CHAPTER IV
RESULTS AND DISCUSSIONS

This chapter comprises of details regarding the traditional woven textiles of Gujarat, namely, kinkhabs, brocade sarees and mashrus which are discussed under the following heads -

- Demographic characteristics of the weavers
- Craft profile which includes, craft setup, manufacturing processes and marketing details
- Yarn and Fabric details
- General observations
- Problems and suggestions
- Case studies

Review of literature revealed that there were entire villages and communities in Gujarat weaving kinkhabs, brocade sarees and mashrus. Even till about forty to fifty years back there were hundred Rawal families and two hundred Patel families weaving kinkhabs in Nardipore and Gojaria. There were about a thousand looms in the village of Ridrol where brocade sarees were woven and Patan had over four hundred families weaving mashrus. But, when the investigator visited the places the situation was entirely different. There were only seven families in Nardipore weaving kinkhabs. In Gojoria, there were only two weavers still weaving, though the investigator saw a few looms in some houses which were
unused as the weavers had given up the craft. So all the seven households of Nardipore and the two households in Gojaria where weaving was still carried out were taken as the sample.

Brocade saree weaving in Ridrol was being carried out only by one family, who had set up a commercial unit employing weavers from other households. There were only two more such commercial units set up by two other weavers - one in Pethapur and one in Mansa. There was one weaver in Nardipore who had a small unit weaving brocade sarees wherein both his family members and other employed weavers did the weaving. He was a sub contractor to the unit at Ridrol. All the four entrepreneurs of these four commercial units were included in the sample.

Mashru fabrics were woven in Mandvi and its surrounding villages by only ten weavers. The other weavers had given up weaving mashrus and were making shawls while some were weaving dhotis. All the ten mashru weavers were included in the sample. In Patan, there were still about 100 families weaving mashru fabrics. Thirty weavers were selected by purposive sampling that were representative of the craft. Besides these one household each that specialised in each of the pre and post weaving operations were interviewed to get process details. It was found that marketing was handled by the traders only, hence one trader in Patan, Mandvi and Ahmedabad each were also interviewed to get marketing details.
Finally the sample comprised of -

- Nine weavers in Nardipore and Gojaria weaving kinkhabs.
- Four entrepreneurs in units at Ridrol, Mansa, Pethapur and Nadiopore each weaving brocade sarees.
- Forty weavers in Mandvi and Patan weaving mashru fabrics.

4.1 Kinkhabs

Nardipore and Gojaria were the two villages in Mehasana district where Kinkhab weaving was carried out. Nardipore covers an area of 4209 acres, whereas Gojaria north of Nardipore, has an area of 4435 acres. Mehasana district is surrounded by Banaskantha in the north, Kutch and Surendranagar in the west, Ahmedabad and Gandhinagar in the south and Sabarkantha in the east.

4.1.1 Demographic Details

There were in all seven weavers in Nardipore and two in Gojaria who were still weaving kinkhab fabrics. The weavers were all Hindus by religion in both the villages. In Nardipore five weavers were of the Rawal caste and were considered backward and two were Thakores. In Gojaria, both the weavers were Patels i.e., of the higher caste.

AGE

In all the nine households, the head of the family did the weaving. The age of the weavers ranged from 20 years to
50 and above. Two out of the nine weavers were between 20-30 years while three were middle aged i.e., between 31 years to 40 years and four were above 51 years of age (Table I).

Table I: Distribution of Kinkhab Weavers According to Age

<table>
<thead>
<tr>
<th>Name of Village</th>
<th>Number of Weavers</th>
<th>Age of Weaver in years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>20-30</td>
</tr>
<tr>
<td>Nardipore</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Gojaria</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>2</td>
</tr>
</tbody>
</table>

LITERACY LEVEL

Only one out of the nine weavers was high school educated, two had reached upto the middle school and two were illiterate. Four weavers had studied upto the primary level (Table II).

Table II: Distribution of Kinkhab Weavers According to their literacy level

<table>
<thead>
<tr>
<th>Name of Village</th>
<th>Number of Weavers</th>
<th>Education level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Illiterate</td>
</tr>
<tr>
<td>Nardipore</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Gojaria</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>2</td>
</tr>
</tbody>
</table>
FAMILY SIZE AND FAMILY TYPE

Only two households out of the nine had three to four members in the family and only one household had more than eight members. Majority of the families i.e., six out of the nine had five to seven members which comprised of old parents and children. In other words seven out of nine families still had the joint family system and only two families were nuclear (Table III).

Table III: Distribution of Kinkhab Weavers According to Family Size and Family Type

<table>
<thead>
<tr>
<th>Name of Village</th>
<th>Number of Weavers</th>
<th>Family Members</th>
<th>Family Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3-4</td>
<td>5-7</td>
</tr>
<tr>
<td>Nardipore</td>
<td>7</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Gojaria</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

4.1.2 Craft Profile

Kinkhab weaving was a household craft i.e., weavers did the weaving in their own homes. The head of the family i.e., the husband did the weaving and the wife, mother and children helped in the winding.

All the weavers of Nardipore and Gojaria did not belong to weaver families, i.e., weaving was not their family occupation. In other words, the present-day craft did not
come down through the family. The present weavers had learnt the craft as children at the age of 7-8 years as helpers with families who were weavers. Their parents were either camel load carriers or agricultural labourers. They felt that weaving would be a more lucrative occupation and encouraged their children to get informal training from weaver's families. Later when the helpers were old, they set up their own looms in their homes with the help of financial assistance from traders. These present day weavers had no formal training from any government organisation or co-operative society. For them this craft was 'acquired'.

Most of the weavers had one loom each i.e., five out of the nine weavers, whereas three of them had two looms and only one weaver in Gojaria had four looms and he employed outsiders to do the weaving and helping in the winding, as his family members did not participate in the craft activities (Table IV).

Table IV: Distribution of looms in Kinkhab Weaver's Households

<table>
<thead>
<tr>
<th>Number of looms</th>
<th>Number of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nardipore</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3 and above</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7</td>
</tr>
</tbody>
</table>
MANUFACTURING DETAILS

Yarns of nylon, viscose rayon and imitation zari were supplied by the trader in the form of hanks to the weavers. After receiving the hanks the processes carried out by the weaver and his family members were -

- winding
- warping
- setting up the loom
- weaving

1. WINDING

Nylon and viscose rayon yarn mostly in red, green, blue or purple were received by the weaver in the form of hanks from the trader along with artificial zari yarns.

The viscose rayon hanks were wound on to simple wooden stands with spikes called 'darka' (Plate 7). These were used as the weft yarns. From the 'darka' they were wound on to pirns called 'nari' with the help of a 'charkha' made of a steel wheel. The 'nari' was a small 7.5 cm long wooden rod about 1.5 cm in diameter which fitted into the shuttle used for weaving. The pirns were placed in a wooden tray after being wound with the viscose yarn and used when required. This activity of winding was carried out by the women of the weaver's family in Nardipore during their leisure hours, whereas in Gojaria the weavers employed outside workers.

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Plate 7: Winding the pirns or 'nari' with the 'darka' and 'charka'. The filled 'naris' are kept in a tray.
2. WARPING

This process involved wrapping the nylon hanks on to the wooden warp beam. This process was carried out by the weaver himself along with two to three other weavers from the neighbourhood. Since a large area was required for this activity, it was carried out in the open field. One person held the hanks in his hands and carried them to the opposite side and wound them on to the warp beam which was held between two wooden poles dug into the ground. Four thousand yarns were rolled on to the beam ensuring that the yarns do not got entangled with each other. This was enhanced by inserting two to three smooth wooden rods at regular intervals between the yarns (Plate 8a,b). About seventy meters of yarns were rolled on to the warp beam. The complete operation took about two to two and a half hours.

3. SETTING UP THE LOOM

The weaver sets up the loom by passing the yarns from the warp beam through the harness or 'rach' then through the reed or 'tani' and then on to the cloth beam. The process followed by them was to merely roll the fresh yarns from the warp beam to the yarns already threaded through the harness on to the cloth beam which was then rotated so that the fresh yarns were pulled through the harness and rolled on to the cloth beam. The whole operation took about one hour.
Plate 8: (a) Setting up warp yarns in the open field. (b) Rolling the warp on to beam.
4. WEAVING

The weaving operation was done on a throw shuttle pit loom in one of the rooms in the weaver's home (Plate 9, 10). The pit was about two feet deep, six feet long and two feet wide. The loom had a jacquard mechanism with a punch card system. The jacquard mechanism and the harnesses were attached with a rope which was controlled by a treadle. This helped in raising and lowering the harnesses when the treadle was pressed according to the design on the punched cards (Plate 11). The shuttle carrying the weft yarn was thrown from one end to the other when the shed was formed.

The weave was generally twill for the design with extra weft and satin weave for the background. The 'naksha' system was replaced by the jacquard system. One of the weavers had a 'ubbanu' i.e., a wooden fork like instrument which was used to raise the warp yarns to form a shed used in the 'naksha' system (Plate 13, 14). According to the weavers, the jacquard system only helped in reducing the number of people required to operate the loom. It did not in any way affect the quality or speed of their work. Weavers knew how to punch jacquard cards (Plate 12).

COLOURS AND DESIGNS

All the weavers of Nardipore were weaving only one design i.e., the dot or 'buti' (illustration 2) whereas, the weavers of Gojaria along with the dot design were also
Kinkhabs

Plate 9: Kinkhab weaver at work on throw shuttle pit loom.

Plate 9: Kinkhab weaver at work on throw shuttle pit loom.
Plate 10: Throw shuttle pit loom with Jacquard Attachment in the weaver's home.

Plate 11: The rope at the back which is controlled by the treadles and attached to the Jacquard mechanism.
Plate 12: Weaver making punch cards for the Jacquard system.
Plate 13: Wooden 'Ubbanu' used earlier when 'Naksha' system was prevalent, to form shed.

Plate 14: Demonstrating the use of the 'Ubbanu'. Two workers were required.
weaving one or two other patterns. None of the weavers had any samples of other designs but were able to give a list of names of designs that they knew and wove earlier. Samples were with or without borders and were collected from the trader in Ahmedabad. Names of some designs were 'pavali' or 'asharfi' (circular motif), 'illachi' and 'buti' (dot), 'kalki' (crown), 'mehendi' (plant), 'kalash' and 'thumadi' (pot), 'keri' (mango), 'moor' (peacock), 'ika' (Ace), 'kamal pata' (lotus leaf), 'tulsi' (leaf), 'kathri' (diamond with dot), 'chasm' or 'chkudi'.

Colours used were red, purple, green, blue, yellow and also black.

INCOME

A weaver was able to weave about twenty five meters of kinkhab material of 65 cms width in one month in lots of two and a half meters each. They were paid Rs. 30/- per meter by the trader, i.e., Rs. 750/- per month was their earning.

Number of hours of work could not be specified as there were no fixed working hours. Weaving could be done only till there was natural light (as most of the weavers had only low voltage bulbs). They did not want to work with artificial lights.

Total family income of the weaver’s of Gojarāa was more than those of the weavers in Nardipore as they had more than
one loom each and also they had other sources of income like from their agricultural lands. They would not disclose their exact income. Income was also supplemented by their children who were doing other jobs. The weavers of Nardipore did not have any land or other sources of income as their children were small. Those who were from joint families and had more than one loom also had higher income.

MARKETING

Traders of Ahmedabad dominated the market scene and controlled the lives of the weavers. They helped the weavers set up looms by giving interest-free financial assistance. They also supplied the yarn and gave design specifications. After a month they would collect the woven material from the weavers, and get them polished and calendered. The material was then sold to other traders who in turn go to Saurashtra to sell their products to the ‘Rabari’ tribes. This material was used for making ‘cholies’ (blouses) by the tribals.

Cost of nylon yarn which the trader bought from Surat was Rs. 350/- per kg. Rayon from Ahmedabad costed Rs. 140/- per kg and imitation Zari from Surat costed Rs. 200-225/- per kg. The trader sold the material for Rs. 100/- per meter. Considering his overheads the cost price should be only Rs. 50/-per meter. That is, he made a hundred percent profit. But when asked how much profit he made the trader said - "Only 10 percent !".
4.1.3 Yarn and Fabric Details

Yarns used for weaving kinkhabs were different for the warp and weft. Nylon was used for the warp and viscose rayon (staple) for the weft. The design formed by the extra weft figuring was by using imitation zari. To emphasis parts of the design, coloured viscose rayon yarn was also used as the extra weft (Table V).

Table V: Details of Yarns Used for Kinkhab Weaving

<table>
<thead>
<tr>
<th>Type of yarn</th>
<th>Count (Ne)</th>
<th>Twist/inch (tpi)</th>
<th>Other Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Warp</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nylon</td>
<td>246'S</td>
<td>-</td>
<td>Monofilament</td>
</tr>
<tr>
<td><strong>Weft</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Viscose Rayon</td>
<td>7.4'S</td>
<td>11.4'S'</td>
<td>2 ply</td>
</tr>
<tr>
<td>(ii) Viscose Rayon</td>
<td>7.4'S</td>
<td>9.2'S'</td>
<td>2 ply</td>
</tr>
<tr>
<td>(iii) Imitation zari(gold &amp; silver)</td>
<td>-</td>
<td>-</td>
<td>Cover yarns</td>
</tr>
</tbody>
</table>

(Illustrations 1)

The fabric count (per square inch) for the kinkhabs varied. They were 30 x 98, 38 x 63, 32 x 84, 40 x 74, 40 x 88 and 48 x 76. Since monofilament nylon yarns were very fine, four or more such yarns were taken as one warp yarn (illustration 2).
Illustration : 1

Yarns Used for Weaving Kinkhāb Fabrics

- NYLON (warp)
- VISCOSE RAYON (weft)
- Imitation Zari (extra weft)

Illustration : 2

Samples of Kinkhāb Fabrics

- Illachi (dot)
- Kalash (pot)
4.1.4 General Observations

The standard of living of the weavers of Gojaria was higher than those of Nardipore. They had bigger, concrete houses and agricultural lands. In Nardipore, the weavers had small mud houses and most of them had no assets.

The weavers had a very nominal social life i.e., visiting relatives occasionally, going on a pilgrimage or to 'melas' (fairs), etc. It was more a personal need, though, the economics did play a decisive role. They were aware that a day's outing meant, a day's labour lost.

Weavers did not want their children to continue this craft as it was not remunerative. The weavers of Nardipore felt that if they got loans to expand their work, then they would let their children learn the craft. The older children were not interested in their parents' occupation and wanted to work outside their homes.

Most of the earlier weavers had migrated to other states or had taken up other jobs for a better livelihood.

4.1.5 Problems and Suggestions

The weavers were aware that the government gave loans but none of the weavers had taken any loan eventhough they wanted to expand. The weavers at Nardipore felt that, the procedure was too complicated and the banks were not co-operative. They did not know how to go about applying for
loans. The weavers of Gojaria complained that, as they were Patels by caste i.e., of the higher community, they were not given loans, for such schemes were only for the lower or backward class.

4.1.6 Case - Studies

<table>
<thead>
<tr>
<th>I. Name</th>
<th>Prakashbhai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>30 years</td>
</tr>
<tr>
<td>Education</td>
<td>7th standard</td>
</tr>
<tr>
<td>Religion, Caste</td>
<td>Hindu, Rawal</td>
</tr>
<tr>
<td>Mother tongue</td>
<td>Gujarati</td>
</tr>
<tr>
<td>Village</td>
<td>Nardipore</td>
</tr>
</tbody>
</table>

Prakashbhai's family consisted of his old parents, wife and two boys, 6 years and 4 years of age and going to school. His wife was illiterate.

Prakashbhai could speak and understand both Gujarati and Hindi. Infact, he was very vocal and expressive and was a spokesman for the other weavers, as he could explain their problems very effectively.

His house, like all the houses in the village was made of mud, with one main room in which the loom was kept over a dug pit. The second room was used, as a kitchen and a bed was also placed there. The room was also used for eating. There was an open 'angan' or 'sit out'. Everything was very neatly maintained. The house was his own. He also had two goats, a table fan and a bulb (of low voltage) in each room.
Weaving was not a 'traditional' craft but was acquired. Prakashbhai's father was a camel load carrier, who educated his son up to class seven and then sent him to a unit in the neighbourhood to learn weaving at the age of 11, as a helper.

Being a household craft there were no fixed timings for work. Prakashbhai started weaving in the morning by nine o'clock and worked till there was sufficient natural light. In summer the work slowed down a little as it was too hot. His wife and sometimes his mother helped in winding the 'pirns'. For this too there was no fixed time or hours of work.

Yarns used were, nylon for the warp and rayon (staple) for the weft. The imitation gold and silver zari yarns were used as the extra weft for the design.

The warping process i.e., setting up the warp beam was done by Prakashbhai with the help of two to three neighbouring weavers in the open ground. This took about one and half to two hours.

The loom used for weaving was the throw shuttle pit loom. It was only five to six years back since he had started using the jacquard attachment. Earlier he was using the 'jala' or 'naksha' system wherein a wooden fork called 'ubanu' was used to lift the warp yarns according to the design requirement. Setting up the loom was done by Prakashbhai himself. The process was simple as it involved,
joining the fresh warp yarns to the previous yarns that were already set on to the loom. This was so because the weaver was making only one design for the last so many years and did not have to waste time re-setting the loom. The reason given by the weaver for this was that the trader wanted only this design. The popular design woven by him was the buti (dot), in extra weft and ground in satin weave.

In a month Prakashbhai was able to weave about twenty five meters of kinkhab material. It was woven in lots of two and half meters each. He got Rs.30/- per meter as labour charges from the trader and earned Rs.750/- in a month. He had no other expenses as the raw material was given to him by the trader. Collecting and selling of the finished product was also the trader's responsibility.

Prakashbhai had no other source of income. He was very well versed in all aspects of weaving. He could weave any design, make graphs and he could also punch the jacquard cards for any pattern. In his own words "Hum Nakasha dhar hai, Naseeb dhar Nahi hai", meaning, "We are design makers, but ill fated". His main complaint was that he did not have enough money to expand his work and earn more for his family, to improve their standard of living. The loom that he had was set up by finances given by the trader as an investment. Bank loans were very difficult to get due to red-tapism and exploitation of the officials. Due to media and a few social workers he was aware that banks give loans and subsidies, but he himself failed to benefit from them.
Prakashbhai did not have any samples or sample book of the various designs that he made earlier. But, he gave a list of names and could describe each design. He felt that these designs had no special significance. Some of the names given by him were ‘keri’ (mango), ‘thumadi’ (pot), ‘kalki’ (crown), ‘butti’ or ‘bindi’ (dots), ‘mor’ (peacock), ‘kamal patha’ (lotus leaf), ‘ika’ (ace), ‘illachi dhana’ (dot), ‘pavlai’ (circular), etc. Colours mentioned by him were red, jammuni (purple), phalsa, green, etc.

His social life was minimal as he was aware that a day’s outing meant a day’s labour lost. But he did take his family out once in a while for a movie or to the temple or visiting relations and to the city.

Prakashbhai was very keen to expand his work if he got a loan. He felt that he would allow his children into this profession only if it was more remunerative.

<table>
<thead>
<tr>
<th>Name</th>
<th>Kisanbhai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>35 years</td>
</tr>
<tr>
<td>Education</td>
<td>5th class</td>
</tr>
<tr>
<td>Religion, Cast</td>
<td>Hindu, Thakore</td>
</tr>
<tr>
<td>Mother tongue</td>
<td>Gujarati</td>
</tr>
<tr>
<td>Village</td>
<td>Nardipore</td>
</tr>
</tbody>
</table>

Kisanbhai’s family set up was nuclear. He lived with his 32 year old illiterate wife, two sons age 7 and 2 years and two daughters 12 and 9 years. Except for the youngest, all were going to school.
Though he and his family lived separately, yet he worked along with his brother in a common large shed which was also their home, where their looms were placed. Their father too was a weaver and they learnt weaving from him as children. So to some extent, i.e. since one generation weaving was their family occupation.

Kisanbhai with the help of his brother was able to buy raw material from Ahmedabad and not depend on the trader. Infact even their looms were set up during their father's time. They were throw shuttle pit looms with jacquard attachment. Yarns used were again nylon for warp and rayon (staple) for weft and imitation zari. Winding was done by the wife, warping by the two brothers and with neighbouring weaver's help. Setting up of the loom was done by Kisanbhai himself.

After weaving the fabrics (about twenty five meters per month) - once again with 'buti' or dot design, the brothers took their produce personally to the trader at Ahmedabad to sell. Hence they got a little more money for their fabric-about Rs.50/- meter. Expenses on raw material was about Rs.20/- for 1 meter of cloth. So ultimately he too earned Rs.30/- meter i.e. Rs. 750/- per month. Being young he sometimes was able to weave more than 25 meters a month and hence earn more.

Kisanbhai also shared his family assets with his brother i.e. one acre of land on which they grew wheat and
bajara for their own consumption. The house-cum-workshop was also their own. They had one buffalo and a fan.

The unique feature of Kisanbhai's set up was that both the brothers had separate 'chulas' (hearths), had separate incomes, but had the security of having each other's support while working. Being a household craft there were no fixed hours of work.

Kisanbhai seemed very content with his lot and never talked about expanding. He only expressed his inability to hire outside help as he could not afford it.

III Name : Vishnubhai
Age : 22 years
Education : 9th class
Religion, Caste : Hindu, Rawal
Mother tongue : Gujarati
Village : Nardipore.

Vishnubhai lived with his father, mother, wife, a small son and two unmarried sisters. The sisters aged 17 and 12 years were studying in the 11th and 8th class respectively. Both Vishnubhai and his father, (who was illiterate), were involved in the craft. Vishnubhai's father never did weaving but had been selling the material in villages. His grand father was a vegetable vendor. Vishnubhai started learning the craft at the age of 8 as a helper. So even for this family weaving was not a traditional craft.
Vishnubhai's father set up two looms with his own money and employed two workers, but now that his son could weave, he had only one worker to work on one loom and help in the winding. Vishnubhai's father bought the raw material himself from the city of Ahmedabad. Cost of raw material was about Rs.30/- for a meter of cloth. He sold his material directly to the rabari tribe in Saurashtra. This helped them to earn more money than the other weavers. They earned about Rs.1200/- month (as reported by the father), but seeing the family set up, the researcher felt that they earned much more. They paid the worker about Rs.500/- month. (This was not confirmed as the worker had not come on the day of the interview).

Vishnubhai's father sold the fabric on cash-down basis at varying rates depending on the popularity of the designs. For example the fabric with dots (buti) sold at Rs.60/- per meter and some at Rs. 100/- per meter. He also sold material made by other weavers and was able to give a few samples to the researcher. Yarns used were, nylon for the warp and rayon (staple) for the weft with imitation zari. Looms were throw shuttle pit looms with jacquard attachment.

Winding, warping and setting upon the loom was done by Vishnubhai himself and the worker. If the father was in town, he too helped. Otherwise other weavers in the neighbourhood helped in the warping.
Vishnubhai possessed a big, 'pucca' house, had a bigger separate room for the looms, a cow, had fans, a radio and light in every room. The sisters seemed to be more urban bred and were well dressed. None of the women helped in any activity of the craft, as they could afford to keep outside help. Vishnubhai expressed his desire to expand his work provided he got a government loan.

IV Name : Rajeshbhai Patel
Age : 51 years
Education : 3rd Standard
Religion, Caste : Hindu, Patel
Mother Tongue : Gujarati
Village : Gojaria.

Rajeshbhai’s family was a nuclear family consisting of his wife and a 22 year old son who had studied up to the 7th class. Rajeshbhai’s father was a merchant and now his son was working in a diamond cutting unit. For him too weaving was an ‘acquired’ craft as he learnt weaving in his village itself in a nearby unit at the age of eleven. Ten years back he set up his own unit consisting of one loom. He was given a loan by a trader. Today, he has expanded and has three looms.

Rajeshbhai buys the raw material himself from Ahmedabad and sells his produce to the traders there. He earns about Rs. 35/- to Rs. 40/- per meter of fabric woven as his designs were more complicated than those made by the weavers of
Nardipore. On each loom he was able to produce about 25 to 30 meters of cloth per month with the help of three workers. He paid them on piece good basis (would not disclose the amount) and sometimes employed an elderly man to help in winding on daily wages. Yarns used were nylon for warp and rayon (staple) for weft with imitation zari yarns. Looms were throw shuttle pit looms with jacquard attachment. He would not give any samples of the material that were woven as each lot consisted of exactly two and a half meters and there were no extra samples or pieces to show or give away.

Apart from income from the craft, he also earned from his agricultural lands. He gave his total income at Rs.5000/- a year. His son brought in about Rs.1500/- to Rs.3000/- a month. These figures seemed false considering the assets and standard of living that Rajeshbhai and his family enjoyed.

He owned a large 'pucca' house, a separate well ventilated shed for his work area, one and a half acres of agricultural land, fans, T.V., radio, one buffalo and earned enough to pay for outside help. His wife did not participate in the craft.

Rajeshbhai planned to close down as he felt that considering the labour put in, he did not earn enough from the craft. Money from his lands was much more in comparison. Also being a Patel, government loans were not easy to get as he was not from the backward class. His son
also did not want to continue the craft as he was not interested in weaving.

4.2 Brocade Sarees

Brocade saree weaving was being carried out in Ridrol, Nardipore and Mansa in South Mehasana district and in Pethapur of Gandhinagar district which has a total area of 649 sq.km. It is the states second smallest district.

The set up of this craft was different from the Kinkhab fabrics. Earlier brocade saree weaving was also a household craft and important weaving centres were Ahmedabad, Surat and Ridrol. Till forty years back there were about thousand looms in Ridrol and nearly every household had a loom. Today brocade saree weaving was no longer prevalent in Ahmedabad and Surat. In Ridrol too only one family was weaving brocade sarees and that too not at a household level but had emerged into a commercial unit. One commercial unit had come up in Mansa and one in Pethapur. There was also one small unit in Nardipore which was working on contract basis. There were four commercial units in all. Entrepreneurs who had started these units were interviewed irrespective of whether they were presently weaving or not.

4.2.1 Demographic Details

All the four entrepreneurs were Hindus, of which two were of the Rawal caste and two were Patels. Other details are given in Table VI.
The youngest entrepreneur was the most educated. The older ones had only primary education. All lived in a joint family set up.

In all the four units the weaver who actually started the unit i.e. the entrepreneur did not necessarily weave themselves presently, nor did their women participate in the craft activities. In Nardipore and Pethapur the male family members actively participated in the craft doing the actual weaving, whereas, in Ridrol and Mansa even the male family members did not do the actual weaving. They only managed the unit, arranged for the raw materials, procured orders, and sold their products. In case of any technical problem they were able to help as they had weaving knowledge.
4.2.2 Craft Profile

Fig. 7 Set up of Commercial Units Weaving Brocade Sarees

Nardipore
- Household unit (Sub-Contractor)
- Set up in the Weaver's house itself.
- Outside workers lived separately.
- Had four looms.
- Weaving done by family males and outside workers.
- Head of unit had only managerial role.

Pethapur
- Semi household unit
- Set up in the same plot as the weaver's house.
- All workers given family accommodation in the same premises.
- Had fifteen looms.

Ridrol
- Commercial unit
- Set up in separate premises.
- Family accommodation given to outside workers.
- Weaving not done by family members.
- Had sixty looms.

Mansa
- Had thirteen looms.
- Head of unit had only managerial role.

Pethapur
- Semi household unit
- Set up in the same plot as the weaver's house.
- All workers given family accommodation in the same premises.
- Had fifteen looms.

Fig. 7 Set up of Commercial Units Weaving Brocade Sarees
Each of the four units in the four places had variations in their set up. The flow chart (Fig. 7) shows the differences and similarities of each unit.

The unit at Nardipore was the smallest and the entrepreneur worked on contract basis for the entrepreneur at Ridrol who gave the yarns and design specifications and paid on piece-rate basis.

Two of the four entrepreneurs were not from weaver’s families i.e., it was an ‘acquired’ craft, whereas, for the other two entrepreneurs weaving was a family tradition. None of them had any formal training from any government organisation or institute. They learnt the craft from household units existing when they were young or from their own family members.

Getting information regarding income was very difficult. Answers were very vague. The general picture that emerged was as follows: Workers were paid on piece-rate basis about Rs. 500-Rs. 700 per saree depending on the design. Winders and helpers were paid Rs. 250/- a month or Rs. 25/- to Rs. 30/- as daily wages. The weavers wove not more than two sarees a month working eight hours a day. Selling price of sarees ranged from Rs. 2000/- to Rs. 20,000/- depending on the design and amount of Zari used. The investigator could not confirm these answers as the entrepreneurs did not allow the workers to be interviewed. In the Mansa Unit the employed
weavers were allowed to be interviewed only in the presence of the entrepreneur who did most of the answering. Employed weavers were mostly temporary migrants from Banaras. Few were from Gujarat itself, comprising of both Hindus and Muslims.

As regards other sources of income, only the entrepreneur at Ridrol revealed that he had additional income from his agricultural land and orchard. Yet, except for the unit in Nardipore all the other units were in the process of expanding when the researcher interviewed them.

MANUFACTURING DETAILS

Rearing of silk worms was practically non-existent in Gujarat. Hence the silk yarns required for weaving were bought from other states in the form of hanks. Processes involved were:

- Degumming of yarns
- Dyeing of yarns
- Winding of weft
- Warping
- Setting up the loom
- Weaving

1. DEGUMMING OF YARNS

The silk yarns in the form of hanks were washed in hot water, soap and soda ash. None of the ingredients were weighed.
This process was carried out in the open area around the work shed. An aluminium tub with about five litres of water was placed on a 'chula' made of bricks. Wooden logs were used to make fire. When the water started boiling about ten grams of soap and soda ash were added. The water was stirred and the hanks were immersed into it with the help of wooden sticks and boiled for twenty to thirty minutes (Plate 15). The hanks were then rinsed and dried.

Drying of the hanks was done usually in the shade on a clothes line, but in one unit a very interesting method was adopted (Plate 17). The washed yarns were thrown on to a concrete wall whose surface was rough. The hanks got entangled to the rough surface of the wall and stayed in place. When dry, the hanks were gently removed by hand or with a long stick or they automatically fell off the wall.

2. DYEING OF YARNS

This process was carried out soon after the degumming process and even before the hanks dried or was done after a few days, as the need arose.

The same equipment used for degumming was utilised. Acid dyes from ‘Ciba’ company were used for dyeing. According to the trader, for 500 gms of yarn, 10 gms of dye and acetic acid were required. But, while dyeing neither the dyes nor the chemicals were weighed. Procedure followed was more out of experience. The dye powder was added to the boiling water
Plate 15: Rinsing out washed silk hanks used for brocade sarees.

Plate 16: Dyeing of silk yarns.
Plate 17: Drying the washed and dyed yarns on a concrete wall.
in the aluminium tub while the hanks were held on wooden sticks and immersed into the dye bath (Plate 16). After the required shade was reached, the dyed hanks were rinsed and dried in the shade.

Earlier dyeing was done by those who specialised in this operation. The weavers only did the weaving. But now each unit did the dyeing also.

3. WINDING THE WEFT

The washed and dyed hanks were placed on a 'darka' which was a wooden stand with spikes. A single 'darka' or double 'darka' was used and the yarn was wound by hand on to another cone shaped stand called 'phirki' made of bamboo (Plate 18a).

From the 'phirki' the yarns were then wound on to small pirns called 'nari' which were made of wood and were 8 cms long. This winding was done with the help of a metal wheel, in place of the usual wooden 'charkha' (Plate 18b). In one unit a motorised system was adopted wherein a small electrically operated rotator was used to wind the 'nari' (Plate 18c). This made winding much faster and the equipment occupied very little space.

The wound 'nari' was then fitted into the shuttle (which was earlier made of 'sim' wood but now made of horn). It was 8" to 10" long and costed about Rs.60/-. (The yarn was used as the weft while weaving).
Plate 18:

a. Winding the weft. Conical shaped bamboo 'phirki' and wooden spiked stand 'darka' used for winding.

b. Winding the weft on to pirns 'nari' with the metal 'charkha'.

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c. Winding the weft on to pirns with motorised winder.

d. View of the work area in brocade saree commercial unit.
4. WARPING

This process was carried out in an open area and about six people were required for this operation. Here the hanks were wrapped on to the warp beam. Five thousand yarns were wrapped at one time and five sarees of five and a half meters each were woven when one warp beam was prepared.

The process is illustrated in Plate 19. Iron pegs were fixed on the ground and a long wooden roll (160 cms long) with a groove in its centre and nails fixed to it was fixed on both sides of the iron pegs.

On the opposite side another wooden roll with hooks fixed on it was taken and held together with a rope which was fastened to an iron poll. Yarns were stretched out from the wooden roll to the other side with thin, smooth wooden sticks placed in between the yarns to prevent them from getting entangled. Ordinary newspaper was rolled along the yarns on to the warp beam. Time taken was about two hours.

5. SETTING UP THE LOOM

The warp beam was placed on one end of the loom and the next lot of yarns were merely rolled on to the earlier yarns which were used for the previous saree. If a different design was to be made, only the jacquard card’s were replaced. Very often the design was the same except for the colour combination. Hence, this process did not take much time. It took only about one to two hours.
Plate 19 : Warping.

a. Silk warp yarns being spread out.
b. Warp yarns attached to wooden rod with hooks.
Brocade Sarees

c. Warp yarns on wooden rod placed inside the groove of warp beam fixed on the ground.
d. Warp yarns stretched on to the opposite side.
e. Separating the warps.
f. Rolling the warp yarns on the warp beam with newspaper in between.
6. WEAVING

The weave used was mostly the extra weft twill weave with satin or plain weave for the background. Earlier the 'naksha' technique was used but that has been replaced by the jacquard mechanism. Each loom had two jacquard attachments - one for the main body and one for the border. Three workers were required when the 'Naksha' system was used. Now, only one main weaver and a helper (who was usually a small boy of 8-10 years) operated the loom, his responsibility being of weaving the border. The shed formation, i.e., pressing the treadles, etc. were done by the main weaver.

Looms used were the throw shuttle pit looms with jacquard attachments with four main treadles or 'pavadi' and eight smaller treadles (Plate 20,22). These were attached by a rope which was taken from behind the weaver upto the jacquard mechanism which in turn controlled the harnesses. The main treadles (1 and 4) controlled the smaller treadles (5,6,7 and 8). The main treadles (2 and 3) controlled the smaller (1,2,3 and 4) treadles. This raising and lowering formed the shed and the respective harnesses were lowered or raised according to the holes on the punched cards fed into the jacquard mechanism.

From time to time the yarns were moistened by the helper who blew water sprays with his mouth (Plate 21).
Plate 20: Brocade saree weaver at the throw shuttle pitloom.

Plate 21: Wetting the warp yarns.
Plate 22: Jacquard attachments and punched cards.

Plate 23: View of looms with silk warp yarns in the commercial unit.
Once the saree was ready, the loose yarns at the back were cut off with the help of small scissors by the weaver himself.

Working hours a day were usually eight but for festive seasons longer hours of work were put in to meet the demand.

COLOURS AND DESIGNS

There was no limit to the colours used - red, green, blue, pink, yellow, purple, maroon, mixed colours. They were all used with zari i.e. gold and/or silver yarns. Double shaded effects were also popular, Designs too were limitless - 'urab' or 'Ada' i.e., diagonal veil 'jal' or 'jalar', i.e., all over design, Lagdi Patha i.e., a closely woven gold or silver border, 'punia' or paisley, 'phul' i.e., flowers; 'asharfi', - gold coin or circular motif, 'Lahar' - wavy lines 'mor popat' - peacock and parrot pattern, 'kangri' - line or stripe pattern, 'lila katara' - small dots in green colour; 'badam' - almond, 'tara-mandal' - star pattern; 'keri' or mango motif, 'Dhup Chan' shaded effect, 'Scytheful' a swastika and flower design; 'mor kotho' peacock in a diamond pattern; 'karanful' - petal and flower design; 'dana' or dots; human figures, 'badsha' - king, Maharani - Queen, were some of the very popular motifs used (Plate 24 to 32).

MARKETING

The silk yarns were bought from Bangalore and the silver and gold yarns from Surat, after money was deposited
Plate 24: Brocade saree with silver Zari. The field has 'urab' - diagonal lines with dots. The pallu heavily woven with the traditional 'jal' design enclosed with a narrow border. Retail Cost Rs. 8595.00
Brocade Sarees

Plate 25 : Brocade saree with 'Urab'- diagonal lines in the field alternated with gold and silk. Pallu has 'jal' design. Zari has been replaced by silk.

Plate 26 : Brocade saree with the traditional peacock and scroll border, dots in the body, paisleys in the corner and motifs of peacocks and flowers in the pallu.
Plate 27: Brocade saree with diagonal lines of contemporary style (like flags). The paisleys in the pallu are enclosed in a border having 'phul' and 'popat' i.e., floral and parrot pattern. No zari used.

Plate 28: The border and pallu are intricately woven with more of silk yarn and less zari. The body has simple floral buttis. Cost Rs. 6765.00.
Plate 29: Traditional peacock and floral motifs spread all over the brocade saree with 'paisley' or 'pania' in the corners. No zari used.

Plate 30: 'Jal' pallu with dots in the field and paisley in the corner in zari and silk yarn.
Plate 31: Heavy gold brocade saree with 'lagdi patta' pallu and dots in the field and paisleys in the corner. Cost Rs. 3100/-.

Plate 32: 'Jal' design on pallu with 'meenakari' border. Cost Rs. 7825/-.
in the bank. Cost of silk yarn was about Rs. 1200/kg and that of pure zari (gold) was about Rs. 12,000/kg and silver - about Rs. 6000 to Rs. 9000/kg. About one kilogram of silk yarn was required to weave two sarees. Amount of zari used depended on the design.

Orders were taken from retail shop keepers and individual clients in big cities like Bombay, Ahmedabad and Baroda. Clients sometimes gave their own designs. Entrepreneurs had photographs of their samples and often clients mixed and matched designs from these photographs. At times retailers also took designs from other sarees of other states which they sold in their shops. Often traditional designs were repeated, but to give variety, provide change and create demand shop keepers tried to incorporate other designs as well. Sales were not always on cash down basis.

Small entrepreneurs who worked on contract basis for bigger units did not do the buying and selling.

4.2.3 Yarn and Fabric Details

The silk yarns used for weaving the brocade sarees were 6 ply filament yarns with 2.4 tpi. The count of the yarn was 29.8’s Ne (illustration 3).

The fabric count of the sarees (per square inch) were 80x80, 100x100, 108x80, 60x60, 100x80. When count was low yarns used were thicker.
Yarns Used for Weaving Brocade Sarees.

Silk Yarns
4.2.4 General Observations

As such all the entrepreneurs weaving brocade sarees, seemed quite well off though, none of them would give exact figures of their income. All of them requested the investigator to help them get loans and subsidies from the bank. They were aware of the government schemes. None of them revealed clearly as to how exactly they got the capital to set up these units. One entrepreneur said that he got some capital from the bank and some from his own savings.

All the entrepreneurs, except the one in Nardipore were in the process of expanding. None of the entrepreneurs wanted to give up the craft, though they did say, it was hard work and returns were not enough. It was now more of a business than a tradition.

4.2.5 Problems and Suggestion

The main problem voiced by the entrepreneurs was getting loans for expanding their business with subsidies. They felt that most of the schemes were for the backward classes and hence the higher caste weavers could not get the benefits. On the other hand the backward class weavers complained that they found it very difficult to please the officials in order to get loans.
4.2.6 Case Studies

I. Name : Shambubhai Patel
Age : 76 years.
Education : 2nd class
Religion, Caste : Hindu, Patel
Mother tongue : Gujarati
Village : Ridrol

While making enquiries about the brocade saree weavers of Gujarat from various government offices, the Weavers Service Centre at Ahmedabad was able to give only one address, that of Shambubhai at Ridrol. Reaching his place was not so difficult as people knew the 'sareewala' of Ridrol, but there was no name at the huge gate of Shambu Bhai's unit. Inside there was an elderly man sitting on the floor and he was introduced by one of his sons as Shambubhai, the person who started this unit.

Shambubhai's eye sight was failing, but he sat around in the unit giving support to his sons and posing for photographs and going down memory lane in chaste Gujarati whenever asked about his past life.

He was proud of his present set up and justifiably so, as he was a National Award Winner, hounoured by the Government of India.

He had five married sons, all living separately. His sons were well educated-the eldest had a B.Sc degree in
agriculture, second son was a commerce graduate, third son an engineer, fourth was a civil engineer and the fifth son had passed class 10 but also had a diploma in automobile engineering. The youngest son was both translator and guide to the investigator explaining the present set up.

Shambubhai was a prosperous weaver. To begin with i.e., fifty years back he had only two looms and was not earning enough. He was planning to close down. Then as his sons finished their studies they, instead of looking for jobs elsewhere, decided to take a loan from the bank and carry on their family occupation. Fifteen years back they took Rs.6000/- loan from the bank and started afresh. Today, (the researcher observed) there were sixty looms in the unit, more than 60-80 adult workers, about ten children (exact figures were not disclosed). Workers were of all age groups, the older people doing simple jobs like winding, whereas, the younger ones were doing the weaving. The children were working as helpers to the weavers, making borders and blowing water on the warp yarns with their mouths from time to time.

The income from the craft as given by the youngest sons was about thirty to thirtyfive thousand a year. They possessed agricultural lands, orchards, cattle, houses, etc, and had income from these sources also. So, on the whole they earned about five to six lakhs a year which was shared by the father and the three sons. Purchase of raw material was on cash down basis, whereas, while selling the sarees the
entrepreneur had to sell on credit for a few days or sometimes even months.

The youngest son's main work was to look after the unit, arrange for raw material i.e., pure silk yarn from Bangalore and zari yarn from Surat. The other two brother's main job was to get orders from retail shops in cities like Bombay, Ahmedabad and Baroda. They also had special well-to-do clients and would go to their homes to get orders for the sarees. None of the sons of Shambubhai did the actual weaving, but they were very well versed with all the technical details.

Earlier Shambubhai never did any dyeing, but today in the unit, cleaning, dyeing, winding and weaving processes were all done by the workers using, synthetic dyes and chemicals. Dyeing procedure and shade cards were given to them from the dye company itself. Cost of dyes varied according to the colour i.e., from Rs.300/- to Rs.600/- per kg. Dyes and chemicals were available in Ahmedabad and Surat.

Looms used were, throw shuttle pit looms. Instead of the 'naksha' system, the jacquard mechanism was used. Each loom had two such mechanisms - one for the main body of the saree and one for the border. There were eight small treadles and four large ones which were attached to each other and which in turn controlled the harnesses and the jacquard punched cards for the design. Each loom had one main
weaver and a small helper. Working hours were eight a day, but when there were more orders during festivals, longer hours were put in. Weaving technique was by the extra weft in twill weave and plain or satin weave for the background.

Workers were paid on piece good basis i.e., about Rs.800/- per saree. The child helper got about Rs. 250/- per month and an adult helper Rs. 300/month. Labour who were employed on daily wages for, winding, were paid Rs. 25/- per day (None of these figures were confirmed as the investigator was not allowed to interview the workers directly).

Many of the workers were Muslims from Banaras and some were Hindus from the village itself. Most of the workers were from weaver's families. The weavers from outside the village were given family accomodation in the premises of the unit itself, so the children were found playing around in the unit when not in school or working as helpers and adding to their family income. There were no women workers at all.

There was an endless variety of colours and designs. Samples could not be procured as they were too expensive. Only photographs in albums were shown and pictures of a few sarees with traditional designs were taken. There seemed to be no fixed preference by customers - some liked traditional motifs, whereas, some wanted something new and different. Anything that caught the customer's fancy, sold. The popular traditional motifs were the peacock, paisley, parrot, star
shaped buttis, 'jal' i.e., all over design, floral scrolls, lion, diagonal lines, etc.

The problems and suggestions voiced were -

- Labour problem - workers who come from Banaras go away for long periods and the work suffers.
- Bank loans are not easy to procure.
- Customers are limited as the sarees are expensive and demand is mostly seasonal and during festivals.
- Raw material is too expensive.
- Competition is created by entrepreneurs using poor quality yarn, imitation zari and light weight sarees.
- There is competition also due to power looms where the weaving capacity is faster.

Shomabhai was in the process of adding on more looms to his unit.

II. Name : Vishnubhai Rawal
   Age : 50 years
   Education : 2nd class
   Religion,Caste : Hindu, Rawal
   Mother tongue : Gujarati
   Village : Nardipore

Vishnubhai a kinkhab weaver till about five years back was today weaving brocade sarees. He was a soft spoken elderly man who had three sons between the age of 22 to 26
years having studied upto class 7,12 and 10 respectively. Two of the sons were married and had small children. They all lived together - the women looking after the household chores and the male members actively participating in the craft. Vishnubhai’s role was now that of a supervisor. Vishnubhai did not come from a weaver’s family but he learnt weaving at the age of ten from a Thakore family in the village itself, as a helper, but his sons learnt weaving from him.

With a little capital of his own (would not disclose exact figure) he adapted his looms which were used for kinkhabs into those used for sarees, the difference was only in the width of the loom, the rest of the mechanisms were the same, i.e., they were throw shuttle pit looms with two Jacquard attachment. He had four looms in all, two full-time outside workers and two helpers who worked along with his three sons. Winding and warping were also done by his workers.

Vishnubhai’s unit was a small scale unit. His work shed though separate was more or less part of his own house which was made of concrete, had fans, a T.V and a radio. He also had a modern Indian toilet - the only one of its kind in the village. He worked as a sub contractor to Shambubhai at Ridrol. The reason he gave for being a subcontractor was that his sons were not educated enough to go to the cities and get orders nor did he have enough capital to buy raw material and execute orders himself. Presently he was given
the raw material i.e., the silk and zari yarns, and the design for the sarees to be woven. He was paid on piece-good basis. Each saree fetched him about Rs. 800/- to Rs. 1000/- (This varied a little if the design was too elaborate) out of which he gave about Rs. 500/- to Rs. 700/- to the worker and helper and kept the rest for himself. (Figures not confirmed) His workers were able to weave about two sarees a month working eight hours a day. Winding and warping were also done by his unit people using simple tools like the 'charka', 'phirki', 'nari' etc. He did not have to do the cleaning and dyeing of the yarns. On the whole he declared his income as Rs. 2000 to 3000/- a month and no other source of income. Judging, from his life style these figures seemed too small.

He felt it was too early to say whether his grandchildren would continue the craft or not, as they were too small and his opinion did not really matter. But he felt that if they made enough money, there was no harm continuing in this craft.

Vishnubhai could make any design given to him. Often punched cards with specific designs were also supplied by the person giving orders for the saree, but if necessary he and his sons knew how to punch cards also. He did not have a sample book, but had designs drawn on paper and graphs.

Vishnubhai was very keen to expand but was not able to raise enough capital or get loans from the bank.
III. Name: Chimanbhai Rawal  
Age: 55 years.  
Education: 2nd class  
Religion; Caste: Hindu, Rawal  
Mother tongue: Gujarati  
Village: Pethapur  

Chimanbhai was yet another entrepreneur weaving brocade sarees in Pethapur. He lived with his wife, four married sons between the age of 21 years to 30 years, and grand children. The total family members were twenty one. They all stayed in separate houses but in the same premises as the unit was large enough to give accommodation even to the workers and their families.

For Chimanbhai, weaving was not a family tradition. His father was a postman. He himself learnt the craft at the age of sixteen while working as a helper to a Patel weaver, but his sons learnt the craft from him.

Chimanbhai appeared to be a very strong willed man. He claimed to have introduced the jacquard system into Gujarat. He had gone to Banaras twelve years back for four months and learnt to use the jacquard system. He then bought all the required equipment with a bank loan of Rs. 15,000/- and then set up his own unit first at Nardipore making Kinkhabs. Since the last ten years he has started weaving brocade sarees. The present unit in Pethapur was set up five years back by him.
At first he had two throw shuttle pit looms. Then with a bank loan of Rs. 7000/- (He had applied for Rs. 20,000/-) and with some financial assistance from merchants, he installed fifteen looms, employed eight to ten workers and six small boys as helpers. The workers were both Muslims from Banaras and Hindus from Gujarat itself. All his sons and some male relatives also worked for him. He paid them all Rs.500/- to Rs. 700/- per saree depending on the design. He would not disclose his income, saying that his work was labour intensive and the number of sarees woven per month varied. By and large he was able to produce twenty sarees a month from his unit. (Considering the market trend each saree would not be less than Rs. 1500/- each).

Earlier he had been buying the silk and zari yarns from Surat but now he got the silk yarn from Bangalore. (He would not disclose the cost of yarn). Dyeing, winding and warping were done in his unit by his workers. He got orders either from retail shops in cities of Ahmedabad and Surat or sold his sarees to the traders at Ahmedabad. He was willing to sell his products to anyone who gave him on cash down basis.

Considering the number of families he was housing and judging by the large size of the area in which his unit was established, he seemed fairly well off. His source of income was only from weaving and no other source. He had fans, lights, radio, T.V, etc.
He strongly felt that only because his sons were working with him, he has been able to establish his work. He was bitter that bank loans were not easy to procure but he was expanding when the investigator visited his unit.

He claimed to have an album of photographs for designs, but would not show them. Chimanbhai was himself a weaver and helped in all the processes of the craft like dyeing, winding, warping and weaving, getting orders and selling his goods and getting raw material. Designs were more or less similar, except the colours of the sarees and the workmanship were not as pleasing and fine (from the investigators point of view) as the sarees woven at Ridrol and Nardipore.

IV. Name: Jagdeepbhai Patel
   Age: 29 years
   Education: B.Com.
   Religion,Caste: Hindu, Patel
   Mother tongue: Gujarati
   Village: Mansa

Jagdeepbhai's father had a brocade saree weaving unit in Ridrol which he had set up in 1987, but due to competition by another unit in Ridrol he closed down and established a unit at Mansa in 1991 for his son. Jagdeepbhai after graduation had started working with his father at Ridrol at the age of twenty three, but now was running this
unit at Mansa. His brother-in-law who was a merchant earlier, also helped him manage the unit. Jagdeepbhai was married and had three small children, the eldest 7 years of age was going to school.

His was a joint family but lived away from the unit. He provided family accommodation to the workers in the unit premises itself. There were thirteen throw shuttle pit looms with two jacquard attachments each, thirteen workers, five child helpers and three winders. Workers were from Banaras and Gujarat. He paid the main weavers Rs.400/- to Rs.1000/- per saree. (He would not disclose his total income). He said, he had no other source of income. Judging from the size of the unit which was being expanded, the investigator felt that he was doing fairly well. Except for his house he did not have any other property.

Silk yarns were bought from Bangalore, zari from Surat, dyes and chemicals from Ahmedabad. Dyeing, winding and warping were also done in the unit. Sarees were made to order for retail shops in the city and/or local buyers. Both Jagdeepbhai and his brother-in-law procured orders. They also possessed an album of the sarees they had woven, and claimed that they could make any design. At present mixed colours for the body of the saree were in vogue.

In this unit the investigator was allowed to interview a few workers in the presence of the entrepreneur who kept
prompting the answers. So only technical questions were emphasised on. When asked what difference did the worker from Banaras find in the type of sarees woven in Gujarat, they said that, in Banaras the sarees had too many floats at the back, but the workmanship was more fine and elaborate in Banaras than in Gujarat. Also in Banaras the looms had only one treadle whereas, in Gujarat the looms had two or more treadles each. Reasons given by workers for coming to Gujarat to work were, more money, less competition and a spirit of adventure.

About two sarees a month were woven by each worker, working eight hours a day.

Jagdeepbhai would certainly like to expand and had applied for a bank loan. About his children’s future, he felt it was too early to say anything as he was still in the process of establishing himself.

Jagdeepbhai and his brother-in-law were full of ideas and were planning to weave patola designs with other motifs to create variety to catch the customers fancy.

4.3 Mashru

Mashru, also known as 'gaji' silk or 'illacha' or 'attasha' is a mixed fabric with stripe designs. It was made of silk warp and cotton weft, but today rayon is used instead of silk.
Earlier, records reveal that Patan and Mandvi were important mashru weaving centres. Even today, there are many households in Patan wherein mashru weaving is still prevalent. Also, in the villages of Mandvi of Kutch district mashru weavers are still carrying on the craft, though their numbers have greatly reduced.

Till about thirty years back, there were about two hundred households weaving mashru fabrics in Patan. Presently there were about hundred families who were weaving the fabric and about fifty families carrying out all the pre and post weaving processes.

In the villages of Mandvi of Kutch district there were only ten families who were weaving mashru fabrics. For the sample thirty percent of the weavers of Patan were interviewed along with all the ten weavers of Mandvi. In all, the sample size comprised of forty mashru weavers. Besides these, for the other operational details one family each who were doing the different processes related to the craft were also interviewed. One trader in Patan and one in Mandvi were also interviewed for marketing details.

4.3.1 Demographic Details

In Patan, most of the weavers were Hindu Khatris i.e., twenty of the thirty weavers, while ten were Muslim shaikhs. All the ten weavers of Mandvi were Hindu harijans.
AGE

The age of the weavers revealed that 40 percent of the weavers were above fifty years of age and only 10 percent were between the age of twenty to thirty years, implying that the younger generation was not engaged in the craft. Those between the age of 31 to 40 years were in the transition period (Fig.8).

LITERACY LEVEL

The educational level of the weavers was very low. Forty five percent had only primary education and ten percent were illiterate (Fig.9).

FAMILY TYPE AND SIZE

The joint family system had broken down to such an extent, that only twelve out of the forty households, i.e., thirty percent were joint families. Twenty eight households i.e., seventy percent of the households were nuclear (Fig.10).

Families were still not very small though they were nuclear. Out of the forty families, thirteen families, i.e., thirty two and a half percent had two to four members in their families, whereas, twenty two families had five to eight members. Only five families had more than eight family members (Table VII).
Figure 8: Distribution of Mashru Weavers According to Age

- 51 years & above: 40%
- 41 to 50 years: 20%
- 31 to 40 years: 30%
- 20 to 30 years: 10%

Total Number of Weavers - 40
Figure 9: Education Level of the Weavers

Weaving Mashru fabrics

<table>
<thead>
<tr>
<th>Education Level</th>
<th>No. of Weavers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>13 (45%)</td>
</tr>
<tr>
<td>Primary Level</td>
<td>10 (27.5%)</td>
</tr>
<tr>
<td>Middle School</td>
<td>6 (15%)</td>
</tr>
<tr>
<td>High School</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>College</td>
<td>9 (25%)</td>
</tr>
</tbody>
</table>

Total Number of Weavers - 40

Figure 10: Family Type Distribution of the Mashru Fabric Weavers

<table>
<thead>
<tr>
<th>Family Type</th>
<th>No. of Families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Family</td>
<td>12 (30%)</td>
</tr>
<tr>
<td>Nuclear Family</td>
<td>28 (70%)</td>
</tr>
</tbody>
</table>

Total Number of Weavers - 40
Table VII: Distribution of Mashru Weaver's Households According to Family Size.

<table>
<thead>
<tr>
<th>Number of family Members</th>
<th>Number of households</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 to 4</td>
<td>13</td>
<td>32.5</td>
</tr>
<tr>
<td>5 to 8</td>
<td>22</td>
<td>55</td>
</tr>
<tr>
<td>9 and above</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>Total number of households</td>
<td>40</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Majority of the households i.e., 55 percent had five to eight members in their families and only 12.5 percent had more than eight family members.

4.3.2 Craft Profile

The set up of the mashru fabric weaving was different when compared to that of Kinkhab and brocade saree weaving. Mashru fabric weaving was a household craft. In Patan, the unique feature of the set up was that all the pre and post weaving processes were carried out in separate households (other than the weavers). For example, there were different households for preparing hanks from cones, threading the headles, dyeing the yarns and even finishing the fabric. These processes were also family traditions as they have been coming down from one generation to the other.

The mashru fabric trader had a pivotal role to play. In Patan, the trader bought the yarns and got the winding,
dyeing, stiffening, weaving and finishing done from the various households and then marketed the fabric. In Mandvi, the trader apart from buying the yarns and selling the fabric, also got the other processes done in his own unit itself, except for the finishing of the fabric (Fig.11).

Fig. 11 ROLE OF TRADER IN PATAN AND MANDVI

Trader in Patan

Buys raw material (yarns).  Sells the finished fabric to retailers or other traders.

↓

Gives the yarns to the various households for the preweaving processes.

↓

Gives the processed yarns to the weavers for weaving.

↓

Gives the fabric to finisher.

Trader in Mandvi

Buys the raw materials (yarns, dyes and chemicals).  Sells the finished fabric.

↓

Carries out all the pre-weaving processes in his unit which is done by employed workers.

↓

Gives the processed yarns to the weaver to weave.

↑

Gives the fabric to the finisher.

For majority of the weavers mashru weaving was a traditional craft i.e., came down the family from one generation to the other. Four weavers reported to be weaving
dhotis or plain fabrics earlier, but were weaving mashru fabrics since the last fifteen years. Some women weavers revealed that they were not from weaver's families but had married into families who did weaving and had picked up the craft. Only two weavers were from an agricultural background.

Both men and women did weaving. The number of men and women weavers in Patan, were more or less same whereas, in Mandvi, only the men did the weaving (Table VIII).

Table VIII : Distribution of Mashru Fabric Weavers According to their Sex

<table>
<thead>
<tr>
<th>Name of place</th>
<th>Number of Weavers</th>
<th>Female Weavers (Number)</th>
<th>Male Weavers (Number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patan</td>
<td>30</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>Mandvi</td>
<td>10</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>17</td>
<td>23</td>
</tr>
</tbody>
</table>

Children of weaver's families knew weaving, but did not weave, though in Mandvi, the children helped in the weaving. In households where the women did the weaving the men were working outside their home, doing other jobs. Family members helped in the winding.

None of the weavers had any formal training from any institute.

Most of the households had only one loom each. Thirty three weavers out of forty had only one loom, six weavers had two looms and only one weaver had three looms in his household (Table IX).
Table IX: Distribution of Households' Looms in Mashru Weaver’s

<table>
<thead>
<tr>
<th>Number of Looms</th>
<th>Number of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In Patan</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------</td>
</tr>
<tr>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

There was no fixed time spent on winding and weaving which was done as time permitted from household chores. In a month the amount of fabric woven depended on the number of looms and the time spent on weaving. The weavers wove two types of fabrics - the 'pucca' good quality fabric and the 'kuchha' poor quality fabric. The labour charges were about Rs. 5/- meter for the 'pucca' variety and Rs. 2/- meter for the 'kuchha' fabric.

Income from the craft as in Fig. 12 shows that 60 percent of the weavers earned Rs. 500/- or less per month. Only two weavers earned more than Rs. 1000/- a month. This high figure was attributed to the fact that one of the weavers had more than one loom and wove the 'pucca' cloth, and the other weaver had a dobby attachment on his loom and was able to weave a larger quantity of material per month.

Apart from the craft, some of the weavers earned from other sources also, i.e., they either had agricultural lands.
Figure 12: Distribution of Income of Mashru Weavers

<table>
<thead>
<tr>
<th>Income/month from craft</th>
<th>Total family income per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs 500 &amp; below</td>
<td>25%</td>
</tr>
<tr>
<td>Rs. 501 to 1000/-</td>
<td>36%</td>
</tr>
<tr>
<td>Rs. 1001 &amp; above</td>
<td>47.5%</td>
</tr>
</tbody>
</table>

Total number of weavers - 40
or one or two of their family members worked elsewhere. In Mandvi, some of the weavers supplemented their income by doing jobs as agricultural labourers during the rainy seasons as they had to stop weaving since their looms were kept outside in the open yards of their homes. Some were cloth merchants, some had grocery shops, some took up part time jobs as diamond cutters, thereby increasing their total family income. Fig. 12 shows that fifty percent of the weaver’s total family income (which included income from craft and other sources) was between Rs. 500/- to Rs.1000/- per month, whereas, 47.5 percent earned more than Rs.1000/- per month. Only 2.5 percent of the weavers earned less than Rs. 500/- a month.

MANUFACTURING DETAILS

The processes and techniques involved in making a mashru fabric did not begin and end with weaving alone. It comprised of many pre and post weaving operations each of which were specialised and carried out in households as a family occupation. The various operations were

- Making of hanks
- Dyeing of hanks
- Mending damaged yarns
- Sizing the warp yarns
- Denting
- Winding and weaving
- Finishing the woven fabric
1. MAKING OF HANKS

The warp yarns called 'tani' were of viscose rayon which were bought by the trader in the form of cones and given to the 'tani maker' to convert into hanks. The yarns were mostly white but coloured yarns were also purchased.

The 'tani' maker arranged the cones on the ground in eight rows of ten cones each (Plate 33a). Yarn from each cone was taken and passed through a 'jali' or heck box made of two wooden frames, 1.5 x 1.5 feet each, enclosing forty iron wires with eyes. These frames were attached by a pulley to a large rotating circular wooden winding frame or 'falka'. The two frames moved up and down between two wooden poles which were fixed to the floor between the cones and the winding frame (Plate 33b). Half the number of yarns i.e., forty yarns, from the cones passed through the eyes of one frame and the other half of the yarns, through the eyes of the other frame. These eighty strands of yarns were then wound around the winding frame. One complete rotation of the winding frame was called an 'ata'. The yarns were then removed from the winding frame and wrapped with the hand along the length of the arm as in the form of figure '8' to form one hank (Plate 33c). The hanks were then sent to the dyer.

The winding charges for making the hank was Rs. 1/- kg. In one day about 10kg to 15 kg of yarn could be wound by one
Plate 33 (a): Making of hanks from cones for warps in Patan.

Plate 33 (b): Passing the yarns from cone through the 'jal' frames.
Plate 33 (c): Wrapping the hanks from winder along the arm.

Plate 34: Mechanized winding equipment in trader's shed at Mandvi.
Plate 35: Vertical winding rack in a village home in Mandvi.

Plate 36: Winding the weft yarn with 'Charkha' in traders' shed at Mandvi.
person. It took about half an hour to wind 1kg of yarn. In a month the family earned about Rs.500/- There were four families in Patan doing this job. Both men and women were engaged in this process.

The cones of viscose rayon were bought from Surat at the rate of Rs. 200/kg for white yarns. Coloured yarns were a little more expensive.

2. DYEING THE HANKS

This process was done by dyers for whom dyeing has been a family occupation for generations. The dyer was a muslim and there were four households specialising in dyeing in Patan.

Naphthol, vat and direct dyes were used. These were from 'Atul' company at Valsad. Cost of dyes ranged from Rs.200/- to Rs. 1800/kg, depending on the type of dyestuff. Dyeing equipment consisted of both simple large aluminium tubs and special electrically operated rotating drums to rinse out the dyed fabrics. Dryers were also used. These could be operated manually, in case of a power failure(Plate 37a,b,c,d). Dyeing charges were about Rs. 15/- for one hank of viscose rayon and Rs.5/- for a hank of cotton yarn.

3. MENDING DAMAGED YARNS

This process was done by women. They worked outside their homes, in the open yard, and were doing this job for
Plate 37a. Dyeing of hanks in Patan.

Plate 37b. Drum used for rinsing out extra dye from hanks.
Plate 37c. View of the dyer's shed having both old and new equipment.

Plate 37d. Rotating drum used for drying dyed hanks.
many years. The dyed yarns were spread out between two wooden poles which were firmly fixed into the ground. The broken or damaged yarns were either removed or mended if possible by twisting or knotting. The entangled yarns were separated and straightened out. Once this was done, the yarns were then gathered and wrapped around the arm in a figure of '8' and twisted into a hank to be given back to the trader (Plate 38). Mending charges were about Rs. 5/- per hank. Time taken depended upon the amount of damaged yarns.

4. SIZING THE YARNS

For this process also the yarns were stretched out between two poles fixed firmly into the ground in an open area. The sizing paste was prepared a day earlier. This was made by soaking overnight about 500gms of a gum called 'saras', a hard, opaque material made of animal origin. About fifty grams of cooking oil was then added the next day and the mixture was boiled to make a thick paste, stirring all the time. The vessel containing the 'saras' paste when cooled was carried to the field and applied by carrying the paste in the hand along the yarn length, dried and wrapped along the arm to form a hank.

With one kilogram of 'saras', ten hanks could be sized. Sizing charges were Rs. 6.50 per hank. Total time taken was about one and half hours.
Plate 38: Mending the warp yarns in the open field (Patan)

Plate 39: a. 'Rach' or harness making in Patan.
5. DENTING THE WARPS

The sized yarns were then taken by the trader and given to the 'rach bandha' or harness maker who not only prepared the harness but also dented the warps according to the design required. Yarns along with the reed were supplied by the trader to house-holds who specialised in rach making and denting (Plate 39a,b).

This was done by the women of Muslim house-holds in Patan. In Mandvi this was done by workers in the traders unit (Plate 40 a,b). Trader sometimes gave instructions or tied strips of coloured yarns to indicate the pattern required. Accordingly the threads were then dented through the headles and the reed. Charges were Rs. 15/- to Rs. 20/- for denting one pattern. In one day only one pattern was dented.

Before the denting the 'rach bandhas' have to actually make the harness. Eight to ten wooden rods 90 cms long and 2 cms in diameter were threaded with waxed cotton threads interlaced in such a way so as to form loops with the help of an instrument called 'kalpha'. This was made of 'sal' wood or out of a sunmica strip. It was about 20 cms long and 5 cms wide and had a long metallic needle called the 'sua'. The wooden rods of the harness were mounted on a wooden foldable stand called the 'akhada'. The waxed cotton thread which was initially wound on the 'phirki' was then interlaced around
Plate 39: b. Using the 'Kalpha' to make loops in the 'rach'.

Plate 40: a. Threading the loops of 'rach' with the warp yarns in the trader's unit at Mundvi.
Plate 40: 'Rach' complete with the threaded warp yarns.

Plate 41: 'Reed' or 'fani' maker with the wooden 'fani' in his hands at Patan.
the wooden rods with the help of the ‘kalpa’ to form loops. The warp yarns were dented through these loops. It takes about four to five hours to make one harness. Charges were Rs.150/- to Rs.300/- for making one ‘rach’ depending on how complicated the design was.

Reed i.e., ‘fani’ making was yet another specialised activity. At present, in Patan there was only one elderly man who specialised in reed making (Plate 41). The reed was made of ‘baru’ wood. It was a long rectangular comb like structure 90 cms long and 15 cms wide with thin bamboo strips in-between. The space between eighty bamboo strips was called a ‘vis’. If a reed was made of 15 vis i.e., the number of wires would be 15×80 = 1200. More the number of ‘vis’ finer the work and higher the labour charges. One ‘vis’ costed Rs.80/-. So a fifteen ‘vis’ reed would cost Rs.1200/-. 6. WINDING AND WEAVING

The trader, after collecting the dented harness and reed from the ‘rach bandha’ gave them to the weavers along with the cotton yarns for the weft.

The weaver or family members wound the cotton weft on to the pirns ‘nari’ with the help of the ‘charkha’ and cone shaped bamboo ‘phirki’. In Mandvi unbleached cotton weft was used. The filled ‘nari’ were placed in a tray of water in order to keep them moist before they were used for weaving. In Patan, coloured cotton weft was used (Plate 42).
Plate 42: Wound pirns - 'nari' with unbleached cotton weft yarns placed in a tray of water (Mandvi).

Plate 43: Dyed cotton for weft and viscose hanks for warp ready to be given to the weaver (Patan).
of viscose rayon along with four and a half kilograms of cotton yarn were necessary for weaving about fifty three meters of mashru fabrics (Plate 43).

The weavers set up the loom with the dent, harness and reed. Looms used were fly shuttle pit looms called "phadka shall" with a pulley arrangement to form the shed (Plate 44a).

The pit was about two and a half feet deep and two feet by two feet in length and breadth. In one home the pit was closed and the weaver sat on a bench. In Salaya of Mandvi, there was a weaver who had a dobby attached to his loom.

The warp yarns coming out of the headles were rolled on to the cloth beam in front of the loom and on the opposite side secured tightly on to a wooden beam. The extra warps were simply twisted into a knot and tied with the help of a rope on to the ceiling (Plate 44b). Eight shaft satin weave was used.

Two types of mashru fabrics were woven (i) the 'kuchha' or poor quality in which the fabric count was low, cotton weft was unbleached and the colours were not fast (ii) the 'pucca' or good quality fabric, had a higher fabric count, cotton weft used was either bleached or dyed and colours were fast. Width of the fabric ranged from 50 cms to 90 cms. In Patan, looms were placed in one of the rooms of the weaver's house (Plate 44a), whereas, in Mandvi looms were kept outside in the open yard of the house (Plate 47a,b).
Plate 44: a. Fly shuttle pit loom with pulley arrangement for shed formation in the home of the weaver in Patan.

Plate 40: b. 'Rach' complete with the threaded warp yarns.
Plate 44: c. Fly shuttle pit loom with treadles.

Plate 44: d. A complete view of a fly shuttle pit loom.
Plate 45: A coir brush used to clean the yarns on the loom (Patan).

Plate 47 (a,b): Fly shuttle pit looms outside the weaver's home in Mandvi.
Mashrus

Plate 48 (a) : Loom with dobby attachment in a weaver's home in Mandvi.

Plate 48 (b) : Wooden Dobby arrangement.
There were about eight harnesses and eight treadles (pavdi) per looms (Plate 44c). The number of harnesses varied according to the type of design.

During dry spells, yarns were moistened from time to time by spraying water with the mouth, whereas, during the rainy seasons a lighted lamp or a stove was placed below the warp yarns to keep away the extra moisture. A brush called 'kuchdo' which was made of coir bristles with a 60 cms long wooden handle, was used to brush away any dust that may have fallen over the warp yarns (Plate 45).

7. FINISHING

The trader collects the finished fabric from the weaver and cuts it into lengths of five to ten meters and sends them to the finisher. The finisher then washes the fabric with soap and water and dries them in the shade. The fabric was then folded such that the wrong sides faced outwards. The folded material was then calendered by the 'kundiwala' by beating (Plate 49). The folded fabric was placed on a piece of log which was embedded into the floor. Two persons sat on either side of the log and moistened the folded fabric which was then beaten by two wooden hammers—one was larger, about 25 cms in diameter and 20 cms in height and the other was about 20 cms in diameter and 15 cms high weighing about 7 kgs and 5 kgs each respectively. The wooden hammers were made of 'Radhan' wood. Beating was carried out for about 5 minutes,
Plate 49: Beating the folded fabric with wooden hammers (Patan).

Plate 50: Back starching the fabric (Patan).
changing the folds from time to time. This not only helped to flatten the yarns and smoothen out the wrinkles but also added sheen to the fabric.

The fabric was then starched on the wrong side with a thick paste of maize starch. This was done by an elderly member of the finisher's family who sat on the floor in the verandah. A large wooden board one and a half meter x one meter was placed in front of the worker and the fabric was then spread in single layer on the wooden board-wrong side facing upwards. A piece of cloth was then dipped into the bowl containing the starch and applied to the wrong side of the fabric (Plate 50). After all the material was starched on the wrong side, it was dried and folded. This procedure was followed in Patan. In Mandvi the finisher spread out the fabric wrong side facing up, in the open (Plate 52) and sprayed the starch paste with sprayers, left the cloth as such to dry and then folded it.

The starched and folded material were then stacked one on top of each other and placed on a long, heavy wooden stand. It was then pressed by another large heavy wooden plank placed on a presser. The heaps of cloth were called 'naka' and twenty such 'nakas' were pressed at one time for one to two hours (Plate 51). This was the procedure followed in Patan and the labour charges were Rs. 3.80 for finishing five meters of cloth. Finisher earned about Rs. 2000/- to Rs. 3000/- per month. Three such families were doing this work in Patan.
Plate 51: Pressing a pile of fabric between two wooden logs. (Patan)

Plate 52: Spraying stiffening agent on the back of the fabric with spraying machine (Mandvi)
Plate 53: Pressing the folded fabric with a heavy stone (Mandvi).
In Mandvi, the starched and folded cloth was pressed by placing a heavy stone on the fabric for about two hours (Plate 53).

The finished fabric was then sent back to the trader.

COLOURS AND DESIGNS

Characteristic feature of mashru fabrics was stripe patterns in different widths and colours including dot designs.

Colours used were red, maroon, green, golden, yellow, royal blue and black. Designs were of multicoloured stripes, self dots or dots with stripes in various placements. Name of some of the designs are -

'Khamki' - striped design used by the Chowdhry caste of Visnagar, used as a waist based for skirts (channia). There were two types - 'kinadhar khamki' and 'kinadhar saree'. i.e. border on both sides.

'Butti', 'arbi', 'methi' and 'dhania mamul' were dot designs.

'Ktari' - stripes used by the 'Banjaras' (gypsies) and Thakores during festivals. Also used for the goddess 'Mataji' as a head cloth. Used as a shroud and also during marriages. Sold mostly in Banaskantha.

'Kakini' - stripes used for goddess 'mataji' made of predominant green stripes.
'Soj' - broad red and green stripes with narrow yellow lines. 'Kali Khamki' - Broad black and golden yellow stripes. 'Asli saudagiri' or 'Sat dhana' or 'Shakar para' i.e. with seven dots.

Other designs were 'nakli saudagiri', 'kanjar kajoor', 'thagadu', 'lashi', 'illacho', 'mohini', 'lili-ba-kakdi', 'lili-thran' - 'kakdi', 'sonariya', 'chokadvi', 'buta veil', double veil, 'pancharangi' (stripes with 6 colours), 'dhali', 'kela fari', 'barashahi', 'panch pato', etc. These were the names of the various stripe and stripe with dot designs that were woven, but only a few samples were available at the time of the field visit. The weavers or traders had no sample books or photographs. The trader in Patan talked about a special saree worn during weddings by the adivasis of Panchmahal district. The saree had a green border and the body had a pink ground with white stripes outlined with black.

MARKETING

The traders, both at Patan and Mandvi, managed the marketing. They bought the yarns and sold the finished fabrics. The trader at Patan on procuring the yarns gives them to various families specialising in the different pre weaving, weaving and post weaving processes. Whereas, in Mandvi the trader in his unit got the pre weaving processes done by employed workers and only the weaving and finishing of the fabric was given to weavers and finishers.
The trader in Patan, bought the viscose and cotton yarns from Surat and Ahmedabad at the rate of about Rs. 200/- per kg and Rs. 65/- per kg respectively.

In Mandvi, the trader reported that he bought viscose rayon yarn from Ahmedabad and Bombay at Rs. 125/- per kg and cotton yarn from Ahmedabad at Rs. 60/- per kg. Cost of dyes ranged from Rs. 200/- to Rs. 500/- kg for direct dyes, vat dyes costed about Rs. 1000/- to Rs. 1500/- kg, naphthol Rs. 500/- to Rs. 600/- kg. Cost of chemicals varied.

The trader in Patan, reported that he sold the 'pucca' mashru fabric at Rs. 40/- per meter to the whole saler and in the market it sold for Rs. 55/- per meter. The 'kuchha' variety sold for nearly half the price. Buyers were mostly from Ahmedabad, Surat and Bhuj and in tribal regions of Gujarat in the Panchmahal district.

The trader in Mandvi, also sold the mashru fabric to whole salers who in turn sold the fabric in cities like Ahmedabad, Baroda and Rajasthan. The 'Ahari' and 'Rabari' tribals also bought the material to make 'khamkhas' (backless blouses).

The traders both at Patan and Mandvi, would not disclose their income but were making sufficient profit to carry on their business. Infact, the trader at Patan was expanding his market by getting articles like bags, bolster covers, jackets and gift items made and selling them to retail shops in the cities.
4.3.3 Yarn and Fabric Details

Table X: Details of Yarns Used for Mashru Weaving

<table>
<thead>
<tr>
<th>Place</th>
<th>Yarn</th>
<th>Count Ne</th>
<th>Twist/inch (tpi)</th>
<th>Other details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patan</td>
<td>Warp</td>
<td>Viscose-Rayon</td>
<td>36.2s 0.75</td>
<td>Monofilament</td>
</tr>
<tr>
<td></td>
<td>Weft</td>
<td>i) Cotton</td>
<td>15.3s 23.2′s′</td>
<td>2 ply</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii) Cotton</td>
<td>20.7s 16′s′</td>
<td>2 ply</td>
</tr>
<tr>
<td>Mandvi</td>
<td>Warp</td>
<td>i) Cotton</td>
<td>22.4′s 22′s′</td>
<td>2 ply</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii) Cotton</td>
<td>18.2′s 19.5′s′</td>
<td>2 ply</td>
</tr>
<tr>
<td></td>
<td>Weft</td>
<td>Cotton</td>
<td>6.8′s 0.15</td>
<td>3 ply binding twist (unbleached)</td>
</tr>
</tbody>
</table>

(Illustration 4)

In Patan, viscose rayon was used as the warp and cotton for the weft, whereas in Mandvi both warp and weft were of cotton - the weft being unbleached.

The fabric count (per square inch) for the mashru fabrics ranged from 110 x 72, 96 x 52, 96 x 76, 86 x 44, 70 x 52 and 60 x 46 (illustration 5).

4.3.4 General Observations

There was more urban influence on the weavers and their families in Patan, than on the weavers of Mandvi. They were more simple and had accepted their lives.
Illustration : 4

Yarns Used for Weaving Mashru Fabrics

VISCOSE RAYON (warp)  COTTON (weft)

In Patan

COTTON

Illustration : 5

Samples of Mashru Fabrics

Satdhana  Buta Bela
Mashrus

Dhana Dhar

i

ii

iii

iv

176
Mashrus

Ktari Khamki (stripes)

177

Kelaphart

Barashahi

Kelaphart
The weavers of Patan, were quite well off and lived in fairly big concrete houses, whereas, the weavers of Mandvi lived in simple, neat, mud houses with a lot of open space surrounding their homes.

The younger generation were not at all keen to continue the craft in Patan, but, in Mandvi the children were seen helping their parents and did not have much of an opinion.

The weavers of Patan, strongly felt that the craft was not remunerative enough. They refused to make any other fabric on their looms.

Weaving was carried on throughout the year in Patan as the looms were inside the homes of the weavers. But, in Mandvi, the looms were kept outside their houses and so had to stop weaving during the rainy season.

The weavers of Patan, were able to supplement their income by doing other lucrative jobs like working in a diamond cutting factory or having a small business of their own or their children worked as salesmen or electricians. In Mandvi though, the weaver's only other source of income was by working as agricultural labourers when they were not weaving.

Though there was tremendous product diversification and large markets throughout India, yet the weavers were not getting a fair deal from their craft. Their good standard of living (in Patan) could be attributed to the earnings of the previous generation.
4.3.5 Problems and Suggestions

The mashru weavers were facing stiff competition from the power loom sector and from manufacturers who were producing cheap printed fabrics with mashru designs.

The weavers suggested that, the government should supply yarns to them on quota basis and their finished product should be bought at a fixed rate. This would ensure a regular income to the weavers and they would not have to face problems of marketing.