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Animal and agro based fibres of Himachal Pradesh and their utilization

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Abstract

Himachal is a wool producing region with tradition of sheep rearing, and traditional livelihoods based on weaving. Local industries make a significant contribution to development from a cultural perspective. The handloom sector is known for its heritage and the tradition of excellent craftsmanship. It provides livelihood to many weavers and crafts persons. More so, the traditional craft goods and artistic handloom fabrics reflect the cultural heritage of the country and next to agriculture, this sector is the major provider of employment to people in the informal economic sector. For instance the *Kulvi* shawl, Kinnauri shawl represent the niche market of handicraft from Himachal Pradesh. Angora wool is also a potential export earning industry in the state. The different agro and animal based fibres and the products developed in the state are discussed.

Key words: Wool, weaving, agro based fibres.

Introduction

Himachal literally means *Land of snowy mountains*. Himachal Pradesh is a small world in itself, which is entered from the plain of Punjab, or Shivalik hills of Shimla, capital of the state, (summer capital of British before independence), through beautiful meandering valleys, covered with pine and typical temperate mountain flora. Himachal Pradesh is bound between 30^0 22'to 33^0 12' North latitude and 75^0 47' to 79^0 4' east longitude. The entire territory of Himachal Pradesh is mountainous with altitude varying from 350 to 7000 meters above sea level.

The climate of Himachal Pradesh varies at different altitudes from semi tropical to semi arctic. The average rainfall is maximum in Kangra at Dharamsala and minimum in Lahaul & Spiti at Spiti. The climate of Zone I is good in summers and moderate in winters. In zone II pleasant summers and cold winters but rainfall is rare. The climate in Zone III is very pleasant in summers, very cold winters with heavy rainfall. In Zone IV climate is temperate in summer and semi – arctic in winter. Snowfall normally begins in October and the whole valley is under snow till March-April. The whole area remains cut off and villages become almost isolated. During winter the whole inhabitants move to the lower hills.

Agriculture is the primary occupation of the people of Himachal Pradesh. Sheep rearing and weaving are secondary occupations of the state especially in the far flung areas where there is only one crop a year, as the mountains are snow clad from October to March and people have to be indoors for about six months. They make themselves busy with spinning and weaving for their self-use and also for earning money. They are still using their age-old techniques to make the traditional articles of use. These fibres are put to limited use at family level only. Especially in the areas where farming activities are seasonal, if technologies are developed for processing of fibres and product diversification, it would help them in creating good market for their products and can earn money.

Therefore, there is a need to explore the possibilities of income generation through improvised technologies for spinning and weaving using local resources. Thus it has become imperative to conduct a base line survey of the textile products of Himachal Pradesh with the objectives:

1. To identify the resources such as agro/ animal based fibres, indigenous dyes and their related products.
2. To study the present utilization of the fibres to understand process of making the products.

Methodology

Interview schedule was prepared to collect the comprehensive and authentic first hand data on agro-animal based fibres and indigenous dyes and their processes of making the products.Himachal Pradesh has a wide variety of agro-climatic and topographical conditions. The state is divided into four agro-climatic zones. Multistage sampling procedure was adopted to identify the requisite samples of 500 respondents. In each zone one district and further one block was identified. In that block, 5-6 villages were selected randomly to reach the required sample. All the responses of the interview schedule were systematically coded for each question and tabulated on the basis of objectives of the study. Since most of the data were in descriptive nature, frequencies and percentages were calculated. Detailed processes and techniques were interpreted on the basis of collected responses.

Results and Discussion

General information of the respondents: In the survey it was found that most of the people of the state did not follow single occupation. Along with agriculture, weaving was followed as a major occupation. Sheep rearing was also common in all the zones in tribal areas except zone I. All family members work for the livelihood, either through agriculture or by spinning and weaving. Education level was very poor. Around half of them were illiterate; those who were educated studied up to matriculation only. With so much of labour they were not able to earn much. Family size was found to be mostly 4-6 members (90%) and equally distributed between both joint and nuclear type. Majority of the respondents were rural and 40 percent were tribal. According to caste they were mixed group but all were Hindus by religion. They were working themselves on a traditional pattern and only 8.8 per cent were members of some local organizations and 7 per cent were members of Government organizations. All the respondents had own land but only a few hectares, which they cultivated themselves.

The agro based fibres found were all wild but not cultivated. Animal based fibres found were sheep wool, rabbit wool, and yak and goat wool. The later ones were used for making floor coverings and ropes only. Majority of the respondents had animals (63.7 %), population around 10-30 animals per family. Each sheep yields around 1-2 kg wool per year, they were sheared twice a year in March-April and September-October. The wool was sheared by hand and the products were woven on handloom. Majority of them utilized these fibres for self consumption. Sometimes they sold these to local people on demand.

The products made were carpets (Plate 1), mufflers, gloves, design borders, caps, *pulan* (straw footwear) (Plate 2), shawls (Plate 3), *patti* (tweed) and blanket (Plate 4). Left over fibre was used for making quilts. Spinning of the yarn was done with the help of *takli* (spindle) or *charkha* (spinning wheel). In zone II *takli* was more popular. Majority (58 %) of the respondents made products on loom. Dyeing was not practiced in the state. The dyed yarns were procured from the market. Only 9.3 percent of the respondents extracted natural dyes with walnut peel in zone II, and dyed yarns and fabrics. Majority of the people made traditional articles with traditional designs only and most of them sold themselves in the villages only but very few sold outside the villages. Price of the products was fixed on the basis of basic investment, cost of the raw material, labour and overhead charges incurred. Most profitable items were shawl, carpet, *pattu* (shawl for men), *patti* (tweed), muffler in descending order. Capital investment on fixed expenditure was around Rs. 1500/- to 3500/- whereas investment on raw material and labour were Rs. 500/- to 1500/- in each case. The respondents worked themselves while taking the help of other family members.

Table 1. List of available fibres

Zones	Agro based fibres	Products	Animal based fibres	Products
Zone I	Sunn	Binna	Wool	Ropes
Zone II	Buail	Ropes	Sheep wool Merino wool	Carpet, shawl, pattu, blanket, langhas
Zone III	-	-	Rabbit wool, Sheep wool, Merino wool	Shawl, mufflers, pattu, blanket
Zone IV	-	-	Goat wool, Sheep wool, Yak wool	Carpet, shawl, pattu, patti, muffler, ropes

Monthly expenditure per animal was around Rs. 50/- to 150/- only. The problem faced by majority in production was lack of financial assistance (52.6 % and other problems were non-availability

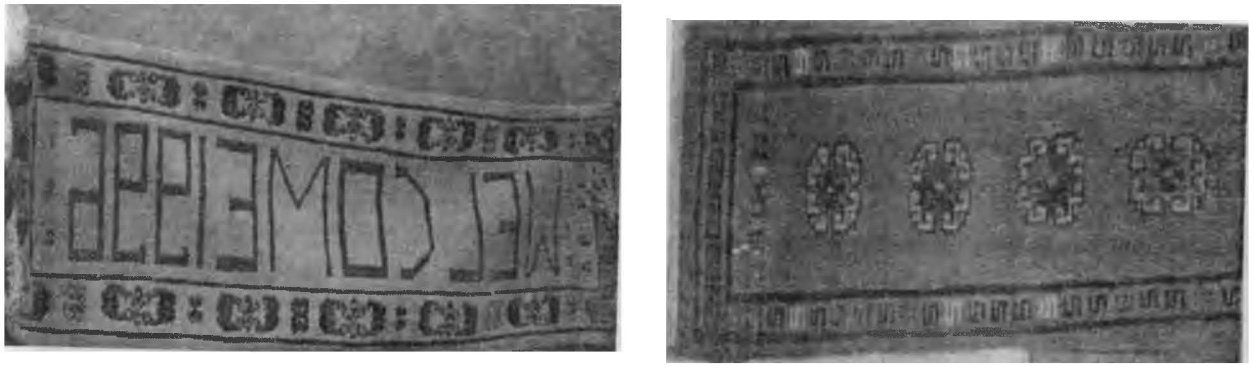


Plate 1. Carpets of Himachal Pradesh



Plate 2. Woven Products



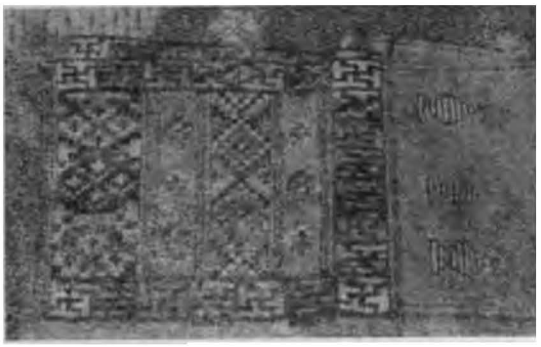


Plate 3. Shawls of Himachal Pradesh





Plate 4. Blankets

of raw material, technical expertise, lack of skilled labour and variety of contemporary products suited to the demands of modern cosumers. Difficulties in selling were marketing at village level, transportation and high commission of middlemen. Majority of the respondents were unaware of the assistance given to them by government agencies at any level viz., financial, training and marketing.

Production processes of available fibres and their use:

a. Sunn (*Crotolaria juncea*): Sunn is a type of wild grass grown in zone I. It grows in rainy season. The grass matures in the month of September-October. The grass is cut with sickle and soaked in water for 2-3 weeks for softening. Softened grass is beaten on stones to remove all the extra adhering foreign matter. After beating it is sun dried and twisted or braided into ropes with T shaped wooden tool. This rope is used for making cots and mats.

b. Buail (*Grivia optiva*): This fibre is extracted from the stem of wild fodder tree in zone II. Leafless bundles of stem are soaked in water for 2-3 months. As the stem softens, these are beaten on the stone to remove the outer covering of the stem and off white fibres are separated from the pith. The separated fibres are sun dried and twisted or braided into ropes with T shaped wooden tool for tying animals.

c. Wool: Sheep rearing and wool weaving is one of the popular professions in zone II, zone III and zone IV of the state. Respondents reared sheep for commercial as well as self use. Sheep are mostly sheared twice with shearing scissors manually. Yield per animal per year is 1-2 kg. The wool is washed and dried before carding. Dried wool is carded manually with carding comb or mechanically got it done from the carder. Carded wool is made into slivers and hand spun with *charkha* (spinning wheel) or *takli* (spindle). Takli was found to be more popular in zone III.

d. Weaving: Spun yarns are used to prepare products of twill and plain weaves. Throw shuttle loom is used to make the products. Commercial units are using fly shuttle loom for making shawls, mufflers, pattus etc. Carpets are woven on vertical looms. Byproducts thus obtained after cutting the pile is used for making quilts.

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