides sheep, they keep cows for milk, and bulls to plough the fields. These cattle are essential for the farmers, who have relied upon organic farming for centuries. Thus, they produce by themselves most of the items needed for living. However, this self-sufficiency is changing fast under the wave of modernisation. The valley of the combined rivers of Chandra and Bagha is called Chandra-Bagha valley, popularly known as Patlan. From the village Tandi to Thirot village on the boundary of Chamba district the valley is wider, fertile and thickly populated. Most of the villages are situated in this valley and most of the cultivation is done here. It may be termed as orchard and granary of Lahul.

There is a remarkable variation in the climate in this district. Patlan valley of Chandra-Bagha river has less elevation and hence less rigorous of the climate. Here cultivators sow and reap two crops in their fields during the spring, summer and Autumn where as upper regions of Chandra-Bagha valleys are snow-covered till almost May and starts snowing with close of the year.

#### **ENTERTAINMENT:**

In the absence of modern means of amusements like cinema and theatre, people mostly depend on fairs, festivals and community dances. Mostly the festival days are observed with dancing, and singing and drinking. During the festival people cast away their worries of life aside for sometime by singing, dancing and drinking. There are more than a dozen forms of dances prevalent in Lahul. Singers and Dancers mostly favour incessant repetition rather than variety. Musicians give accompaniment to the dancing crowd. The myths, legends, folk tales, ballads and riddles which mirror musings, beliefs and traditions of the tribal people come to light, irrespective of the occasion of the harvest or festival that the myths and legends are learnt by the people during winter season when they sit around the warming fire, and the old men and women tell folk tales and riddles etc.

#### **INFRASTRUCTURE:**

In this mountain region, passes only provide the routes of communication. Baralacha pass from Ladakh side, Rothang pass from a Manali side and Hamta and Kullu side are the main gateway. The old trade route between Sultanpur to Leh used to pass through Lahul. But now there is a regular bus services between Manali to Darcha via Rohthang, Khoksar, Sissu, Ghondla, Tandi, and Keylong. Besides bus services, the army operates regular helicopter service. Despite geographical barriers, climatic hardship and communication problems in the past, adventurous men have searched the remotest comers of the several valleys of the region and have established themselves here.

#### **FESTIVALS:**

In Lahul 'Halda', Phagli', 'Gotsi' are important festivals. 'Halda' is the new-year's day of Chandra and Bhaga valleys. The date of the new-year is fixed by the ' lamas' or the priests and generally falls in the month of January. At the appointed time, on the day of the new year two or three persons from the house bum sticks or branches of pencil Cedar and take them to the west and pile these sticks or

branches making a bonfire which give a spicy aroma, chanting away they then throw all the sticks into the bonfire, after which they go to their homes and worship the goddess of wealth 'Shikar-apa' and feast with 'Chhang' and meals. The following morning youngsters wish their elders good luck. The festival goes on for three to four days during the time nobody visits others houses as it is considered to be a bad omen. They come out to meet friends and relatives after the worship period and wish each other happy new-year. 'Phagli' follows 'Halda' within a fortnight, on this day people offer flowers as token of greetings for the new-year.

'Gotsi' is a festival of Chandra and Baga valleys, is celebrated in the month of February in the houses where a son was born during the preceding year. The villagers gather in that house in the morning and take 'Chhang'. During the night the men and women dance.

#### **DRESS:**

Men wear coat and pyjamas and women wear tight pyjamas, choga like shirts tied at the waist which extends down to the calves and is not a one piece skirt, but made of many pieces, this is worn with a waistcoat. Most of the time clothes on women are of maroon colour and dark brown colour. While men keep short hair, women keep their hair twisted into numerous pigtailed held in position by plaits. The Lahulis have traditional straw shoes the soles of which are made of barley straws and the upper from string Cannabis fibers. These shoes are very suitable for walking on snow. The traditional shoes also are indicative of the social status, as well-to-do classes wear shoes, which are fur lined.

#### **LAHUAL: RAW MATERIALS AVAILABLE:**

#### **WOOL:**

Wool is the body hair of sheep. The fiber length of which varies between 15 to 20 mm. to 250 to 300 mm. and even more. The diameter is expressed in microns. Fine wool is generally used for fine clothing and knit wear. Coarser ones used for blankets and carpets. There are other animal hairs also available for the purpose which are Alpaca, llama, cashmere, angora, mohair, etc.

Merino wool is considered to be the best grade of wool because it has the most crimp, thinnest diameter best resiliency and elasticity, softest hand and the most scales on the surface. It is due to these very properties that wool is considered one of the plushest fabrics.

### General properties of wool:

Wool is mainly composed of protein because it is an animal fiber; it is a medium-weight fiber of a natural cream, brown or black colour with a fiber length between 1 and 18 inches. When viewed under a microscope its shape is round with a scaly surface.

Cattle rearing was an important profession, sheep being a utility animal, availability of meat, milk, wool through it. So more importance was given to the sheep rearing. Pashmina wool available from Tibet as Tibet was not only close but was also an important trading centre fine quality yarn was traded and brought from Tibet.

Natural dyes attained from local plants, herbs and trees as they fulfilled the colour requirements, which is of a fairly dull colour pallet.

The material traditionally used for weaving was the under fleece obtained from mountain goats, called 'Chigu', found in the higher reaches of Tibet and Lahul-Spiti. This was and still is the most sought after variety. Coarse hair, obtained from the goats in the mid and outer mountain region, known as Lacham or Ramma also as Bakaratha or Sheli, are used to weave fabrics.

The Bedu sheep is most popular at present and every household owns these sheep for wool, milk and meat.

### NATURAL DYES:

Natural dyes comprise those colorants (dyes and pigments) that are obtained from animal or vegetable matter without chemical processing. They are mainly mordant dyes, although some vat, solvent, pigment, direct and acid types are known.

Vegetable dyed fabrics are of three categories.

- Yam dyed in natural colours and woven.
- Materials block printed with natural dyes.
- Kalamkari where kalam or pen is used on clothing.

In Lahul vegetable dyed fabric using the yam dyed and then woven process was used. But now natural dyed yam due to the long and tedious process has become a casualty of the modern times. It is no longer being done. The exquisite beauty of natural colours, with

their soft glow is lost; giving way to bright colours made from chemical dyes from Ludhiana and Panipat.

## EMBROIDERIES:

### **Dyes used in Lahul were:**

*Lac dye* - Lac is probably one of the most ancient of the animal dyes. The dye yields scarlet and crimson shades, which exhibit good properties, especially to light and washing.

*Saffron* - The major chemical constitution of saffron is crocetin. It is obtained from the pistils of the *crocus sativus*.

*Cochineal* - Cochineal is obtained from the insect of the same name, which feeds on cactus. The main colouring component of this dye is carmine acid.

*Kaiphal* - *Myrica Esculenta*, it is a plant of thick foliage which grows in the sub-tropical Himalayas. This dye is used to dye onion colour on wool. Depending on the mordant used, the colour obtained varies from ochre to grey and exhibit good fastness to light and fair to washing.

*Turmeric* - *Curcuma Longa*, is historically known as one of the most famous and brightest of naturally occurring yellow dyes. It is a substantive dye capable of directly dyeing wool.

*Barberry* - *Berberis Vulgaris*, the short thorny bush, bearing live red berries grows abundantly in the Himalayas. Wool or silk are kept, without boiling in a dye bath composed of a decoction of the mashed plant, until the desired intensity of colour is obtained.

*Henna* - *Lawsonia Inermis*, for use as colouring material, henna powder is pasted with water and applied to part to be dyed. It acts as a substantive dye and imparts an orange red colour.

### **Lahuli textiles fall into two distinct categories:**

- Woolen fabrics
- Woolen with surface ornamentation

Most of them are intended for personal use and few are specially designed for ceremonial occasions.

maximum efficiency and at the lower production cost, thereby providing the optimum combination of quality raw materials, exceptional yarns and most economical prices.

### **EMBROIDERIES:**

Colour is introduced either at the raw fiber stage or when the yarn is spun. The women of Himachal have evolved a distinct tradition of embroideries, which have no parallel in India, and reflect the rich artistic and cultural heritage of the region. This embroidery is as varied in its richness and beauty as the landscape from which it seems to have derived its design and colour's. The erstwhile hill states of Chamba, Kangra, Mandi, Kulu, Basohli, Bilaspur, Suket, and Sirmaur were always celebrated for their embroidered textiles. Unfortunately, no ancient specimen of these survived.

As elsewhere in India, in Himachal Pradesh also, embroidery was considered women's accomplishment. In the afternoon free from their house hold chores the women engage themselves into embroidering objects for their personnel use. The younger girls sit near by and observe, copying designs stitch by stitch and motif by motif, attaining expertise over the years.

Irrespective of caste creed, all 'Pahari' women practised embroidery. The articles embroidered include hangings, rumals, bodices, cholis, prayer gloves, gaumukhi, ceiling covers, chandani, flags, dhvajas, coverlets, manuscript wrappers, hand fans, dice boards and caps. The tradition seems to be an old one, although no specimens predating the 18th century are available, with the exception of a 16th century hanging.

### **WOOL WEAVING:**

#### **Stages in Yarn Spinning**

Raw wool is blended together in precise proportions according to the 'character' and 'handle' of the yarn required.

The blend is scoured, pulled and teased (the technical term is 'carded') until it is straighter, whiter and free of natural burrs and foreign bodies.

The fiber is systematically opened up and layered and then cross layered and eventually this web or bat is split into slubbings which are then pulled and twisted on a spinning frame which adds strength to the single strand of yarn.

Two or more of these strands are then twisted together, or 'doubled', and this results in a yarn with a high tensile strength capable of being woven or tufted by the latest high tech machinery with the

maximum efficiency and at the lower production cost, thereby providing the optimum combination of quality raw materials, exceptional yarns and most economical prices.

Colour is introduced either at the raw fiber stage or when the yarn is spun into the thickness weight and length for the particular carpet.

The extremely cold winters of Himachal Pradesh compelled the people to develop the craft of wool weaving, which is one of the most important crafts of the state. From a daily necessity, wool weaving evolved into an extremely fascinating craft as family units and professional weavers handed down these techniques over the centuries. Weaving was not merely a method of production and economic survival but also satisfied a need for self-expression and creativity bringing meaning, fulfillment and colour to the drab routine of every day life. From being a mere commodity, the end product grew to become one of the essential elements of life - binding together its diverse social, economical and cultural aspects. According to traditional belief, wool is regarded as pure and wearing woolen clothes is imperative for all ritualistic occasions. The bride and groom for instance are wrapped in woolen shawl at the time of marriage to protect them from the evil eye.

People from different castes engage themselves in this occupation which has become a cottage industry. Every household owns a pitloom and men as well as women have acquired this skill. Weaving is generally resorted to during the chilly winter months, when the 'Paharis' are compelled to stay indoors.

Due to an increasing demand in shawls, a class of professional weavers have emerged over the past two or three decades, most of who belong to the scheduled casts. Before that, the professional weavers were the Brahmins of Chhatrarhi, the Muslim in Kilar district, the Rajputs in Mandi and Mahasu districts, the Chamangs, leatherworkers, in Kinnaur district and the Kolis, Chamars and Doornas in other places.

Due to perishable nature of the materials, very old woolen fabrics have not survived do not till today nor is their any historical or archaeological evidence. But references to them, especially to woolen wraps, abound in 'Pahari' folk song.

It is said that the Empress Mumtaz Mahal is credited with having discovered the art of wool weaving in Himachal Pradesh in the 17th century. An expedition to the hill areas returned with fabrics woven intricate designs for the queen who was so impressed by their texture and design that she gave them royal patronage which elevated their products to the same level as the fine woolens from Kashmir and Turkistan.

The best known woven object in the Himachal Pradesh is the shawl, which is marked by a harmonious combination of colours and designs evolved over the centuries. Shawls are available in a wide variety, ranging from extremely fine to the coarse.

- The material traditionally used in shawl or other fabrics making was the under fleece obtained from the mountain goat, pashmina, found in the higher regions of Kinnaur and Lahul, Spiti valley. This is the finest and the most sought after variety of wool and is known as 'byangi' in the 'pahari' dialect and popularly known as 'pashm'.
- Slightly inferior quality but very soft to touch is 'imboo' lamb's wool.
- The Bedu sheep wool is commonly used for knitting, weaving etc. by the people of Lahul valley.
- 'Desar' is the most inferior quality and is obtained from the local breed of flat-tailed sheep, gaddi or dumba. This is coarse, short staple wool.
- Today rabbit wool, angora, is increasingly used for its softness and warmth. Pashmina wool used to be imported from Ladakh and Tibet, and no doubt their profits large.

For centuries the Rohtang Pass has been an important trade route used by the Lahulis traders going to Tibet and Ladakh and bringing back Pashmina wool among other items.

#### **PROCESS OF WEAVING:**

All over Himachal the same process of spinning and weaving is employed. Shearing is done twice a year in the months of March - April and August -September. The wool from the sheep is cut with scissors that are made of iron by the weavers themselves. The wool that is shed naturally by the sheep when they rub against thorny plants and shrubs is also collected throughout the year. After shearing, the dirty raw Wool is graded according the naturally available colours like white, cream, black, grey and pinkish brown. Then the fine fleece is separated from the inferior one and cleaned thoroughly in running water. When completely clean it is dipped in sour solution in order to lend the wool a soft touch and luster. The wool is then beaten or made fluffy by using the brushes with comb

known as 'Shwast'. This process of cleaning the wool and softening it is called 'Peenjana' locally.

Both men and women do Carding, which is the process of cleaning the yam. Thereafter, an ordinary spindle, called takli, taklu, koru, unsar or katin in different dialects, is used to spin the yarn. Men and women spinning yarn on a spindle and strolling down the road is a common sight. The Gaddis are often seen doing this during their migration from Brahmaur to less cold region in the months of November to April.

The spinning wheel, 'charkha' is used mainly by women working at home as well as by those employed by the state government weaving centers. Weaving is done at home or by professional weavers. The latter have been traditionally weaving woolen fabrics for rich landlords. On an average, a weaver weaves about two to three meters a day. Every household has an ordinary pit-loom kept in a special room for weaving woolens for personnel use.

#### **KINDS OF LOOMS:**

Almost all households owns its indigenous looms, even if the family does not possess one the yarn prepared by the family members is given to a professional weaver in the village, who would then weave the yarn into fabric for the family on the traditional symbiotic system. This system is however now loosing ground against the monetary system. All over the state, throw shuttle pit looms have been used for centuries in the rural areas. This is a more traditional way of weaving and the weavers make the loom themselves. The locally available wood of walnut or 'chuli' tree is used to make the loom. It takes one day to convert sleepers into the frame. The loom is stretched horizontally on the ground and supported generally by four to six posts, fixed deep into the ground in a rectangular form. These are about one and a half feet above the ground. Beater and balance of heddles are attached to two or more wooden sticks suspended horizontally with a cord near the ceiling. Below the heddles, there is one and a half-foot deep pit in which four peddles is laid. The pit may be one and a half-foot wide and two foot long. The whole loom accessories are suspended from the ceiling and linked with strong thick woolen cords at various places to form the loom structure. The pit-loom consists of a wooden frame, two beam rods known as 'musli' for the front warp beam (cloth beam) and a 'belan' for the back warp beam, a harness called 'rach', beater called the 'hatha', reed called 'kanghi' wooden Levers to lift the harness called 'rach' beater called the 'hatha' reed called 'kanghi', wooden levers to lift the harness called the 'charkuch' (meaning four in number) or 'chidiya' and the peddle which is known as 'lata'. The beams are either made by the weavers themselves or brought for RS.

250 per beam from the local carpenters, where as beaters are self-made. The wooden layers are made out of wall-nut and are four in number on either side of the harness. The shawls and blankets woven on throw shuttle are usually joined in the middle, because the loom is not wide. It is deliberately made narrow so that one person can work on it without help, after which the two pieces are stitched together to make a piece. In the training centers set up by the government, fly shuttle frame-loom is being made. Another loom popularly use in Lahul is the 'Khaddi' it is suspended horizontally and supported by two beams. The 'Khaddi' is used to weave carpets on. The warp is made of 'Sutta' or cotton yarn, the carpets are hand knotted and involves weft design. A 'Saraya' is a narrow iron rod used to separate the warp yarn for weaving and interlacing the weft with the warp; the knots are made on this and later cut with the help of a knife, which is in the shape of a bell. After weaving each line a wooden hammer is used to beat the 'saraya' to join it with the other line and so on. This kind of a loom to make carpets is seen in almost every house in Lahul 'as the women folk make carpets almost all the time. Another type of loom is the 'Thakshay', on this loom the people of Lahul weave Pherbas. The loom is parallel to the ground and supported generally on four to six legs. These are about one foot above the ground. The length of the loom is 33feet and breath is 1 feet. Hence the fabric's woven on this loom is usually cut into desirable length and stitched together at one-foot intervals for final use. The loom is deliberately made narrow so that one person can operate the loom without any help, after which two pieces are stitched together to make a piece, to attain the desired fabric size.

#### **WEAVES:**

Plain tabby weave is the simplest form of weaving. The design is prepared by interlacing of weft yams with the warp yarns in a sequence of one down. The order is reversed for every subsequent weft thread. Normally this weave is employed by the rural weavers for preparing 'durries' and for a piece of cloth on which colours ink-lay work or patterns are introduced by using dollies of colour threads. This weave pattern can be taken up on a two- heald loom. The warp threads are entered alternately in the healds, which are raised and lowered one by one by means of two pedals. The same weave effect can be produced on a four-heald loom. Twill weave is produced in the same way. The only difference is interlacing of two up and two down warp threads moving diagonally across the cloth in a regular sequence. Inter lacing arrangements may be made over one

and under three. Warp ends may be spaced in several other irregular groupings. For this type of weave, a loom with four healds is invariably required.

Twill weave effects may be produced in a number of textures - regular twills, painted wavy twills, rearranged twills, combined twills, broken twills or fancy twills. These are employed only by the government the villagers use only regular weave. The texture produced this way gives the effect of stair steps in a fabric.

As it is made out of wool of the mountain goat known as Lachem or Ramna to the locals. Due to its water-repellent qualities it was used by the earlier nomadic tribes as a cover for their tents to protect against rain and snow. There is not much of aesthetic value incorporated in the fabric, as its prime use is as a function.

Pherba is woven by the nomads during the months of April-May when the snow has melted and the goats dry up. This is due to the fact that the loom used for weaving is difficult to operate indoors and needs to be made in the open.

Coarse hair obtained after dehauling of raw goat-wool and the hair of the goats in the mid and outer mountain region, known as Lachem or Ramna also as Bakaratha or Sheli, are not much used. But the indigenous mountain folks have found ways to make best use of this waste material. Once the raw wool is obtained, the men separate the wool on basis of colour as wool from the goat is not soft and unlike fleeces it doesn't have to be separated based on its fineness. As the wool used for Pherba is not used for spinning and cleaning need not be done.

The pherba is woven on a loom called the Trakshay, which is parallel to the ground and supported generally by four to six legs. These are about 1.5m above the ground. The length of the loom is 3.4m and breadth is 1.2m. The width of the fabric woven on this loom is usually 1.2m. The loom is made of wood and is operated at one end. There are intervals for raising and lowering the threads. The operation is such that one person can operate the loom without any help, after which two pieces are stitched together to make a piece. To attain the desired fabric size.

Pherba is of a simple plain twill weave the little designs that is added is prepared by the interlacing of weft yarn with warp yarn in a sequence of and down. The order is reversed for every subsequent weft thread. This weave pattern can be taken up on a two-heap loom. The warp threads are entered alternately in the healds, which are raised and lowered one by one by the hand. The designs are incorporated in the warp and do not have any special treatment.

Each family has a typical design for Pherba making each weave unique and also to prevent it from being copied as there is no other way to distinguish a pherba but from its colour. This is due to the monotonous colour.

## **PHERBA: THE TRADITIONAL CRAFT:**

The art of Pherba weaving like most crafts in Lahul originated from Tibet. The adversely cold climate of Lahul has forced its people to provide themselves with materials to fight the harsh conditions. Pherba is a coarse woolen blanket used by the people of Lahul, heavy and rough in nature this is due to its composition, as it is made out of, wool of the mountain goat known as Lacham or Ramma to the locals. Due to its water-repellent qualities it was used by the earlier nomadic tribes as a cover for their tents to protect it from rain and snow. There is not much of aesthetic value incorporated in the fabric, as its main motive is function.

Pherba is woven by the men folks during the months of April-May when the snow thaws and the grass dry up, this is due to the fact that the loom used is very long in size hence is difficult to operate indoors and needs to be made in the open.

Coarse hair, obtained after dehairing of raw goat- wool and the hair of the goats in the mid and outer mountain region, known as Lacham or Ramma also as Bakaratha or Sheli, are not much use. But the indigenous mountain folks have found ways to make best use of this waste material. Once the raw wool is obtained, the men separate the wool on basis of colour as wool got from the goat is not soft and unlike fleece it doesn't have to be separated based on its fineness. As the wool used for Pherba is coarser, carding and cleaning need not be done.

The pherba is woven on a loom called the Thakshay, which is parallel to the ground and supported generally on four to six legs. These are about one foot above the ground. The length of the loom is 33feet and breath is 1 feet. Hence the fabric's woven on this loom is usually cut into desirable length and stitched together at one-foot intervals for final use. The loom is deliberately made narrow so that one person can operate the loom without any help, after which two pieces are stitched together to make a piece, to attain the desired fabric size

Pherba is of a simple plain tabby weave the little design that is added is prepared by the interlacing of weft yarn with warp yarns in a sequence of one down. The order is reversed for every subsequent weft thread. This weave pattern can be taken up on a two-head loom. The warp threads are entered alternately in the heads, which are raised and lowered one by one by the fingers. The designs are incorporated in the warp and do not have weft designs.

Each family has a typical design for Pherba, making each weave unique and also to prevent it from being stolen as there is no other way to distinguish a pherba but from its patterns this is due to the monotonous colours.

The colours incorporated are the colour the wool comes in, dye is not used, as it is difficult to dye the yarn due to poor absorbency of colour by the goat hair, moreover the vegetable dyes popularly used in the region are not as affective as synthetic dyes. Hence the colour pallet comprises of whites and browns varying in shades.

There are six distinct designs incorporated in a Pherba.

- Cholshak - this means shells or cowries named after its similarities to cowries shells.
- Chumik/ Cheel - the pattern resembles a pair of spectacles hence it has been named so.
- Parparchi - this is almost similar to ajacquard, as it is the same design on reverse order except colour changes.
- Puchi Sava - this is by large the most difficult design and involves a lot of skill, it is similar to jacquard weave.
- Chua ke daat - this means rat's teeth due to the similarity of the pattern to the name given.
- Stripes -plain stripes form a large part of the pattern as it is often alternated with the other patterns.

The above mentioned patterns are all on the warp and there is no weft patterns happening, this is due to the construction of the loom which does not enable weft design.

Today the craft of Pherba weaving is declining and in some areas is completely forgotten, there are many factors leading to this let us take a look at the more obvious factors leading to its down fall.

- With change in technology and infrastructure, the younger generation are exposed to greater opportunities and hence they have no time to sit and weave Pherbas, as indeed to weave a Pherba requires great preparation time and simple hard work.
- The people of Lahul no longer keep goats, they have shifted to rearing cows and sheep -that which give them
- more in return in form of milk, fleece, etc; hence raw material shortage creates a problem.
- Education plays a vital role as now due to the various literacy programs the people of this area have become educated and hence opt for more satisfying jobs which require lesser manual labour.

- The nearby markets are flooded with cheap substitutes for Pherba; blankets, which are warmer, softer, lighter, and more aesthetically appealing, are available at reasonable rates.
- The processes of Pherba weaving is painstaking and involves a lot of hard work hence its woven by the men.
- Earlier Pherbas were given great importance and when women got married it was given as apart of the dowry now it has lost its importance.
- Pherba as a fabric is rough in nature and is very uncomfortable especially to use as a blanket, moreover with the number of options increasing it is but a matter of time that this craft will be extinct.

Hence we see that the odds are against this craft and the only way to do something about it was if the people were encouraged to practice it and more important make alternative use for this fabric and create a demand for it.

#### **THANAM:**

Thanam is a variation of Pherba its weave is similar to that of Pherba, also the loom used is alike, the only difference being that instead of using goat hair the raw material used is sheep wool. Hence thanam is softer and lighter as compared to its counterpart pherba.

Thanam is used for covering the thulten a kind of floor cushion used by the Tibetans the thulten is stuffed with dry, soft buckwheat grass and stitched up into a square cushion, this is then covered by the thanam fabric. The thanam can be as colourful as the dyes used and unlike goat hair, sheep wool absorbs colour more easily, thus thanam comes in an array of colours. The fabric is thick and good for upholstery. The loom used to weave thanam is similar to that of pherba hence thanam too is woven outside after the winter months when the weather improves.

The designs used for thanam are exactly similar to pherba: Cholshak this means shells or cowries named after its similarities to cowrie shells.

- Chumik/ Cheel -the pattern resembles a pair of spectacles hence it has been named so.

- Parparchi -this is almost similar to a jacquard, as it is the same design on reverse order except colour changes.

- Puchi Sava -this is by large the most difficult design and involves a lot of skill, it is similar to jacquard weave.

- Chua ke daat -this means rat's teeth due to the similarity of the pattern to the name given.

- Stripes -plain stripes form a large part of the pattern as it is often alternated with the other patterns.

Each family has their own array of patterns/stripes to recognise it from the others. This is similar to that of pherba.

There are two sources of carpet fibers - Natural and Man Made

#### Natural Fibers:

Wool  
Silk  
Jute  
Cotton  
Flax

#### Man-made fibers:

Nylon  
Polyester  
Polypropylene  
Acrylic  
Viscose  
(a vegetable based fiber)

#### Natural Fibers:

Wool

The oldest and most popular of all fibers, wool is exceptionally suited to carpets because it combines hard wear with lasting good looks. Wool does not support mildew and is resistant to moth damage under normal conditions.

## CARPET WEAVING IN LAHUL:

### HAND KNOTTED CARPET (CHUGTHU)

All carpet results from the conversion of raw fiber. With a few exceptions, this fiber is spun into yarn and this yarn is then made into carpet through one of three methods -

- Weaving
- Tufting
- Bonding.

All carpet fibers have something special to offer, whether it is warmth, cleanability, hard wear, fire-retardance or even price. Your carpet will perform longer and look better depending upon which fiber you select and how much is packed into the carpet.

Fibers are sometimes blended together to give the optimum performance at the best possible price.

There are two sources of carpet fiber - Natural and Man-Made.

#### Natural Fibers:

Wool  
Silk  
Jute  
Coir  
Flax

#### Man-made fibers:

Nylon  
Polyester  
Polypropylene  
Acrylic  
Viscose  
(a vegetable based fiber)

#### Natural Fibers:

##### Wool

The oldest and most popular of the natural fibers. Exceptionally suited to carpets because it combines hard wear with lasting good looks. Wool does not support combustion and under normal conditions does not conduct static electricity.

## **Silk**

Little used except in fine quality hand made rugs. It is very easy to Jute but will wear if exposed to flame.

Used mainly in backing materials but occasionally in surface fibers for flat woven rugs.

## **Coir**

Coconut husks contain a strong and flexible fiber. The husks are harvested and soaked for many months before being beaten, washed and dried. The pale yellow fibers are then spun into yarn which is finally woven into either flat weave carpeting or cut pile rugs and mats.

## **Flax**

Used occasionally in loop pile and flat weave rugs and carpets.

## **Man-Made Fibers:**

Popular since the early 1950's, great advances have been made in the performance of man-made carpet fibers.

### **Main benefits of man-made fibers.**

#### **Acrylic**

Not as hard wearing as Nylon and less fire resistant than wool, Acrylic is a fiber with good bulk and resilience.

#### **Polyamide (Nylon)**

Many different brand names, such as ANTRON, Anso, Timbrelle. A tough fiber and with stain resistant treatments is less prone to soiling than earlier nylon carpets. More flammable and prone to static than wool. Nylon is often added to wool to increase resistance to wear especially in lower pile weights and densities.

#### **Polyester**

Used in luxury Saxony styles, less resistant to flattening than some fibers but wears well.

## **Polypropylene**

Hard wearing and not as resilient as other fibers. It is very easy to clean but will scar if exposed to flame.

## **Viscose**

Not as resilient as many other fibers it is prone to flattening. But it is relatively inexpensive fiber and it brings fitted carpets within a wider reach.

## **Yarns**

Carpets are only as good as the raw materials from which they are made and the expertise with which they are constructed.

All carpets are made with raw fiber and this is normally spun into a yarn which is then woven or tufted into a fabric that you see in the shops.

Spinning the yarn itself is a skilled job and one which has created its own specialist companies.

Chugthu is the local name given to carpets. The craft owes its origin to the ancient art of Tibetan carpet weaving as the early settlers who came to Lahul valley from Tibet during the 1950's brought along with them this skill. It has indeed been of great use to the Lahulis, as the thick woolen carpet helps, combat the bitter cold of the snow bound, mountainous terrain. The Gorambh carpet made from aborted sheep foal is one of the best and served as an inspiration to many carpet weavers. These were carpets, which had an excellent luster, whose shine increased as the viewing distance increased. The Gorambh were used for marriages and ceremonial occasions. The yarn was naturally dyed and Tibetan Buddhist motifs done on a silk dyed in black. In Tibet the wool of the Byenkar an indigenous name given to the Great Tibetan mountain goat, is used, as this type of goat is found only in Tibet, hence to compensate this Lahulis used the wool of the local sheep known as Bedu. The wool of the Byenkar is coarser in nature as compared to that of the Bedu, which is merino wool hence soft to touch. This makes a difference as now the entire look of the carpet is changed due to change in texture. Thus the carpets made in Lahaul does not get the same recognition as that of Tibet. Also due to many other factors such as

- Dilution of skill,
- Unavailability of raw materials,
- No market value, as the carpets woven by them are of an interior quality,
- Lack of interest in the making carpets,
- Time restrictions, we must remember that the Lahulis consider themselves to be farmers first, the rest is secondary and of lesser significance.
- Also carpets are made solely for domestic purpose hence there is not much specialization and care given to details.
- They have no idea of the quality requirements for carpets, this mainly due to the fact that the carpets are made for personnel use.

The above mentioned scenario may look bleak, but as of now there is a new found awareness of the marketability of this craft. With this comes improvement and up liftment of the craft in general, they would making more standard products due to competition and other factors involved in it.

As mentioned earlier that the art of weaving carpets has come from Tibet hence the designs would also be from Tibet and speak volumes about their culture and traditions of Tibet, the Lahuli people have embodied this culture too and we can see it in their lifestyle, religion, festivals, etc.

The carpets are woven on similar looms as that of hand knotted carpets. The loom used is called Khaddi by the locals it is a vertical wooden frame 4breadth by 7 height. Here the Sarriya does the work of a shuttle feeding the Wool. The weft is made of cotton yarn called Sutta, for a full sized carpet 1 1/2 kilograms of Sutta is required. The warp is made of pure wool; the Chugthu is a weft design fabric. The weaving is done by hand, 2 threads from the warp is taken and wool is inserted and knotted thus interlocking and knotting the carpet line by line. The shuttle feeds wool from one end to the other thus forming the base of the carpet. Denting is done at the edged to secure the sides of the carpet. The other tools used are Chappti, which is a ruler like piece of flat wood, to maneuvered the Warp, a wooden hammer with a sharp edge is used to beat the carpet, in order to join the lines that are woven. How" smooth a

finish you get depends on the closeness of the knots to each other thus its very necessary to hammer the lines together tightly. The Chugthu comes in two common sizes:

Size 6 by 2 1/2, a carpet this size would take 2 kilograms of wool and a time period of one week for completion.

Size 2 1/2 by 2 1/2, would take 2 days to be made and 1 kilogram of wool.

The amount of wool consumed would also depend on the 'Phool' or design the more intricate the design the more coloured wool needed. Earlier the locals used the wool made by them. The Kattai or process of carding and preparation of wool takes approximately three days. In recent times the wool is brought from the shops that get their merchandise from Amritsar, Chandigarh, etc rather than prepared at home, as this saves time and also the wool is of a better quality, and comes in a variety of shades. The motifs that are found in the Lahuli crafts are simple but on the other hand very exclusive to Lahuli culture. These motifs and design patterns have now of late been made popular by the much-vaulted Kullu shawls. The designs and motifs of Lahuli crafts are derived from Buddhist religious themes, and as mentioned above the designs depict a strong influence from Tibet, where the craft originated. Because of this correlation of religion and motifs, great importance is laid on the colour combinations that are used, for the colours symbolise certain gods and goddesses in Buddhist mythology. Hence, we see why the colour maroon is so popular among Lahuli women. To the extent that the women's traditional dress- cholu is worn only in Maroon, as they consider maroon to be the colour of the Daikini or goddess and Lahul is also known to be the "land of the Daikini" or the land of the goddess. Some of the popular designs are:

- Dorjee - This is a Tibetan symbol of good luck.
- Ganak Charu - This motif looks like a wall hence its name, which means wall of China.
- Shoor -Shoor means coniferous tree as it looks like one.
- Boo Boo Mic - This means owl eyes.
- Paboo - This looks like peas worm in motion, hence the name.
- Tasil Kora - This design looks like snow -flakes and the locals called it so.

- Palpe - This design consists of multi coloured squares and a V-shaped border on the base.
- Yung-Rung Bhutti - In this four T's are placed outwardly on four sides of the square. It has religious aesthetic appeal.
- Chugthu's - These are made using the above designs, which are called phool and unlike pherba, which has a certain set of designs for each home, chugthu weaver, are not considered whether their carpet would turn out to be exactly similar as their neighbours.

THE PRODUCT DEVELOPMENT PROCESS

## CHAPTER 6 PRODUCT DEVELOPMENT PROCESS

The product development process includes the following stages:

- Evaluation
- Design
- Sourcing
- Pre-Production
- Production
- Distribution
- Promotion and Sales

A new product, during the period of its launch, is likely to be introduced in a market, it will initially be unknown and will be sold only in small quantities. Gradually the market will recognize the product and sales will increase. An increase in sales, its swiftness and timing, depends on three main factors:

1. The real number of potential consumers for the particular product.
2. The frequency at which the product is exposed, generally dictated by the prevailing fashion trends.
3. The delay competing manufacturers experience in the launching of a successful product.
4. Similar product.

To be successful, a new product has to comply with two basic requirements:

1. The new product has to appeal to a large enough number of consumers who are willing to purchase it at a price high enough to generate sales and profits big enough to satisfy all parties in the distribution process, all the way from manufacturer to retailer.
2. The manufacturer of the product has to be able to:
  - a. Design or have it designed properly
  - b. Produce it economically
  - c. Have it transported efficiently
  - d. Distribute it effectively

## STEPS IN THE PRODUCT DEVELOPMENT PROCESS

The product development process involves 8 steps:

- Evaluation
- Design
- Sourcing
- Pre-Production
- Production
- Distribution
- Promotion and Sales.

### 1. DESIGN

A new product, during the period following its first introduction in the market, is still relatively unknown and will be sold only in small quantities. Gradually the market will recognize the product and sales will increase. An increase in sales, its swiftness and timing, depends on three main factors:

1. The real number of potential consumers for the particular product.
2. The frequency at which the product is replaced, generally dictated by the prevailing fashion trends.
3. The delay competing manufacturers experiment in the launching of a successful
4. Similar product.

**To be successful, a new product has to comply with two basic requirements:**

1. The new product has to appeal to a large enough number of consumers who are willing to purchase it at a price high enough to generate sales and profits big enough to satisfy all parties in the distribution process all the way from manufacturer to retailer.
2. The manufacturer of the product has to be able to
  - a. Design or have it designed properly
  - b. Produce it economically
  - c. Have it transported efficiently
  - d. Distribute it effectively.

## DESIGN OF THE NEW PRODUCT

### STEPS IN THE PRODUCT DEVELOPMENT PROCESS:

#### 1. EVALUATION:

- Previous seasons sales analysis
- Analysis of competitor returns
- Competitor analysis
- Marketing Research
- Trend Identification
- Development Plan for upcoming season.

#### 2. DESIGN:

- Line development
- Fabric Research and Development
- *Findings*
- Art work for, embroideries and prints
- Develop new processes of finishes
- Proto type \ samples.

#### 3. SOURCING:

- Pre-costing
- Determine production capacity requirements
- Obtain color lab dips
- Proto type prints, embroideries and screen prints.

#### 4. PRE-PRODUCTION:

- Fabric approval
- Color approval
- Care label approval
- Production patterns
- Finalize sourcing decisions and purchase agreements
- Line finalization

#### 5. PRODUCTION

#### 6. DISTRIBUTION

#### 7. PROMOTION AND SALES

#### 8. FOLLOW UP

## DESIGN OF THE NEW PRODUCT

The product development process is one, which involves the transformation of fashion ideas into commercial products that satisfy the needs of the target consumer. Set. The information may be attained through testing, changing and refining of products ideas, which again may be original, adapted or copies.

Design of the new product turns the idea into factually addition to the product line.

### ELEMENTS OF DESIGN

Keeping in theme of the color in mind the range of products designed also aimed at including a combination of all the elements of good design.

- Color
- Fabrication
- Line
- Shape
- Detail

Let us look into each of them.

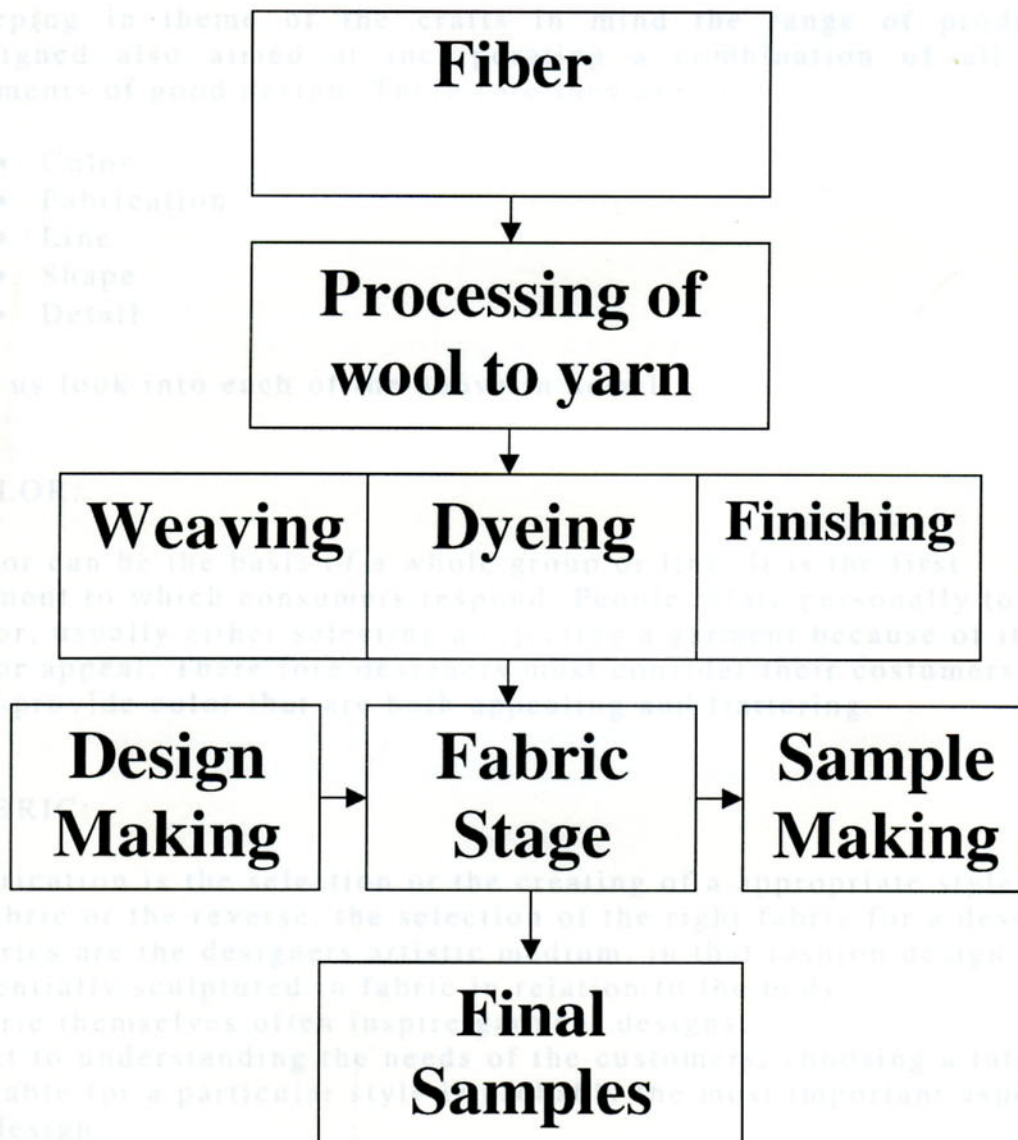
### COLOR

Color is one of the basic elements which give the first element to which consumers respond. People buy personally color, usually when they buy a product because of its color appeal. The color of the product is chosen because of its and

### FABRIC

Fabrication is the process of choosing the appropriate fabric for a fabric or the reverse the selection of the right fabric for a design. Fabrics are the designer's partner. The fashion design is essentially sculptured in fabric. The fabric chosen to the body. Fabric themselves offer inspiration to the designer. Next to understanding the needs of the customer, choosing a fabric suitable for a particular style is an important aspect of design.

The fabrics are chosen on the basis of fashion trends, quality, performance, price, and suitability.



## THE DESIGNER:

The designer creates the styles giving form to fashion ideas. The designer must also supervise pattern making and sample making seeing the line through to a successful completion. The designer is concerned with and or responsible for all the areas discussed in the rest of this.

## ELEMENTS OF DESIGN:

Keeping in theme of the crafts in mind the range of products designed also aimed at incorporating a combination of all the elements of good design. There fore they are

- Color
- Fabrication
- Line
- Shape
- Detail

Let us look into each of the above in detail.

## COLOR:

Color can be the basis of a whole group or line. It is the first element to which consumers respond .People relate personally to color, usually either selecting a rejecting a garment because of its color appeal. There fore designers must consider their costumers and provide color that are both appealing and flattering.

## FABRIC:

Fabrication is the selection or the creating of a appropriate style for a fabric or the reverse, the selection of the right fabric for a design. Fabrics are the designers artistic medium, in that fashion design is essentially sculptured in fabric in relation to the body.

Fabric themselves often inspire garment designs.

Next to understanding the needs of the customers, choosing a fabric suitable for a particular style is probably the most important aspect of design.

The fabrics are chosen on the basis of fashion trends, quality, performance, price, and suitability.

## DESIGN DEVELOPMENT

### LINE:

After selecting the fabric the designer must consider the rest of the design elements:

- Line
- Shape
- Detail

Line, an important element of structure, determines the direction of visual interests in an entire garment. Details such as trim seem openings contribute to the line direction for the whole garment. Line should flow from one part of the garment to another and should not be meaninglessly cut up.

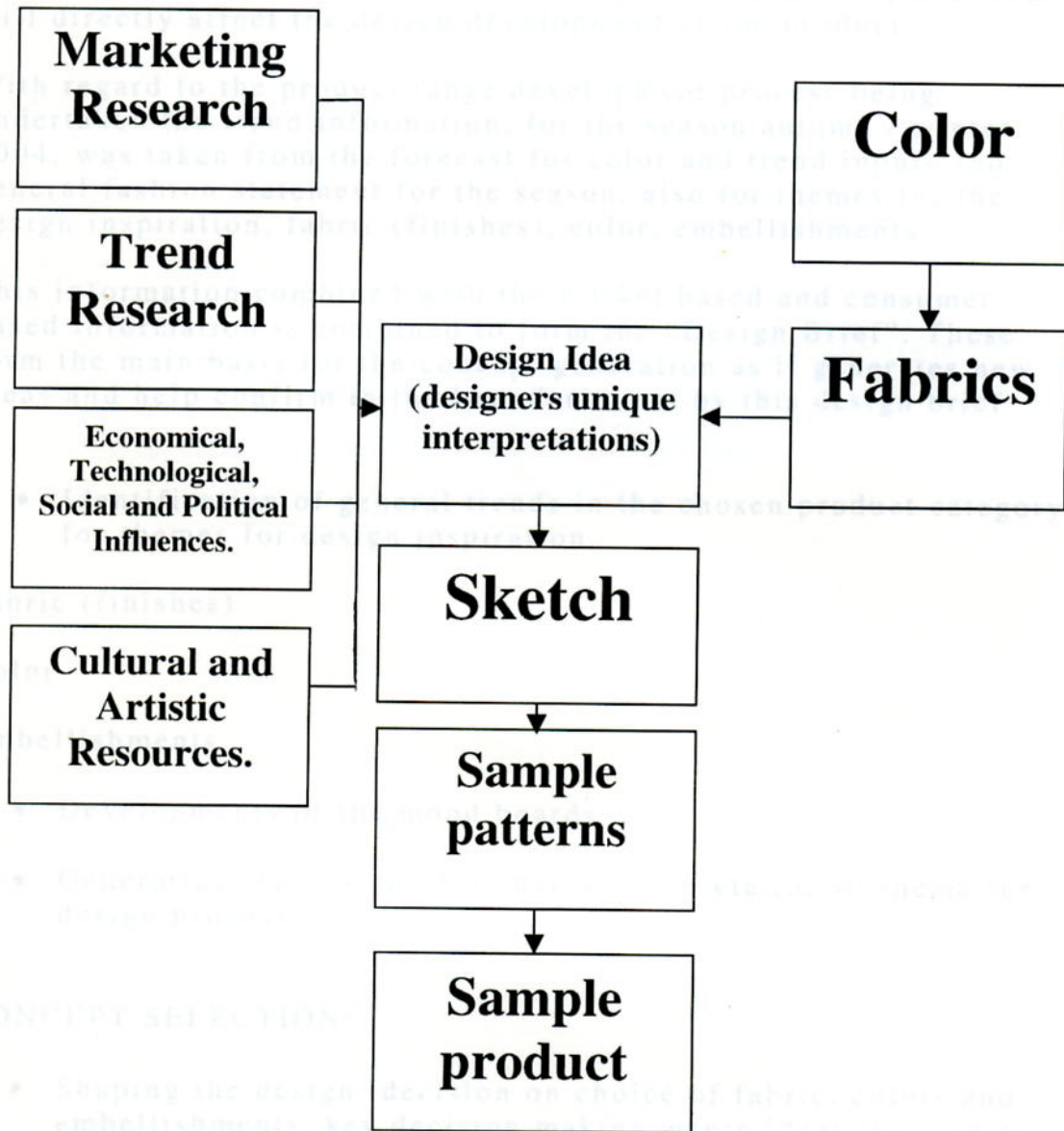
### SHAPE:

Shape, another function of line is to create shape. We use the terms silhouette to describe the outline of the whole garment. Because the silhouette is what we see from the distance, it is responsible for one of our first impressions of the product or garment. Silhouette tends to repeat themselves in cycles throughout history.

### DETAIL:

Details, the finishing touches that are added to a product are the details. There include every seam, top stitch button trims etc. details must not be over done nor forgotten. The best results are obtained by using the principles of design in their application.

CONCEPT GENERATION:  
DESIGN DEVELOPMENT:



## CONCEPT GENERATION:

The first step after gathering market information and the consumer requirements in the market is of investigating the development that will directly affect the design development of the product.

With regard to the product range development process being undertaken the trend information, for the season autumn / winter 2004, was taken from the forecast for color and trend inputs and general fashion statement for the season, also for themes for the design inspiration, fabric (finishes), color, embellishments.

This information combined with the market based and consumer based information is combined to form the "Design Brief". These form the main basis for the concept generation as it generates new ideas and help confirm in the boundaries set by this design brief.

- Identification of general trends in the chosen product category for themes for design inspiration.

Fabric (finishes)

Color

Embellishments

- Developments of the mood boards
- Generating the design: designer's interpretation of theme for design process.

## CONCEPT SELECTION:

- Shaping the design: decision on choice of fabric, colors and embellishments, key decision making where ideas that can be continued for further development are chosen.

## DESIGN – MANUFACTURING INTERFACE:

- Presentation of design concepts / final artworks and design specification sheets to the manufacturers

- Finishing the design: incorporating manufacturing bottlenecks and considering alternative materials and techniques.

#### SAMPLE DEVELOPMENT:

- Manufacturing the product in the different color-ways.
- Incorporating optional samples in the range to justify the design concept fully.

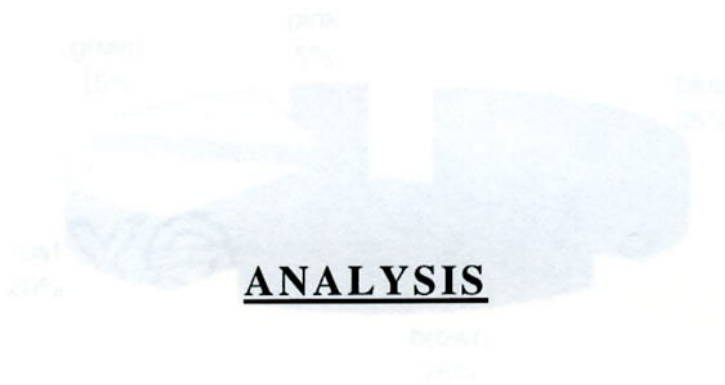
#### MARKET FEEDBACK:

- Displaying the range to the market representatives from the various importing countries.
- Changing the product according to the market requirements

## CHAPTER 7

Colours most preferred to brown, followed by blue and then just then green and the pink.

Colours most Preferred



### ANALYSIS

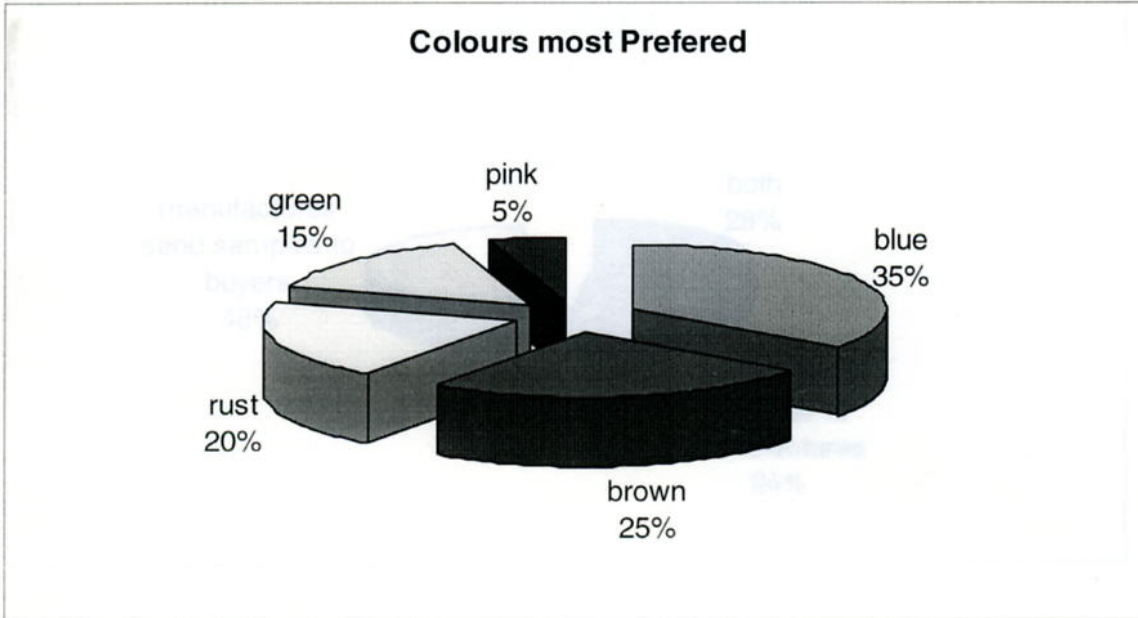
Most of the wool harvested from New Zealand, followed by Australia and then Spain.

Wool Harvesting Countries

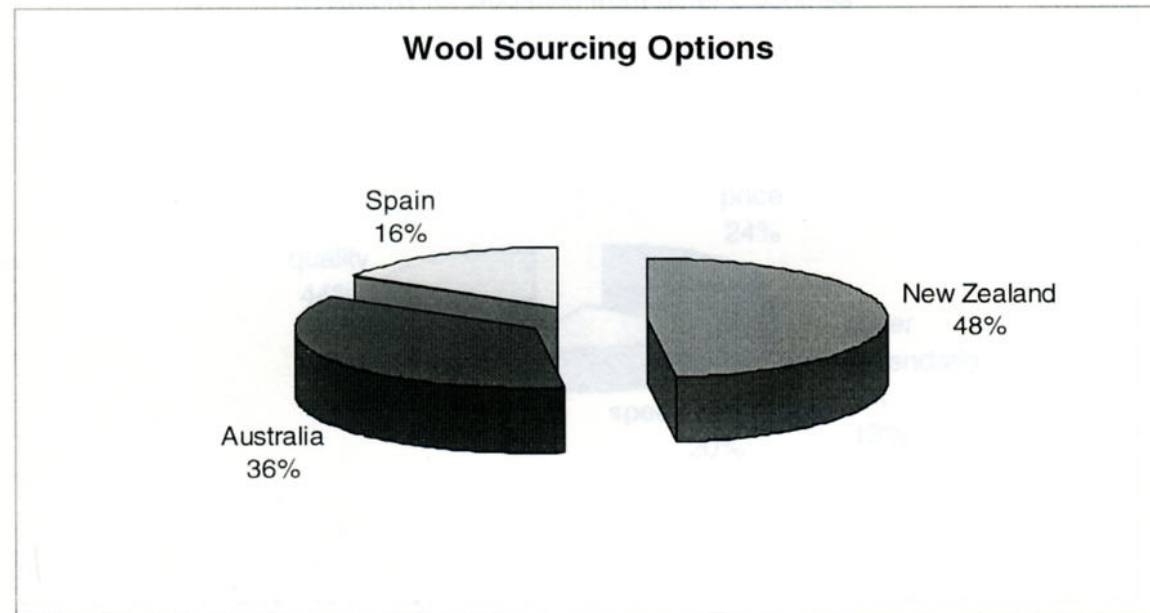


Colours most preferred is brown followed by blue and then rust then green and the pink.

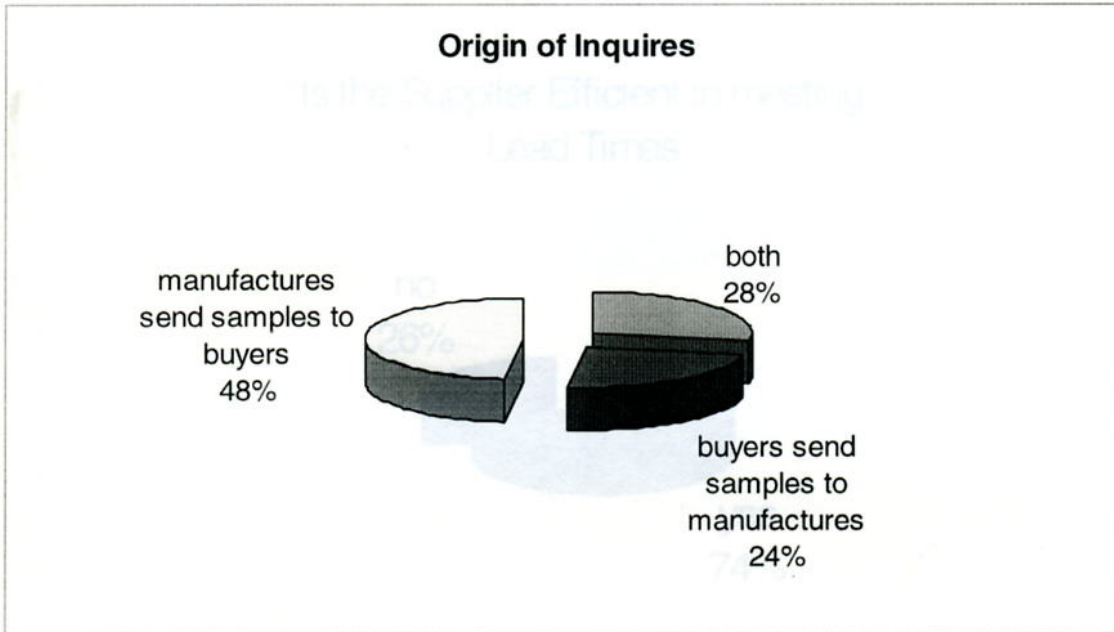
Origin of inquires



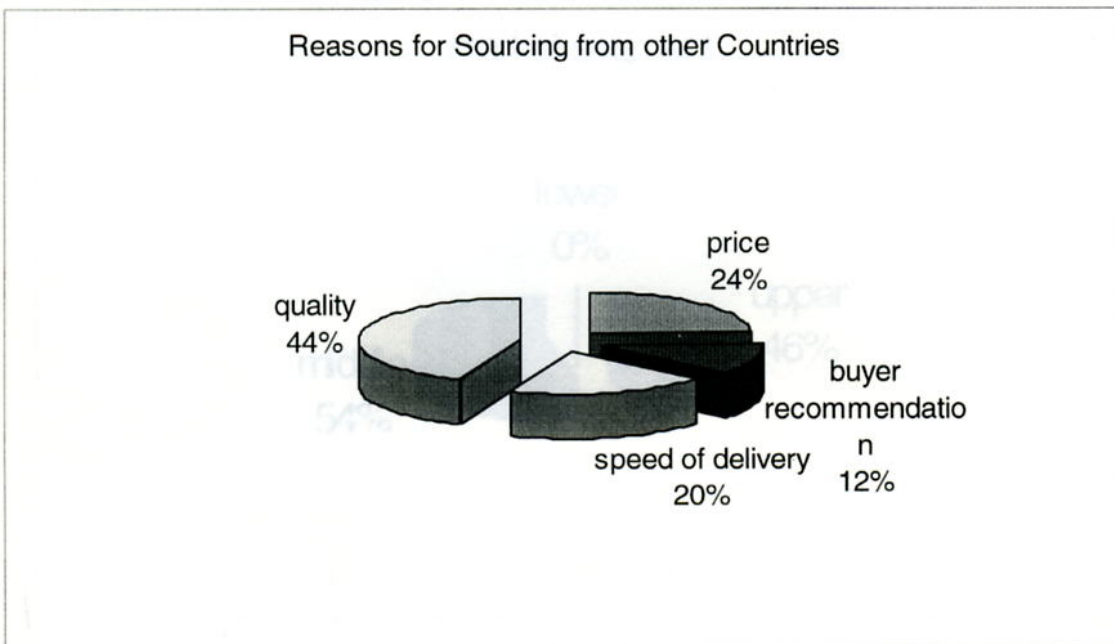
The reasons for sourcing from other countries are quality, 34%, the price is 21%, speed of delivery is 10% followed by buyers and then both.



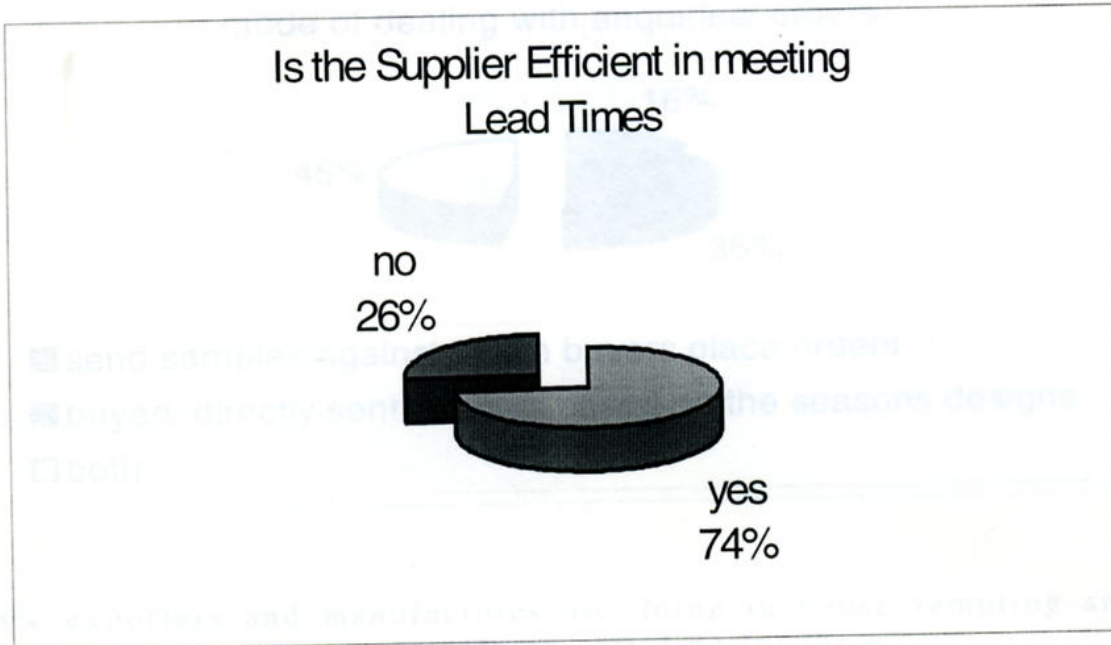
Most of the manufactures send samples to the buyers, followed by both buyers and manufactures sending samples and 24% buyers send samples to manufactures.



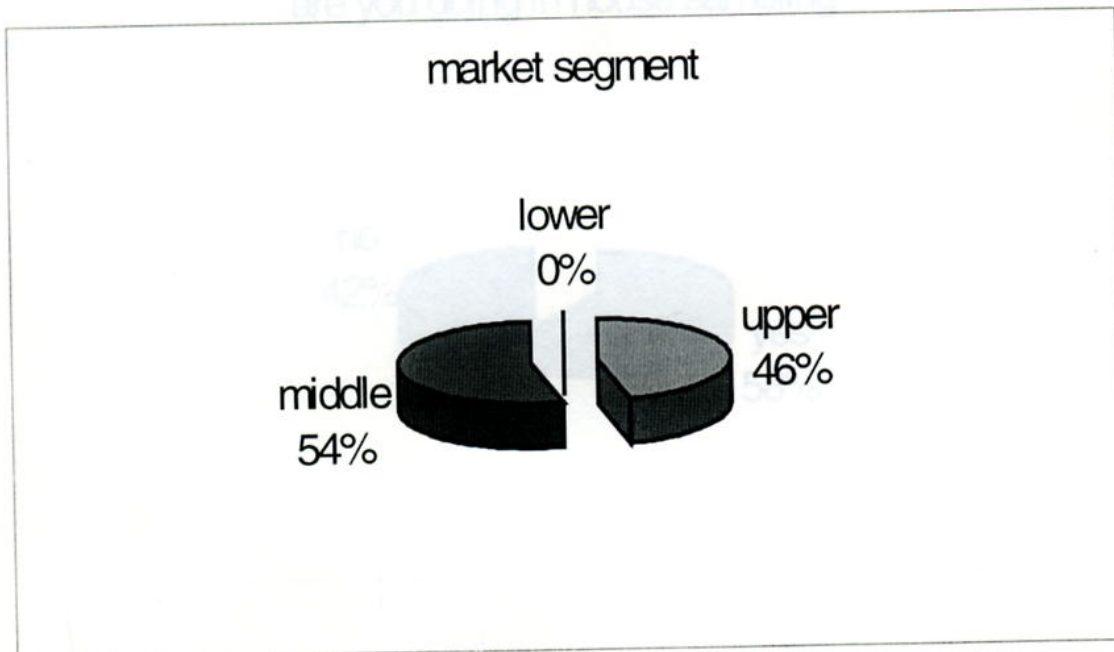
The reasons for sourcing from other countries are quality 44%, the price is 24%, speed of delivery is 20% followed by buyers recommendation which is 12%.



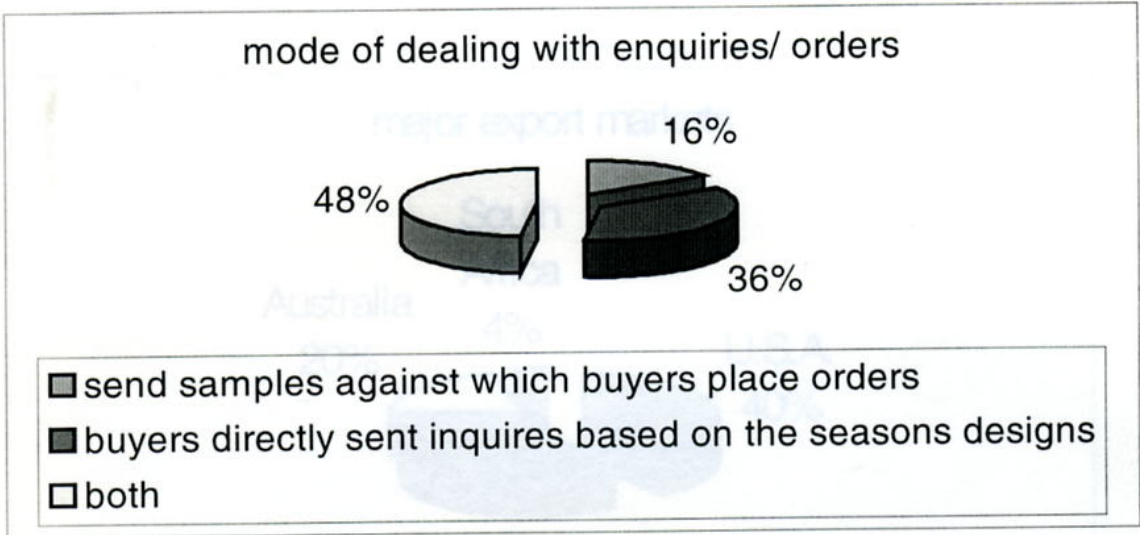
Most of the manufactures and retailer exporters agree that that suppliers are efficient in meeting lead time 74%. And 26% of them do not agree.



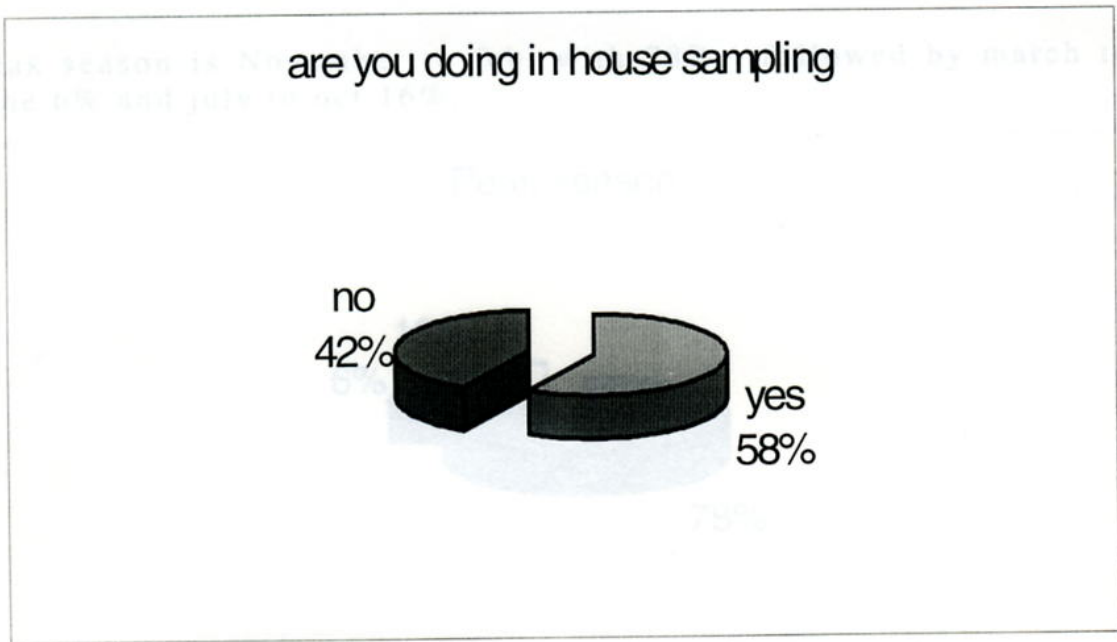
54% sales are made to the middle class followed by 46% to upper class and no sales are made to the lower class.



48% send samples against which buyers place orders and buyers directly sent inquires based on the seasons designed, 36% buyers directly send inquires based on season design and 16% send samples against which buyers place orders.



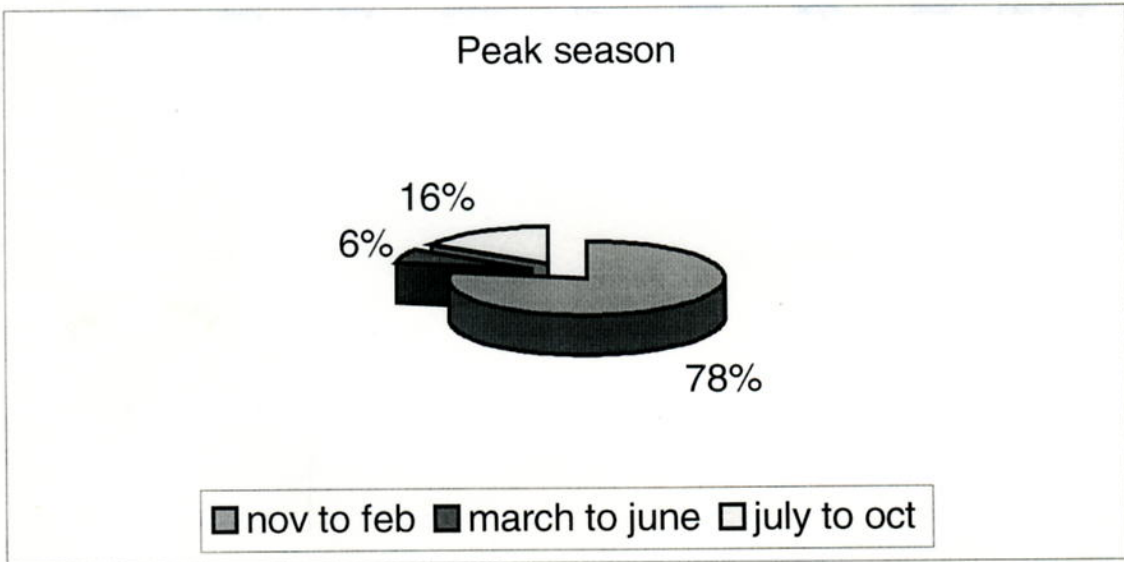
58% exporters and manufactures are doing in house sampling and 42% have out house vendors doing sampling for them.



US is the major export market. Followed by Germany with 36%, Australia with 20% and S. Africa with 4%



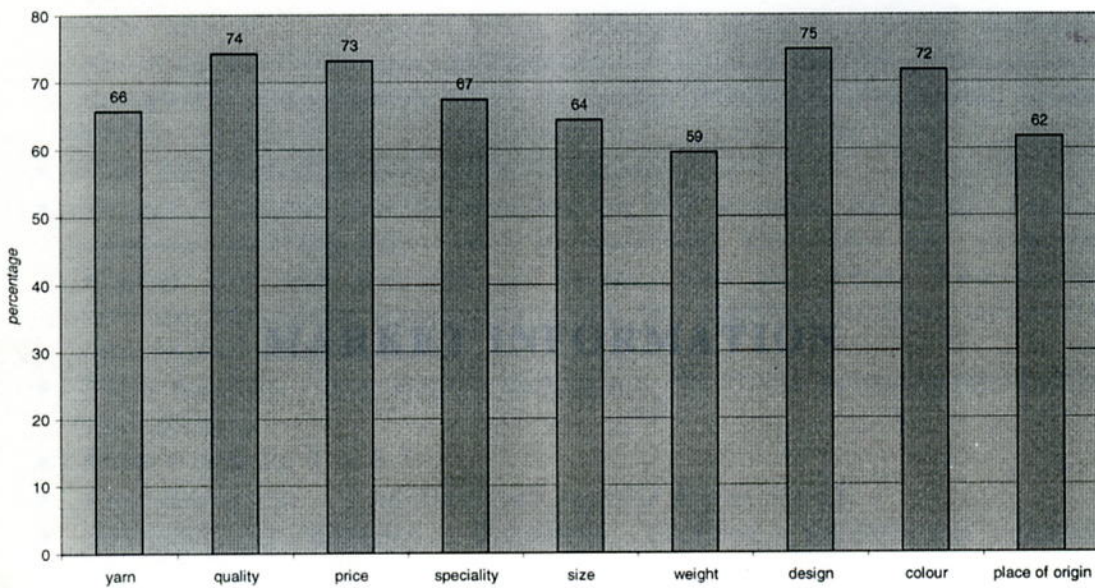
Peak season is November to feb. with 78%, followed by march to june 6% and july to oct 16%.



## CHAPTER 8

Factors affecting the sale of carpet- 75% agree that design is most important, 74% think quality is most important, 73% think price is important, 72% think color to be a deciding factor, 67% think the speciality i.e. the qualities imbibed in the carpet is important, 66% believe the yarn used is important, 64% believe size is important, 62% place of origin is important, 59% think size is important.

Factors Affecting Sales



## CHAPTER 8

### GENERAL MARKET INFORMATION

#### Product: Chughtos

- Colours: Navy Blue, Maroon, Walnut, Green, Pastel shades like mustard, cream, greenish yellow, light pink, magenta, black.
- Raw Material: local wool, cotton yarn. Though local wool produces rough carpets and cannot be dyed properly which should be looked into by upgrading the finishing processes.
- Variables Affecting Sales: Size, price, number of knots, designs, workmanship and the accuracy of designs, finishing (the absence of fringes, irregular, asymmetrical designs, absence of fringes, irregular in shades of the same colour, irregular, uneven, etc.) & lower colour blend/mix, plush feel.
- The 1-knotting rug sells the most.
- Prices: Prices are determined by the number of knots, size of carpets, and the yarn used in weaving. The finer the yarn, the higher are the number of knots, and the cost. The darker shades are more expensive than the lighter shades primarily due to the

### **MARKET INFORMATION**

- Peak Season: October to February. 70% sales occur during this period.
- Size: 2 x 2, 3 x 6.
- Raw material: Reprocessed wool & local wool.
- Designs: Stripes. The 1-knotting traditional goods comprise 90% of the total production. The designs like animals, flowers, etc.
- Variables affecting sales: Size, price, number of knots, designs, workmanship and the accuracy of designs, finishing (the absence of fringes, irregular, asymmetrical designs, absence of fringes, irregular in shades of the same colour, irregular, uneven, etc.) & lower colour blend/mix, plush feel.
- Potential to be tapped: handmade rug.
- Customers: Major customers from the lower income group.
- Competition from: other more commercial carpets.
- Customer Preferences: Softness and feel, warmth, attractive and light weight.
- Prices: Rs. 1200 for a set of 3 x 6.
- Sales outlets: In the government run outlets, Local stores.

## GENERAL MARKET INFORMATION

### **Product: Chugthu:**

- Colours – Navy Blue, Maroon, Walnut colour, Pastel shades like mustard, cream, greenish yellow, light green, magenta, black.
- Raw Material – local wool, cotton yarn. Though local wool produces rough carpets and cannot be dyed properly which should be looked into by upgrading the finishing processes.
- Variables Affecting Sales – Size, price, number of knots, designs, workmanship and the accuracy of designs, finishing (the absence of protruding threads, unsymmetrical designs, absence of holes and difference in shades of the same colour, irregular dimensions etc) & looks (colour blend/mix, plush feel)
- The 21 knots/sq inch sells the most.
- Prices – Prices are determined by the number of knots, size of carpets, and the yarn used in weaving. The finer the yarn, the higher are the number of knots, and the cost. The darker shades are more expensive than the lighter' shades primarily due to the cost of dyes.
- Peak Season – October to February. 70 -75% sales occur during this period.
- Size – 2 x 2, 3 x 6.
- Raw material – Reprocessed wool / local wool.
- Designs – Stripes, Checks, various traditional motifs (□wastika, perna, khorlo, golden fish etc.) and modern designs like animals, flowers, etc.
- Variables affecting sales – Softness, Warmth, Appearance (size suitability, colour combinations, feel) and Price.
- Potential to be tapped handmade tag.
- Customers – Major customers from the lower income group.
- Competition from – other more commercial carpets.
- Customer Preferences – Softness and feel, warmth, attractive and light weight.
- Prices – Rs. 1200 for a set of 3 x 6.
- Sales outlets – in the government run outlets. Local stores.

CHAPTER 9

**GENERAL MARKET INFORMATION**

**Product:Pherba:**

There is no established market for Pherba.

RECOMMENDATIONS

## CHAPTER 9

### RECOMMENDATIONS

#### Product: Phorb

- The width of the paper should be reduced from 210 mm to 180 mm.
- Innovative colour combinations schemes should be formulated. Depending on modern taste, the following are not widely divergent colours. Both bold colours and pastel stories could be developed, for eg., five different shades of blue in the bands, blue and red stories. Neutral colours: Brown, Black, Grey and White, Pastel shades. Different shades of blue and earthy colours like yellow and orange. Each story should have a range of lighter and darker shades of the same colour.
- Product design should provide total solutions in a particular category, for eg., bed room furnishing. A proper packing has to be developed.
- Usage of only vegetable dyes could enhance price and market of the product.
- De hairing will be required.
- The industry should be maintained with different shades and colours.

### RECOMMENDATIONS

## RECOMMENDATIONS

### Product: Pherba (Chugila)

- The weight has to be reduced from present 3 kgs. To 2 kgs.
- "Innovative colour combination schemes have to be formulated. Depending on modern lifestyles, countries etc. Not widely divergent colours. Both bold stories and pastel stories could be developed, for eg., five different shades of blue in the bands, blue and red stories. Neutral colours: Brown, Black, Grey and White. Pastel shades: Different shades of blue and. Earthy colours like yellow and orange. Each story should have a bright colour and various lighter shades of the same colour/contrasting colour. .
- Product size and design should provide total solutions in a particular category, for eg., bed room furnishing. A proper packing has to be developed.
- Usage of only vegetable dyes could enhance price and market of the product.
- De-hairing will be required.
- The indigenous spontaneous designs should be maintained with different shades and colours.
- The material has to be thinned. Finer wool and thread could be used. The product should be made washable.
- The cost has to be lowered to make it affordable and enable it to compete with available products like knitted hats, and cotton fabric.
- Variety is required in designs to increase the display value. for eg., if triangles are used- these should be of varying thickness.
- Variations, higher quality fabric of similar type sold as bath mats. Of even higher quality sold as furnishing material.

**RECOMMENDATIONS****Product: Carpet (Chugdu)**

- The knots in the carpet should be increased.
  - They need to be made of varying sizes.
  - The designs can be such that the pieces which are attached, follow the designs of the former. Designs should be focused. Do not mix motifs and checks/stripes. Either only motifs, or only checks/stripes.
  - The weight has to be reduced as the temperatures in the plains are not as severe as in the hills.
  - The product should be made more elegant and graceful to catch the attention of the buyers.
  - The motifs should be placed in different patterns.
  - Neutral and bright shades should be used.
  - The loops should be made smaller/trimmed.
  - Use few (3-4), well-matched colours. Stress on neutral and bright colours.
  - The loops can be made as patches with the other parts plain.
  - Can be modified for children's bed spreads, daris, cushions, floor mats as they are soft, warm and can be made more presentable by designing them appropriately. Bags could be developed by stitching two rectangular or square chukdus and a strip can be attached for carrying it.
  - The material has to be thinned. Finer wool and thread could be used. The product should be made washable.
  - The cost has to be lowered to make it affordable and enable it to compete with existing products like woolen daris, and cotton fabric.
  - Variety is required in designs to increase the display value, for eg., if triangles are used- these should be of varying thickness.
1. Variations, higher quality fabric of similar type sold as bath mats. Of even higher quality sold as furnishing material.

## CHAPTER 10 COSTING:

The cost of an article is determined by the whole sale price of the material, the price of the labor, the purchase price of the material, the quality of the material, the quality of the work, and the quality of the style.

### Whole Sale Price

- \* The price of the material
- \* The price of the labor
- \* The price of the purchase
- \* Moderate quality product at medium priced for the average consumer
- \* Fungal products for the high value market

### COSTING FUNCTIONS: COSTING

There are two types of costing: Job Costing and Process Costing.

- \* Job Costing is used for the production of a single product or a small quantity of products.
- \* Process Costing is used for the production of a large quantity of products.

The cost of a job is determined by the labor and material cost. The labor cost is determined by the wages and salaries of the workers. The material cost is determined by the price of the material. The cost of a job is determined by the labor and material cost. The cost of a job is determined by the labor and material cost. The cost of a job is determined by the labor and material cost.

Final costing is an exact calculation of the cost of a product. It involves the calculation of the cost of materials and labor. The cost of materials is calculated by multiplying the quantity of materials used by the price of the materials. The cost of labor is calculated by multiplying the quantity of labor used by the wage rate. The cost of a product is the sum of the cost of materials and the cost of labor. The cost of a product is the sum of the cost of materials and the cost of labor.

## **COSTING:**

### **The Cost Sheet**

The costing of a product must be determined so that the whole sale price can be set- the price the retailers pay for goods they purchase from the manufactures. To keep its retail customers, each manufacture tries to maintain a consistent price structure and quality of styling and construction.

Whole sale price structure:

- The price ranges cover three main categories:
- Better quality products is usually high priced and of high quality.
- Moderate quality product is medium priced for the average consumer.
- Budget products is low priced and for high volume market.

## **COSTING FUNCTIONS:**

There are two separate costing functions:

- Pre cost
- Final costing

Pre cost is an estimate made before the product is adopted in the line. From the outset, the designer must keep fabric and labor cost for each garment within the limits set by the company lines price range. The material cost must be kept on record. This enables the designer of the costing department to estimate the whole sale cost and analyze whether the product fits into the lines price structure.

Final costing is an exact calculation utilizing final figures for materials and labor. The costing department uses the designers work sheet, an actual sample, and the production pattern to analyze the products materials and construction step by step. It may consult the designer for information or to recommend more practical ways to make the product. A detailed cost analysis for garments include expenses for fabric, trims, cutting, labor, overhead, sales

commission, and manufacturer's profit. The final cost is plotted on a cost sheet.

### **The Cost Sheet**

**Materials.** First, the total amount of yardage of each fabric needed for the garment is estimated and then multiplied by its cost per yard. The sum of these figures is the total material cost per garment.

**Trimmings.** Unit costs are multiplied by the amount of trimmings needed for each garment. The sum of these figures is the total trimmings cost per garment.

**Labor.** Production directors decide which operations can be done better and cheaper in house and which can be contracted out (sent to a specialized factory to be done). It may be that the whole garment will be made by a contractor.

Production pattern making, grading, and marking. Most companies allow for these costs in the general overhead that also covers the design department. However, if these functions are performed outside by a pattern service, the cost is divided by the total number of units they estimate will be cut:

total cost + units to be made = cost per unit

If the garment is later re-cut (because of reorders), there will be no new cost for patterns, grading, and marking.

**Cutting.** If the cutting is done by a contractor, the total negotiated cutting cost is figured on the number of garments to be cut. The contractor adds his or her fee to this amount. The cost for cutting done in house is based on the cutter's hourly wage multiplied by the number of hours it takes to cut the style. Cutting cost per dozen is figured by calculating how many dozen garments will be made, and dividing that number into the total cutting cost.

**Construction.** Construction labor includes not only sewing but finishing and hemming as well. Some companies break down labor costs by each operation. Information for such a costing structure is gathered through time-and-motion efficiency studies. The cost for each operation, such as the closing of a shoulder seam, is determined. To figure the total costs for a whole garment, one adds the individual operation costs.

**Freight.** The cost of shipping completed garments from the contractor to the manufacturer must be calculated. Domestically the

garments are usually trucked. If the garments are imported, then a percentage of the air or sea freight cost must be added to the cost of each garment. Obviously sea transportation is cheaper and therefore adds less cost to the garment, but then valuable lead time is forfeited.

The cost of shipping garments to the retailer is generally paid by the retail store (the receiver). But manufacturers must pay air freight if they are late with their delivery.

Additional costs for imported garments. These include the quota charge and/or import duty, and agent fees.

Due to the foul smell of pherba many otherwise interested potential customers tend to shy away from it. Hence the first step was to take away the smell.

This was done by using a solution of Sodium Hydrosulphite - grade SI 247 - 250.

25 grams of sodium hydrosulphite added to 6 liters of water an additional table spoon of sulphuric acid was added as this has softening properties.

The end result was that the Pherba was now free from the foul smell.

The second thing to take into consideration was the fact that the pherba was very rough and heavy, this was due to the fact that it was made completely out of goat hair which can be heavy.

So at the yarn stage instead of using only goat hair sheep "bedu" wool was added. The end result was that the pherba being woven was rather light - the weight reduced by nearly half a kilo.

Thirdly as Pherba is a warp design fabric and due to the loom no weft design can be added it was decided to bring about design inputs by manipulation of the yarn itself as in the twist in the yarn could be increased or even reduced to give a different effect.

After the above change were brought about in the end use of the pherba - bags, wall tiles, mat were designed out of the fabric.

## CHUGTHU

Chugthu as a craft was far more developed than Pherba it only lacked the quality inputs that other carpets had.

For chugthu the knots were increased from an existing 17 knots per sq inch to 30 knots per sq inch.

## Conclusion

The ultimate aim of the project was to bring about change in the crafts of Pherba and Chugthu weaving and breath in new life into the craft so that it would survive extinction. Further plans to mainstream the crafts so that it would survive led to development of new designs and ideas for the uses.

### PHERBA:

Due to the foul smell of pherba many otherwise interested potential customers tend to shy away from it. Hence the first step was to take away the smell.

This was done by using a solution of Sodium Hydrosulphite – grade: S1 84% - 88%

25 grams of sodium hydrosulphite added to 6 liters of water an additional table spoon of sulphuric acid was added as this has softening properties.

The end result was that the Pherba was now free from the foul smell

The second thing to take into consideration was the fact that the pherba was very rough and heavy, this was due to the fact that it was made completely out of goat hair which can be heavy.

So at the yarn stage instead of using only goat hair sheep “bedu” wool was added. The end result was that the pherba being woven was rather light – the weight reduced by nearly half a kilo.

Thirdly as Pherba is a warp design fabric and due to the loom no weft design can be added it was decided to bring about design inputs by manipulation of the yarn itself as in the twist in the yarn could be increased or even reduced to give a different effect.

After the above changes were brought about in the end use of the pherba - bags, wall tiles, mats were designed out of the fabric.

### CHUGTHU

Chugthu as a craft was far more developed than Pherba it only lacked the quality inputs that other carpets had.

For chugthu the knots were increased from an existing 17 knots per sq inch to 30 knots per sq inch.

Also much was done on the design foray and a set of 6 designs were given. The design inputs were taken from the forecast for inputs on colour, etc

Suggestions given for other uses of chugthu were wall hangings in which wool of a lower count i.e. thinner wool or silk or cotton yarn was to be used.

Mats, here the size of the chugthu could be reduced and colourful mats to be made, similarly Two such mats were designed and made with the above mentioned developments

Also the weavers only used "bedu" wool, variations in the usage of yarn was introduced and a mix of Tibetan carpet wool and the locally used wool was introduced.

#### THANAM:

The thanam is a variation of the pherba and the fabric is much more lighter and easy to use hence more ideas could be got in its end usage.

The thanam fabric was woven with chandes in the wool which used to be un dyed bedu wool, now a different blend of wool was used and this made it easy to select a set of colours that were in accordance to the current trends.

A range of bags were made out of the thanam fabric, mixing thanam with leather.

A range of cushion covers were made, using brocade and thanam.

There is much that can be done with the crafts all it takes is a little help from the government or NGO's such as Pragya to breath new life into the crafts.

Much how ever can be gained by mainstreaming the crafts as it would then face competition and with that the crafts men would be more alert.

Dear Sir / Madam,

As per of my academic curriculum, I am carrying out a research project on behalf of Pragya, an NGO working for the development of handicrafts of the Himalayan region. The project is aimed at mainstreaming the 'pherba' and 'chugden', two woven crafts of Lehaul. Towards realizing this aim, I am conducting a survey of the market to identify the development requirements of these products. Please help me by answering the following questions regarding the export of the two target crafts.

Thanking you in advance,

Shalin Dey  
NEFT, 2001-2003

### THE RESPONDENT ORGANISATION

1. Name of the organization \_\_\_\_\_
2. Address \_\_\_\_\_
3. Nature of organization  manufacturer exporter  
 merchant exporter  
 retailer  
 buying house
4. Main product categories you are dealing with & average no. of pieces you are doing in each category  
i. \_\_\_\_\_  
ii. \_\_\_\_\_  
iii. \_\_\_\_\_  
iv. \_\_\_\_\_

### ANNEXTURES

5. Major export markets with % share in each market  
i. \_\_\_\_\_  
ii. \_\_\_\_\_  
iii. \_\_\_\_\_  
iv. domestic market (if any)
6. Major buyers you are working with  
i. \_\_\_\_\_  
ii. \_\_\_\_\_
7. To which segment of the market are your exports mainly directed  
lower \_\_\_\_\_  
middle \_\_\_\_\_  
upper \_\_\_\_\_
8. Which mode of dealing with enquiries / orders is your company following  
a. you send samples against which buyers place orders  
b. buyers directly send you samples based on the season demand  
c. both

### THE TARGET CRAFTS

1. Are you dealing with the following?  
a. Wool (Sheep) \_\_\_\_\_  
b. fur ('pherba') fabric \_\_\_\_\_  
c. both \_\_\_\_\_
2. Details of current fur fabrics used by your organization  
a. product category it was used for \_\_\_\_\_  
b. IF 70 \_\_\_\_\_

Dear Sir / Madam,

As per of my academic curriculum, I am carrying out a research project on behalf of Pragya, an NGO working for the development of handicrafts of the Himalayan region. The project is aimed at mainstreaming the 'pherba' and 'chugden', two woven crafts of Lahaul. Towards realizing this aim, I am conducting a survey of the market to identify the development requirements of these products. Please help me by answering the following questions regarding the potential of the two target crafts.

Thanking you in advance,

Shalini Dorji  
NIFT, 2001-2003

### THE RESPONDENT ORGANISATION

1. Name of the organization .....
2. Address .....
3. Nature of organization
  - manufacture exporter
  - merchant exporter
  - retailer
  - buying house
4. Main product categories you are dealing with & average no. of pieces you are doing in each category
  - i. ....
  - ii. ....
  - iii. ....
  - iv. ....
  - v. ....
5. Major export markets with % share in each market
  - i. ....
  - ii. ....
  - iii. ....
  - iv. domestic markets (if any)  
.....
6. Major buyers you are working with  
.....  
.....
7. To which segment of the market are your exports mainly directed
  - lower .....
  - middle.....
  - upper.....
8. Which mode of dealing with enquiries / orders is your company following
  - a. you send samples against which buyers place orders
  - b. buyers directly send you inquiry based on the season designs
  - c. both

### THE TARGET CRAFTS

1. Are you dealing with the following?
  - a. Wool (Sheep).....
  - b. fur ('pherba') fabric .....
  - c. both.....
2. Details of current fur fabrics done by your organization
  - a. product category it was used for.....
  - b. price.....

Dear Sir / Madam,

As per of my academic curriculum, I am carrying out a research project on behalf of Pragya, an NGO working for the development of handicrafts of the Himalayan region. The project is aimed at mainstreaming the 'pherba' and 'chugden', two woven crafts of Lahaul. Towards realizing this aim, I am conducting a survey of the market to identify the development requirements of these products. Please help me by answering the following questions regarding the potential of the two target crafts.

Thanking you in advance,

Shalini Dorji  
NIFT, 2001-2003

### THE RESPONDENT ORGANISATION

1. Name of the organization .....
2. Address .....
3. Nature of organization
  - manufacture exporter
  - merchant exporter
  - retailer
  - buying house
4. Main product categories you are dealing with & average no. of pieces you are doing in each category
  - i. ....
  - ii. ....
  - iii. ....
  - iv. ....
  - v. ....
5. Major export markets with % share in each market
  - i. ....
  - ii. ....
  - iii. ....
  - iv. domestic markets (if any)  
.....
6. Major buyers you are working with .....
7. To which segment of the market are your exports mainly directed
  - lower .....
  - middle.....
  - upper.....
8. Which mode of dealing with enquiries / orders is your company following
  - a. you send samples against which buyers place orders
  - b. buyers directly send you inquiry based on the season designs
  - c. both

### THE TARGET CRAFTS

1. Are you dealing with the following?
  - a. Wool (Sheep).....
  - b. fur ('pherba') fabric .....
  - c. both.....
2. Details of current fur fabrics done by your organization
  - a. product category it was used for.....
  - b. price.....

**List of companies visited:**

Tribes a unit of trified  
Central cottage Industries Corporation  
Handlooms and Handicrafts Export Promotion Council  
North eastern handicrafts Emporium, Tibet House  
His Holiness The Dalai Lamas Charitable Trust  
Fabindia Overseas Ltd.  
Shyam Ahuja  
National Institute of Fashion Technology  
Indian Cottage Industries – Handicraft and Jewellery Showroom  
Moghul – Arts Emporium  
Bandhini Home Store  
Makhani Silk Fabrics  
Cottage Industries Exposition Ltd.  
Mridula Furnishings Pvt. Ltd.  
Hasan Teppich  
Ashirwad Carpets  
Ashima  
Yak Carpets  
India buying service  
Trans Carpets  
Ajay Carpets  
Kohinoor Carpet Mfg.  
Rajasthan Carpets  
Surya Carpets  
ABC Overseas  
Bholanath Industries Limited  
Surya Carpet  
Alfa Carpets  
Colaba Carpets  
Coirflex  
Indian carpet

BIBLIOGRAPHY

## SOURCES

1. The world wide web
2. Crafts of Himachal Pradesh
3. Fashion from Concept to Consumer - Gini & Prasad
4. ITC - statistical updates from the Indian statistical bureau
5. Home and Textiles - Journals
6. Ikea - book of home furnishing designs
7. Marketing research - Kress

## **BIBLIOGRAPHY**

## SOURCES

1. The world wide web
2. Crafts of Himachal Pradesh
3. Fashion from Concept to Consumer – Gini S. Frings.
4. The statistical updates from the Indian statistical brewer
5. Here and There – forcaste
6. Ikea – book of home furnishing designs
7. Marketing research – Kress