

## CHAPTER 3

### HISTORICAL BACKGROUND OF BHADOHI CARPET INDUSTRY

#### 3.1: GENERAL BACKGROUND OF BHADOHI:

Sant Ravidas Nagar District was carved out from Varanasi district on June 30<sup>th</sup>, 1994 as the 65<sup>th</sup> district of Uttar Pradesh. The district is known by the name Carpet city as it is home to the largest hand-knotted carpet weaving industry hubs in South Asia. The Indian Institute of Carpet Technology, the only Institute of its kind in Asia was established here by the Ministry of Textiles in 2001. The town of Bhadohi, which gives its name to the Pargana and the Tahsil, is situated in Lat 25°23' N. and Long 82°34' E. at the distance about thirty miles from west of Varanasi, twelve miles north-east of Gopiganj and about three miles south of the river Varuna. It is connected with Jaunpur by a provincial highway and with Gopiganj by a mettaled road running via. Gyanpur connecting the road from Bhadohi to Suriawan and Parsipur. The Northern Railway traverses the town, the name of the railway station and the town being the same. It is said that it derived its name from the Bhars, who seem to have inhabited this region in early times. Former it was included in the Sharqi Sultans of Jaunpur. When Akbar came to Jaunpur, Bhadohi was made a pargana in the Sirkar and Subah of Allahabad. During that time it was held by the Monas Rajputs and probably Sagar Rai or his sons were the chiefs of this clan. His great grandson, Jodh Rai obtained a Sannad for the zamindari of the whole pargana from Shah Jahan. During the time of Madan Singh (Jodh Rai's younger brother) and his sons, the family seems to have reached the zenith of its prosperity. The pargana continued to remain in the family till 1751. When Raja Balwant Singh of Banaras took possession of it and it remained part of the Banaras state till the later's merger with Uttar Pradesh in 1949 (Joshi, 1965, pp. 390).

The origin of the name of Bhadohi is interesting. Earlier its name was Anand Van. Many historians had in scripted the name. At some places, it is also known as Saghnavan or Kanchanvan. But during the time of Monso, it was known as the Sundervan. During the ancient time Bharo had occupied over the nomads of the forest and given the name Bhardohi. In old papers of Britishers before 1828 the name Bhadohi was found. Before Bhar over the region Monas Rajput had ruled. Monas

Rajput had thrown Bharo due to which the name of the Bhardrohi and afterwards its name were kept as Bhadohi. The period of Bharo ruler was between 1193 to 1394 period. In the forest of Mirzapur Sultan Muhammad Gauri's army had defeated the sardar and established its kingdom. They had established their fort and castells. The remark of the broken castells is present in Rohi, Bankat, Bairibisa, Bharduar, Sarai Kot and other villages. The capital of Bhar is Suriyava. Bhar had ruled over Bhadohi around 200 years. In 1394, Monas Rajput had ruled over Bhadohi when they have thrown Bhar and established their rule. Their kingdom were in the diameter of 600km. The first generation king of Monas were Ananant Rani after that in sequence Balwant Singh, Biramdev Sagar Rai, Jagadish Rai, Haribansh Rai, Ramehandra Rai, Jodhram, Madan Singh, Sankata Singh, Tej Singh and Pancham Singh etc. The last King of Monas Dynasty was King Balwant Singh 1728, but due to financial crises, the Monas Kingdom comes to an end. After the decline of the kingdom of Monas, the region was ruled by the Raj Gharana of Banaras from 1748 to 1948. After Independence during the reign of King Udit Narayad Singh, Gyanpur is the Pargana of Mirzapur. After Independence Bhadohi was detached from Mirzapur and become the part of Banaras as Tehsil. The region got the existence as district, keeping its cultural heritage it is ancestral and historical background because of the world fame on 30<sup>th</sup> June 1994. This district is divided into three tehsils namely Aurai, Bhadohi and Gyanpur, and six blocks, Bhadohi, Suriyawan, Gyanpur, Deegh, Abholi, and Aurai. There are 1075 populated and 149 non-populated villages along with 79 Nyay-panchayat and 489 Gram panchayats in the district. The district has nine police stations for maintaining law and order. Gyanpur town is the district head quarters (GOI, MSME-DI, 20???. p. 5).

There is a hydel power house at Bhadohi which supplies electricity to all the towns and tube-wells of the Tahsil. There are a police-station, a telegraph office, a public call office and a sub-post-office in the town. Bhadohi is famous for its carpet weaving which employs 1,776 people. Blanket weaving and sugar refining were two of its industries formerly. Bhadohi gives its name to a shadow block of which, however, it is not a part. The town has a higher secondary school, four junior basic schools, a girl's private school, an inspection house, a small dharmasala and the Balwant Singh hospital which is maintained by the government. A ramlila fair is held every year on the tenth day of the bright half of the month of Asvina. Another fair

called Ghazi Miyan-ka-Mela, is held on the first Sunday of the month of Jyaistha. The water is supplied to the towns through tubewells and wells. The principal agricultural crops are wheat, barley, bajra and peas and the commercial crops are Sugar-Cane and Potato. Bi- Weekly markets are held on Mondays and Fridays. The town covers an area of about 2,560 acres, 720 of which are under cultivation (Joshi, 1965, pp. 390-391).

Sant Ravidas Nagar (Bhadohi) district is biggest carpet manufacturing centre in India. It is known for its hand-knotted carpet. The Mirzapur-Bhadohi region is the largest handmade carpet weaving cluster, engaging around 3.2 million people in the industry. Bhadohi employs 22 lakh rural artisans. Carpet weaving in the region dates back to the 16<sup>th</sup> century during the reign of Mughal Emperor Akbar. The carpets of the region received the Geographical Indication tag, which means carpets manufactured in nine districts of the region, Bhadohi, Mirzapur, Varanasi, Ghazipur, Sonbhadra, Kaushambi, Allahabad, Jaunpur and Chandauli would be tagged with `handmade carpet of Bhadohi`. Well known carpet types from Bhadohi include cotton dhurry, chhapra mir carpets, Loribaft, Indo Gabbeh (GOI, MSME-DI, 20???. p. 12).

In earlier times small, natural water channels were the only means of drainage in the town and even now there is no efficient drainage system here. There are no underground drains for carrying the collage and the excess rain water out of the town except shallow drains which run on both sides of all the roads and lanes. A scheme for improving the drainage system at a cost of Rs 6,72,000 has been prepared and the board has approached the government for a loan for this purpose. There are two deep drains in Muhalla Chak Saif which join each other in Muhalla Marjad Patti from where they go on and end in Daropur, the excess water flowing into the river Varuna (Joshi, 1965, p. 203).

In addition to carpet manufacturing, the district of Sant Ravidas Nagar has an agrarian economy. The soil of the district is very fertile and the crops which are mainly cultivated are wheat and rice. Some other crops like chana, arhar and urad are also grown. It offers very good scope for food processing and live stock based industries. Some of the manufacturing areas having potential for development in the district are listed as follows • Rice mill • Flour mill • Dall Mill • Bone mill • Dairy • Fruits and vegetables preservation • Kettle feed • Poultry • Poultry feed • Sheep

Rearing • Bio-degradable Carry bags • Gate, Grill, Shutter • Canvas Bag • Exercise book • Leather goods (GOI, MSME-DI, 20??, p.12).

### **3.2: HISTORY OF CARPET INDUSTRY IN BHADOHI**

Bhadohi and its adjoining areas have no production or availability of various raw materials used in carpet making but these are the places where the carpet industry was founded and flourished tremendously. The ancient history of carpet making in India goes long back and it was Emperor Jahangir was contemporary of Shah Abbas of Iran. Both the kings were friends. It is a well known historical fact that during the regime of Shah Abbas, the carpet industry made a spectacular progress. He took special interest in developing new attractive designs and some of them are popular even today. Emperor Jahangir ruled India in the 16<sup>th</sup> century A.D and his capital was Akbarabad (Agra) where he encouraged this handicrafts. After 1857A.D war of freedom which was named by Britishers as Mutiny, Agra, Delhi and other places were full of turmoil and subsequently a number of carpet weavers fled from Agra and got shelter in the village of Madhosingh on the G.T. road located between Bhadohi and Mirzapur and started carpet weaving on a very small scale. Perhaps it was during the late 19<sup>th</sup> century that one Mr. Brownford noticed those making carpets and realized its economic viability and decided to establish a company under the name and style of M/s. E. Hill & Co. in the small village of Khamaria. It was followed by Mr. A. Tellery who got his factory established in Bhadohi. His eldest son Mr. Brownford noticed those making carpets and realized its economic viability and decided to establish a company under the name and style of M/s. E. Hill & Co. in the small village of Khamaria. It was followed by Mr. A. Tellery who got his factory established in Bhadohi. His eldest son Mr. Otto Tellery was one of the founder members of the All India Carpet Manufacturers Association and was the first president of the organization. Next to these two gentlemen, a group of three Europeans formed a company by the name of M/s Obeettee. The group comprised of Messrs. Oklay, Bowden and Tallor the abbreviation of these three is Obeettee (Waziri, p. 55).

Indian carpet Industry has to be innovative for development of quality, design, texture and use of different multi fibers and colours. They should always think of research and new development seeing the trend of the market and for this government should allow subsidy and MDA. Cost is a measure factor now a day. Exporter should

not compromise on quality by reducing the price but should maintain top class integrity to win the buyers confidence. Trend and fashion has changed a lot. They have a stiff competition with machine made carpet is increasing which is very much alarming but still they have good future for handmade carpets because we can produce every single carpet in particular size, design, colour which is not possible in machine made carpet. Machine made carpet has to be made in big quantity in one size, colour, design and quality. For growth of carpet export cooperation of state government for infrastructure is very much needed. Condition of roads in carpet producing area is very much horrible, supply of power is uncertain without any schedule, no transport facilities are available, lack of drainage / sewer line causes dirtiness and bad smell to the visitors and therefore foreign buyers do not come to Bhadohi (Baranwal, 2010, pp. 59).

Once upon a time, in the district of Bhadohi the company of Tata has opened one of the branches of carpet division. During the decades of 80s Tata Company has entered into the carpet industry. It was a cottage industry by the nature. Tata finds it very difficult that their product is in an unsecure condition to be spread due to which they withdrew their hand from the business of carpet manufacturing. They closed the corporate division and went back. The earlier buyer also knew today they will give the order then after two three years they will get the order due to the slow process of the skill of making carpets on *kath*. A situation of global market is discussed here during the time of the International Band in Iran for their products. When there was the International band over the products of Iran at that time Indian weavers have got the chance to show their skill in the hand-made carpets to the world. There is an effect of economic system over the market. That is why the industry has to deal with the expenses. Sometimes the exporters get loss and sometime the buyers get the profit. The carpet industries sometimes flourish with the profit and sometimes with the loss. The carpet industry of Bhadohi had got the attraction for its handmade carpets. The handmade carpets of Bhadohi come into highlight in substitute to the carpets made in Iran. That was the reason due to which the industry got flourished and become the source of earning for its people. At that time the government also has given incentives and opens the weaving centers to learn the skill of the carpet. The Indian government has not left any step from their side to give incentives or in opening the weaving centers. The export of carpets went on increasing and about 90

percent of the total production is exported outside the country. The industry saw its bad days during the Second World War. When it was faced with the shortage of materials and shipping and exchange difficulties and the making of carpets gave place to the production of blankets for the defense department. After the war, because of the demand for woolen carpets from the United Kingdom, The United States of America, Canada, Australia, Newzealand and other countries, it regained its position in 1951 and the export of carpets from Bhadohi (as well as from Mirzapur) touched the figure of six crores of rupees approximately. There was a recession in business after 1951 due to the general slump and increasing competition from machine-made carpets manufactured in foreign countries (Joshi, 1965).

There are about eighty-three units engaged in the manufacture of woolen carpets in the district, the total investment in the industry being estimated to be two crores of rupees. The industry is equipped with nearly 4,000 looms and provides employment to about 40,000 persons. The raw materials required are wool and woolen and cotton yarn, jute twine, hessian and dyes during 1957 raw materials worth Rs 1,78,00,000 were consumed producing carpets worth Rs 2,96,00,000. Like other cottage industries, this industry also does not provide continuous employment, the workers being engaged for less than 250 days in a year. It needs improvement in the spheres of purchase of raw materials, dyeing of wool and improved type of carding machines (Joshi, 1965).

**TABLE 3.2.1: TABLE OF REGISTERED UNIT**

<b>S.No</b>	<b>Head</b>	<b>Unit</b>	<b>Particulars</b>
1.	Registered Industrial Unit	NO.	3696
2.	Total Industrial Unit	NO.	-
3.	Registered Medium & Large Unit	NO.	-
4.	Estimated avg. No. of Daily Worker Employed in Small Scale Industries	NO.	15810
5.	Employment in Large and Medium Industries	NO.	-
6.	No. of Industrial Area	NO.	01
7.	Turnover of Small Scale Industries	IN LACS	-
8.	Turnover of Medium & Large Scale Industries	IN LACS	-

(Source : GOI, MSME-DI, 20??, p.9)

**TABLE 3.2.2: TABLE OF REGISTERED UNIT YEAR WISE**

<b>Year wise trend of units registered year</b>	<b>Number of registered units</b>	<b>Employment</b>	<b>Investment (crores rs.)</b>
1995-96	88	343	0.97
1996-97	186	768	1.88
1997-98	217	981	2.03
1998-99	177	726	1.33
1999-2000	250	995	2.17
2000-01	96	478	0.98
2001-2002	153	687	1.33
2002-03	262	1092	2.11
2003-04	258	1078	2.13
2004-05	261	1081	1.76
2005-06	264	1185	1.31
2006-07	260	1086	15.92
2007-08	298	1225	2.62
2008-09	302	1185	2.47
2009-10	303	1560	9.03
2010-11	321	1350	9.37
Total	3696	15814	57.44

(Source : GOI, MSME-DI, 20??, p.9)

### **3.3: AREA UNDER STUDY, SAMPLE AREAS OF THE STUDY**

The area is surrounded in the west from the ancient city Varanasi. The area is famous for its carpets. The location of the study area is in the district of Bhadohi under Bhadohi block. Bhadohi block consist of the urban and the rural areas. The study has selected those areas for the sample which are the main cluster zone of carpet production. The urban area of the study is Nagar Palika Parishad, Bhadohi and the rural area *viz.* Ahamadpur Phulwariya, Jamunipur Badfaros, Makdumpur, Gangapur. The rational for selecting Bhadohi (NPP) is because it is the area of the district that is the main center for the manufacturing of the various range and designs of the carpets. The area specializes in carpets production of various knots and counts for their varied range and designs and for the production of the woolen, Tufted, Tibetan carpet and *durries*. The name of the district is upon the name of Bhadohi (NPP) because of the glory of the carpet production. The office of the Carpet Export

Promotion Council is located in the sample area of the study. It is a non-profit organization, set up with the objective to promote and develop exports of handmade Carpets, Rugs and other Floor coverings. It is an official body of handmade carpet exporters for promotion of exports from country and its project India's "Make in India" image abroad as a reliable supplier of high quality handmade carpet products. The district consists of 371 registered firms for export under CEPC. The large numbers of firms are in Bhadohi (NPP). According to the 2011 census the total population of the Bhadohi (NPP) is 94,620, of the total male population is 49,639, and the total female population is 44,981. The government development setups are located in the rural areas institutes like Carpet city, Indian Institute of Carpet Technology and the companies which are adopting the production inside their premise and the contemporary technology. In the town area the people are following the local network of production system. The study is upon the carpet industry of Bhadohi that is why the study is divided into rural and urban areas. There are five stages in the processes of carpet manufacturing. For the various stages it has to go to the various areas. The production system of carpets can be divided into production inside the premise and production outside the premise. In production outside the premise has to go with local network of production system for each stage it has to go to various units located in different rural and urban areas.

It is very difficult to understand the nature of the industry because there are some units of weaving and dyeing that are registered and on the other hand there are unregistered units. It is an unorganized sector because the unit for dyeing like bhatta is not registered it is the skill of the rangsaaz with the help of which he is doing the work of rangsaazi. The reason for not being registered is due to the unavailability of the work all the time. Once they are registered under factory act 1948 then they had to follow the rules and regulation of the act. That is the reason of not taking the advantage of the factory act in terms of getting the loans they prefer to be not the part of it due to the unavailability of order throughout the year. The industry is also a cottage industry because the weaver along with his family member or friends weaves the carpet at their home. That is the reason the study has opted for the judgment sampling method for the selection of the sample.

**TABLE 3.3.1 TOTAL POPULATION MALE / FEMALE**

<b>S. No.</b>	<b>RURAL AREA</b>	<b>SUM OF TOTAL POPULATION</b>	<b>SUM OF MALE POPULATION</b>	<b>SUM OF FEMALE POPULATION</b>
1.	Ahamadpur Phulwariya	2296	1201	1095
2.	Jamunipur Badfaros	3158	1667	1491
3	Makdumpur	1180	625	555
4	Gangapur	528	282	246
<b>Grand Total</b>		<b>7696</b>	<b>4037</b>	<b>3659</b>

(Source: Census 2011)

**3.4: TYPES AND FEATURES OF SOME OF THE CARPETS**

- ❖ Abadeh
- ❖ Afshar
- ❖ Bakhtiari
- ❖ Balouchis
- ❖ Bijar.
- ❖ Birjand
- ❖ Bownat
- ❖ Dergazine
- ❖ Feraghan
- ❖ Gabbeh
- ❖ Hamadan.
- ❖ Herez
- ❖ Isfahan
- ❖ Joshghan
- ❖ Karaja
- ❖ Kashan
- ❖ Kelardasht
- ❖ Kerman
- ❖ Kurdish rugs.
- ❖ Lillihan
- ❖ Luri

- ❖ Maslaghan
- ❖ Nain
- ❖ Qashqa'i
- ❖ Qum
- ❖ Sarour
- ❖ Seraband (Lichi)
- ❖ Shiraz
- ❖ Tabas
- ❖ Tabrez Carpets
- ❖ Tehran
- ❖ Tehran knot
- ❖ Veramin
- ❖ Viss
- ❖ Yezd (Summers, 1994).

#### ❖ **TABREZ:**

Tabrez carpets are woven in Tabriz and numerous small surrounding villages. They use a tool that enables the weavers to tie a knot in a second. Called the Tabriz hook, it consists of knife, similar to that used in other weaving centers, with a small hook at its tip. This implement enables the weaver to isolate a pair of warp threads, loop a strand of wool around the warps, than cut the strand free, all in one continuous motion. Weaving in the Tabrez area can vary greatly in quality ranging from some of the world's finest carpet to a poor, bazaar quality. Common quality of Tabriz rugs ranges from 30 to 90 knots per line or *radj*. A *radj* is a measure which equals the length of a Persian cigarette, approximately 3 inches (7 centimeters). In fine quality Tabriz rugs, a thin white cotton cord is used for the warp and weft threads. The wool used for the pile is an excellent quality and trimmed short. Small amounts of silk are often used to accentuate certain designs and motifs. In rugs of medium to coarse quality, a thick cotton warp is used and heavy wool of medium length is used for the pile (<http://www.claremontrug.com/antique-rugs-information/antique-persian-rug-guide/tabriz-rugs/>).

#### ❖ **HAMADAN:**

The weave of Hamdan rugs is characterized by a combination of one shoot of weft and warps on the same level. This combination yields a flat appearance to the back of the rug. Both rectilinear and curvilinear designs are woven in rugs of the Hamdan area. Rectilinear rod medallions, *boteh* and *herati* pattern are frequently used. The weave in Hamdan rugs varies from coarse to medium: older Hamdans have a thinner pile and a much tighter weave than rugs currently woven. Excellent-quality wool is used for the pile which yields rugs that were exceptionally well. The largest majority of Hamdan rugs are woven in small sizes, from mats to rugs approximately 4 by 7 feet. Room-size rugs and runners are also made. A large number of used Hamadan rugs are available and are quite often in good condition. They are usually much less expensive than other rugs of similar age (Summers, 1994, pp. 59-60).

#### ❖ **BAKHTIARI:**

The most common designs woven in Bakhtiari rugs are the Medallion, Panel and Lozenge designs. The field of the panel design is divided into rectangular compartments, each of which contains one of a variety of motifs: flowers, trees, *boteh* or *palmettes*. This design was adopted from the matrix formed by the irrigation channels in Persian gardens. The lozenge design is similar to the panel in that the field is segmented by repeating lozenges. Each lozenge contains a small motif similar to those used in the panel design. This design is commonly found in older and antique Bakhtiari carpets. The medallion design is composed of a large lozenge shaped medallion superimposed on a field filled with stylized floral patterns. Another type of Medallion design is that of a large stylized floral bouquet, referred to as a Gul-i-France, which is contained within a medallion. The colours of Bakhtiari carpets can vary from somber with a predominant use of browns and rust-red tones to very bright with pink, white and orange. The colours found in antique Bakhtiari carpets are mellow with rich, deep shades of red, blue, green and white (<http://www.oldcarpet.com/bakhtiari.htm>).

#### ❖ **GABBEH:**

Gabbeh rugs are woven by nomads in the Zagros Mountains region fars. The majority of weaving is done by Qashqa'I or luri weavers. Gabbehs are usually woven on horizontal looms by women and young girls, who also spin and dye much of their

wool. Traditional Gabbeh rugs are coarsely knotted with numerous weft threads between each row of knots. The pile is along shaggy wool. Rugs are small and tend to be squarish. Modern Gabbeh rugs, made for markets in the west, are woven with thick, coarse knots and a relatively long pile. Two to four weft threads are used between each row of knots. Because of their dense pile, Gabbeh of this type with stand wear much better than their earlier counterparts. The designs used are simple geometric patterns. The most common is that of a central medallion or several medallions on a large expanse of open field. Small geometric motifs, birds, animals and plants are scattered throughout the field. Other designs are also woven, such as a central stylized tree, lions, zigzag stripes and bands. Gabbeh are colourful, with bright shades of golden yellow, red, orange, blue, green, and white. Some gabbeh rugs are woven with natural undyed wool in shades of beige, brown, and black and others with a mixture of undyed and brightly colourful wool. Gabbeh are occasionally made with pile on both sides and a different design on each side. Most gabbeh rugs tend to be squarish in shape, in sizes from 4 by 5 feet to 7 by 9 feet. Recently large sizes up to 9 by 12 feet have been woven (<http://www.rugidea.com/aboutgabbeh.html>).

#### ❖ **DURRY:**

In India, weft-faced pile fewer rugs are known as durries, originally they were woven entirely of cotton, but since the late 1940s wool has been used for the wefts. Today the majority of durries are woven with wefts and cotton warps. Those of the finest quality come from Agra, Srinagar, and Bhadohi areas. Finer-quality durries are woven with a blend of local, New Zealand, and Australian wool. The imposed wool yields a stronger carpet and gives a most lustrous appearance. Wool durries are produced primarily in the Bhadohi area and cotton durries in Srinagar and Agra. In Agra, gold and silk threads are added to accentuate certain motifs. A few all-silk durries are produced and are expensive. A drugget is a coarsely woven, inexpensive flat weave. The wool used for the weft is not combed well before spinning and is often mixed with other fibers. The designs are simple geometric patterns. Druggets are woven in small sizes, 3 by 5 feet (90 by 150 centimeters), 4 by 6 feet (120 by 180 centimeters), and 5 by 7 feet means 150 by 215 centimeters (Summers, 1994, pp. 202-203).

### ❖ **TIBBETTI / NEPALI-TIBBETI:**

Tibetan carpets are utilitarian. Small rugs were made for horse blankets, saddle rugs, and mats for sitting and sleeping. Mats for sitting and backrests for seats were woven in 3-foot (90-centimeter) squares. Sleeping mats approximately 3 feet by 5 feet six inches (90 by 170 centimeters) were used by Tibetans in their homes as well as by nomads. Saddle rugs were usually made in pairs, one to put under the saddle and over the other to cover the top of the saddle. Large rugs were made for floor covering as well as for other purposes. In monasteries, rugs were used for door curtains, temple runners, and pillar rugs. Temple aisle runners were woven up to 33 feet (10 meters) in length. These were divided by design into 3-foot (90-centimeter) square sections for monks to sit on in rows. The pillar carpets were woven in one-directional designs, often with a dragon. Many pillar rugs were woven in such a way that the figure of the dragon wrapped around the pillar, in a continuous coil of the dragon and its tail. Antique Tibetan carpets are coarsely woven on a woolen foundation. Wool was used solely for the warp and weft threads until after World War I, when the use of cotton for the weft threads was first introduced. The Tibetan use of a metal or wooden rod in knotting carpets is unique. Instead of cutting the yarn after each individual knot, the yarn is looped around consecutive pairs of warp threads and then around the rod. After the row has been completed, a knife is run along the rod, cutting the pile. This gives the pile a ridged appearance.

### ❖ **DRUGGETS:**

Designs woven in druggets tend to be geometric. Floral patterns are linear and do not have intricate, curved outlines. Central medallions, stripes, repeated floral sprays or geometric motifs, abstract modern designs, and stylized animal, bird, and human figures are all used. Druggets are woven with the shared-warp technique. They are either finished with fringe at both ends and bound on all four sides with wool overcasting, and are completely reversible. Druggets are inexpensive but attractive floor coverings and come in all sizes, from small mats to room-size rugs.

### **3.5: MANUFACTURING PROCESSES**

The carpet manufacturing process can be divided into the five major processes. The first process is the designing, second dyeing: third, weaving and finishing. All the four steps are discussed here one by one.

## ❖ **FIRST STEP IS DESIGNING:**

Design is the first step in the carpet making process; it can be said as the heart of the body. The design is an oriental rug that can be divided into two parts that is the field and the border. The field is the center and focal point of the rug. The border serves as a frame for the design used in the field. The field composition can be classified into seven basic types: medallion, repeated motif, all over pattern, empty or open field, compartmentalization or panel, picture or portrait and prayer. Each of these design types has numerous variations.

From time to time there is the change in the demand of the designs and pattern of the carpets. Earlier the designs were made with the hands only with the help of the *nakshakar* (Manual designer), *painter* and *tracer*. Upon the designing plates the orders are passed then these designs are made over the *naksha* paper with the help of pencil scale, driven by the *nakshakar* with the measurement of *Tara* and *Pogoji*. After making half design, the designs are traced by the tracer upon the full *naksha* paper, after *tracing* the design on the *naksha* paper these designs go for the painting as the colour were demanded by the buyer through exporters. After the painting, the *naksha* are given the support of large paper (Bans paper) or cloth for the stability by pasting the *naksha* are pasted with the paper or cloth at the back by putting *maadi* (fevicol) over it.

The new method of making the *naksha* is with the Computer Aided Designs. Here the designers made the design which was earlier done by the designing plates. These designs are passed and then drawn into the computer and then with the help of the printer, designs are printed.

## ❖ **SECOND STEP IS DYEING OF THE WOOL**

The dyeing of wool is a delicate process which varies according to the dyestuff used and the colour desired. Commercially this process is directed by a master dyer, who is highly skilled and respected craftsman in a profession that demands accuracy as well as skill (Summers, 1994, p. 25).

The procedure of wool dyed in Bhatta while dyeing all excess oils and grease must be removed from the wool so that the dye can penetrate into the fibers. The wool is then treated with a mordant to facilitate the adherence of the dye to the fibers. A mordant is a metallic salt which enables the dye to affix itself to the wool fibers,

thus improving the colour fastness of the dye. The mordant binds to the wool fiber and the dye then binds to the mordant wool. The mordant most commonly used are alum, iron, chrome, and tin. The mordant used can affect the colour or tint obtained; for example, tin mordant tend to brighten colours and iron mordant tend to darken them. The dye is dissolved in water, called the *kuda* (dye tub). The wool in skeins (loosely coiled lengths), is submerged in the *kuda* (dye tub), which is heated and brought to a boil. The wool is stirred through the dye bath to ensure uniform dyeing. After the dyeing has been completed, the wool is hanged in the sun to dry Bukani-colour.

**Table 3.5.1: LOCAL TERMINOLOGY FOR COLOUR**

S.No	Colour Name	Local Term
1.	White	Chandi
2.	Of white	Malai
3.	Sky blue	Phattahi
4.	Pink	Mallah
5.	Red	Lal
6.	Golden	Sona

(Source: Field Study, 2014-2015)

The New method or the emerging pattern is the technology of the Boiler dyeing plant was located that replaced the technology of Bhatta. The convenience is in the installment of the boiler dyeing plant due to which there is the fast production in terms of the dyeing of the wool. That also reduced the cost of dyeing and the time also.

### ❖ **THIRD STEP IS THE PROCESS OF WEAVING**

#### **a. OPENING OF KATTI**

After the colouring of the wool, the wools are open which is mainly done by women at home sometimes taken to their home by themselves or sometimes delivered to their home by the contractor on a fixed price per kg to open *kati*. Opening of *Kati* means after the dyeing of wool, the wool get mixed up with each others; these mixed strings are opened by women at their home with the help of *charkhi*, as demanded by the contractor like. *do tag*, *teen tag* etc, etc. and they will form *dhimora* or *kabli* as required.

## b. WEAVING OF CARPETS

In the procedure of weaving carpets, there are various ways of weaving carpets like Knotted, Tibbetti, Nepali. The carpets which are made upon *kath* by making *knot* are costly because it is require fine quality wool and other materials due to which its cost of production becomes high. So many factors from the starting till the end make the carpets costly. The varieties of patterns of carpets making is used to reduce the cost of production of the carpets. The tufted guns are introduced to reduce cost of the production of the carpets. The knotted carpets that started weaving upon the *kath* that was located mostly in homes. Hand knotted carpets are composed of three parts: warp, weft, and pile. During the weaving process the warp threads are attached to the upper and lower beams of the loom. They run vertically through the body of the carpet. A strand of wool is looped around a pair of warp threads, forming a knot. The loose ends of the knots make up the body of the carpet and are called the pile. Weft threads run horizontally through the carpet and are used to secure the rows of knots in place. At the first step the tana are made through the *batatar* upon the *kath*. Upon those *tana* weaver started weaving after doing the procedure of *khatti* and *chunan*. The weaver by looking from the *naksha* that was hanged over the corner side of the *kath* with nails makes the designs over the tana for manufacturing carpet. The weavers started weaving by handling three steps its terminology is *khadi sedhi*, *khadi giri* and *khadi uthi*. These are the three terminologies of weaving. When *khaddi sedhi* it mean the wools were taken out from the *kabli* which was hanged near to the *kath*. When *khaddi giri* then it means the weaver will took *tharri* into the strings of the tana. Then he will give stroke upon each knot with the help of *panja and chura*. When he will put *khaddi uppar* it means again he will put the *lachhi* into the strings of the *tana*. Again he will give stroke (beaten) on tana, with the help of *panja and chura*.

When the *khaddi sidhi* then it means now weaver will start weaving the carpets with colourful *kati* over the *kath*. The length and breadth of carpet and also the number of knots as per given shown in the *naksha*. The deviation in weaving from these specifications affects the quality of the carpet. Number of knots per square inch and quality of woolen yarn are the main criteria for the determination of the quality of the carpet using the weaving process. The warps are attached to the upper and lower beam of the loom. After weaving is completed and the carpet is removed from the

loom, the loose warp threads are called the *phatte* (fringe). A knot is formed as a strand of wool is looped around a pair of warp threads. The warp threads run vertically through the body of the carpet. The material used for the warp threads must be strong and the warps must be tightly strung on the loom, with an even tension. Uneven warp tensions will result in bumps or ridges in the carpet.

The other and dominating way is to weave the carpets upon *khaddi* through the tufted guns. With the help of the tufted guns the carpets are woven by taking the string of the wool into the tufted guns which is a sharp scissor form of tools that has given power through the power supply or charged battery with the help of the scissor. The carpets are weaved on those cloths that have the designs inscription with the *neil* (Indigo). The frames of the weaving of such type of carpets are called *khaddi*.

❖ **FOURTH STEP IS WASHING**

After taking out the carpet from the *kath* carpet goes for *dhulai* upon plot. Plot is a vast place where the arrangement of water was there the carpets are washed through the washing powder, bleaching, acid, sunlight soap by the manual unskilled carpet workers through the *pharua*, *kangha /chura*. In the procedure of washing also there is the pattern of the changes. The pattern of the change is in the terms of first the carpets are washed with herbal next with artificial wash further with antique wash.

❖ **FIFTH STEP IS FINISHING AND PACKING**

There are similar processes of finishing in the made upon *kath* and the carpets made upon *khaddi*. In the handknotted carpets the process of finishing is different than carpets made with tufted guns.

**TABLE 3.5.2: LOCAL TERMINOLOGY FOR FINISHING**

<b>Carpets upon kath</b>	<b>Carpets upon khaddi</b>
<i>Pechai</i>	<i>Letexing</i>
<i>Berai</i>	<i>Pechai</i>
<i>Gachhi badhai</i>	<i>Dhulaiya</i>
<i>Dhulaiya</i>	<i>Clipping</i>
<i>Gultras</i>	
<i>Brooming</i>	

(Source: Field Study, 2014-2015)

**a. PECHAI**

It is done through the *suja* with the border of the colour of the carpets to give the final touch to the side of the carpets called as binding.

**b. KHOPAI**

It is done mostly in the high quality of hand knotted carpets. *Khopai* means a rod called *bhokani* which is putted inside the carpet again and again to bring out the flower.

**c. BERAI**

It is done mostly in the high quality carpet but some low quality carpets like 5/28, 5/40 also go through the process of *berai*. *Berai* means with small pencil structured tool of rod or bamboo stick will be used by the semi skilled carpet workers to roll over the flower and took out the finished touch of the flowers.

**d. CLIPPING**

Through scissor or clipping machine the upper portion of the carpet is trimmed.

**e. BROWNING**

Through the unskilled carpet workers each carpet are browned.

**f. PACKING AND SHIPMENT**

The next process is of packing. There the carpets are packed after the final inspection. The last stage is the shipment of the carpet (Source Field Study, 2014-2015).