CHAPTER 3

METHODOLOGY
CHAPTER III

METHODOLOGY

This chapter deals with the methodological steps adopted for the study. The research procedure has been divided into the following sections:

3.1 Research design
3.2 Operational definitions
3.3 Sample selection
3.4 Development of the instrument
3.5 Collection of data
3.6 Analysis of data

3.1 RESEARCH DESIGN

The study aims at collecting and analysing the comprehensive information on shawls of Himachal Pradesh. The research was undertaken to study the production processes and techniques, designs of the shawls, socio-economic background of the weavers and problems faced by the industry. With all the specific objectives of the study in mind descriptive survey method was used.

Interview method was employed to collect the relevant data supported by participatory observations for the present study. Laboratory tests were done for the analysis of samples. Interview method helped in establishing rapport with the respondents to gain their confidence and full cooperation for collecting authentic data. Participatory
FIG. 2 THEORETICAL FRAMEWORK
observations helped in indepth interpretation of production processes and techniques employed in shawl making.

3.1.1 Theoretical framework (Fig. 2)

Based on the objectives of the study theoretical framework was planned. According to the available literature, household as well as commercial units in Himachal Pradesh were engaged in producing shawls. Commercial units were; private units, co-operative societies and government units i.e. Himachal Pradesh Handloom and Handicraft Corporation and Khadi units.

Weaving being a part of the socio-economic life of the people of Himachal Pradesh it met the twin needs of providing gainful employment particularly in winter when there was snow all round and agriculture was at low ebb, and providing a local source to meet the requirements of woollens in cold climate. These people wove for self consumption as well as for marketing purposes.

It was evident from the available literature that designs and colours in textiles get influenced by culture, religion and surrounding environment of the weavers. Motifs, designs and their placement in shawls of Himachal Pradesh are said to be originated in Kinnaur. Kinner culture was broadly associated with Tibetan culture as Kinnaur shares its boundaries with Tibet. Kinners believed in Buddhism.
In Himachal Pradesh two types of shawls viz., Kullu and Kinnauri were available in the market. It was assumed that production processes and raw materials used would be different in commercial and household units in different districts of the state for the two types of shawls.

3.2 OPERATIONAL DEFINITIONS :

3.2.1 Household Units :

Household units were, where members of the family worked and stayed under one roof and produced shawls for self consumption as well as for marketing purpose. All the family members get involved in the production in one way or other.

3.2.2 Commercial units :

Commercial units were engaged in buying and selling of goods and services by way of trade.

3.2.3 Private units :

Private units were the units run by traders or master weavers having their own selling outlets. Workers worked for the units at traders workshop on piece rate wages.

3.2.4 Desi Sheep :

Desi sheep were domesticated in the area.

3.2.5 Desi Wool :

Wool obtained from locally domesticated sheep was known as Desi Wool.
**FIG. 3** MULTI-STAGE REPRESENTATIVE PURPOSIVE SAMPLING

Himachal Pradesh

<table>
<thead>
<tr>
<th>State</th>
<th>1st Stage</th>
<th>2nd Stage</th>
<th>3rd Stage</th>
<th>4th Stage</th>
</tr>
</thead>
</table>

**3rd Stage**

<table>
<thead>
<tr>
<th>Units visited</th>
<th>Household</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>28</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>33</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>27</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>38</td>
<td>26</td>
<td>12</td>
</tr>
</tbody>
</table>

**4th Stage**

| Respondents interviewed | 199 |
FIG. 4 LOCATION OF PLACES VISITED IN MANDI DISTRICT

INDEX

★ District Head Quarter
● Places Visited

MANDI

- Chauntra
- Bijani
- Kalangar
- Nagwain
- Satol
- Khuri
- Gohar
- Sundernagar

10 5 0 10 20 Km.
3.2.6 Raffal :

Raffal was merino wool mill spun yarn used for shawl weaving.

3.2.7 Weavers :

Persons involved in the process of shawl making from rearing sheep to selling of the finished product in household units. Weavers in the commercial units were only engaged in weaving.

3.3 SAMPLE SELECTION :

3.3.1 Locale of the Study :

The present study has been carried out in the state of Himachal Pradesh, a hill state, where weaving in part and parcel of the life of people. Hill people domesticate sheep for wool as well as for mutton. Many houses in villages of Himachal Pradesh had their own loom to meet their own demands.

The investigator herself belongs to Himachal Pradesh and is conversant with social and cultural norms of the state, which facilitated her in establishing good rapport with the respondents for ensuring reliable data.

3.3.2 Sampling design :

Multistage representative purposive sampling design was followed to select the study area and respondents were selected by snow ball technique to collect data (Fig 3).
FIG. 5 LOCATION OF PLACES VISITED IN KINNAUR DISTRICT

INDEX

★ District Head Quarter
● Places Visited

- Gaybong
- Rushkulang
- Pooh
- Sunam
- Sashokhad
- Spillo
- Kanam
- Labrang
- Khuangi
- Tapri
- Kamroo
- Sangla

10 5 0 10 20 Km.
FIG. 6 LOCATION OF PLACES VISITED IN KULLU DISTRICT

INDEX

★ District Head Quarter
• Places Visited

Manali
Jagat Sukh
Dungari
Nagar
Seobagh
KULLU
Butti
Khokhar
Bhuntar
Bichona
Bagicha
Diyar
Bajaura
Kalehli
Jhiri
The investigator contacted the offices of the (1) Department of Industries, (2) Himachal Pradesh Handloom and Handicraft Corporation (3) Registrar co-operative societies and (4) Khadi and village Industries Board in Simla, Himachal Pradesh for the purpose of selecting sample. Department of Industries provided the information regarding districts producing shawls in Himachal Pradesh viz. Chamba, Kangra, Mandi, Kullu and Kinnaur.

Himachal Pradesh Handloom and Handicraft corporation and Khadi Village and Industries Board gave the list of their centres producing shawls in the state. A list of co-operative societies registered in the state was provided by Registrar, Co-operative Societies. None of the departments could furnish information of list of household units or private units engaged in the shawl production.

On the basis of available information the investigator first visited government production centres in each district and finally sample was drawn by snow ball technique visiting from place to place.

Sixty-seven villages and towns were selected from the five districts of the state and 199 persons were interviewed personally to collect authentic first hand data on shawls of Himachal Pradesh (Fig. 4,5,6,7 and 8).
FIG. 7 LOCATION OF PLACES VISITED IN CHAMBA DISTRICT

INDEX

\(\star\) District Head Quarter

• Places Visited

N 10 5 0 10 20 Km.

CHAMBA
• Chaner
• Rakh
• Chowari

Bharmuar
• Ponsei
• Kholer
• Hadsar

Keenala
• Holi
• Deal
• Diyar

N

10 5 0 10 20 Km.
FIG. 8 LOCATION OF PLACES VISITED IN KANGRA DISTRICT

INDEX

★ District Head Quarter
• Places Visited
3.4 DEVELOPMENT OF INSTRUMENT

3.4.1 Pilot Study:

Pilot study was conducted to get acquainted with the overall working and production technique of shawl making. Pilot study helped in the development of interview schedules and data collection.

3.4.2 Construction of Interview Schedule:

On the basis of objectives formulated for the study and critical analysis of theoretical framework, both open and close ended questions were framed. Structured interview schedules were designed to collect data.

In commercial units, three types of members were involved in shawl making viz., master weavers/traders, weavers and designers, whereas in household units all members of the family contributed in one way or other in shawl production. Three separate interview schedules were prepared to collect information on the profile of commercial and household units, weavers and designers.

3.4.2.1 Interview Schedule I: This schedule was administered to weavers in household units and traders/master weavers in commercial units.

The schedule comprised of five sections:

Section I of the schedule was designed to elicit background information of the units regarding type of
establishment, source of investments and knowledge of credit policies.

Section II of the instrument dealt with the production details, which included the raw materials used, types of tools and equipments used, wages, profits and time taken to complete the particular operation.

Section III contained questions regarding selling outlets.

Section IV provided information on problems and constraints faced in running the units.

Section V was designed only for commercial units in which all the details about members working in the units, quality control, export of products and information on service benefits given to the members were included.

3.4.2.2 Interview schedule II: Interview schedule for the weavers was divided into six sections.

Section I of the schedule provided information on respondents personal and family characteristics.

Section II was designed to elicit information on the life of a weaver such as the age at which the weaver learnt and started weaving, teaching the craft of weaving to his/her children and reasons for taking up craft of weaving as an occupation were included in the section.
Section III contained questions regarding the production processes and techniques, types of shawls woven, looms used, designs and finishing details of the shawls.

Section IV included questions on effect of craft on general health of the weavers, and relationship of socio-cultural life with designs and colours of the shawls.

Section V was exclusively designed for household weavers. This part of the schedule covered questions on shearing of sheep, wool yield, sorting and grading of wool, pre-spinning and spinning yarns for shawl making.

3.4.2.3 Interview schedule III: Interview schedule for the designer was comparatively shorter and had two sections:

Section I of the schedule was designed to elicit information on respondents' personal and family characteristics.

Section II dealt with the questions on designing as an occupation and source of inspiration for making designs and types of designs made till date.

Each respondent was given an opportunity to give his/her views regarding various problems faced and suggestions for the upliftment of the craft and craftsmen at the end of the each schedule.
3.4.3 Pre-testing:

The interview schedules so developed were pre-tested to overcome the unforeseen problems in final administration of the interview schedule. A few modifications were incorporated after pre-testing and tools were finalised for data collection.

3.5 COLLECTION OF DATA:

Data were collected through intensive field survey in high terrains of the state supported by participatory observations in which investigator personally carried out weaving of shawls for the proper interpretation of the technical details. Each and every respondent was interviewed personally by the investigator.

Firstly government production centres of Himachal Handloom and Handicraft Corporation and Khadi units were visited in each of the selected districts. Information of household units was obtained from the members in the above centres and household units were selected by snow ball technique. A list of registered co-operative societies was procured from the Registrar, co-operative societies, and the available number of co-operative societies then existing were visited which were very few in number as compared to the list procured. Private units were existing in the towns and cities only. Purposive sampling was done to give full representation to all types of units.
The investigator being on rolls on the staff members of Himachal Pradesh Krishi Vishvavidyalaya took help of extension departments at research stations of the university. Thus rapport building was not a problem through extension workers of the university. Respondents answered willingly to each and every detail of the information required by the investigator.

In private units and co-operative societies, the traders/master - weavers/secretaries of the co-operative societies did not allow their weavers to talk freely. Respondents of these units were found to be scared of their masters, but the desired information was collected by cross-questioning the respondents.

Designers were not commonly employed by all commercial units. Some master weavers themselves designed the shawls. Only two designers came across were interviewed.

In household units information was collected from the person available in the house at the time of the visit who did weaving and was well versed in weaving processes as there were no differently defined roles for males and females. Majority of the villages in the state were not connected by road, thus the investigator travelled from village to village on foot for the purpose of data collection. In each village two household units were visited. Weavers in the commercial units were interviewed according to the choice of the owners of the units.
Full representation was given to both the types of shawls as well as units so as not to miss any information on production of shawls.

The investigator also contacted/interviewed a professor in Tibetan studies, Director Sarnath University to get information on the significance of colour and design in shawls.

Investigator collected the data in two phases from March 1993 to June 1993 and during September 1993. All the schedules were thoroughly edited before coding the responses.

3.5.1 Analysis of Samples :

Yarns used in shawl making were tested for degree and direction of twist and yarn count. Thread count of the fabric was calculated.

1. Degree and direction of the twist:

The twist tester manufactured by Subhash Metal industries was used to determine the twist per inch (TPI) and direction of the twist by untwist method. Ten inches length of the yarn was fixed into clamps of the tester under tension. Movement of wheel determined the direction of the twist. Anticlockwise movement determined the 'Z' and clockwise movement the 'S' twist because yarn moved in the opposite direction of the wheel. Specimens were untwisted and readings were noted on the recorder and results were calculated by the following formula:
2. Yarn count:

Yarn count was calculated by indirect system. In Woolen count system, the count is number of hanks each of 560 yards weighing one pound. One meter of yarn was weighed with the electric balance and count was calculated with the following formula:

\[
\text{Woollen count} = \frac{0.8858}{x}
\]

\[x = \text{weight of one meter of yarn}\]

\[1 \text{ pound} = 453.6 \text{ gms}\]
\[1 \text{ inch} = 2.54 \text{ cms}\]
\[1 \text{ yard} = 36 \text{ inches}\]

\[36 \text{ inches} = 2.54 \times 36 = 0.9144 \text{ meters}\]

\[560 \text{ yards} = 0.9144 \times 560 \text{ meters}\]

\[\text{weight of 1 meter} = x\]

\[\text{weight of 560 yards} = x \times 0.9144 \times 560\]

\[
\text{Thus woollen count} = \frac{453.6}{x \times 0.9144 \times 560}
\]

\[
= \frac{0.8858}{x}
\]
Thread Count:

Thread count was determined by counting the warp and weft yarns under magnifying glass. The number of ends and picks per inch were noted.

3.6 ANALYSIS OF DATA:

All the responses of the interview schedules were systematically coded for each question and tabulated on the basis of specific objectives of the study. Since most of the data were descriptive in nature, frequencies and percentages were calculated for each question.

Participatory observations helped in the interpretation of processes and techniques used for the documentation of shawls along with information furnished by the respondents.

Based on the findings of the study hypotheses were formulated for further testing. This would stimulate other researchers and would help them to confirm some sort of relationships based on the available knowledge.