SILK SAREES OF MOLAKALMURU

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By

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CERTIFICATE

This is to certify that the thesis entitled **"SILK SAREES OF MOLAKALMURU"** *submitted by* **Miss. SANNAPAPAMMA K. J.,** *for the degree of* **MASTER OF HOME SCIENCE** *in* **TEXTILES AND CLOTHING** *to the University of Agricultural Sciences, Dharwad, is a record of research work carried out by her during the period of her study in this university, under my guidance and supervision and the thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar titles.*

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Affectionately Dedicated
To
My Beloved Parents

Appaji Sri. Jagaluraiah
and
Amma Smt. Suryamma

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Dharwad
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(Sannapapamma K. J.)

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Introduction

I. INTRODUCTION

Clothing occupies an important place in our society since pre-historic time. Throughout recorded time and probably even before, clothing along with food and shelter has been recognised as one of the primary needs of the human beings. According to Horn (1968) clothing is second in the triumvirate of fundamental necessities of life. Clothing is an expression of the person reflecting his personality, way of living and way of his thinking. In recent years other basic necessities like health transportation and sufficient economic assets to obtain an adequate level of living have also been added. Whatever may be the priorities, clothing remained as an essential element which is necessary for human well being.

The value of clothing is to meet certain human needs such as physical protection, modesty, adornment and so on. Clothing fulfills many of the social, physical, psychological, emotional, aesthetic and economical needs of an individual. It also decorates and protects the body from sun, rain, air, infection and other extreme climatic conditions.

The use of clothing has been in the past and is still now dictated by custom, fashion and style. The existing culture and society are the derivatives of the past. For thousands of years a great deal of time, money and energy has been devoted on clothing and decorating the human body. Clothing not only reflects, expresses and enhances one's personality but also is a symbol of one's culture, prestige, status and standard of living.

Unity in diversity is reflected in the costume of Indian States. Each State has unique style of traditional, costume, identified regionwise. However, a woman in saree is always identified as an Indian.

India, the country of villages where the main occupation of the people is agriculture, followed by some of the other subsidiary occupations such as weaving, carpentry, blacksmithy, goldsmithy, pottery and so on.

The picture of the Indian woman familiar to a foreigner is a figure draped with long yardage of cloth, half of it wrapped around the waist falling floor length as an improvised skirt and the remaining half climbing up over the bosom which is clothed in close fitting choli. Rarely we see a woman of any other country out side her native land in her national dress. Yet, it is almost impossible to find an Indian woman abroad in any costume except the saree and choli. That is the Indian woman.

Indian fabrics were famous all over the world because of their exquisite art of interlacement. These craftmen were experts in the art of manufacturing fine, translucent, delicate fabrics. The cloth was also studded with pearls and jewels enhancing the value of these fabrics to million pieces of silver. Even the kings and queens of Europe were very fond of these highly priced valuable materials.

To decorate fabric in those days meant producing self designed fabrics which now means woven designs. Because of scientific method of colour mixing, artistic and intelligent use of *ends and picks* in floral

buttas and bird motifs in the weaving technology, there is great demand for Indian sarees in Western and Eastern countries. Further this art of weaving was inherited for the manufacture of sarees by the craftmen who put in their hereditary skill.

The word "Saree" is believed to be derived from 'Sati' or 'Shati' a Sanskrit word means a "Strip of cloth" or "Pattas of cloth". From Shatika, word satee was formed, so came to be known as "Sadi" in Marathi. In the language of Oriya, Bengali, Bihari and Hindi the word "Sadee" is popular. It has been claimed that undoubtedly the saree was famous since ancient times.

It is difficult to say as to when this feminine wear the saree, came into existence because, at the birth of christ, during sindh culture and in some ancient sculptures of the sumerian tradition, the existence of saree is seen. These are examples of some tiny sculptures and pieces which claimed as the first examples of sarees. In the ancient literature such examples are also prevalent.

In Rigvada it is found "Hiranyadrapi" as an example of saree, a fine cloth with border as pattas. In Mahabharath, Minicheri is nothing but a woven saree interwoven with pearls with glittering border. In Ajanta and Bagh there are various specimen of sarees woven with different techniques. The chief characteristic use of colour in saree is the produce rhythmic contrasts which is been displayed in the murals of Ajanta.

The historical evidences proved that skilful and artistic designing of sarees is the ancient art in India. For many centuries it has been the

custom for "Hindu" to wear sarees with border and pallu on auspicious and ceremonial functions. The border and pallu have been specific and are the main attraction of a saree. The tail end of the saree or the anchal is called pallu and choli the closely fitted bodice derived from the dynasty of the king Cholas period (Joshi, 1984). The saree is almost synonymous with the word "silk". Undoubtedly it is the traditional costume of India almost time immemorial. The saree is simply a long fairly wide strip of cloth but with a knot here and pleat there, it is transformed into a graceful drapery, lovingly following the female form. The most common way of draping is to pleat it at the waist and throw one end over the left shoulder.

Women in different states have tried out other equally graceful styles with saree. There is Gujarathi style of draping saree 'ulta' pallu, in which the anchal is brought from the back of the right shoulder and tucked into the left side of the waist covering the bosom. Coorgi women (Karnataka) have pleats in the back, and the pallu is wrapped across the bust, brought over the right shoulder from the back and pinned into place with a broach. Bengalis wear saree without any pleats at all and Maharastrains wear like a 'dhoti'. Today in the modern system most of the models drape the saree in various fashion not necessarily covering either back or bosom. The variations are infinite and the wonderful thing about saree is that it tends itself easily to any of these variations.

The exact data when saree was adapted by the South Indians is not known, and though itinerant painters showed women of south started

wearing saree in the middle of the 19th century. But it appears that in some parts of South India the saree is hardly older than the century before which both men and women moved about bare breasted (Joshi, 1984).

Indian artists and designers have started making use of the patterns in the present day designing with successful efforts. The only traditional motif used was mango pattern 'kalka' which is exclusively employed in most Indian sarees, the Indian saree is incomplete without a mango design in the border or the pallu. Other patterns gradually adopted were the majestic elephant, peacock, parrot, horse rider and other floral patterns. In some sarees hunting scenes, procession of elephants, the traditional garbha to some extent, the decorative arches of the temples, the religious and puranic motifs gave feast to the eyes.

South India is famous for its traditional silk sarees like, Kanjeevaram, Kumbhakonum (Tamilnadu), Dharmavaram, pochampalli, peddapuram sarees (Andra Pradesh), Mysore sarees, Bangalore sarees (Karnataka). Karnataka is one of the southern states producing varieties of traditional sarees *viz.,* Bangalore silk sarees (Bangalore, Doddaballapur), Mysore silk sarees (Mysore, Channapattana), Gadi-Dhadi sarees (Gadag, Betageri, Koppal), Ilkal sarees (Ilkal Sorebhavi, Amingad) and Molakalmuru silk sarees (Molakalmuru, Kondlahalli). All these silk sarees of Karnataka are unique and distinctive in their yarn type, weave, colour, motif, finish applied and texture.

Molakalmuru is a taluk place which is situated in Chitradurga district about 250 km away from the capital city, Bangalore. Molokalmuru sarees are known for their ethnic beauty, woven by aesthetic skills of the magic weaver. The various designs, eye catching colours and the method employed to produce them are still unknown to many Indians.

The basic occupation of people in Molakalamuru is weaving who are either padmasalis or swakulsalis (caste/creed) followed by agriculture. This town has a population of about 12,000 and majority of them are involved in traditional weaving. However the major percentage of looms are shared between padmasalis and swakulsalis and the rest by other communities like, Nayakas, Yadavas and even Muslims who are actively engaged in one or the other activities related to pre and post loom processes. Out of about 500 weaving families of Molakalmuru, padmasalis and swakulsalis constitute around 350 families. The ancestors of these two major communities are believed to have migrated from 'Agrahara' of Andhra Pradesh and Maharashtra respectively about 200 years ago.

Molakalmuru weaving has been influenced by the weavers of Kanjeepuram (Tamilnadu) and Dharmavaram (Andhra Pradesh). Therefore these sarees do resemble Kancheevaram sarees to some extent with respect to motif and texture expect the cross pallu and korvai system of weaving.

Keeping in view the foregoing discussion, it was felt essential to initiate a study to understand the history, development and weavers

socio-economic conditions in the state. Hence, the present investigation on silk sarees of Molokalmuru is taken up with the following specific objectives :

1. To study the historical background of Molakalmuru sarees

2. To enumerate the existing weaving technique

3. To assess the economic viability of different types of sarees produced.

Review of Literature

II. REVIEW OF LITERATURE

It is appropriate to report some of the work done by former researchers in the area of silk sarees, to provide a suitable background for the present study. The review of highlights the important issues raised and findings obtained by earlier research workers which may give ideas to the current study. Therefore, a few studies which have some relevance to the present study are reviewed and arranged under the following heads.

2.1 Degumming of silk yarn

2.2 Dyeing of silk yarn

2.3 Weaving technology

2.4 Varieties of silk sarees

2.5 Problems of silk weavers

2.6 Marketing of silk made ups

2.1 DEGUMMING OF SILK YARN

Gulrajani and Malik (1993) in their study on "Degumming of silk with Methylamine" observed the effect of methylamine treatment at different concentrations temperatures and treatment time on the weight loss, strength loss, bending length, crease recovery and flexual rigidity of mulberry silk fabric using a Box and Behnken response surface design and the condition for degumming were optimised. The best degumming was achieved when the silk fabric treated with 0.2 ml methylamine at 80°C for 30 min using 3 gms pl non-ionic wetting agents. The fabric

degummed under the optimum condition showed properties comparable to those of the fabric degummed with Marseille's soap. Unlike soap, the degumming efficiency of methyl amine was affected by the hardness of water upto 1000 ppm.

Mishra *et al.* (1993) conducted a study on "Degumming of silk with acetic acid". The yarn was treated with acetic acid at 80°C and 90°C for 30 to 120 minutes. The results showed weight loss from 16 to 25 per cent depending upon the conditions. This weight loss increased with the increase in the concentration of acid, temperature and time of treatment. Further the dye uptake also increased in a similar manner.

Gulrajani *et al.* (1996) conducted a study on "Degumming of silk with different protease enzymes". It was concluded that silk was degummed with eight different commercially available enzymes *viz.*, Degummase 1000 L, protosal, Trypsin, Alcalase, protease A, protease N, pepsin and protease M. The degumming conditions with respect to concentration and time were optimised for each enzyme. Enzyme activity an important intrinsic property and degumming efficiency were evaluated interms of weight loss, tensile strength, handle and lustre. A weight loss of 24±3 per cent was observed for most of the enzymes at an optimum enzyme concentration of 15 per cent, except for degummase 1000 L which gave this results at 25 per cent concentration. Trypsin and pepsin gave extremely poor results. The increase in treatment time at the optimum enzyme concentration showed no further significant weight loss. There was no significant strength loss in any of the degummed samples but a

marked improvement in handle and lustre was observed. The Scanning Electron Microscope (SEM) showed that enzyme gave the best results both with respect to weight loss and smoothness of the fabric.

Pathak *et al.* (1996) conducted a study on "Effect of hardness of water on degumming of silk" and observed that degumming of silk was carried out in hard water and distilled water using different concentrations of an industrial grade detergent based alphaolefin sulphanate. The optimum quantity of detergent was calculated and same was used for carrying out degumming with water having different levels of hardness. Degumming action has been found to be better in soft water. Correlation coefficient between degumming loss and hardness using this particular detergents has been found to be - 0.989. Degummed sample were tested for degumming loss, tenacity and elongation. It was found that the optimum degumming loss is obtained with 1 gpl detergent in soft water. The tenacity increased with decrease in hardness of water, and no clear trend in the case of elongation observed.

Hadimani *et al.* (1996) conducted a study on "Degumming: Role of water and soap". It was concluded that, water is an essential input in wet processing of textiles. In degumming of silk, water and soap play a crucial role and hence maintaining their quality is of utmost importance. The usual process of degumming of silk entails the use of alkalies and most popular method of degumming employs soap and soda. Soap is the best degumming agent which supplies the required alkalies to react with sericin in controlled quantities. However, to reduce both processing time

and consumption of soap, sodium carbonate is incorporated in the bath so as to maintain the bath 10 to 10.5 pH.

Chakravarty *et al.* (1997) conducted a study on "Effect of degumming and bleaching". The study revealed that, degumming with soap is best indeed; strength, crease recovery and other properties are excellent. Feel of degummed sample is superior because a negligible part of soap retained by the fibre which provides suppleness. However, to reduce cost, soap can be partially eliminated introducing sodium carbonate (Na_2CO_3) control over application of alkali should be positive, otherwise fibre may get damaged and become harsher. Degumming can also be done using alkaline-nonionic detergent solution for further reduction in cost of degumming: in doing so the extent of dosing should be modified and optimised before application. Bleaching, if required can be carried out in hydrogen peroxide/ ammonia (H_2O_2/NH_3) technique to improve whiteness as well as other post-degumming properties.

Gulrajani *et al.* (1998) conducted a study on "Efficiency of proteases on degumming of dupion silk. It was found that dupion silk degummed with seven different commercial proteases *viz.*, Alkaline proteases degummase, protosol, Alcalase, protease A, protease N, Acidic protease M and papsin. Conditions with respect to concentration and time were optimised for each enzyme and degumming efficiency was calculated. The treated samples were tested for tensile strength, handle, lustre and microscopic structure. Alkaline protease have shown good results and the efficiency of degumming varied with variety of dupion.

Jeyakodi (1999) conducted a study on "Degumming of silk with tannic acid". It was concluded that, when the raw mulberry silk yarn was treated in 5, 10, 15, 20 and 25 gms pl tannic acid solution for different periods *viz.*, 10 min, and its multiples upto 120 min at 90°C, pH 5 adjusted by glacial acetic acid with MLR 1:30 in good dye uptake, wash and light fastness. And with concentration 25 gms pl for 120 mins, showed the maximum removal of gummy material, the sericin.

Sharma *et al.* (1999) conducted a study on "Effect of degumming followed by sequential oxidative and reductive bleaching on mulberry and tasar silk fabrics". In this study, the effect of degumming followed by sequential oxidative and reductive bleaching on physical properties, such as tenacity, thickness, fabric weight, bending length, crease recovery, flexual rigidity and air permeability of mulberry and tasar silk were studied. It was observed that tenacity, fabric weight, bending length, crease recovery and flexural rigidity decreased where as air permeability increased after degumming and bleaching.

2.2 DYEING OF SILK YARN

Shenai and Chavada (1990) conducted a study on "Low temperature dyeing of silk in presence of Redox System". It was found that degummed and bleached silk yarn could be dyed with acid dyes at as low temperature as 40°C in one hour to get near complete exhaustion of the dye bath. When the dyeing is carried out in the presence of a new redox system comprising of a mixture of formaldehyde and hydrogen

peroxide. Considerable increase in dye bath exhaustion values have been observed in the presence of this redox system, compared to the dyeing in its absence.

Gulrajani *et al.* (1991) conducted a study on "Effect of temp and time on dyeing of silk with acid dyes". In this study three acid dyes manufactured by Sandoz (India) Ltd., were used which corresponded to the three primary colour i.e. Sandolan Navy 5 RLI, Sandolan Rhodine E2GL and Sandolan yellow 4 GLI. It was concluded that Sandolan Navy 5 RLI showed an increase in colour value and wash fastness with increase in time, temperature and dye concentration. Sandolan Rhodine E2GL had extremely poor wash fastness. The K/S value increased with increase in temperature and time but the dye did not diffuse into the fibre so that the OD values remained almost constant even with increase in temperature and time.

In the case of Sandolan yellow 4GLI it was possible to lower the temperature of 70°C and achieve fairly good results by increasing the dye concentration, while for Sandolan Navy, the dye concentration as well as the dyeing time were to be increased for better results at 70°C interms of colour value. Sandolan Rhodine is not recommended if dyeing is to be carried out at a lower temperature.

Lakkumi and Apitha (1991) conducted a study on "Dyeing of silk using Reactive dyes". Degummed mulberry silk dyed in reactive orange MR (cold brand), HR (Hot brand), HER (high exhaustion type) and 3R

(Vinyl sulphone dye). It was found that among the four dyes tested, vinyl sulphone dyes showed maximum exhaustion or dye uptake when the dyeing was carried out for 2 hours at room temperature.

Venkiduswamy and Ramaswamy (1994a) carried out a study on "Dyeing of silk with acid dyes involving Redox system". The results of the study revealed that dyeing of silk with a redox system (potassium peroxide disulphate glucose) lead to better dyeability. The improvement depended upon the concentration of the system and dyeing temperature.

Venkiduswamy and Ramaswamy (1994b) conducted a study on "dyeing of silk with direct dyes involving redox system" the study revealed that, silk fabrics were dyed with direct dye in the presence of ammonium per sulphate glucose redox system. This system showed higher dyeability silk could be dyed successfully at 60°C instead of the boil, with the addition of a redox system. About 80 per cent dye uptake was achieved at 60°C with the addition of 0.03/0.03 ammonium per sulphate glucose system.

Venkiduswamy and Ramaswamy (1994c) analysed on "Dyeing of silk with basic dyes involving redox system". It was reported that, dyeing at higher temperature deteriorated the silk yarn. Therefore, an attempt was made to reduce the dyeing temperature by adding redox chemicals in the dye bath. Silk was dyed successfully at lower temperature (60°C) with 0.015 gms pl of redox chemicals. An increase in redox system reduced the dye uptake value. -

Farouqui *et al.* (1995) conducted a study on "Effect of acid and direct dyes on silk". It was found that, dye absorption by silk fibre decreased with an increases in dye concentration for direct dyes. But in the case of acid dyes, the absorption of dye increased with an increases in dye concentration but further it decreased with gradual increase in dye concentration. The dye concentration for acid dye was 0.5 to 3.0 per cent or 3.5 per cent and for direct dye it was 2.5 to 3 per cent.

Murlidharan *et al.* (1999) conducted a study on "The redox system assisted dyeing of silk with kemacid yellow 2G". It showed that, the dyeing behaviour of silk with an acid dye in the presence and absence of ammonium per sulphate/thiourea redox system was carried out with a view to bring down the dyeing temperature. The use of redox system improved the dye uptake. It's effect on the fastness properties of the dyed material was also assessed.

Radhika and Jacob (1999) conducted a study on "Natural dyeing of silk". It was observed that, the dyes extracted from Jatrapha seeds have a range of bright, soft, even and lustrous colours on silk fabric. These dyes added some more new colours to the range of natural dyes used on silk. This dye has an advantage of its applicability in small scale and cottage industries because of its easy adaptability.

2.3 WEAVING TECHNOLOGY

Ravi Kumar (1984) conducted a study on "Kancheepuram sarees", and observed that, Kancheepuram weavers used mulberry silk yarn of

denier 18/20 and 30/35 filature or charaka silk as warp and medium to course qualities of charaka silk yarn of 2 ply for weft. TPM ranged from 195 to 390 depending on the yarn denier. Finer the yarn higher the twist and vica-versa.

Kannan (1989) conducted a study on "Sonata Sarees" and reviewed that the Bangalore mills are specialised in the manufacture of Sonata sarees. These sarees are woven with warp 2/30/22 denier mulberry silk and weft 2/210 chinese or extra special Indian spun silk. The pure gold zari was used for border and pallu. The extra warp designs are woven with the aid of dobby or jacquared. Reed is made up of bamboo wire and reed count is 120. These sarees resembled a Kanjeevaram, Dharmavaram and Kumbhokonam sarees of south India. Sonata sarees are less expensive as compared to the other silk sarees.

Reddy and Jacob (1989) carried out a study on "Polynosic rayon yarns in the weft of traditional Dharmavaram silk saree". The quality of woven fabric was judged initially by its appearance and handle and thereafter, by its wears and performs in service. In this study three sarees were woven with silk yarns of warp and polynosic rayon of weft. These silk polynosic saree were evaluated subjectively by a panel of judges in comparison with pure Dharmavaram silk saree for its visual characteristics like lustre, whiteness retention and overall appearance of the unlaundered stage and as well as 10 and 20 washes. Majority of the consumers preferred silk polynosic saree because the artificial lustered disappeared after laundering further there was not much difference in the

appearance of both the sarees after washing. The silk polynosic saree was most preferred to that of pure Dharmavaram silk saree because of its low cost and good lustre, texture and overall appearance.

Ramesh and Mukund (1989) conducted a study on the splended, rich, elegant and sanctified sarees of Kancheepuram the study revealed that each Kancheepuram silk saree is woven to a standard size of 5½ meters consumes 400-600 gms of fine quality charka silk and 30 to 200 gms of gold zari. A finished saree depending upon the variety weighs about 600 to 700 g. The warp in the looms generally is of 18 yards length and width of 48 inch. The body of the saree may be plain or in simple checks or most commonly with buttas. The pallu is filled with incomparable temple designs.

Nadiger *et al.* (1995) conducted a study on "Marvellous Kancheepuram Sarees" and concluded that the weaving of Kancheepuram Sarees is a slow process because of its intricacies and designs. The weaving is done on pit looms with dobby and jacquard attachment for border, pallu and extra warp designs. Reeds used are of the bamboo, locally fabricated equal to 96s stockport. Usage of flexible bamboo reeds, reduced the yarn damage especially in case of charka silk and minimised damage to gold zari thread.

Jacob (1996) conducted a study on "Grandeur of Kancheepuram" and reported that the Kancheepuram silk sarees which are of heavy nature, are woven from charka raw silk. The 16/18 denier silk is generally

used. While 13/15 denier raw silk is preferred for zari work. Generally two ply yarns were used for body and three ply to four ply for border on either sides and pallu. Warp yarns of 18 tpi and weft of 8 tpi of fine, medium and coarse charaka silk is employed. Kancheepuram sarees are generally weft predominant. It is because of this typical construction the sarees have earned a name for their durability, thickness, quality, draps and low creasing tendency.

Krishnamurthy *et al.* (1996) studied on "Kumbhokonam sarees; A blend of tradition and modernity. The weaving of Kumbhokonam sarees is a slow process because of its intricacies and elaborate designs. The weaving is done on frame looms with jacquard for border and extra warp designs. Generally silk yarn of 2 ply 20/22, 20/24, 16/18 and 28/32 are used. The warp is of 18 tpi using filature silk while untwisted or zero twisted charaka silk of 2 to 3 ply or even 4 ply are used for weft. Two threads gold zari is used for warp and 3 or 4 for weft. Reed is made of bamboo wire and reed count for body is 90-96s and for border 70-90s.

Rajappan and Vathsala (1998) conducted a study on "Splendrous silk of Dharmavaram" and findings of the study indicated that the weavers mostly worked on pit looms with dobby and jacquard attachment for border pallu and extra warp designs. Generally 2 ply silk yarn of 20/22, 20/24 and 28/30 are used. Mainly two types of sarees are woven in Dharmavaram 'Kuttu' sarees with contrast borders and pallu with entire weft having only one colour. The process is very slow because it involves stitching. The other is 'Lattu' sarees with self border and pallu,

the process of which is very fast and in line with the latest trend and fashion.

2.4 VARIETIES OF SILK SAREES

Joshi (1984) conducted a study on "Golden age of Indian Sarees" Bluchar sarees : and the study revealed that Baluchar sarees used to be woven in the Murshidabad district of West Bengal. This type of sarees showed stylised trees. Women smoking hookas, riding on horseback or riding locomotive. The sarees were woven with charaka yarn. The sarees are woven either in dark red and blue or both combined. The most favourable season for weaving sarees was mansoon. The design on the anchal of bluchar sarees covered the entire width of the saree and occupied a height of 24" x 32".

Annathomas (1984) conducted a study on "Benaras textiles" and reported that, India's fabric of dream is the Benaras brocade, which is literally a cloth of gold. In olden days gold and silver wires of such fineness were drawn that a whole saree could be woven from them without the use of any kind of thread. The saree would glitter with the metallic sheen. Silk yarns were purchased from Bangalore, Kashmir and Malda. The tested zari were brought from Surat and were used for Brocades, Jangala, Tanchoi, Satin border, Banarasi Butidar, Tassar silk and organza types of weaves used on Varanasi textile area a combination of plain, satin and twill weaves used to create the designs. The different motifs were grouped as floral, fruit, animal and birds, geometrical

patterns and human figures. Colours used were shades of red, pink, blue, green, yellow and purple. Black and white were also used sometimes.

Bansal and Phadke (1984) conducted a study on "Hand woven sarees of Maharashtra" and revealed that Maharashtra sarees are simple, plain and inexpensive. The motifs in paithani sarees were Kuyari, Gokarnbal, Asavali, Aakruthi, Morebogdi, Totamaina, Asharphi, Jiparighari, Ajanta lotus, Humaparinda and Anarbale. These motifs kept changing from shalivahan period to Moghal period. History had a great influence on motifs. The motifs used in them have the supernatural meaning.

The traditional colours were yellow, pink, purple, blue, red, maroon, black and orange. Paithani saree length ranged from 5, 5½, 6 and 9 yards and the width ranged from 45" to 49". The paithani sarees were of woven in extra length for blouse.

Jacob (1989) conducted a study on the rich, artistic silk sarees of Andhra Pradesh and revealed, Kothakota sarees are produced in Kothakota town in Mehboobnagar district. These richly brocaded sarees are woven with double ply yarns used for both warp and weft. The weight of the saree ranged from 500 gms to 750 gms. It has a pleasing body colour with contrasting border and pallu carrying distinctive motifs influenced by the traditions of stone and wood carving of that area. The Hamsa, mythological swan combine with carved tendrils is an exclusive border pattern. Gouli-stylised single and double headed eagle are the other important motifs used on the pallu.

Jacob (1989) studied on the rich, artistic, silk sarees in Andhra Pradesh and reported that Armoor sarees are traditionally woven in deep colours with the use of heavy silk. Purple and deep red are the usual colours used for this rich saree. The border is also in deep red, width ranging from 2½ to 3". It carries geometrical pattern of logenges worked in gold. The pallu is intricately woven with a variation of techniques and patterns. The central band of 10" to 12" is woven with red warp and gold weft, creating a tissue like surface on which mango motifs are worked in silkworm threads. It resembles paithani border but not the paithani techniques. The body carries small star like flowers.

Jacob (1989) conducted a study on rich artistic silk sarees of Andhra Pradesh and revealed that Pochampalli sarees are light in weight, because of use of single yarn and tested zari is alone employed to enrich the saree. The motifs commonly used are geometrical patterns, parrots, peacocks, elephants and floral designs with attractive colour combinations.

Nadiger *et al.* (1995) conducted a study on "Marvellous Kancheepuram sarees" and revealed that Kancheepuram sarees are generally weft predominant, with saree length ranged from 6 to 9 yards and width of 48". Most commonly used motifs are geometrical, incomparable temple designs, Rudraksham, venkis, ekanchu, ganduberunda, gaurdanchu, brickpettu, diamond, simhasanam, Ardhasimhasamam, elephants, horse, parrots, peacocks and soon.

Jacob (1996) Grandeur of Kancheepuram reported that the special feature of Kancheepuram saree is that it is often woven in double colours which impart a rare glow both in natural and artificial light. Unlike other silk sarees, these have distinctive body border and pallu in enchanting colour combinations. The traditional colours were given deep colours like violet, crimpson, maganta, bottle green, golden yellow, Indian red, navy blue, parrot green, orange, mustard, arakku, coffee, turquoise, blue, brown and black are used. Mixed colours are also in use.

Krishnamurthy *et al.* (1996) studied on "Kumbhokonam sarees: A blend of tradition and modernity. It revealed that the Kumbhokonam silk sarees are of heavy weight. A saree of 5.5 to 6 meters consume 600 to 1000 gms of raw silk and about 200-500 gms of gold zari. It has both single and double sided border and the colour combination is in tune with modern fashion. The Kumbhokonam sarees have a variety of colour range. Some sarees are in single colour but others are in short colours giving light and shade effects (Dhoop and chan). Common colours are crimpson, violet, carrot, green, arakku, turquoise blue, brown and blends of all these. The hallmark of these sarees are absolute perfection, well geometric, finely curved and depiction of motifs derived from nature and temples. Sigappuraja, white roja, buttondollar, grape, creep cross creep, double flower, red rose and diamond rose are some of the popular motifs.

Rajappan and Vathsala (1998) studied on "Splendrous silk of Dharmavaram and revealed that Dharmavaram sarees are light in weight with broad heavy zari borders ranging from 6" to 12". Known as

'Gatti'anchu, means solid border. The hallmarks of Dharmavaram sarees are the motifs and designs adopted from the sculptures of temples at Lepakshi and Tadapatri and other motifs of nature like, peacock, deer, flower etc. The culture and tradition of Andhra Pradesh has also been woven into the sarees. The common colours are parrot green, olive green, rani, magenta peacock blue, mustard and lux colours.

2.5 PROBLEMS OF WEAVERS

Rao (1980) analysed economic aspects of Gadwal handloom industry in Andhra Pradesh. He found that the industry was facing problems because of the exorbitant rise in price of zari yarns which in turn increased the cost of production of sarees. This rise in price had consequently decreased the demand and created problems to the weavers.

Anita (1988) conducted a study on problems of handloom weavers in Pochampalli and Vellanki of Andhra Pradesh. The findings of the study revealed that majority of the weavers were not facing any major problems either with the Co-operative society or master weavers. The weavers were unhappy since they had no freedom in selecting the designs.

Rao and Prasad (1989) analysed the problems of Andhra Pradesh handloom weavers and reported that this industry was facing the problems of scarcity of yarn, raw materials and lack of sufficient marketing facilities to their products. The weavers were also facing the problems of lack of sufficient financial facilities i.e. the commercial banks failed to provide sufficient finance to the weavers in the form of loans. In

order to enhance the socio-economic status of the weavers, it is essential to provide continuous employment throughout the year, thus the weavers need to be supplied with adequate yarn.

Venkatasubbaiah (1991) conducted a study on socio-economic conditions of handloom weavers in Cuddaph district of Andhra Pradesh. He divided the district into two parts on the basis of nature of weaving. In western part the articles like janata sarees were woven and in eastern part the weavers engaged in weaving superior varieties of cloth such as pure zari sarees. To improve the living conditions of this community the author suggested that the weavers must take assistance of Weavers Service Centres to learn modern skills that fetch them better wages. He also suggested that a good number of training centres need to be started in the rural area of the state to provide intensive training in the modern technology.

Kirsur and Shivaprakash (1991) studied on the Marvellous and poignant story of the silk weavers of Molakalmuru and reported that the weavers were facing the problems of lack of sufficient marketing facilities to their products. The master weavers were faced on the problem of increased labour charges and lack of demand during off-season. Their main question is to whom to sell and how? Which narrates about the constricted advertising channel.

2.6 MARKETING OF SILK MADE UPS

Bansal and Phadke (1984) conducted a study on "Hand woven sarees of Maharashtra" and reported that the sarees of Maharashtra are

quite in demand. The investigator found that these sarees were sent all over India, especially to Bombay, Delhi, Baroda, Marathawada, Khandesh and Indore. It was reported that nearly one fourth goods found their own way out of the state and remaining three fourth being enough to meet the local demand of the people.

Nadigar *et al.* (1995) conducted a study on "Marvellous Kancheepuram Silk Sarees" and reported that, the Kancheepuram silk sarees are mainly used for wedding purpose. The local market is mainly confined to southern states of Andhra Pradesh, Karnataka and Tamilnadu. Besides to some extent it goes to Dehli and Bombay. People of Andhra Pradesh buy costly sarres in bulk. The Co-operative Societies will have a market of 50 per cent of silk sarees in Kancheepuram it self. Co-opetex buys from Co-operative societies and market at national level. Some of the leading societies have opened the showrooms at different states. Most of the progressive master weavers market the sarees through retailers.

Munikrishnappa *et al.* (1996) conducted a study on 'silk fabric marketing'. Findings of the study revealed that silk fabrics are marketed through government and private retail houses in Mysore city.

Price is vital element of the marketing philosophy which is the most advantageous in terms of profit and volume of sales. The analysis made with respect to the pricing system followed in all silk showrooms, for their range of products revealed that all showrooms followed fixed price system. In Government showrooms, the price fixation is made by their respective

head offices where in private showrooms the price is fixed depending upon the profit margin expected, prevailing market demand, competition and some time purchasing power of the customers.

Krishnamurthy *et al.* (1996) conducted a study on Kumbhokonam sarees: A blend of tradition and modernity and reported that these sarees are expensive and mainly used for important occasions like wedding and social rituals. The price ranges from Rs.1500-28,000. It enjoys a sound domestic market in the southern states of the country mainly through retail outlets. A limited quantity also travels overeas to countries like New York (USA) and Singapore.

Tondon (1997) conducted a study on 'Marketing of Banarasi silk goods' and stated that Banarasi silk sarees are famous for their exquisite beauty, Splendous and ethnic designs. The marketing of these silk saree is as complex and intricate as that of its production. The article deals with 'satti' – the traditional pattern or practice of buying and selling continuously is the backbone of the merchandising Banarasi silk sarees.

Rajappan and Vathsala (1998) studied on 'Splendorous silk of Dharmavaram' and reported that, Dharmavaram sarees are mainly used for special occasions like wedding and festivals. These sarees sell like hot cake and are in great demand in whole of south India, Tamilnadu being the major market.

Material and Methods

III. MATERIAL AND METHODS

The present investigation is designed to study the weaving and other related aspects of "Silk Sarees of Molakalmuru". The methodology adopted for the study is presented under the following headings.

3.1 Location of the study

3.2 Selection of Sample

3.3 Methods used for data collection

3.4 Pilot study

3.5 Data collection

3.6 Variables included in the study

3.7 Classification of Independent variables

3.8 Statistical tools

3.9 Hypothesis

3.1 LOCATION OF THE STUDY

The study was conducted in Molakalmuru taluk of Chitradurga district during the year 1999. According to census 1991, the number of households engaged in weaving were about 500. However for the present study a sample of 120 independent weavers were taken into consideration.

3.2 SELECTION OF SAMPLE

In order to select the sample from the population a list of independent weavers was taken from Block Development Office of

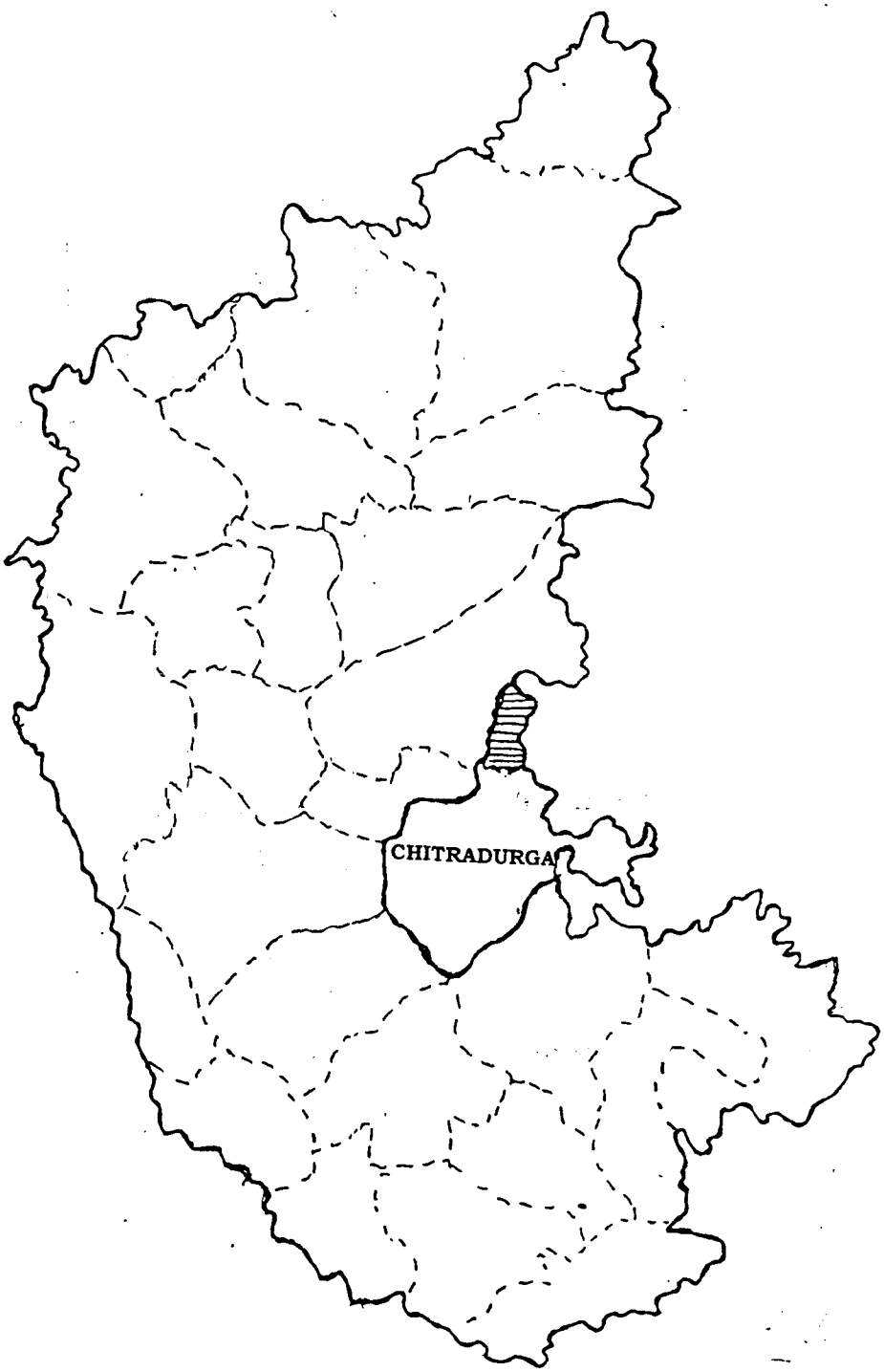


FIG. 1. LOCATION OF MOLAKALMURU TALUK IN KARNATAKA STATE

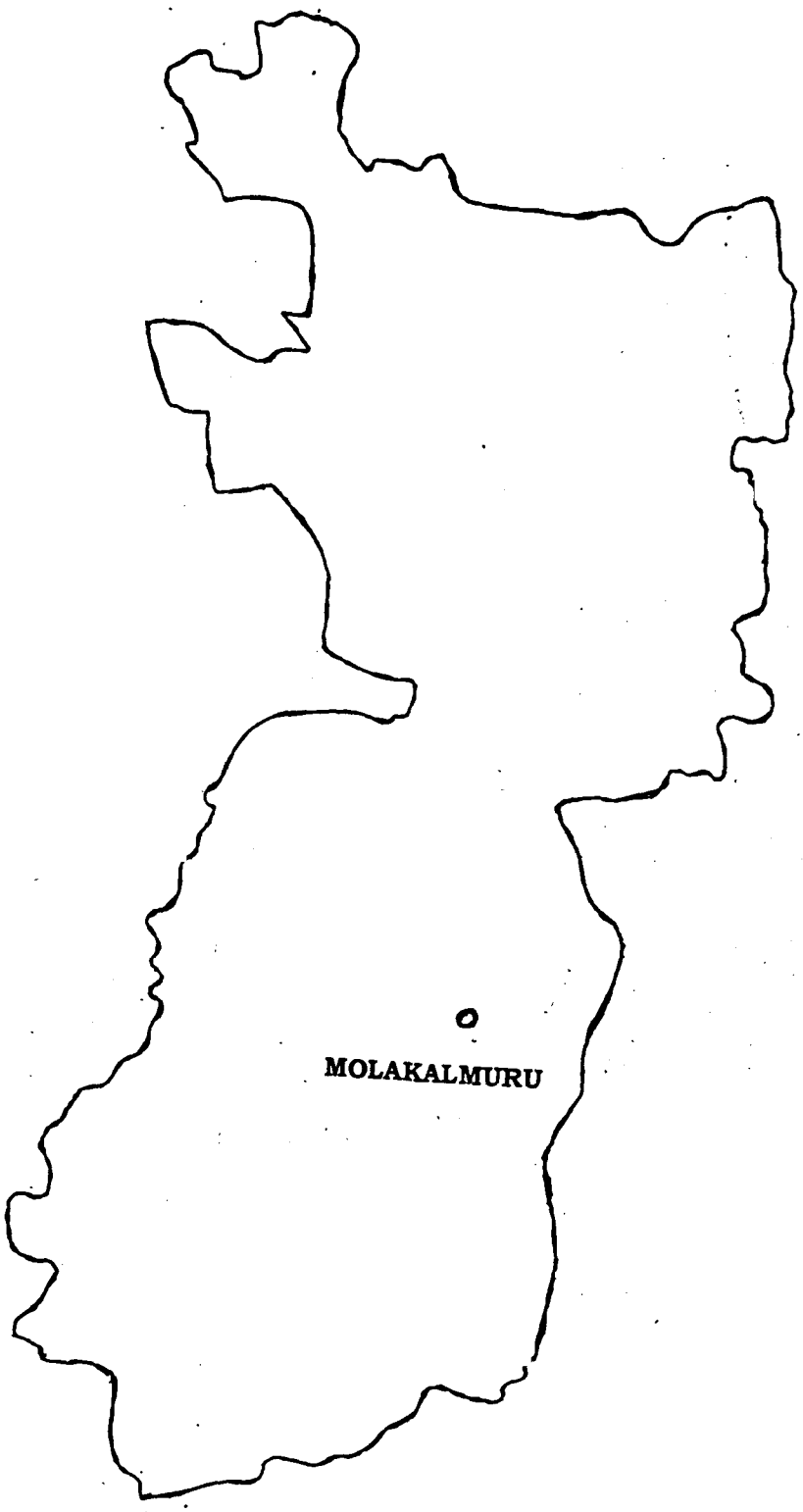


FIG. 2. LOCATION OF MOLAKALMURU

Molakalmuru. Sample was classified according to the number of looms owned by weavers as follows.

1-3 looms → 30 respondents

4-6 looms → 30 respondents

7-9 looms → 30 respondents

10 and above → 30 respondents

The criteria for selection of the sample were.

i) respondent should be the head of family and

ii) the main occupation of the respondent should be hand loom weaving

iii) the respondent should be an independent weaver.

3.3 METHODS USED FOR THE DATA COLLECTION

Random sampling method was resorted for enumerating the required information. A well structured questionnaire was administered to elicit the information from the respondents by personal interview method. The questionnaire was of four parts of which the first part dealt with general information and origin, second part to gather information about weaving techniques, third part to collect information on motifs and types of silk sarees manufactured and finally the last part to analyse the marketing channels.

3.4 PILOT STUDY

Pilot study was conducted in Molakalmuru taluka. Ten weavers were interviewed with the help of well structured questionnaire and were

not included later in the actual data collection. This pilot study was conducted to know the reliability of the questionnaire.

3.5 DATA COLLECTION

Personal interview method was the tool adopted for the collection of data and the respondents were requested to spare their leisure time for the same.

3.6 VARIABLES INCLUDED FOR THE STUDY

3.6.1 Dependent variables

1 Production of Silk sarees.

3.6.2 Independent variables

1 Age

2 Education

3 Family type

4 Family size

5 Income

6 Raw materials

3.7 CLASSIFICATION OF INDEPENDENT VARIABLES

3.7.1 Age of the respondents

Based on the age mentioned by the respondents they were classified into three groups which is similar to the procedure followed by Kumar (1992).

Group	Age
Young	35 and below
Middle age	36-55
Old age	Above 55

3.7.2 Education of the respondents

The respondents were classified into six groups based on educational levels. Education was quantified using the procedure followed by Usharani (1999).

Group	Category
I	Illiterates (Do not know to read and write)
II	Primary (I-IV std)
III	Secondary (V-VII std)
IV	Higher secondary (VIII-X std)
V	P.U.C
VI	Degree and above

3.7.3 Family type

Family type referes to two way classification of family as nuclear and joint. The basic grouping of mates and their children is called nuclear family and collection of more than one nuclear family on the basis of close blood ties and common residence is called Joint family (Dhama and Bhatnagar 1980).

Group	Education levels
I	Nuclear
II	Joint

3.7.4 Size of the family

The respondents were classified based in their family size. The classification was done on the basis of mean and S.D.

Group	Category	Number of members
I	Small	< 3
II	Medium	4-6
III	Large	> 7

3.7.5 Annual family income

The families were grouped into three categories based on annual income levels of the respondents. For the convenience of the study their annual income was classified into three categories based on the concepts of normal distribution (Mean ± 0.425 S.D).

Group	Categories	Income
I	Low income	< 19,969 Rs.
II	Middle income	19,970 – 38.912 Rs.
III	High income	> 38.913 Rs.

3.8 STATISTICAL TOOLS

Statistical analysis was done with the help of percentage analysis frequency distribution mean and standard deviation (S.D).

3.9 HYPOTHESIS

1. The weaving technologies of Molakalmuru Sarees were highly traditional.

2. The profitability of weaving Molakalmuru Sarees is low.

3. Independent variables affect the production of Silk Sarees.

Terms and definitions

Interest on working capital

The interest on working capital was charged at the rate at which banks were advancing short-term loans (15%) for non-agricultural activities.

Interest on fixed capital

The interest on fixed capital (assets such as buildings and looms) was charged at the rate of interest which banks were advancing term loans (15%).

Results

IV. RESULTS

The data collected has been subjected to rigorous statistical analysis and the results are presented relating to production and other related aspects of "Silk Sarees of Molakalmuru" as under.

4.1 Historical background

4.2 General information

4.3 Raw materials

4.4 Weaving technology

4.5 Motifs used

4.6 Colour combinations

4.7 Fabric information

4.8 Production

4.9 Weavers problems

4.10 Merchandising practices

4.11 Economics of different sarees

4.1 HISTORICAL BACKGROUND OF MOLAKALMURU SAREES

Historical background

Molakalmuru a tiny township on the foot of barren stony hills and lose rocks – tracing its origin to the earlier version of "Molagavakallur" or Molagallur meaning the local echoing rock has a hoary past dating back to the Mauryans. Forming part of the Mauryan empire, this area is supposed to have flourished of Kuntala. As rightly observed by the

eminent writer "Rice" Molakalmuru was also an important seat of the government during the region of the Kadambas in the fourth century. In the 10th century a temple for the local deity Lunkesvara was constructed by the Kadamban king. Ajavarma amidst the Lunka -Bhaira hills. It is a remarkable enclosed valley or ravine with no visible outlet at entire end.

Under the Vijayanagar kings in the 15th century Molakalmuru was ruled by the chief of Rayadurga. Historical changes sweeping across the space and through the time saw the tiny fortress of Molakalmuru coming under the administrative control of the local palegars (Nayakas). Bommanayaka, incharge of this place, experiencing heavy financial constraints, gave away this township to Mallapa Nayaka of Hatti (Nayakana hatti) in exchange for cattle. And in 1777, Haidar Ali annexed the fort to Mysore with some resistance from the local palegar.

It is reported that they used to pour oil and ragi on the wall when the enemy tried to scale the fort. In the process, the enemy soliders broke their knees to reinforce the hidden meaning in the name Molakalmuru. The meaning of the word "Molakalmuru" in kannada is "break the knee". Later on it came under the jurisdiction of the British administration.

Social aspects

The average annual rainfall, recording 50 cm in Molakalmuru taluk has converted it into an eternally drought prone taluk in the state. Deep rooted tradition and clearly spelt out caste system with its well defined customs and beliefs mark the social mosaic. Nearly 75 per cent of the

population is below the poverty line. Acceptance of economic poverty has resulted in the age-old beliefs and social customs political dominance over the centuries held by the palegars is pronounced in majority community of Nayakas known as Myasanayakas, a wearing tribes.

Lack of heavy rains has also ensured the weaving operations round the year. There are very few possibilities for prosperous industrial establishment due to non-availability of raw material and lack of effective communication system for profitable marketing. The only option left for the locals is to bring raw materials from outside and return to the market outside the finished goods and there by in the process. Make a small margin of profit for their livelihood. And deft hand work and rhythamic peddling by the local padmasalies and swakulasalies workers in particular has made silk weaving a veritable commence over the centuries. Economic activity is immediately reflected in the weaving profession followed mainly by padmasalies and swakulasalies.

True professionals

i) Padmasales : As observed by Hayavadana rao his gazetteer and rightly refered to by Thurston and Rangachar in their "Castes and tribes of south India", the word sale derives from the sanskrit salika a weaver. The sales are divided into two main endogamous sections padma or lotus and pattu or silk. In the beginning pattusales woven super fine clothes and padamasales coarse clothes.

Moving from the Andhra regions, the padmasales have not served their root connections in Telugu culture. Speaking Telagu though largely

influenced by kannada, they have retained most of their cultural traits in matters of their social customs and beliefs. They try to follow the tenets as laid down for their ancestors in the east. Their house names like Jinka, Guram, Varada, Basapathi, Devarakonda, Kanaka are common in Andhra Pradesh. Marriage and death customs are still Andhra oriented. Most of them are vaishnavites worshipping Venkateswara and their caste deity Markandiya and Bhavana rishi.

ii) Swakulasales: Swakulasales are not only worthy foils but also able comrades-in-arm to the padmsales in weaving trade at Molakalmuru coming from the southern parts of Maharashtra via, Belgaum, Hubli and Bijapur, swakulsales have retained all their daily routines speaking Marathi though, largely influenced by kannada swakulsales are saivaites. They worship regularly Vittoba of Pandharapura. They are also known as "Savvase" or "Savvaseru". Jihvesvara religious head is in Irani in Harihar Taluk. Their endogamous steps names include Geekwadkamble, bolade, Sarode, Divate etc. a clear spill over from the Maharashtrian culture. And also in their marriage and death customs they follow the typical Maharashtra culture.

In the beginning they wove coarse cotton clothes sometimes back they switched over to the interweaving of cotton and silk. Since the returns were meagre in these textures and also to fulfill the changing social demands they switched over to silk saree weaving deriving the recent decades. Now more or less only silk saree weaving is the major activity.

4.2 GENERAL INFORMATION

The general information includes the distribution of weavers based on their age, education, caste, size type and annual income of the family and choosing the profession.

4.2.1 Age

The classification of respondents based on age is presented in Table 4.1 and Fig. 3 revealed that majority of the weavers belonged to middle age (60.83%) and 30.83 per cent of the weavers belonged to young age followed by old age (8.34%).

4.2.2 Education

As indicated in Table 4.2 and Fig. 4, majority of the weavers had education upto higher secondary (30.8%) and 21.70 per cent of the weavers were illiterates. About 16.66 per cent of the weavers studied upto PUC and degree respectively, followed by secondary (9.16%). It was observed that very meagre per cent of the weavers had education upto primary (5%).

4.2.3 Caste

It is observed from Table 4.3, that majority of the weavers belonged to padmasali caste (62.5%). About 37.5 per cent of the weavers belonged to swakulsali caste.

4.2.4 Size of the family

The distribution of weavers according to the size of the family has been presented in the Table 4.4 and Fig. 5 revealed that majority of the

Table 4.1. Distribution of the weavers based on their age

N = 120

Sl. No.	Age	Number of respondents
1.	Young age	37 (30.83)
2.	Middle age	73 (60.83)
3.	Old age	10 (08.33)

Note: Figures in parentheses indicate percentages

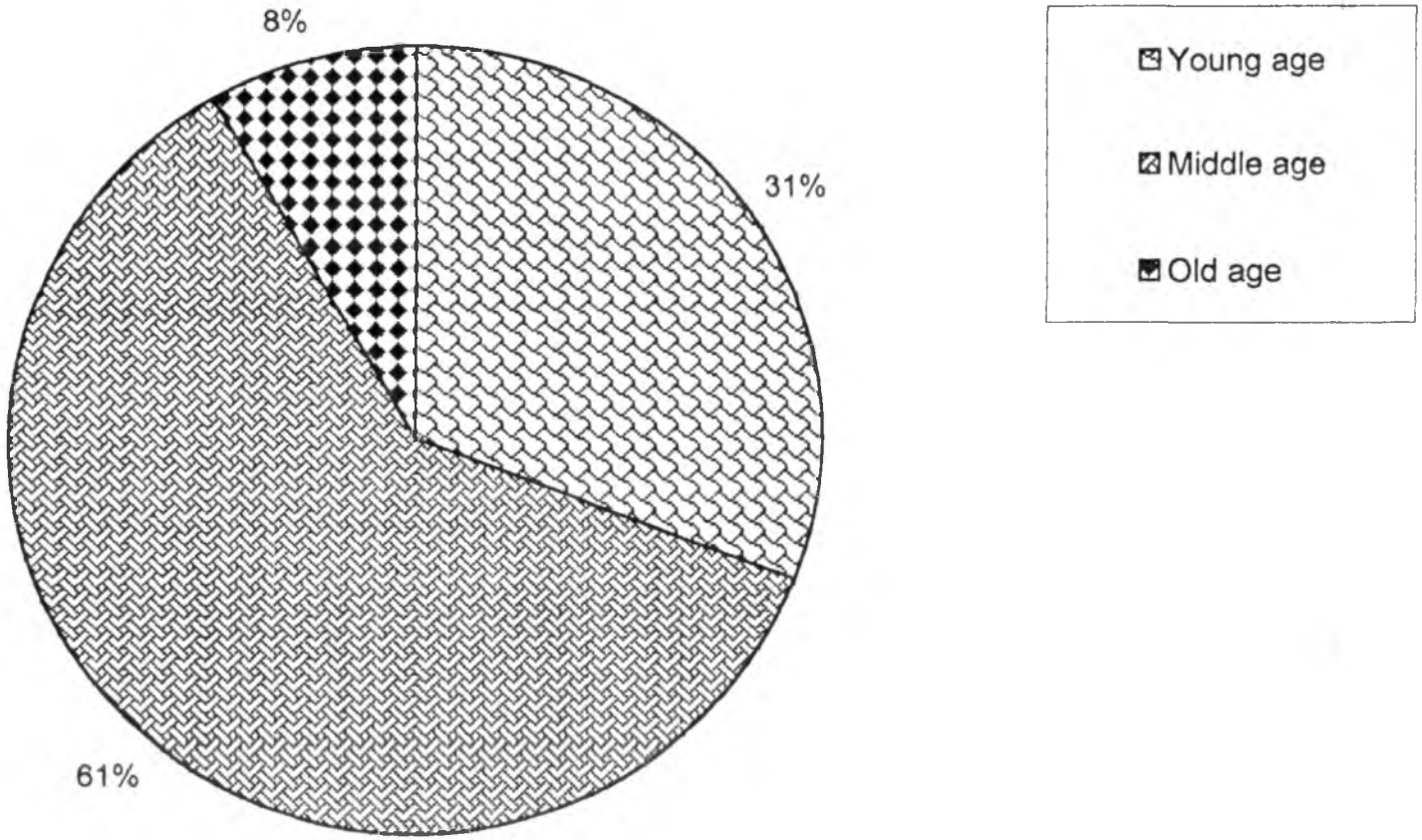


Fig. 3. Distribution of the weavers based on their age

Table 4.2. Distribution of the weavers based on their educational level

N = 120

Sl. No.	Education	Number of respondents
1.	Illiterates	26 (21.70)
2.	Primary (I-IV std)	6 (05.00)
3.	Secondary (V-VII std)	11 (09.16)
4.	Higher secondary (VIII – X std)	37 (30.82)
5.	P.U.C	20 (16.66)
6.	Degree and above	20 (16.66)

Note: Figures in parentheses indicate percentages.

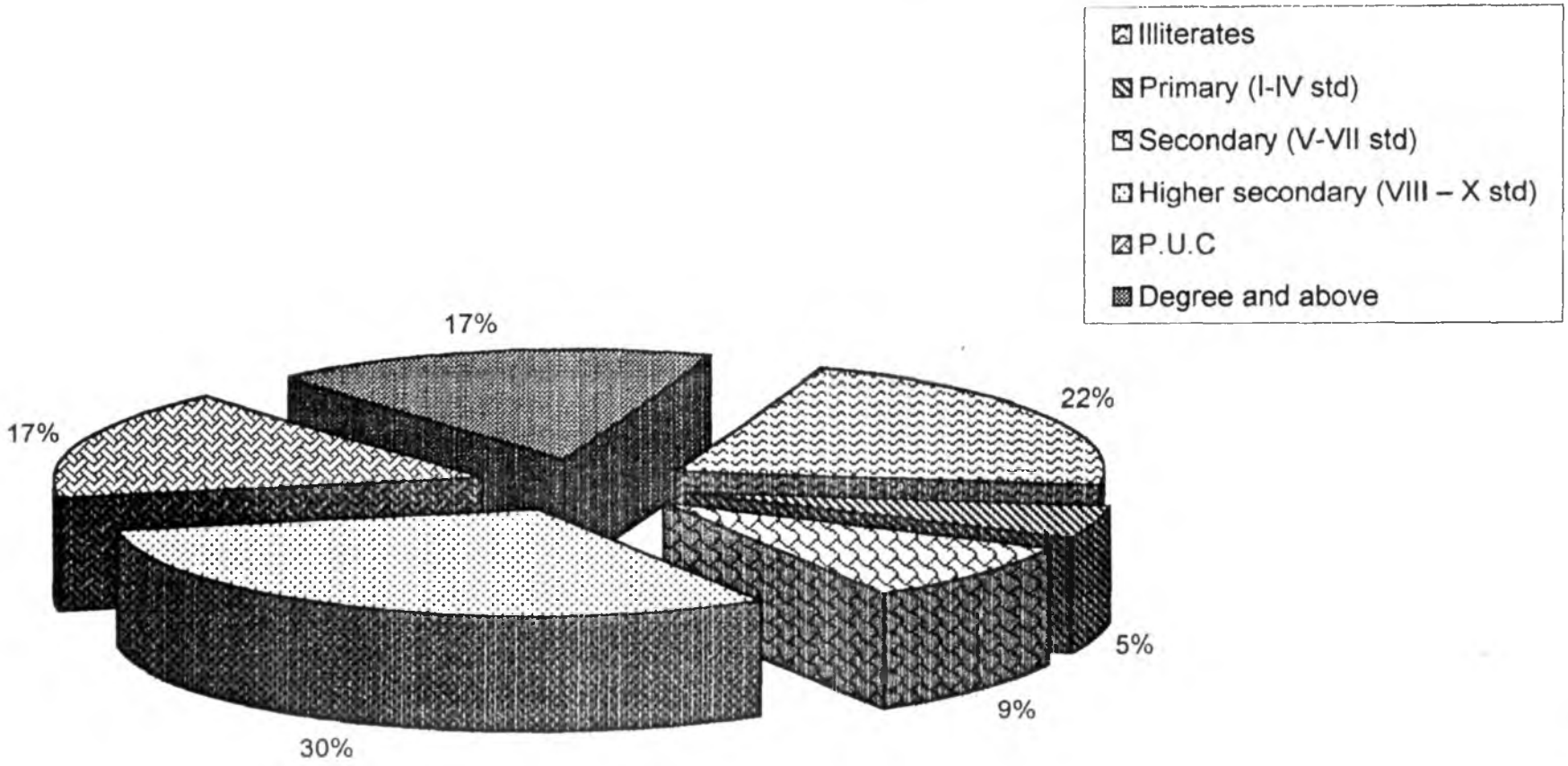


Fig. 4. Distribution of the weavers based on their educational level

Table 4.3. Distribution of the weavers based on their caste

N = 120

Sl. No.	Caste	Number of respondents
1.	Padmasali	75 (62.50)
2.	Swakulsali	45 (37.50)

Note: Figures in parentheses indicate percentages.

Table 4.4. Distribution of weavers based on their family size

N = 120

Sl. No.	Family size	Number of Respondents
1.	Small (<3)	12 (10.00)
2.	Medium (4-6)	55 (45.83)
3.	Large (>7)	53 (44.17)

Note: Figures in parentheses indicate percentages.

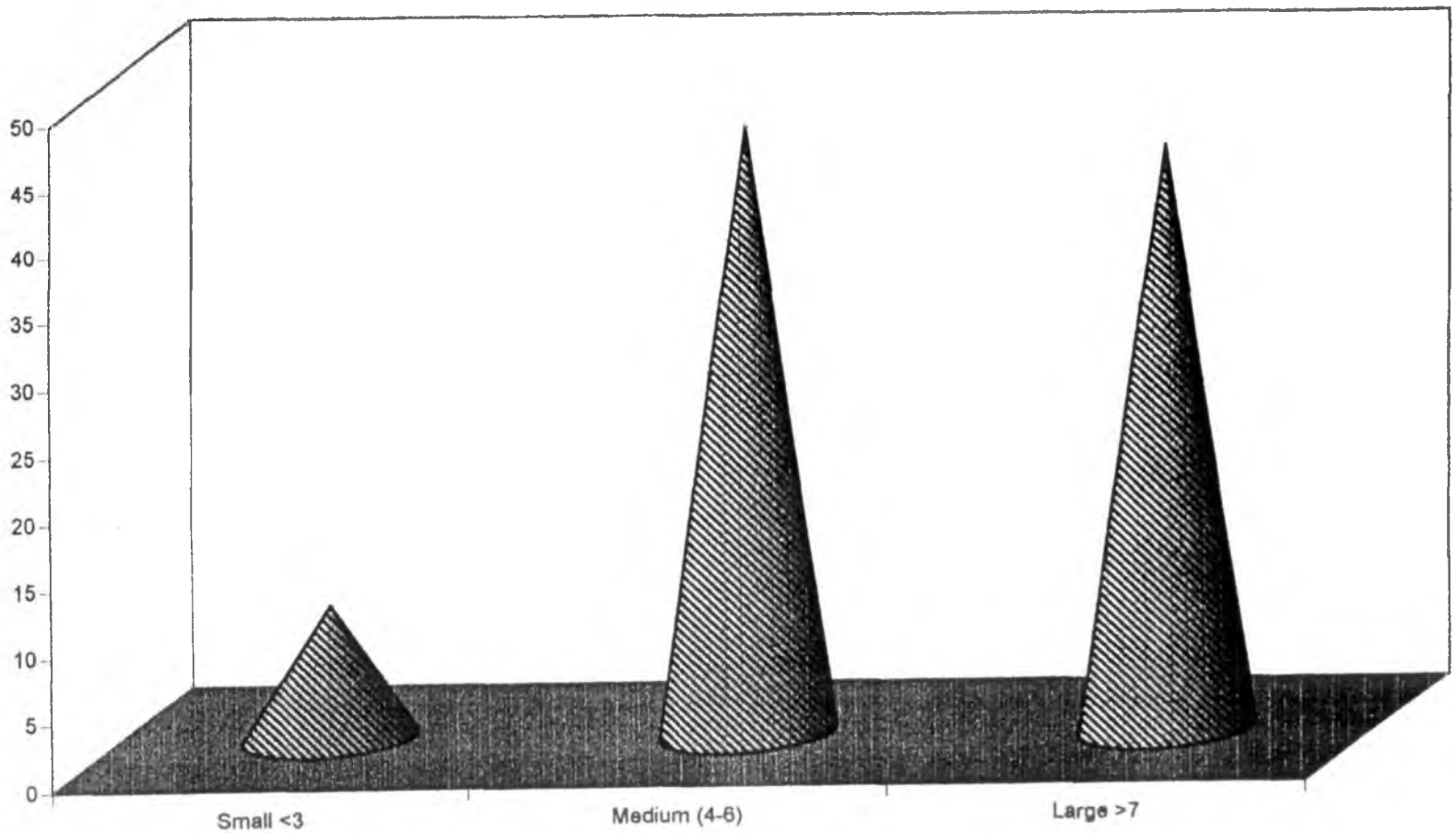


Fig. 5. Distribution of the weavers based on their family size

weavers belonged to medium family size (45.83%) followed by large family size (44.17%). Relatively few of them (10%) belonged to small family size.

4.2.5 Type of family

From Table 4.5 it is clear that majority of the weavers belonged to nuclear family (69.17%) and about 30.83 per cent of them belonged to the joint family.

4.2.6 Income of the family

It is obvious from Table 4.6 and Fig. 6, that majority of the weavers fell in the middle income group (45.83%) followed by high income group (27.50%) and low income group (26.67%).

4.2.7 Choosing this profession

The weaving skill has been acquired through hereditary or through other means Table 4.7 depict that majority of the weavers selected weaving as a profession because of hereditary (85%) followed by first generation (9.17%). Very few per cent of the weavers selected weaving on their own interest (2.5%) and training (3.33%).

4.3 RAW MATERIALS

For producing any products raw material plays an essential role. The raw material commonly used in the production of sarees are filature silk, charaka silk and zari. However the yarn type, yarn count, turns per inch, amount of silk, cost of raw materials and procurement of raw

Table 4.5. Distribution of the weavers based on their family type

N = 120

Sl. No.	Family type	Number of respondents
1.	Nuclear	83 (69.17)
2.	Joint	37 (30.83)

Note: Figures in parentheses indicate percentages.

Table 4.6. Distribution of the weavers based on the annual income of the family

N = 120

Sl. No.	Annual income (Rs.)	Number of respondents
1.	Low income (<19.969)	32 (26.67)
2.	Middle income (19,970-38,912)	55 (45.83)
3.	High income (>38,913)	33 (27.50)

Note: Figures in parentheses indicate percentages.

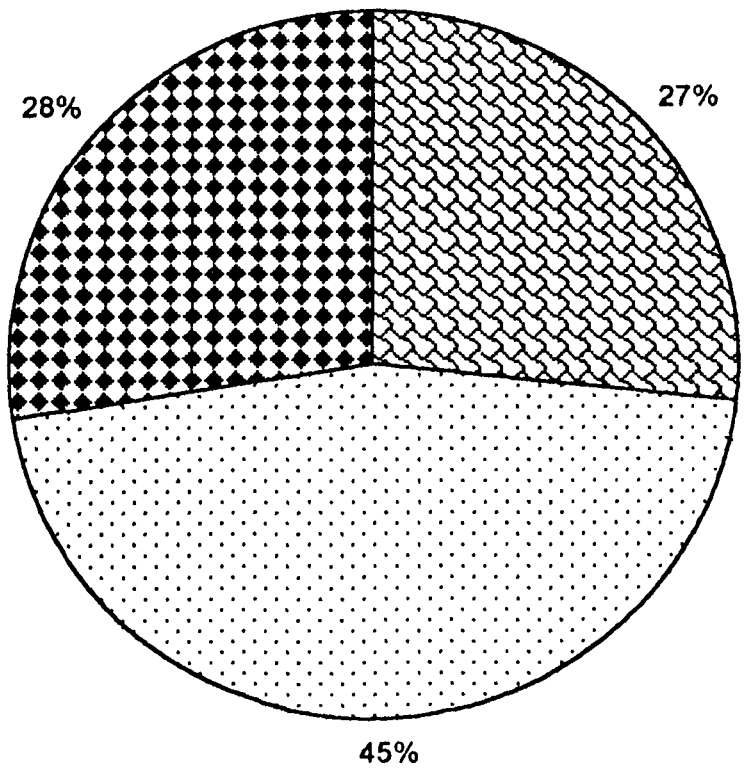


Fig. 6. Distribution of the weavers based on the annual income of the family

Table 4.7. Distribution of the weavers based on their preferences for choosing weaving as a profession

N = 120

Sl. No.	Preferences	Number of respondents
1.	Hereditory	102 (85.00)
2.	Forefather occupation	11 (09.17)
3.	Training	4 (03.33)
4.	Interest	3 (02.50)
5.	Migration	-
6.	Job opportunity	-

Note: Figures in parentheses indicate percentages.

material remained almost same irrespective of type of sarees. This aspect includes raw materials details, frequency of purchasing the raw material, problems faced while procuring the raw materials and zari information.

4.3.1 Raw material details

The Molakalmuru sarees are unique in feature as evident from Table 4.8. All the weavers followed more or less same technique for weaving the sarees. Molakalmuru sarees woven with a standard quality of mulberry silk of deniar 20/22 2 ply filature silk as a warp and 18/20 or 20/22 3 or 4 ply medium to coarse quality of charaka silk was used for weft. Warp yarns of 108 tpi of fine quality filature silk and weft of 20 tpi of medium to coarse quality charaka silk was used. About 200 gms of filature silk was required for warp and 400 gms charaka silk for weft. The cost per kg of filature silk varied from Rs.1700-1800 and charaka silk Rs.1350-1400. The weavers purchased silk yarns from Bangalore, Rayadurga and local dealers. Local dealers purchased silk from Bangalore and Rayadurga.

4.3.2 Frequency of purchasing the raw materials

The frequency of raw material purchases has been presented in Table 4.9. Majority of the weavers purchased charaka and filature weekly (41.66%) each, and for zari monthly (36.66%) followed by charaka and filature fortnightly (37.50%) and for zari bimonthly (30.83%). About 20.83 per cent of the weavers purchased charaka and filature monthly, for zari fortnightly (20.83%). Only few per cent of the weavers purchased zari weekly (16.66%).

Table 4.8. Raw material requirement per saree

Sl. No.	Raw material details	Type used
1.	**Direction**	
a)	Warp	2 ply filature silk
b)	Weft	3 or 4 ply charaka silk
2.	**Denier**	
a)	Filature silk	20/22 denier
b)	Charaka silk	18/20 or 20/22 denier
3.	**Turns per inch (Tpi)**	
a)	Warp	108
b)	Weft	20
4.	**Amount of silk**	
a)	Warp	200 gms
b)	Weft	400 gms
5.	**Procurement of silk**	Bangalore, Rayadurga and Local dealers

PLATE 1. RAW MATERIALS USED FOR MOLAKALMURU SAREES

Table 4.9. Frequency of purchasing the raw materials by the weavers

N = 120

Sl. No.	Product	Frequency of purchase			
		Weekly	Fortnightly	Monthly	Bimonthly
1.	Filature	50 (41.66)	45 (37.50)	25 (20.84)	-
2.	Charaka	50 (41.66)	45 (37.50)	25 (20.84)	-
3.	Zari	14 (11.66)	25 (20.84)	44 (36.66)	37 (30.84)

Note: Figures in parentheses indicate percentages.

4.3.3 Problems faced while procuring the raw materials

It is evident from the Table 4.10 that majority of the weavers always faced the problem of hike in price of filature (23.33%), charka (30.33%) and zari (46.66%) so far as scarcity is concerned, 10 per cent of the weavers each for filature and charka and 26.66 per cent for zari encounted this problem. About 6.66 per cent, 10 per cent and 13.33 per cent of the weavers faced the problem of untimely supply of filature, charaka and zari respectively. None of them faced the problem for inferior quality of filature, charaka and zari.

Some times the weavers faced the problem of inferior quality of filature, charka (83.33% each) and zari (30%) followed by delay in transportation (40.00 and 53.33%) for filature and charaka respectively and 23.33 per cent for zari. Non-availability of required count was expressed as a problem by 60.00 per cent, 41.66 per cent for filature, charaka respectively. About 53.33, 43.33 and 33.33 per cent of the weavers some time faced the problem of untimely supply, scarcity and hike in price of filature charaka and zari respectively.

It is also clear from the same table that about 70 per cent of the weavers never faced the problem of inferior quality of zari, followed by delay in transportation of filature (53.33%), charka (46.66%) and zari (60%). However, 23.33 per cent of the weavers never faced the problem of hike in price of filature, charaka and zari respectively.

Table 4.10. Distribution of the weavers based on the problems faced while procuring the raw materials

N=120

Sl. No.	Problems faced	Filature			Charka			Zari		
		A	S	N	A	S	N	A	S	N
1.	Untimely supply	8 (06.66)	64 (53.33)	48 (40.00)	12 (10.00)	52 (43.33)	56 (46.66)	16 (18.33)	40 (33.33)	64 (53.33)
2.	Scarcity	12 (10.80)	60 (50.00)	48 (40.00)	12 (10.00)	52 (43.33)	60 (50.00)	32 (26.66)	40 (33.33)	44 (36.66)
3.	Hike in price	28 (23.33)	64 (53.33)	28 (23.33)	40 (30.33)	52 (43.33)	28 (23.33)	56 (46.66)	36 (30.00)	28 (23.33)
4.	Non-availability of required count	8 (06.66)	72 (60.00)	40 (33.33)	-	50 (41.66)	70 (58.34)	-	-	-
5.	Delay in transport	8 (06.66)	48 (40.00)	64 (53.33)	-	64 (53.33)	56 (46.66)	20 (16.66)	28 (23.33)	78 (60.00)
6.	Inferior quality	-	100 (83.33)	20 (16.66)	-	100 (83.33)	20 (16.66)	-	36 (30.00)	84 (70.00)

Note: Figures in parentheses indicate percentages.
Multiple response possible
A = Always, S = Some time, N = Never

4.3.4 Zari information

The gold zari is used to create glittering embossed embellishment which gives a touch of class to the saree. The two popular varieties of gold zari are used in Molakalmuru sarees:

a) Pure gold zari

b) Half-fine gold zari i.e. tested zari

Composition

The composition of the two varieties are discussed here with.

1. **Pure gold zari**: The center core of pure zari is made up of degummed twisted mulberry silk, over which is wound silver lametta (thin foils) and is electroplated in pure gold solution.

2. **Half fine gold zari i.e. tested zari** : The center core is twisted degummed mulberry silk on it is wound copper lametta (thin foil) and this is electroplated with pure gold solution.

From the Table 4.11 it is clear that all the sarees i.e. Type-A to Type-J either woven with a pure or tested zari. The amount of zari required for weaving the sarees varied according to the designs used. The cost of the pure silk hand woven saree depended on the quantity of the zari used in it rather than the raw silk used. Two ply threads were used for warp and three ply threads for weft. Type-J saree consumed 120 gms of pure/tested zari. About 180 gms of pure/tested zari was required for both Type-A and Type-F sarees. Type-G saree consumed 150 gms of pure

Table 4.11. Amount of zari used for different types of Molakamuru sarees

Sl. No.	Saree type	Specifications	Amount of zari (gms)
1.	Type – A saree	Self plain with rich pallu	180
2.	Type – B saree	Self buttas with rich pallu	240
3.	Type – C saree	Self checks with rich pallu.	360
4.	Type – D saree	Self tissue with rich pallu	360
5.	Type – E saree	Self tissue buttas with rich pallu	360
6.	Type – F saree	Gatti border plain saree	180
7.	Type – G saree	Gatti border checks saree	150
8.	Type – H saree	Gatti border tissue saree	360
9.	Type – I saree	Varalaxmi saree	240
10.	Type – J saree	Patti saree	120

PLATE 2. WRAPING OF ZARI THREAD

PLATE 3. PIRN WINDING OF ZARI THREAD

zari. For Type-B and Type-I sarees 240 gms pure/tested zari was used. About 360 gms of pure/tested zari was required for Type-C, Type-D, Type-E and Type-H sarees respectively. Most of the time zari thread was purchased from Surat. The cost of pure zari ranged from Rs.1,200-2,500 and for tested zari it was Rs.350-400.

4.4 WEAVING TECHNOLOGY

Weaving technology includes preparatory processes, weaving process, post loom processes and types of looms are discussed here with.

4.4.1 Preparatory process (Pre-loom processes)

The word preparatory here signifies the number of processes that are being done before weaving. When the weavers purchase silk yarn from local dealers i.e. master weaver or any other source, which has to under go the following preliminary processes.

A – Warp preparation

B – Degumming

C – Dyeing

D – Weft preparation

A – Warp preparation

Silk yarn in the form of "Hank" was transfered to creel section of the reeling machine. Silk yarn in the form of hanks were wound onto the wooden bobbins or plastic bobbins.

PLATE 4. BOBBIN WINDING

PLATE 5. DOUBLING OF THE SILK YARN

i) Doubling : The wound bobbins were placed in a creel section of the doubling machine according to the type of ply required for the weaving. The yarn was plied into two or more.

During this operation a small amount of twist was inserted by traverse and wound on to the cones. These cones were taken to creel section of the warping machine.

ii) Warping : The individual yarns from each cone were taken through the tensioner and leasing section and was wound on a warping wheel having diameter of 6 yards and width of one yard. It is a manually operated machine and only one person is required to operate the machine. Fifty-eight yards is sufficient for nine sarees, approximately it takes two hours for winding 58 yards length of warp. The wound yarn was then removed from the warp wheel and made into a hank form. Ready hanks were further taken for degumming and dyeing processes.

B – Degumming

The natural silk has to be purified before it takes any colour. The silk needs to be softened by removal of sericingum and other impurities, by degumming process. The process also imparts lusture to the yarn.

The process was carried out using the following ingredients.

1) Soda – 50-120 gms per kg silk yarn
2) Tinopal – 10 gms
3) Soap (501 bar soap) – 20 gms per kg silk yarn
4) Temperature of bath – boiling point

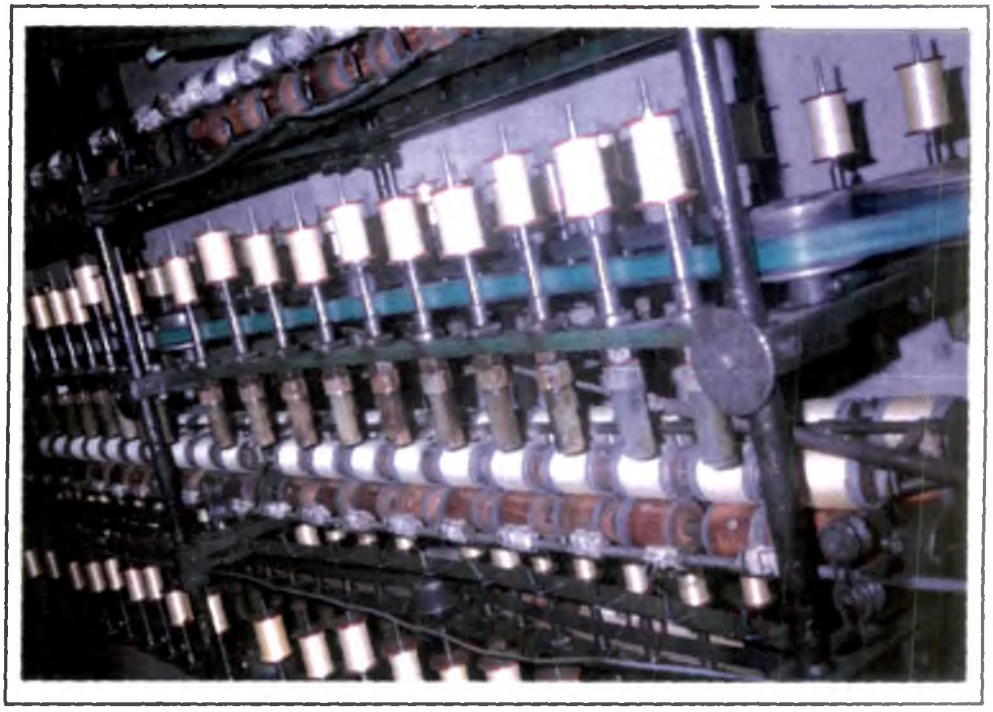


PLATE 6. TWISTING OF THE SILK YARN

PLATE 7. WARPING

5) M:L:R – 1:30

6) Time – 15-30 minutes

After treating the sample in the degumming bath it was dipped in cold water successively four times and squeezed it thoroughly. About 25 per cent weight loss would occur during degumming process of silk.

C. Dye recipe

Sl. No.	Acid dye	Direct dye
1.	Dye stuff	Dye stuff
2.	10 per cent globour salt	30 per cent globour salt
3.	2 per cent acetic acid	20 per cent acetic acid
4.	M:L:R 1:30	M:L:R 1:30
5.	Temperature 90-95°C	Temperature 90°C
6.	Time – 60-90 minutes	Time – 45-60 minutes

The dye bath was set with required quantity of water, 2 per cent of glacial acetic acid and 10 per cent globular salt. The dissolved dye paste was then added to dye bath and the temperature was raised. The degummed silk hanks were suspended in smooth steel rods and immersed in dye both. The temperature was raised during 60 minutes to 90-95°C and dyeing was carried out at this temperature for 30 minutes. If the dye was not exhausted within the stipulated period of dyeing time, 1 to 2 per cent of acetic acid was added and the sample was treated for another 10-15 minutes. After dyeing the sample was rinsed thoroughly in cold water squeezed and shade dried.

Note : Same acid dyeing procedure was followed for dyeing the silk yarn with direct dye.

PLATE 8. DYEING OF SILK YARN

PLATE 9. SHADE DRYING OF DYED SILK YARN

D – Preparation of weft

The dyed silk hank was placed on the swift. During this operation the silk yarn was wound on a "Perrivatam" (A cone made from bamboo sticks). This operation is called as "Thoduvadu" (in kannada). Three perrivatams were required to make one single silk yarn which was wound on small pirn with the help of ordinary charaka. The whole operation was done manually. The ready pirns were used for picking operation.

4.4.2 a) pre weaving processes

Saree weaving always commences with pallu making. Each of new warp was joined to corresponding warp thread of previous saree. Two warp threads were passed through each dent and were treated as single. Twisting was the technique employed to join the ends together with the help of gum. This operation is called as "Kechchuvadu" (piece work). Simultaneously border zari threads were also joined. Female members of the family were exclusively employed for this process. The new warp was gaited known as dressing of the loom. A certain length of surplus ball warp was extended behind the loom according to their desired length and conveniently divided into four or six sections and were tied it to the bamboo stave called as "Madukolu" and in turn to the peg posted in the ground called "Mudagootum". The warp sheet uniformly spread according to the correct width of the cloth without any twists and overlapping of the threads and the lease rods were moved to level the warp threads, in order to complete the preparation i.e. gating and the loom was set for weaving.

PLATE 10. SWIFT WINDING

PLATE 11. PIRN WINDING OF SILK YARN

PLATE 12. PIECE WORK

PLATE 13. WARPING OF THE SAREE

b) Weaving process

Mainly two types of sarees were woven by the Molkalmuru weavers.

1) Self saree weaving (Lattu)

Same colour of weft thread was used as that of warp for weaving body, border and pallu of self sarees. Fly shuttle with dobby and jacquard attached pit looms were used. The pallu includes intricate designs (Computer designs). Body designs were controlled by jacquard while border designs were controlled by dobby mechanism.

a) Primary motions

Shedding was done by pressing the treadle a pick was released as the shuttle moves through the shed across the width of the cloth. The freshly inserted pick was beaten to the fell of the cloth by batten and immediately the other treadle was pressed to change the shed. After inserting 2 ground picks a separate treadle was operated which was connected to jacquard mechanism. At the same time a selected harness were raised and then zari was inserted for producing extra weft figures and the same procedure was repeated till the end.

2) Contrast saree weaving (Kuttu)

Border and body of the saree have different colour combination. For weaving these sarees throw shuttle with dobby attached pit looms were used. Pallu portion was dyed of border colour. Pallu of the saree includes geometrical designs and simple motifs and was controlled by dobby mechanism.

PLATE 14. SELF SAREE WEAVING WITH FLY SHUTTLE

PLATE 15. CONTRAST SAREE WEAVING WITH THROW SHUTTLE

a) Primary motion

The most interesting technique which was developed in the Molakalmuru was the weaving of solid border i.e. interlocking system, using three shuttles. The two side shuttles carried coloured threads for the border. Center shuttle carried the coloured thread of the body. In the beginning the shuttle on the right side was thrown by hand through the shed created in the right border the thread was intertwined with the weft thread to the body and placed on the woven section. The second shuttle was thrown right across to the other border where the thread of the third shuttle was intertwined with weft thread of the body and thrown across the border. The shed was closed and the operation was repeated.

b) Secondary motions

The procedure followed for secondary motion remained same for self and contrast sarees weaving.

Take-up motion

The woven cloth was taken up and wound it to the cloth roller (doni) and the process was called take-up motion.

Let-off-motion

The warp sheet (ball warp) was released as and when from warp roller (Madukolu) and process was called let-off-motion.

After weaving the saree upto one foot length a royal gum in the form of past was applied on the woven part of the saree uniformly.

The main purpose of applying the gum was

1) To over come the fabric fault

2) To give strength and stiffness

Cutting and doffing of the saree

After weaving the ready length of the saree an extra length of approximately one inch was woven and was separated from the cloth beam with the help of knife. This helped to prevent the slippage of yarns through the dents. Extra length of six inch of warp sheet was left at the back of the harness to which the new warp threads were joined.

4.4.3 Post loom processes

The woven saree was shade dried along with cloth beam (doni) and then separated from doni. The saree was examined for flows. Folded and packed neatly.

4.4.4 Types of looms employed

1. Throw shuttle pit loom with dobby attachment.

2. Fly shuttle pit loom with dobby and jacquard attachment

PLATE 16. SHADE DRYING OF WOVEN SAREE

PLATE 17. FOLDING OF THE SAREE

Dimension of looms

Loom Depth = 36"

Width = 40"

Length = 60"

Cost of throw shutstle pit loom = Rs.5000 to 10,000.

Cost of fly shuttle pit loom = Rs.12,000 to 15,000.

Dobby mechanism

Dobby mechanism was used to construct designs that can't be produced by plain, twill and satin weaves. The designs were simple, limited in size and mostly geometrical inform. Though dobbies were generally used for the purpose of controlling extra warp threads and was also used to produce extra warp figures on the sarees.

The dobby mechanism consists of a number of wooden levers A. Central at B which were resting upon the barrel C. The harness D was tied at the other end of the jack lever A. The octagonal barrel or cylinder was sometimes pegged permanently for small designs or maybe grooved to hold a chain composed of "lags" equal to the number of picks in a repeat of the design called a "lattice". When a pegged lag F comes under jack lever, the latter along with the harness D and its warp threads was raised to form the upper line of the shed. The cylinder was rotated each pick or every two picks by a pushing lever E actuated by a treadle or heald shaft with the help of cord G. The pegs in a lag lift a number of jack-levers

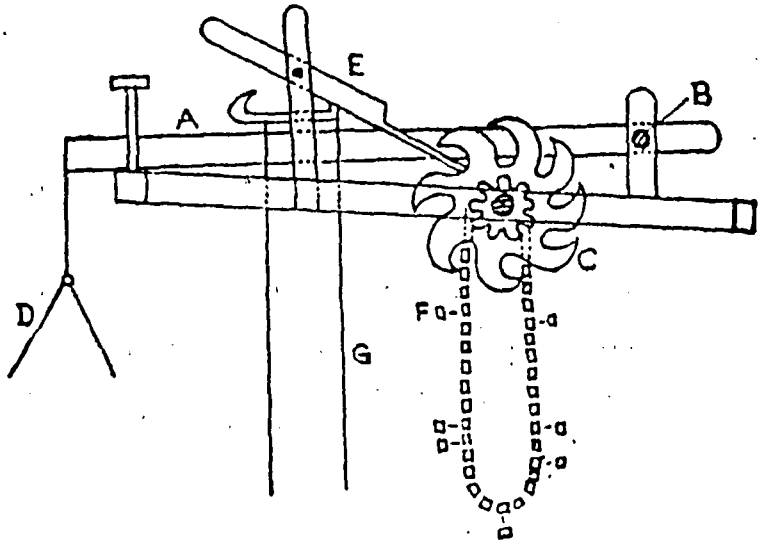


FIG. 7. DOBBY MECHANISM

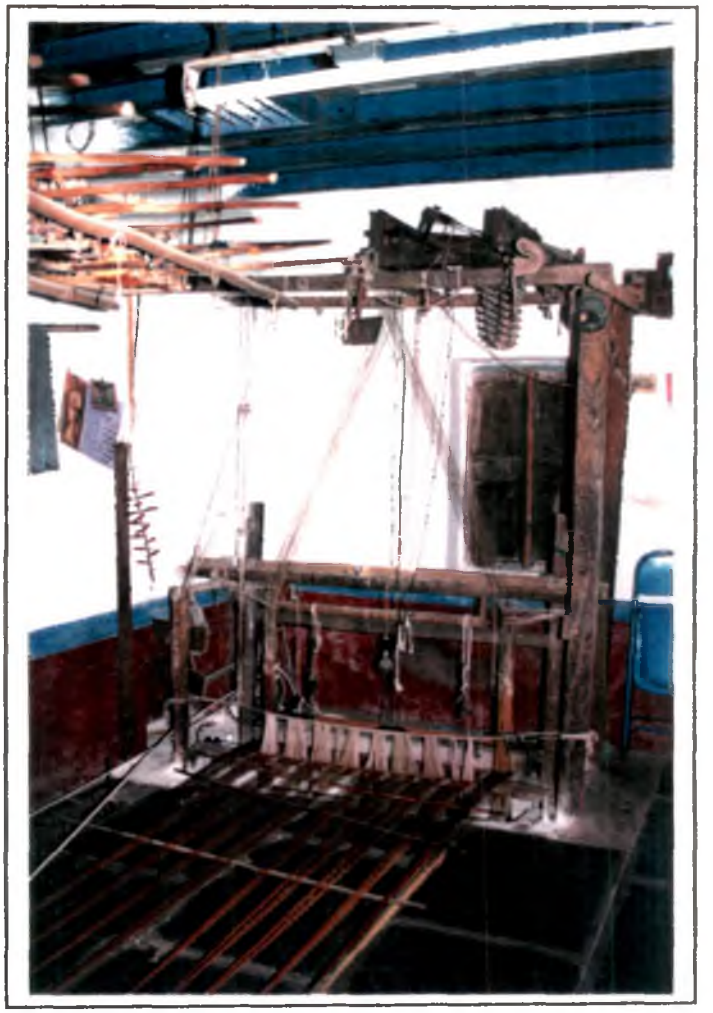


PLATE 18. THROW SHUTTLE PIT LOOM WITH DOBBY ATTECHMENT

according to the peg plan of the design. A detent and a flat spring prevent the barrel from rotating more than one tooth at a time. The jack lever and harnesses were lowered by dead-weights, known as lingoes. Which were knotted sufficiently below the level of the warp. Each harness has a lingoes or cylindrical dead weights at the bottom. In this type of dobby the kind of shed produced was called "Semi-open", as the jack lever coming down a little goes up again for then next pick.

Jacquard mechanisms

The jacquard was a shedding device placed on the top of the loom to produce large figure patterns by using a very large number of warp threads separately, by means of harness cards, hooks and needles. It was the finest of all machines for making the figured woven fabrics, that have ever been invented and for superior in capacity to a dobby. Each hook in a jacquard represents a single heald.

The principle of jacquard shedding was that each mail-eye was connected separately to its hook by means of a harness. If there was perporation in the pattern card, the hook was left over the knife and when the knife went up, it carried the hook, the harness and the mail-eye with the warp end to form the top line of shed. Again, if there was no perporation the pattern card the hook was left down and the warp end forms the bottom line of shed. This bottom line of warp was maintained or was produced by cylindrical dead weights. The lifting handle was connected to the separate treadle by rope connection. The operation of the

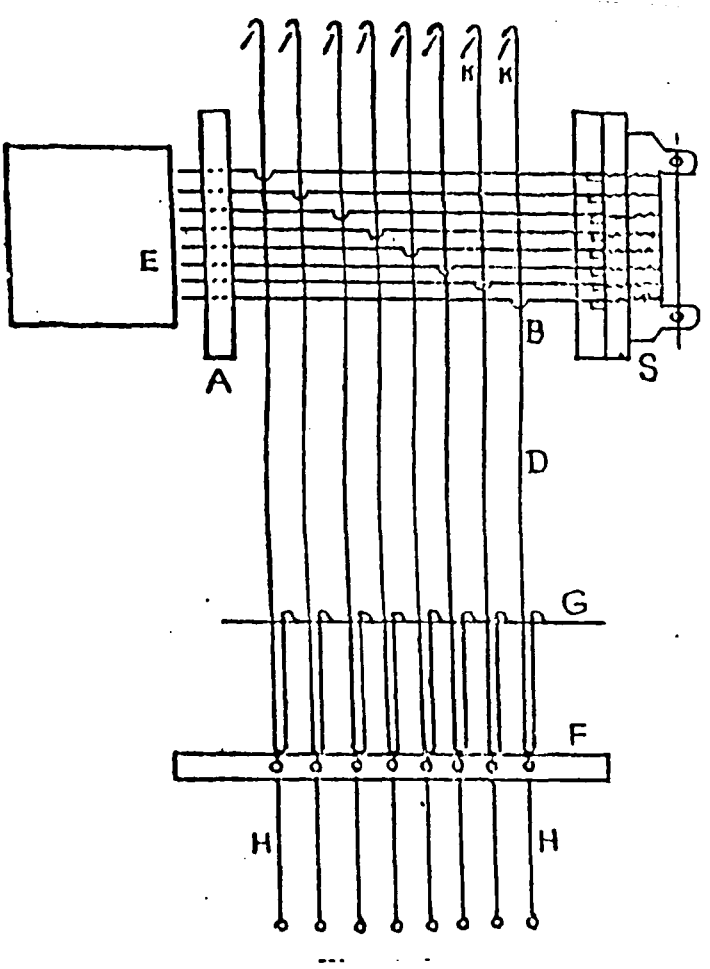


FIG. 8. JACQUARD MECHANISM

A. Needle board
B. Bottom needle
D. Hook
E. Cylinder
F. Bottom board
G. Grate
H. Tug cards
K. Knives
S. Spring box

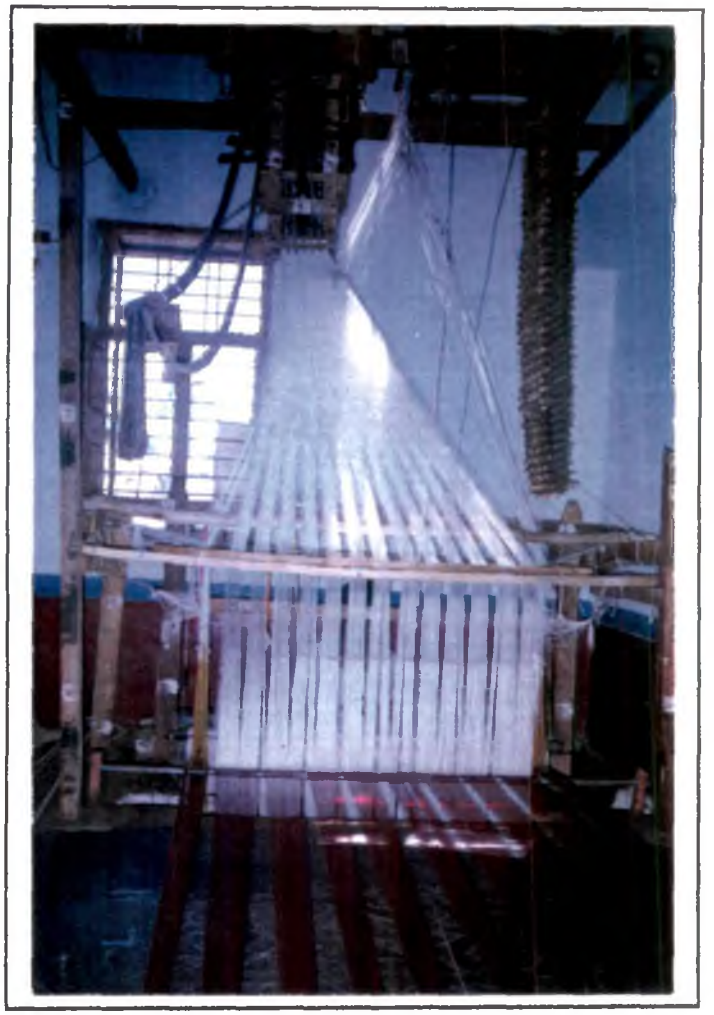


PLATE 19. FLY SHUTTLE PIT LOOM WITH DOBBY AND JACQUARD MACHANISM

jacquard was done for every two picks when the weaver pressed the tradle the particular hooks along with ends were lifted. Thus two ground picks and one extra weft (zari thread) in the proportion of 2:1 were insertions successively till the completion of design.

4.5 MOTIFS USED

4.5.1 Motifs employed on different types of sarees

The motifs used were gallery of designs of various sizes and shapes which were exotic, exquisite and sturdy. Geometrical designs, stylized dots, rudrakshi beads and other decorative floral patterns, various sizes and stylized pattern of mango, peacocks, parrots, hamsa, lotus, temples creeper, diamond, half diamond, pheonix etc. form the motifs.

Although the designs and the methods used were traditional, the weavers and designers tried to keep pace with the changing trend. The expert designers prepared designs on graph paper and then transferred to the harness of the looms.

Sarees of Molakalmuru were named after the motifs used in the sarees. This aspect includes motifs employed an different sarees, source of obtaining the designs and factors considered while designing the motifs.

4.5.1 Motifs employed on different types of sarees

Table 4.12 showed that sarees of Molakalmuru were named after their motifs employed on the body, border and pallu. Each saree has its

own beauty and called by different names. Type-A saree (self plain with rich pallu) had a plain body with a border having motifs of peacock, mango, deepa, venki and banaras (diagonal lines). Continuous intricate designs were used to enhance the richness of the pallu.

Type-B saree (self butta with rich pallu) body was woven with peacock, mango buttas, small leaf, flower and rudrakshi beads, lotus, peacock, parrots banaras and venki were the border motifs. Continuous intricate designs were used to adorn the pallu.

Type-C saree (self checks with rich pallu) had a check and buttas body, with a border having peacock, bananas and venki motifs and the pallu with intricate designs (Computer designs).

Type-D saree (self tissue with rich pallu) woven with strips and peacock, deepa, venki and diamond were the border motifs and intricate designs in the pallu.

Type-E saree (self tissue buttas with rich pallu) body was covered with strips with mango buttas and peacock motifs and peacock parrot deepa venki and diamond motifs at the border. A rich effect was obtained by using continuous intricate designs in the pallu.

Type-F saree (Gatti border plain saree) had a plain body, with a border having motifs of rudrakshi, diamond and double venki. Stripes, peacock and mango motifs were employed on either sides of the border of the pallu area.

Type-G saree (Gatti border check saree) was constructed with check body and border covered with motifs of rudrakshi, hamsa, pheonix, venki and banaras (diagonal lines). Stripes and peacock motifs were employed on pallu portion.

Stripes and buttas were employed on body portion of type-H saree (Gatti border tissue saree) with a border having hamsa, peacock, venki and banaras motifs. Stripes peacock and mango motifs were used on pallu portion.

Type-I saree (Varalaxmi) had a stripes with buttas body, border using motifs of diamond, venki and double venki and peacock motifs. Stripes peacock motifs were used to beautify the pallu.

Type-J saree (patti saree) was woven with a plain body with a narrow tape like border with gold zari stripe. Computer designs were employed on the pallu portion.

4.5.2 Source of obtaining the motifs

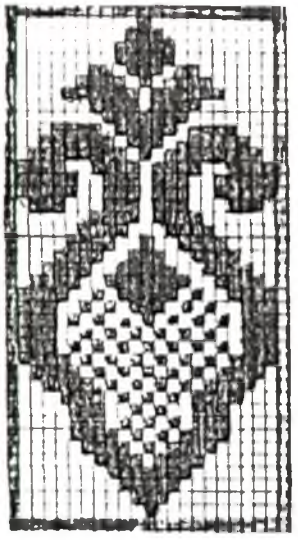
Table 4.13 and Fig. 22 revealed that majority of the weavers obtained their designs from professional designers (74.16%) and followed by master weavers (60.00%). About 16.16 per cent of the weaver learnt from elders. Relatively very few per cent of the weaver obtained their designs from neighbour (10.00%) and friends (8.33%) respectively.

4.5.3 Factors considered while designing the motifs

It is depicted from the Table 4.14 and Fig. 23 that majority of the weavers considered fashion and demand (50%) respectively followed by

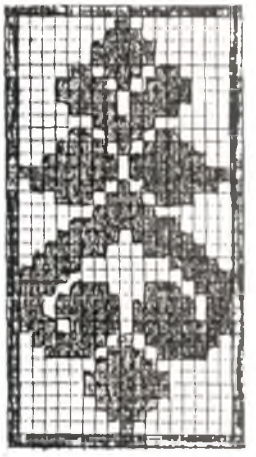
Table 4.12. Motifs employed on different types of sarees

Sl. No.	Saree type	Motifs used		
		Body	Border	Pallu
1.	Type – A saree	Plain	Peacock, mango, deepa, venki, banaras	Intricate designs (Computer pallu)
2.	Type – B saree	Peacock, mango buttas, small leafs, flower, rudrakshi beads, parrots	Peacock, lotus, venki, banaras	Intricate designs (Computer pallu)
3.	Type – C saree	Checks and buttas	Peacock, venki, lotus, banaras	Intricate designs (Computer pallu)
4.	Type – D saree	Stripes	Peacock, deepa, diamond, venki	Intricate designs (Computer pallu)
5.	Type – E saree	Stripe, peacock, mango buttas, parrots	Peacock, deepa, lotus, venki, diamond	Intricate designs (Computer pallu)
6.	Type – F saree	Plain	Rudrakshi, hamsa, diamond, double venki	Stripe, peacock and mango motifs
7.	Type – G saree	Checks and buttas	Rudrakshi, hamsa, pheonix, banaras	Stripes and peacock motifs
8.	Type – H saree	Stripes, peacock, small buttas	Peacock, hamsa, venki, diamond, banaras	Stripes with mango, peacock motifs
9.	Type – I saree	Stripes, peacock, mango buttas	Peacock, diamond, venki, double venki	Stripes and peacock motifs
10.	Type – J saree	Plain	Intricate designs	Intricate designs (Computer pallu)

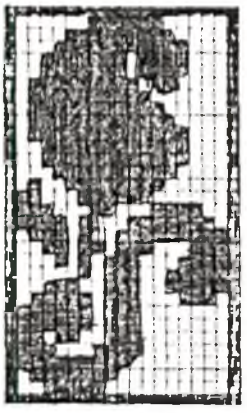


E. KALASHA

F. MANGO

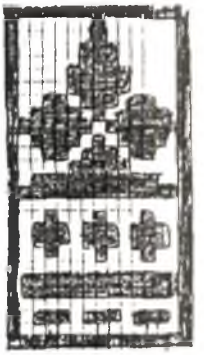


G. KALASHA



H. MANGO

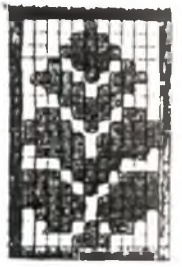
I. CHARIOT



J. CHARIOT

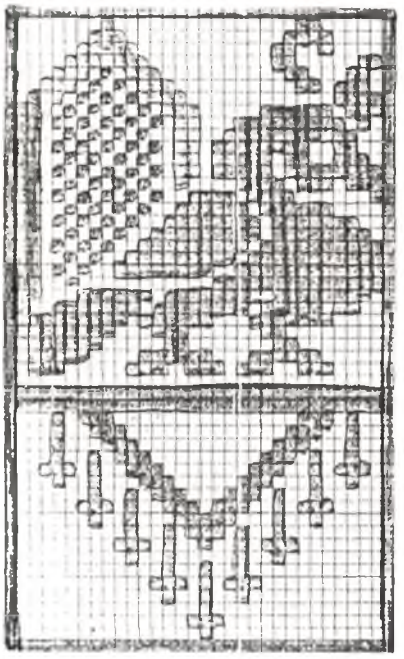
K. LEAF

L. FLOWER

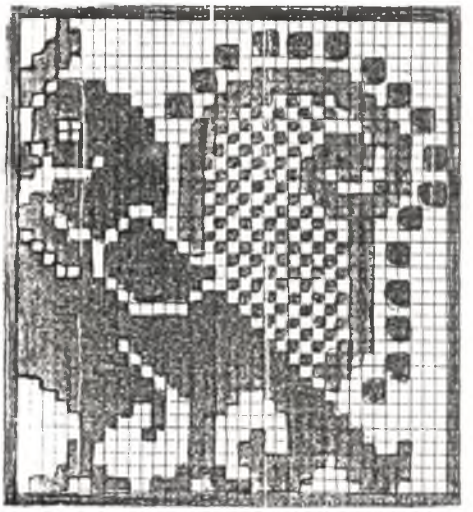


M. FLOWER

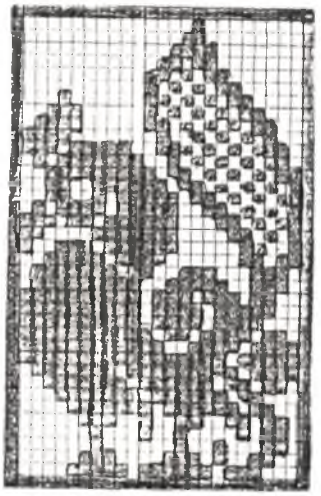
FIG.9 E-M. MOTIFS EMPLOYED ON THE BODY OF THE MOLAKALMURU SAREE



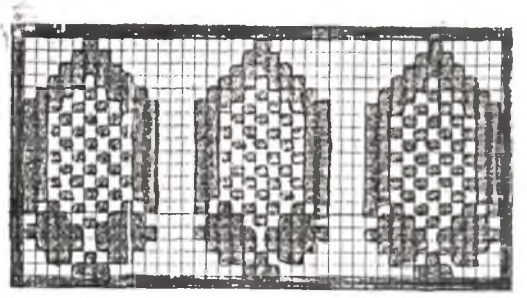
A. PEACOCK



B. PEACOCK



C. PEACOCK



D. DIAMOND

FIG.10 A-D. MOTIFS EMPLOYED ON THE BODY OF THE MOLAKALMURU SAREE

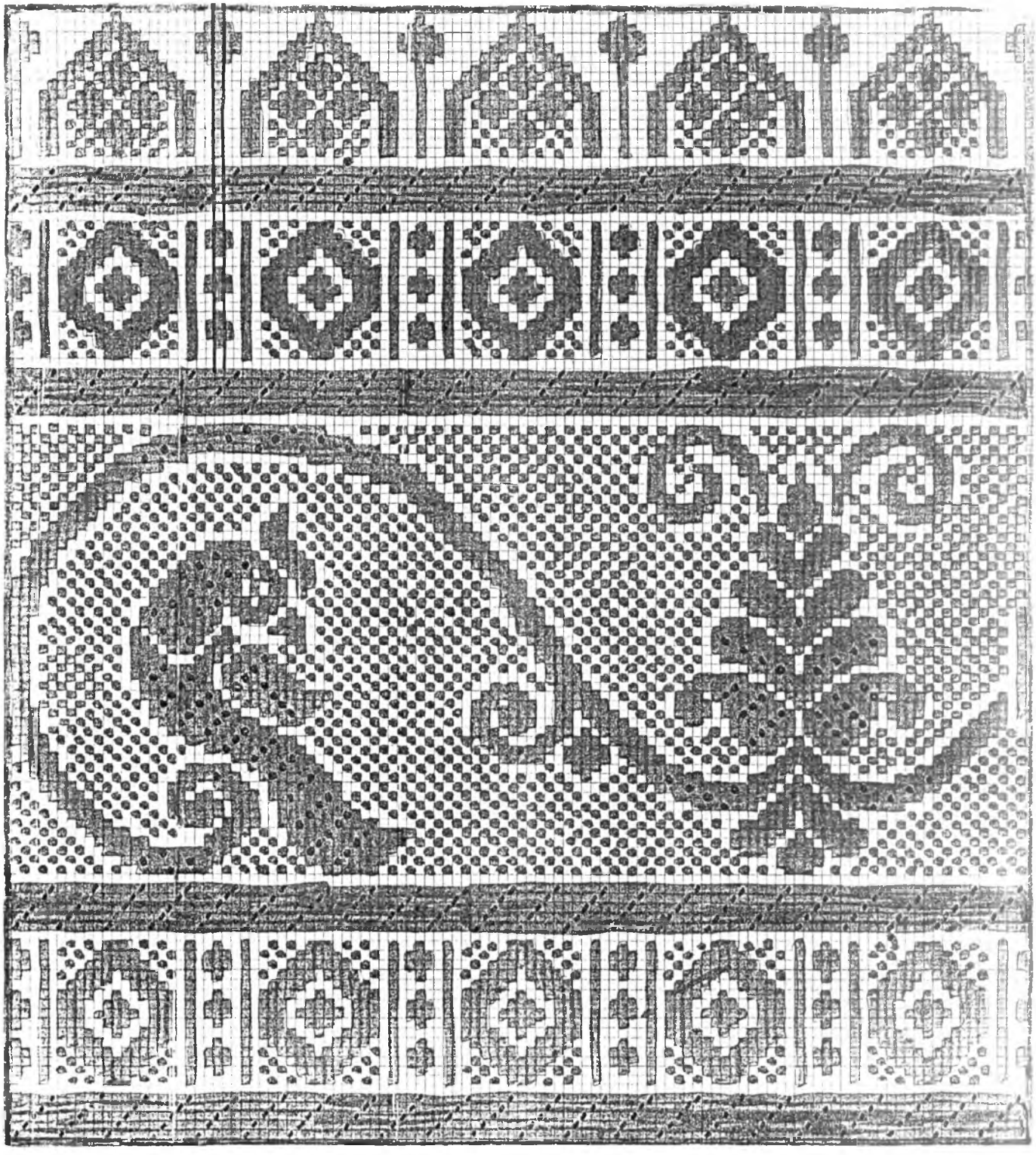


FIG.11 STYLIZED PEACOCK BORDER OF MOLKALMURU SAREE

FIG.12 STYLIZED PEACOCK BORDER OF MOLKALMURU SAREE

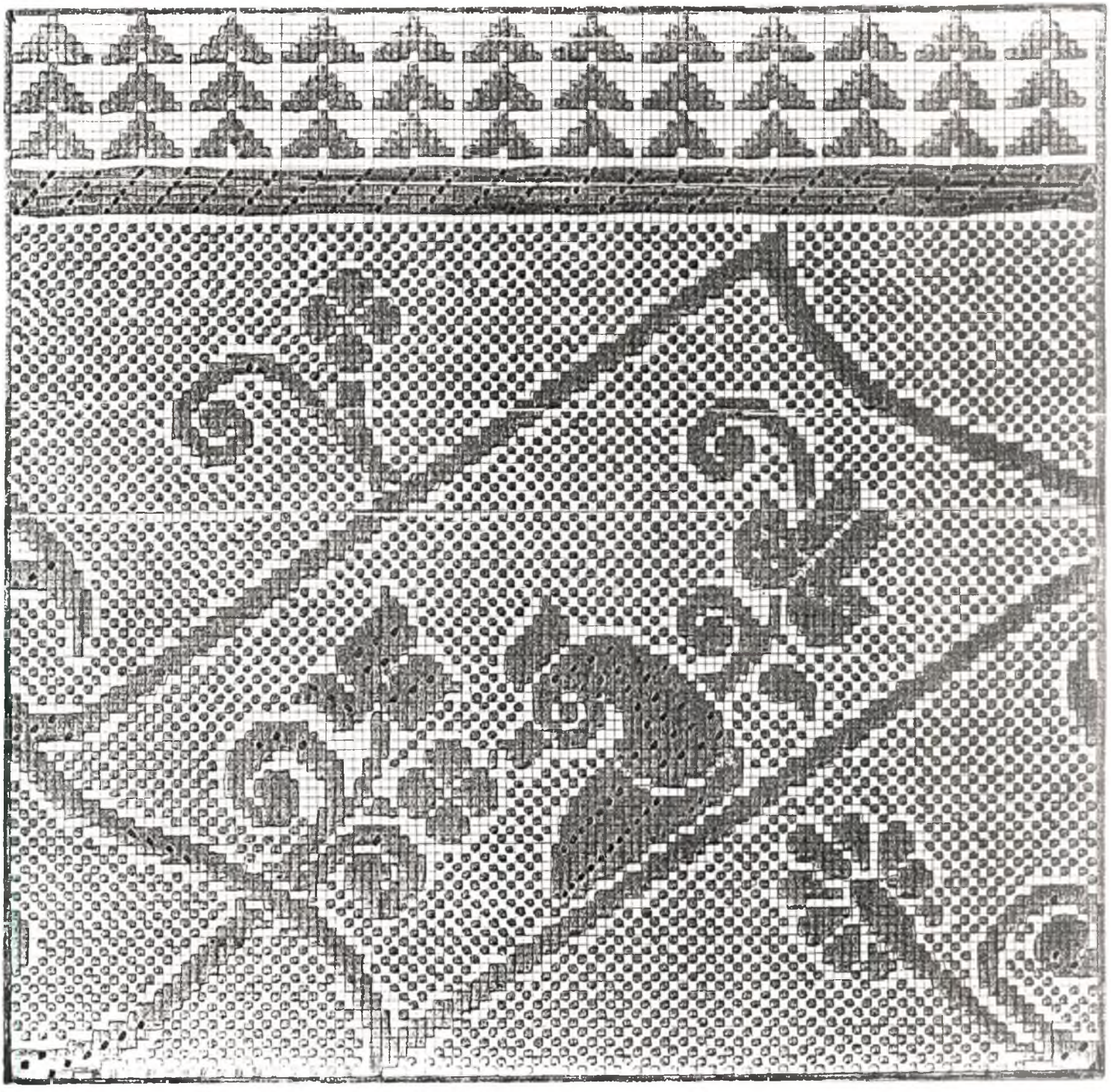


FIG.13 STYLIZED PEACOCK BORDER OF MOLKALMURU SAREE

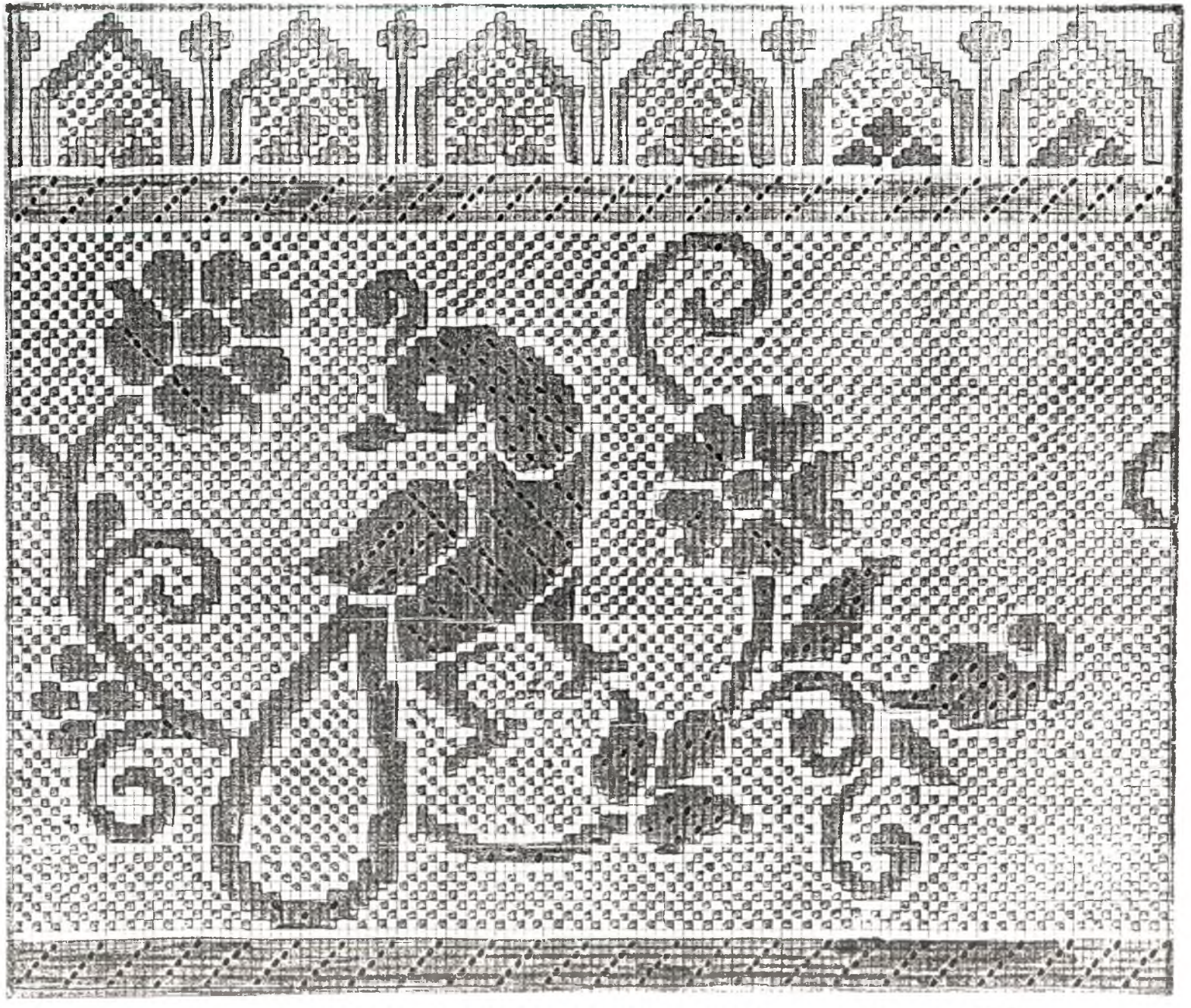


FIG.14 STYLIZED PEACOCK BORDER OF MOLKALMURU SAREE

FIG. 16 STYLIZED PEACOCK BORDER OF MOLKALMURU SAREE

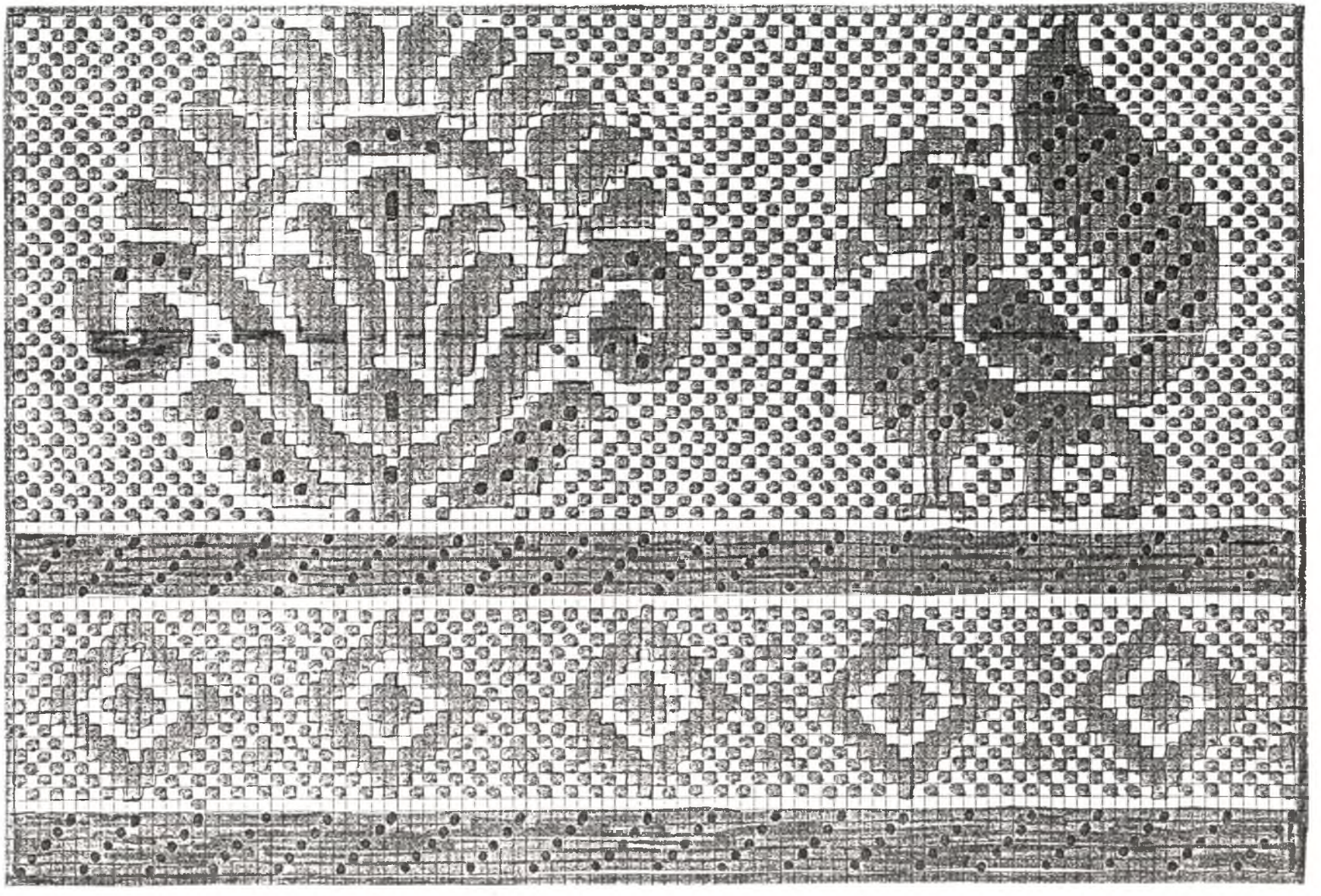


FIG.15 STYLIZED LOTUS AND PEACOCK BORDER OF MOLAKALMURU SAREE

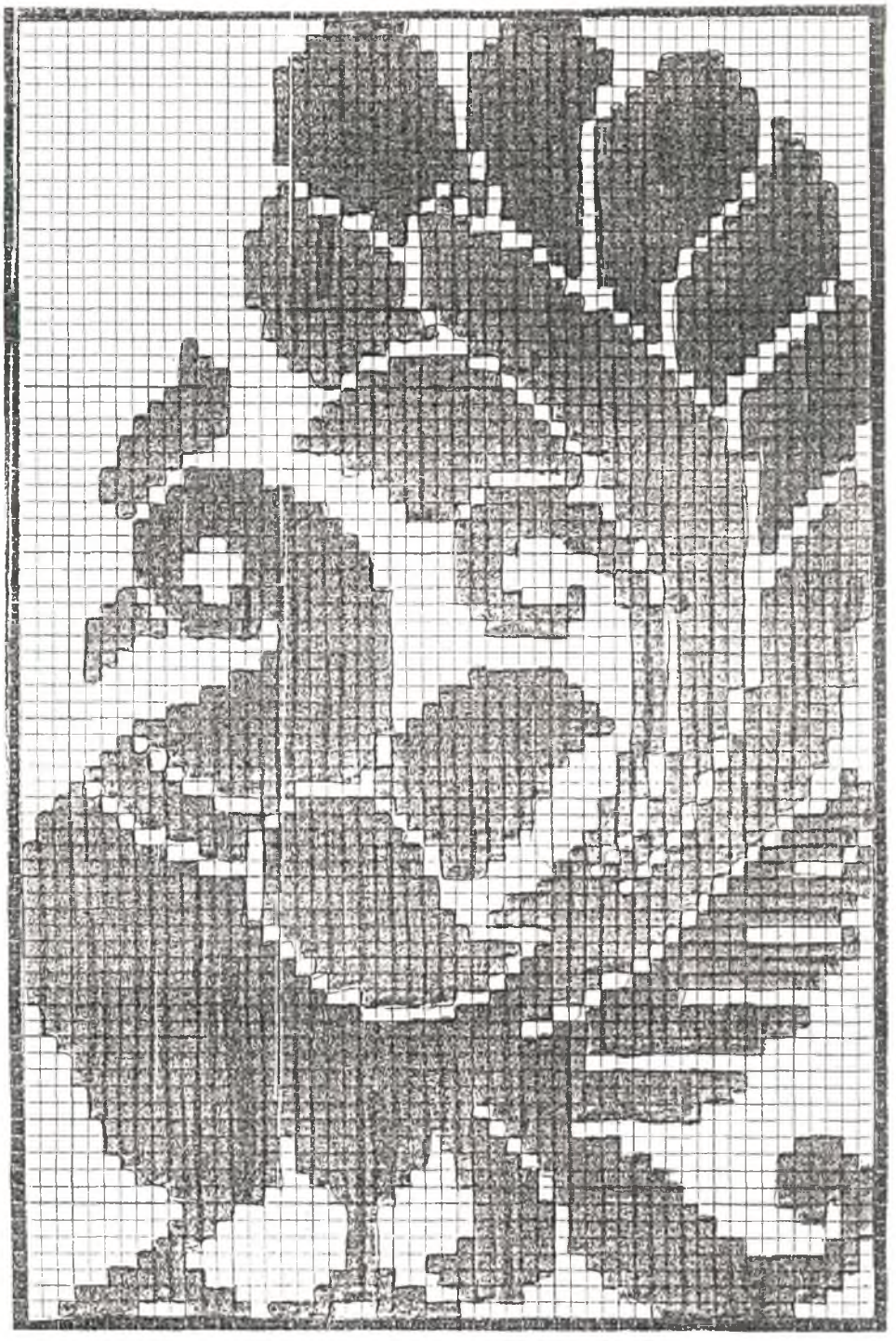


FIG.J7 STYLIZED PEACOCK MOTIF EMPLOYED ALONG WITH THE BOTTOM BORDER OF MOLAKALMURU SAREE

FIG.18 STYLIZED PEACOCK MOTIF EMPLOYED ALONG WITH THE BOTTOM BORDER OF MOLAKALMURU SAREE

FIG.19 STYLIZED PEACOCK MOTIF EMPLOYED ALONG WITH THE BOTTOM BORDER OF MOLAKALMURU SAREE

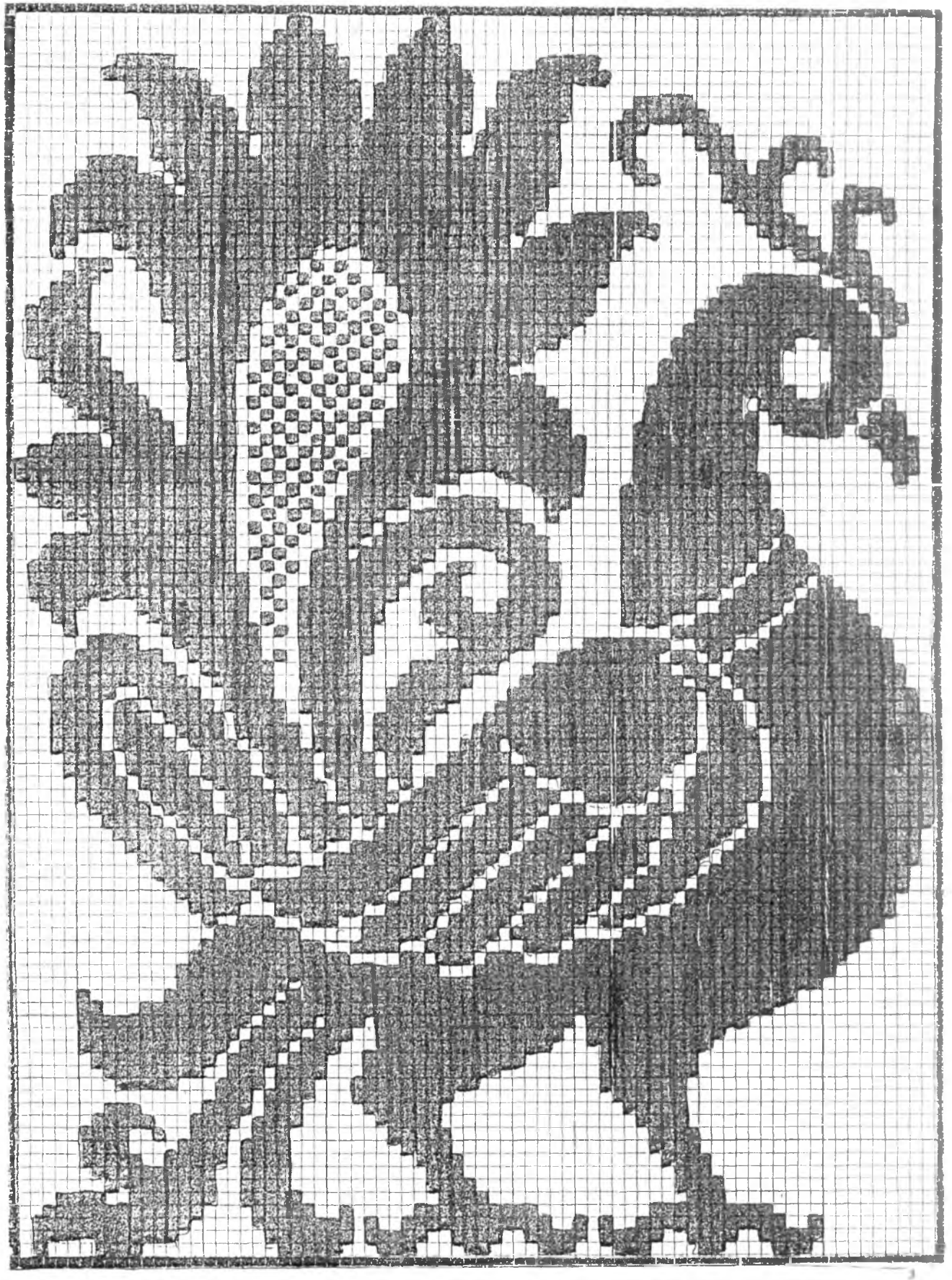


FIG. 20 STYLIZED PEACOCK MOTIF EMPLOYED ALONG WITH THE BOTTOM BORDER OF MOLAKALMURU SAREE

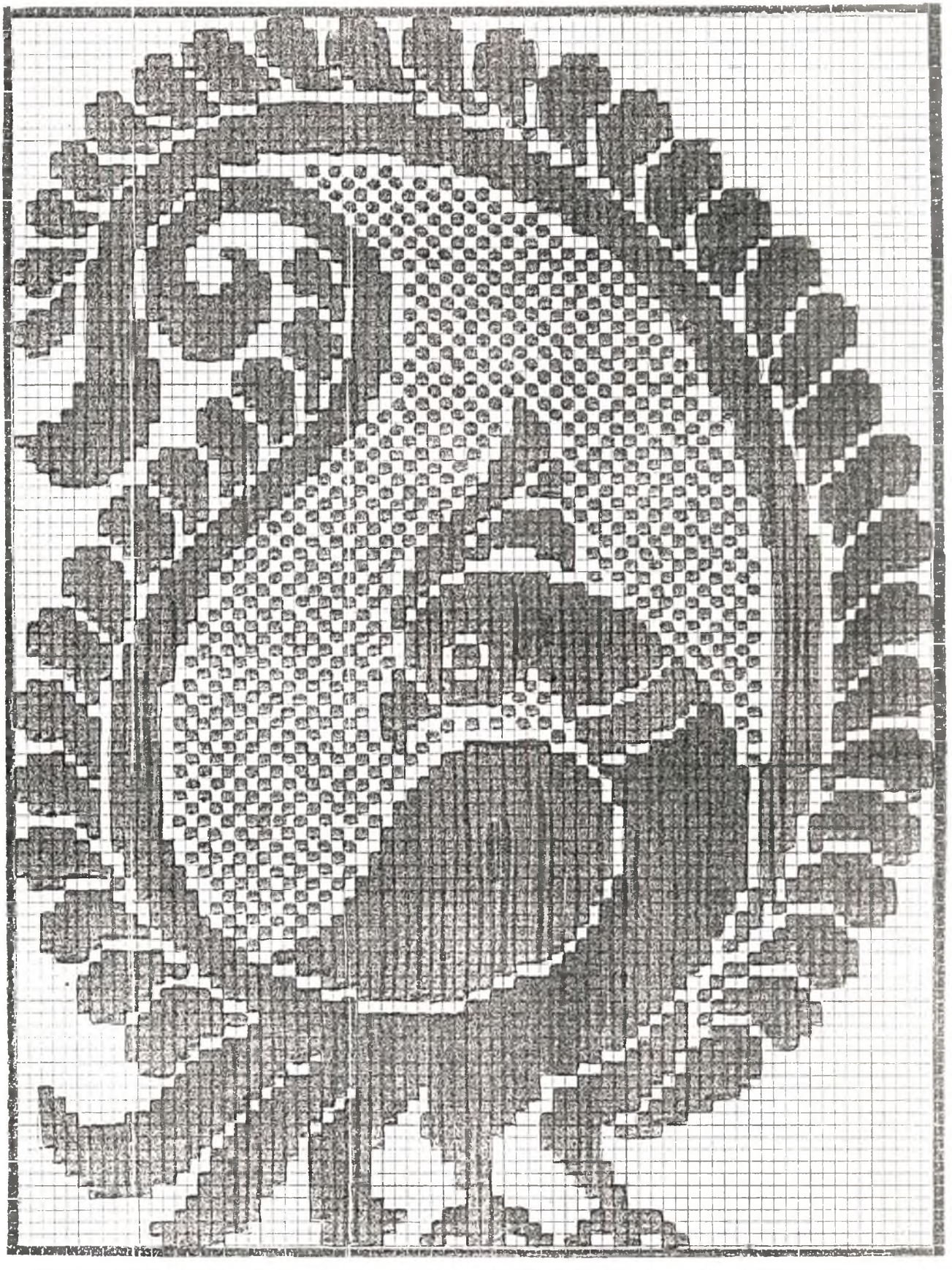


FIG.21 STYLIZED PEACOCK MOTIF EMPLOYED ALONG WITH THE BOTTOM BORDER OF MOLAKALMURU SAREE

PLATE 20. SELF PLAIN WITH
RICH PALLU SAREE

PLATE 21. SELF BUTTAS
WITH RICH PALLU SAREE

PLATE 22. SELF CHECKS
WITH RICH PALLU SAREE

PLATE 23. SELF TISSUE
WITH RICH PALLU SAREE

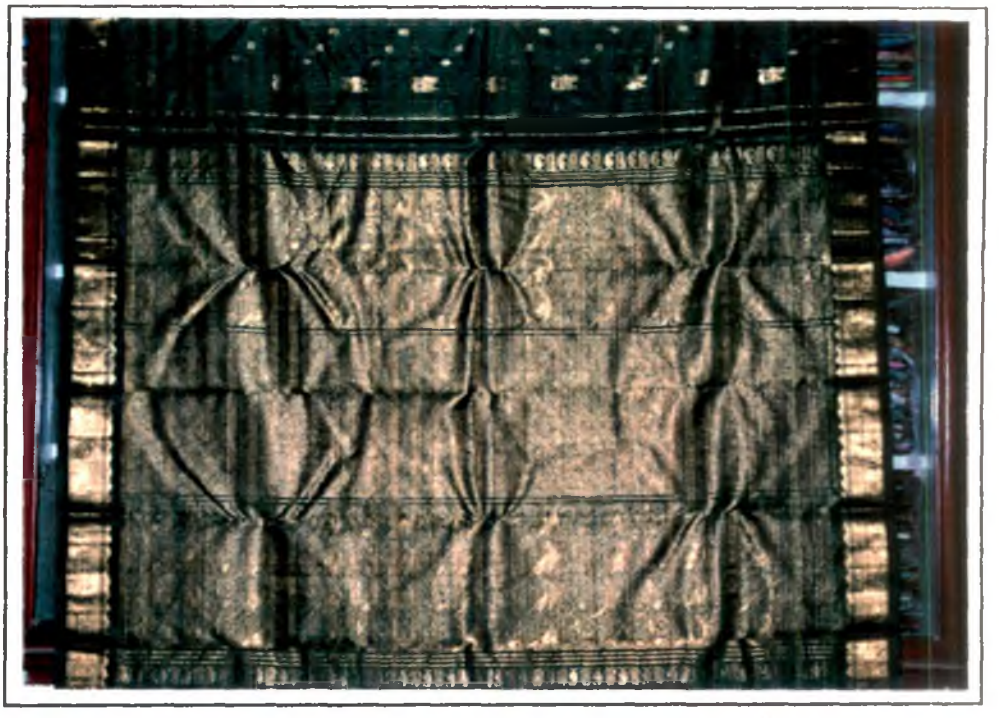


PLATE 24. SELF TISSUE BUTTAS WITH RICH PALLU SAREE

PLATE 25. GATTI BORDER PLAIN SAREE

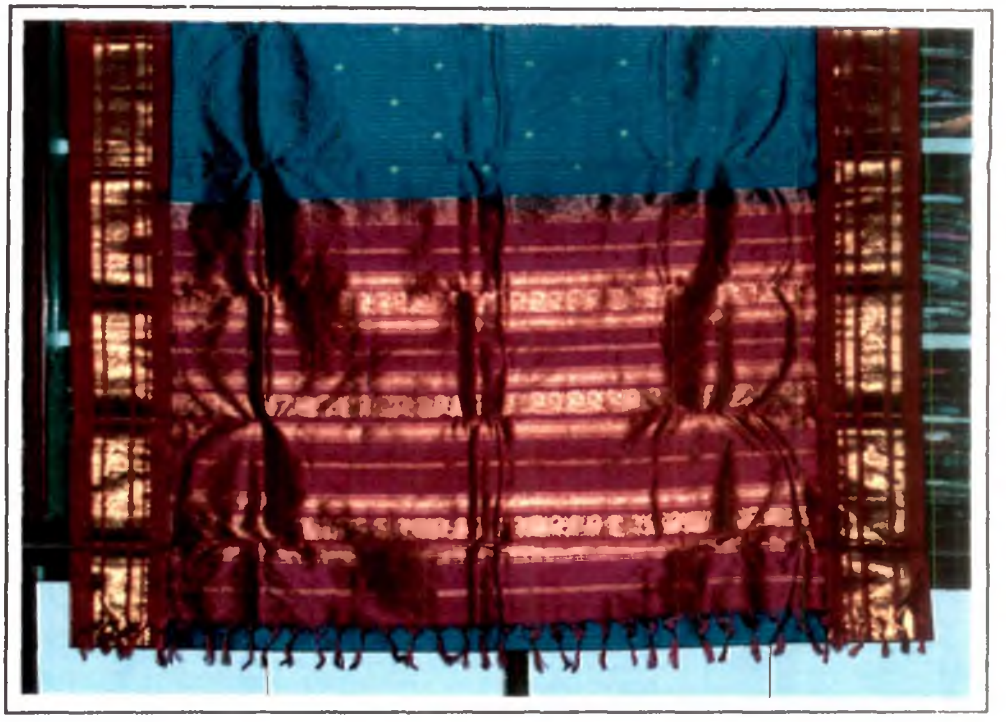


PLATE 26. GATTI BORDER CHECKS SAREE

PLATE 27. GATTI BORDER TISSUE SAREE

PLATE 28. VARALAKSHMI

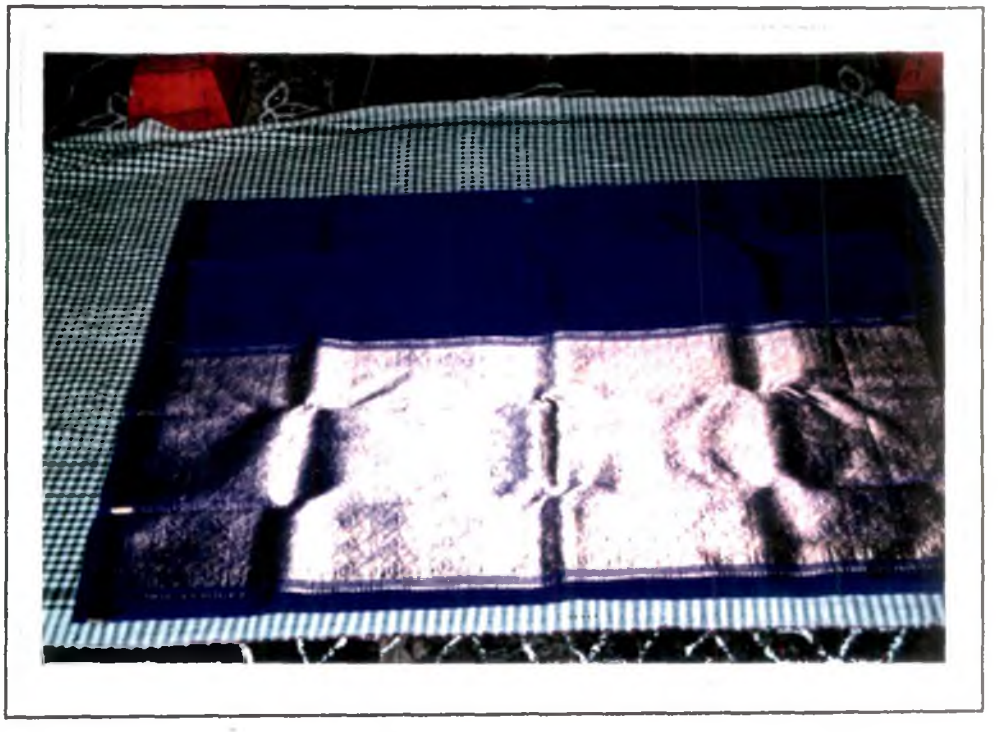


PLATE 29. PATTI SAREE

Table 4.13. Distribution of the weavers based on source of obtaining the motifs/designs

N = 120

Sl. No.	Source	Number of respondents
1.	Professional designers	89 (74.17)
2.	Master weavers	60 (50.00)
3.	Elders	20 (16.66)
4.	Neighbours	12 (10.00)
5.	Friends	10 (08.33)

Note: Figures in parentheses indicate percentages
Multiple responses possible

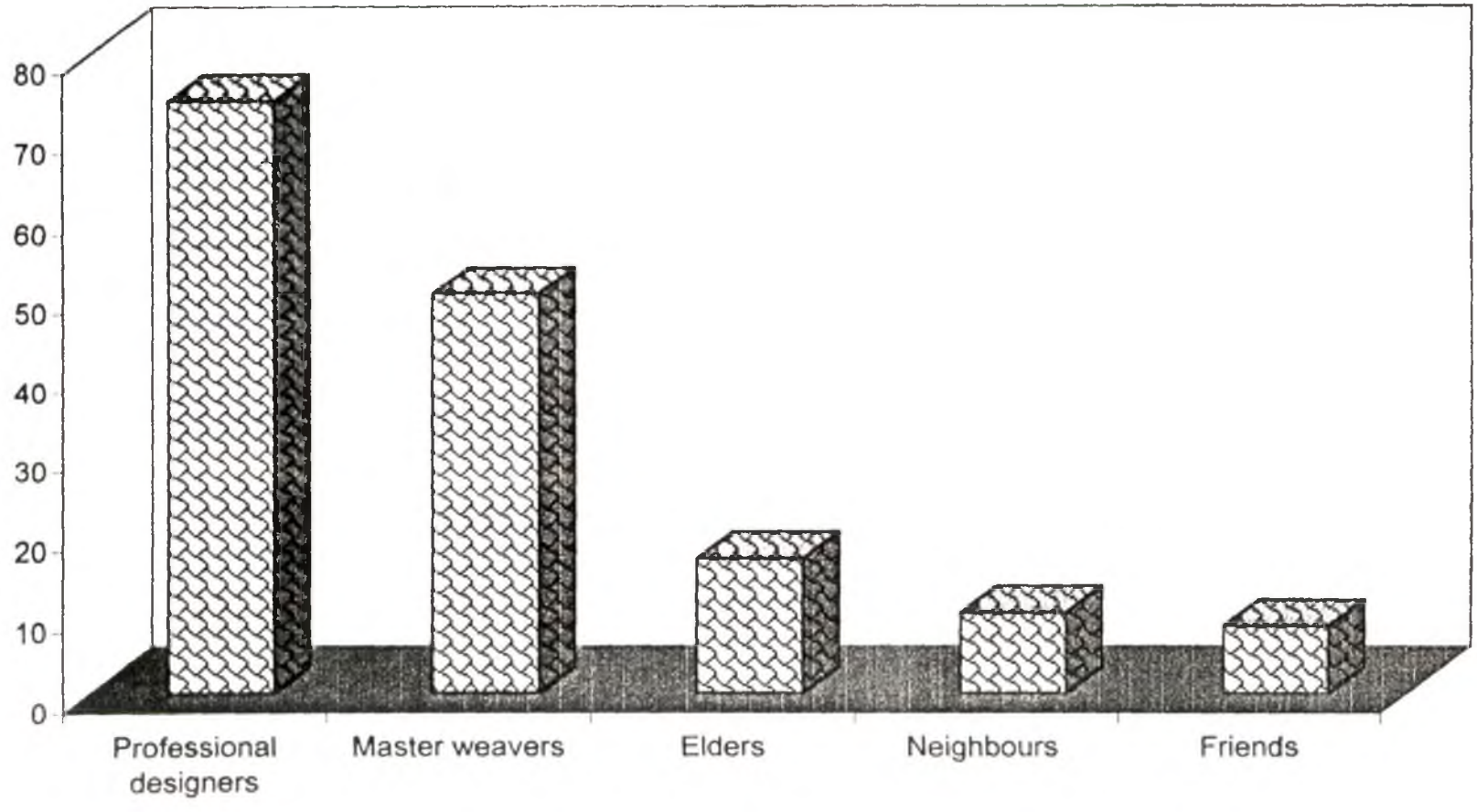


Fig. 22. Distribution of the weavers based on source of obtaining the motifs/designs

Table 4.14. Distribution of the weavers based on the factors considered while designing the motifs

N = 120

Sl. No.	Source	Number of respondents
1.	Fashion	60 (50.00)
2.	Demand	60 (50.00)
3.	Order	36 (30.00)
4.	Cost	12 (10.00)
5.	Ease of weaving	12 (10.00)

Note: Figures in parentheses indicate percentages
Multiple responses possible

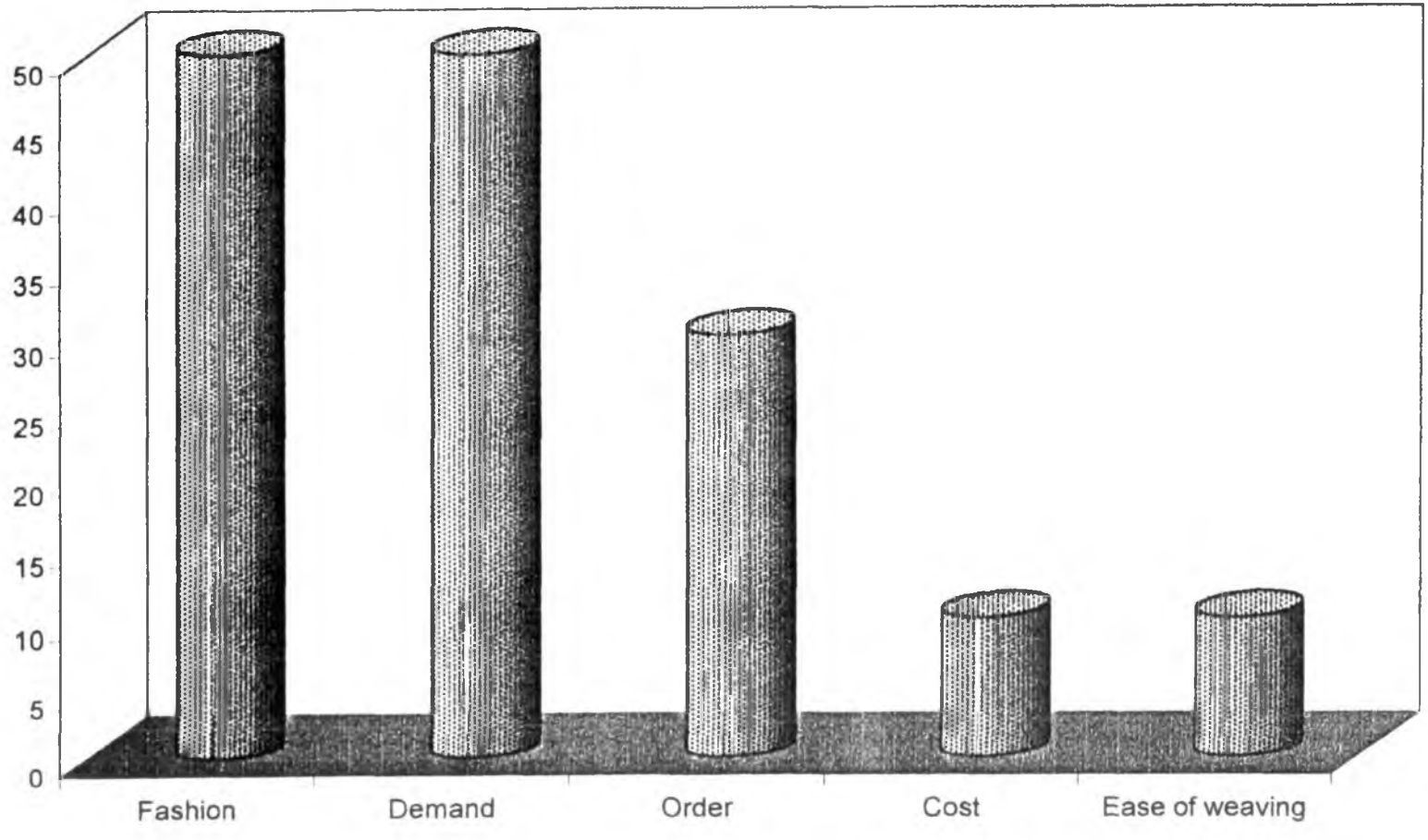


Fig. 23. Distribution of the weavers based on the factors considered while designing the motifs

order (30%). About 10 per cent of the weavers considered cost and ease of weaving respectively.

4.6 COLOR AND COLOUR COMBINATION USED FOR MOLAKALMURU SAREES

Mainly two types of sarees are woven in Molakalmuru.

1. Contrast sarees (kuttu) the border and pallu colour are different from body colour. The weaving process is very slow because it requires 3 shuttles i.e. 2 side shuttles carries border colour and centre shuttle carries body scolour.

2. Self sarees (Lattu) The body border and pallu are of same colour and the weaving process is very fast. Here only one shuttle is required for carrying one colour and in vogue with the latest trend and fashion.

It is evident from the table 15 that the different common colours used for border and pallu were red, green, navy blue and pink and for the body colours were maroon, yellow, peacock green, red sky blue. Grey violet, cream, shocking pink and so on.

Table 4.16 indicates that the Molakalmuru sarees had a variety of colours. Some were of same colour and same were the results of blending of different coloured yarns in the weaving process. Same colours used for both warp and weft included scarlet, green, black, peacock green and yellow. Blending of different coloured yarns in the warp included rani, black, peacock green, violet and for weft direction colours were orange, shocking pink, bottlegreen, magenta, blue, brown and so an.

Table 4.15. Colour and colour combinations used for contrast sarees

Sl. No.	Colour of border and pallu	Body colour
1.	Red	Green, yellow, blue, cream, peacock green, snuff, gray, olive green, bottle green, voilet, black, navy blue
2.	Green	Yellow, red, orange, purple, shocking pink
3.	Navy blue	Maroon, yellow, red, green, olive green,
4.	Pink	Navy blue, black, ananda, gray

Table 4.16. Colour and colour combinations for self sarees

Sl. No.	Warp direction colours	Weft direction colour
1.	Same colours	
	Scarlet	Scarlet
	Green	Green
	Black	Black
	Peacock green	Peacock green
	Yellow	Yellow
2.	Different colours	
a.	Rani	Orange, light pink, half white, brown colours
b.	Black	Shocking pink, olive green
c.	Peacock green	Snuff, bottle green, magenta, maroon, gray, leaf green
d.	Voilet	Blue, magenta
e.	Brown	Shocking pink, peacock green, gray, red, orange, sky blue

PLATE 30. COMMON COLOURS USED IN MOLAKALMURU SAREE

4.6.1 Type of dyes used

Table 4.17 revealed that majority of the weavers used acid dyes (95.80%) and about 25 per cent of the weavers used direct dyes.

4.7 FABRIC INFORMATION

This aspect includes fabric information for self and contrast sarees and changes mode in the sarees.

4.7.1 Fabric information for self sarees

Table 4.18 reveals the fabric set of the different types of sarees. Type-A and Type-C saree had same ends and picks/inch i.e. 120 and 82 respectively. Type-B saree woven with a 112 ends and 78 picks per inch. Type-D and type-E sarees was constructed with a 100 ends and 70 picks per inch respectively. The length of saree with blouse and pallu, width of body, border and total width of sarees remained constant for all the sarees i.e. 6 mts, 25"-36" length, 42' body width, 3" width of the border on either side of body and 48" total width of the saree respectively. The total weight of the saree ranged from 780-960 gm respectively. All weavers could weave only one saree per week irrespective of the type of sarees.

4.7.2 Fabric information for contrast sarees

Table 4.19 furnishes the fabric information of contrast sarees. Type-F and H sarees were woven with a 90 ends and 72 picks per inch respectively. Type-G saree interlaced with 92 ends and 78 picks/inch.

Table 4.17. Distribution of weavers based on the type of dyes used

N = 120

Sl. No.	Type of dyes	Number of respondents
1.	Acid dyes	115 (95.80)
2.	Direct dyes	30 (25.00)

Note: Figures in parentheses indicate percentages
Multiple response possible

Table 4.18. Fabric information for self sarees

Sl. No.	Type of saree	Threads/inch		Length of saree (mtr)	Width of the			Length of pallu (inch)	Width of saree (inch)	Total weight of saree (gms)	Production rate/week
		Ends	Picks		Body (inch)	Border (inch)					
						Bottom	Top				
1.	Type – A saree	120	82	6	42	3	3	25-36	48	780	1
2.	Type – B saree	112	78	6	42	3	3	25-36	48	840	1
3.	Type – C saree	120	82	6	42	3	3	25-36	48	960	1
4.	Type – D saree	100	70	6	42	3	3	25-36	48	960	1
5.	Type – E saree	100	70	6	42	3	3	25-36	48	960	1

Table 4.19. Fabric information for contrast sarees

Sl. No.	Type of saree	Thread/inch		Length of saree (mtr)	Width of the			Length of pallu (inch)	Width of saree (inch)	Total weight of saree (gms)	Production rate/week
		Ends	Picks		Body (inch)	Border (inch)					
						Bottom	Top				
1.	Type – F saree	90	72	5 ½	38	5	5	36	48	780	1
2.	Type – G saree	92	78	5 ½	40	4	4	36	48	750	1
3.	Type – H saree	90	72	5 ½	40	4	4	36	48	960	1
4.	Type – I saree	80	68	5 ½	32	10	6	36	48	840	1
5.	Type – J saree	72	64	5 ½	44	2	2	36	48	720	1

Type-I saree constructed with 80 ends and 68 picks and Type-J saree woven with 72 ends and 64 picks per inch respectively. The length of sarees without blouse and pallu length remained. Same for all the sarees i.e. 5 ½ mt and 36" respectively. Though the total width of the sarees remained same for all the sarees i.e. 48" but width of the body and border for differed. Type-G and H sarees had 40" body width and 4" border width on either side of the body respectively. About 44" body width and 2" border width on either sides body for Type-J saree and for Type-F saree had 38" body width and 5" border width on either sides respectively. Total weights of the saree ranged from 720 g-960 gms for contrast sarees. All weavers could weave only one saree per week irrespective of the types of sarees.

4.7.3 Changes made in the sarees

It is learnt from the Table 4.20 that about 86.66 per cent of the weavers made changes in motifs followed by zari (83.33%). About 48.33 per cent of the weavers made changes in reed number. Relatively very few per cent of the weavers made changes in length of saree (10%).

4.8 PRODUCTION

A glance at Table 4.21 revealed that production rate of Type-B saree was highest among all the sarees i.e. 11000 sarees, followed by Type-A saree i.e. 5,000 sarees. The production rate of Type-C saree was 2,800, followed by Type-G (2,500), Type-F (2,000), Type-H (1,800), Type-D (1,500), Type-I (1,000) and Type-E (800) respectively. Production rate of Type-J was lowest among all the sarees i.e. 400 sarees per year.

Table 4.20. Distribution of weavers based on the changes made in the sarees

N = 120

Sl. No.	Changes made	Number of respondents
1.	Reed number	58 (48.33)
2.	Zari	100 (83.33)
3.	Motifs	104 (86.66)
4.	Length of saree	12 (12.00)

Note: Figures in parentheses indicate percentages
Multiple response possible

Table 4.21. Annual production of different types of sarees

Sl. No.	Type of sarees	Number of sarees
1.	Type – A saree	5000
2.	Type – B saree	11000
3.	Type – C saree	2800
4.	Type – D saree	1500
5.	Type – E saree	800
6.	Type – F saree	2000
7.	Type – G saree	2500
8.	Type – H saree	1800
9.	Type – I saree	1000
10.	Type – J saree	400

A persual of Table 4.22 revealed that majority of the weavers faced problem of marketing of sarees (95.83%) and about 12.5 per cent of the weavers faced health problems. Very few weavers faced problem of financial assistance (4.16%). None of them faced problem of technical and transportation problems.

4.10 MERCHANDISING PRACTICES

This aspect includes place of market, frequency of selling and marketing channels for their products.

4.10.1 Place of market for silk sarees

It is clear from the Table 4.23 and Fig. 24 that majority of the weavers sold their products in local market (91.66%). About 20.8 per cent of the weavers sold their products in state show rooms, only 8.33 per cent of the weavers sold their products to neighbour states.

4.10.2 Frequency of selling

It is obvious from the Table 4.24 that most of the weavers sold their sarees during special occasion (91.66%) followed by as and when (83.33%). Relatively very few per cent of the weavers sold their products once in a month (25%).

4.10.3 Marketing channels for distribution of the sarees

It is seen from the Table 4.25 that majority of the weavers sold their products directly to the master weavers (83.33%) and about 33.33 per cent of the weavers sold their sarees directly to the customers.

Table 4.22. Distribution of weavers based on their problems

N = 120

Sl. No.	Problem type	Number of respondents
1.	Health	15 (12.50)
2.	Technical and transportation	-
3.	Marketing	115 (95.83)
4.	Financial assistance	5 (04.16)

Note: Figures in parentheses indicate percentages
Multiple response possible

Table 4.23. Distribution of weavers based on the place of market for their sarees

N = 120

Sl. No.	Place of market	Number of respondents
1.	Local market	110 (91.66)
2.	Show room	25 (20.80)
3.	Out side state	10 (08.33)

Note: Figures in parentheses indicate percentages
Multiple response possible

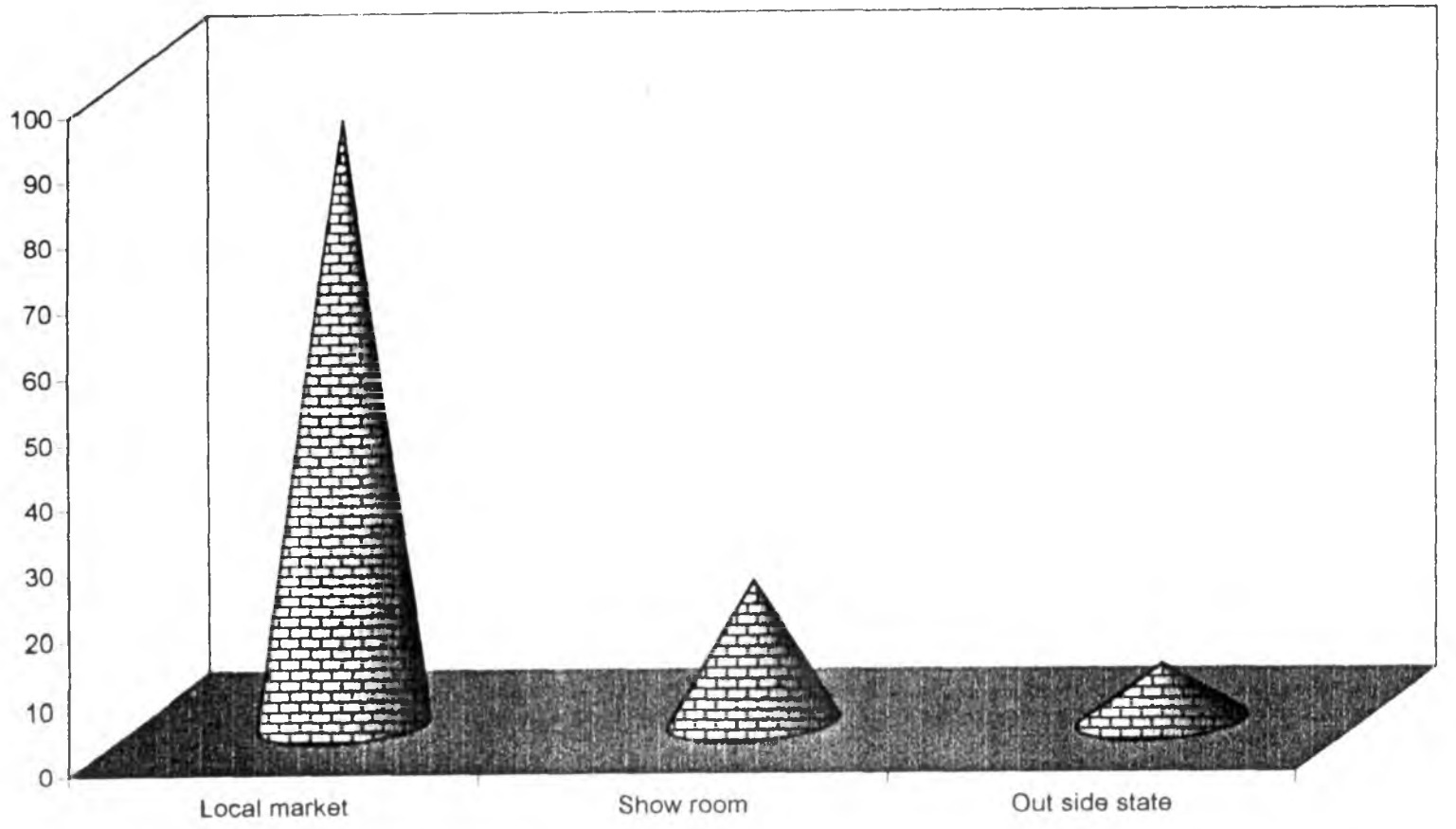


Fig. 24. Distribution of weavers based on place of market for their products

Table 4.24. Distribution of weavers based on their frequency of selling the sarees

N = 120

Sl. No.	Frequency	Respondents
1.	Monthly	30 (25.00)
2.	Special occasion	110 (91.66)
3.	As and when	100 (83.33)

Note: Figures in parentheses indicate percentages
Multiple response possible

Table 4.25. Distribution of weavers based on marketing channels for distributions of sarees

N = 120

Sl. No.	Channels	Number of respondents
1.	Direct selling	40 (33.33)
2.	Master weavers	100 (83.33)

Note: Figures in parentheses indicate percentages
Multiple response possible

4.11 ECONOMICS OF DIFFERENT TYPE OF SAREES

The cost of different types of Molakalmuru sarees were ranged from Rs.2,200-4,500 (Table 4.26). The cost of filature, charaka, dyeing, gum, interest on fixed capital and repair charges were same irrespective of type of the sarees. Cost of zari, wages, interest on working capital, total returns, total cost and profit values differed for different type of sarees. Interest on working capital, total cost, total returns and profit of Type-H saree was the highest among all the sarees i.e. Rs.509.70, Rs.3955.83, Rs.4,500 and Rs.544.17, respectively. Interest on working capital, total cost, total returns of Type-A saree was the lowest among all the saree i.e. Rs.234.07, Rs.1,842.93 and Rs.2200 and Type-E saree profit was the lowest (Rs.239) among all the sarees.

Table 4.26. Economics of different types of sarees

(Rs./saree)

Sl. No.	Particular	Type of sarees									
		Type-A	Type-B	Type-C	Type-D	Type-E	Type-F	Type-G	Type-H	Type-I	Type-J
1.	Filature	340	340	340	340	340	340	340	340	340	340
2.	Charaka	540	540	540	540	540	540	540	540	540	540
3.	Dyeing	48	48	48	48	48	48	48	48	48	48
4.	Tested/pure zari	262.50	350	2000	475	475	750	2000	2000	1200	600
5.	Gum	20	20	20	20	20	20	20	20	20	20
6.	Wages	350	350	420	420	420	350	350	450	450	350
7.	IWC	234.07	280	505.20	276.45	368.60	307.20	494.70	509.70	389.70	234
8.	IFC	39.06	39.06	39.06	39.06	39.06	39.06	39.06	39.06	39.06	39.06
9.	Repair charge	9.70	9.70	9.70	9.70	9.70	9.70	9.70	9.70	9.70	9.70
10.	Total cost	1842.93	1976.76	3921.96	2168.24	2260.36	2403.96	3841.46	3955.83	3036.47	1842.93
11.	Total returns	2200	2500	4300	2700	2500	2800	4200	4500	3500	2200
12.	Profit	396.13	523.24	378.04	531.76	239.64	346.04	358.54	544.77	464.00	396.13

Note : IWC = Interest on working capital
IFC = Interest on fixed capital

Discussion

V. DISCUSSION

The results of the study is discussed in the following headings:

5.1 General information

5.2 Raw materials

5.3 Motifs used

5.4 Dyes used

5.5 Fabric information

5.6 Production

5.7 Weavers problems

5.8 Merchandising practices

5.9 Economics of different types sarees

5.1 GENERAL INFORMATION

The general information includes the age education of the weavers, caste, size, type, annual income of the family and choosing this profession.

5.1.1 Age

From the Table 4.1 it is inferred that 60.83 per cent of the weavers belonged to middle age. About 30.83 per cent of weavers belonged to young age followed by oldage (8.53%). This may be due to the fact that the younger generation of the weavers community preferred to take up employment other than hand loom weaving after their higher education

and involvement of oldage people was less because of their health problem. This being the existing condition, weaving was mainly occupied by middle age people. However, these findings are similar to the findings of Mamatha (1997).

5.1.2 Education

It is noticed from the Table 4.2 that one third of the respondents had education upto higher secondary (30.83%) and 21.66 per cent of the weavers were illiterates. About 16.66 per cent of the weavers had education upto PUC and degree respectively. This might be due to their financial crisis, imposement by the elders to take up employment of weaving and lack of encouragement from the elders to go for higher studies on the other hand weaving is their age old traditional art. However, these results are in line with the findings of Mamatha (1997).

5.1.3 Caste

Table 4.3 revealed that 62.50 per cent of the weavers belonged to padmasali caste followed by Swakulasali caste (37.50%). This may be due to reason that total population of the padmasalies are more at Molakalmuru as compared to Swakulsalies.

5.1.4 Size of the family

It is indicated in the Table 4.4 that 45.83 per cent of the weavers belonged to medium size family followed by large family (44.16). Most of the weavers belonged nuclear family system and middle income group.

The reason for opting medium size family that, which reduce the risk, provide opportunities for comfort, food and shelter and one can enjoy all the facilities to the fullest extent. Similar findings are observed in the studies conducted by Singh and Molhi (1989).

5.1.5 Type of family

It is apparent from the Table 4.5 that about (69.18%) of the respondents fell in the category of the nuclear family system and remaining 30.83 per cent of them to the joint family system.

This shows that the joint families are disappearing gradually, may be because of lack of facilities and opportunities, less comfort in terms of food, clothing shelter and problem of adjusting with the joint family. The present findings are in line with the findings of Jayashree (1995).

5.1.6 Annual income of the family

It is reported from the Table 4.6 that nearly half of the weavers comes in the middle income group (45.83%) having annual income of (Rs.19,970-38,912). About 27.57 per cent of the weavers belonged to the high income (>Rs.38.913) and 26.66 per cent of the weavers belonged to low income group (<Rs.19.969).

This may be due to the season that most of them belonged to nuclear family with medium size family where the number of individuals engaged in weaving are limited. Moreover the demand for the handloom silk sarees many times set back because of variety of power loom goods,

lack of demand and fashion, which indirectly affected their socio-economic condition. However, the findings are in conformity with the findings of Mamatha (1997).

5.1.7 Choosing this profession

An appraisal of Table 4.7 indicates that 85 per cent of the weavers selected weaving as a profession, mainly because of hereditary and to keep their age old traditional are alive.

5.2 RAW MATERIAL

Raw material plays on important role in the production of the saree. Type of raw materials remained some for almost all type of sarees but frequency of purchasing the raw materials and problems faced while procuring the raw materials were varied.

5.2.1 Frequency of purchasing the raw materials

Table 4.9 reveals that 41.66 per cent of the weavers purchased charaka and filature on weekly basis respectively and for zari monthly (36.66%) followed by charaka and filature purchased fortnightly (37.55%) and for zari bimonthly (30.83%). This may be due to reason that raw materials are purchased based on the number of looms owned by the weavers.

5.2.2 Problems faced while procuring the raw materials

Table 10 shows that majority of the weavers always faced problem of hike in price of filature (23.33%), charka (30.33%) and zari (46.66%).

About 83.33 per cent of the weavers some times faced problem of inferior quality of filature and charaka respectively and 33.33 per cent of the weavers some time faced problems of untimely supply and scarcity of zari. The reason for the existing problems are mainly due to price fluctuation, inferior quality of filature and charka during rainy season, untimely supply and scarcity of zari.

5.3 MOTIFS USED

This aspect includes source of obtaining the designs and factors considered while designing the motifs.

5.3.1 Source of obtaining the motifs

It is evident from the Table 4.12 that nearly three fourth of the weaver (74.16%) availed the designs from professional designers followed by master weavers (60%).

From the above results it is clear that the two major sources of providing designs were professional designers and master weavers. This shows that the professional designers are expert in creating the new designs. A designers role is to keep abreast with the latest trend and fashion, predict the fashion with his intritive ideas and experience. However, the findings are in conformity with the findings of the Rajappan and Vathsala (1998).

5.3.2 Factors considered while designing the motifs

It is indicated from the Table 4.13 that half of the respondents considered fashion and demand while designing the motif. The reason

may be that weavers make sarees according to the customer choice, taste and demand, so also they take care of present fashion trend.

5.4 DYES USED

From the Table 4.16 it is clear that greater per cent of the weavers (95.83%) used acid dyes and about 25 per cent of the weavers used direct dyes. This might be due to reason that, acid dyes have good affinity towards silk and good colour fastness to light and wash as compared to direct dyes.

5.5 FABRIC INFORMATION

This aspect include changes made in the sarees.

5.5.1 Changes made in the sarees

A glance at the Table 4.20 reveals that 86.66 per cent of the weavers made changes in motifs followed by zari (83.33%). It may be due to reason that motifs are changed according to market demand, customers taste and fashion. Majority of them preferred tested zari because of low cost and also tested zari is imitation of gold zari i.e. pure zari.

5.6 PRODUCTION

It is apparent from the Table 4.21 that production rate of Type-B saree was highest among all the sarees i.e. 11,000 sarees and Type-I saree was lowest among all the sarees. The main reasons quoted were market demand, fashion and customer choice.

5.7 WEAVERS PROBLEMS

It is apparent from Table 4.22 that 95.83 per cent of the weavers faced problem of marketing of goods. This may be due to reason that lack of advertisement and lack of proper marketing system which make the present situation worst.

5.8 MERCHANDISING PRACTICES

This aspect includes place of market, frequency of selling and marketing channels for their products.

5.8.1 Place of market for silk sarees

It is learnt from Table 4.23 that most of the weavers sold their sarees in local market (91.66%). About 8.33 per cent of the weavers sold their products to neighbour states like Andhra Pradesh. Tamil Nadu, Kerala and Maharashtra. It may be due to reason that Molokalmuru sarees are not much popularized as that of Kancheepuram sarees and only local people prefer for special occasions like wedding and festivals.

5.8.2 Frequency of selling

It can be inferred from Table 4.24 that majority of the weavers sold their goods during special occasion (91.66%) followed by as and when (83.33%). It may be due to reason that during marriage and festival seasons the demand for the Molakalmuru sarees is shoot-up, so much that the traders themselves come to the weavers for bulk purchase. But during the off season the weavers have to go to the traders for selling and are forced to bad bargains.

5.8.3 Marketing channels for distribution of sarees

It is apparent from the Table 4.24 that 83.33 per cent of the weavers sold their products directly to the master weavers. It may be due to the fact that, an independent poor weavers with meagre means of substance is always forced to take loans from his master weavers and controlled by master weavers for his products. Sometimes, lack of knowledge and ignorance about the marketing channels compel him to hand over his products to the master weaver.

5.9 ECONOMICS OF DIFFERENT TYPES OF SAREES

It is apparent from the Table 4.26 that the cost of the pure hand-woven silk sarees depend on the quantity of the zari used in it rather than the raw silk used. Total cost, total returns and profit of Type-H saree was found to be the highest among all the sarees i.e. Rs.3,455.83, Rs.4,500 and Rs.544.17 respectively. Total cost and total returns of Type–A saree was lowest among all the sarees i.e. Rs.1,842.93 and Rs.2,200.

This might be due to reason that Type-H saree was woven with a pure zari. The cost of the pure zari is costlier than the tested zari (The cost of pure zari per marc ranged from Rs.1,200-2,500, whereas tested zari is 350-400). The price of Molakalmuru sarees ranged from 2,200-4,500 (some time price of sarees goes upto Rs.8,000) depending on the type of the sarees, quantity and type of zari used.

Summary

VI. SUMMARY

The present investigation entitled "Silk Sarees of Molakalmuru" has been conducted with a view to study the historical background of Molakalmuru sarees, to enumerate the existing weaving technology and to assess the economic feasibility of different types of Molakalmuru sarees.

The study has been carried out during the year 1999-2000 in Molakalmuru city where the sample comprised of 120 independent weavers personal interview method was the technique employed to collect the necessary information using self structured questionnaire. This data was statistically analysed by using frequency tables, percentages and standard normal deviate test.

The results of the present study are summarized as follows.

- Majority of the weavers belonged to middle age group and medium family size.
- Nearly one third of the respondents had education upto higher secondary and more than 20 per cent of the weaver were illiterates.
- Maximum number of weavers belonged to nuclear family and middle income group.
- Most of the weavers choose weaving as profession because of hereditary.
- Weavers purchased raw materials from Bangalore, Rayadurga and local dealers.

- About 41.66 per cent of the weavers purchased filature and charaka silk weekly and zari once in a month (36.66).

- Weavers always faced problem of hike in price, inferior quality of filature and charaka silk, untimely supply and scarcity of zari.

- Geometrical designs, temple designs, intricate designs (Computer designs) Mango buttas, peacock parrot, hamsa, lotus, diamond, rudrakshi beads, deepa, banaras, venki and phenoix were the common motifs used in Molakalmuru sarees.

- Most of the weavers obtained their designs from professional designers and master weavers.

- It was observed that about 74.16 and 60 per cent of the weavers were considered fashion and demand while designing the motifs.

- More than ninety per cent of the weavers used acid dyes to die the silk yarn.

- Popular colour combinations were green, bottle green, peacock green, gray, navy blue, sky blue shocking pink, orange, blue, brown, black and mixed colours.

- Molakalmuru silk sarees were of medium weight ranged from 700-950 gm. A saree of 5.5 to 6 mts consumed 600 g of raw silk and about 150-360 g of pure/tested zari and had a double sided border ranged from 2"to 10" and width of the saree was 48".

- Greater per cent of the weavers made changes in motifs and zari.
- Annual production of the sarees were 28000.
- About ninety five per cent of the weavers faced problems of poor marketing system for their sarees.
- Majority of the weavers sold their sarees to the local markets.
- Maximum number of weavers sold their sarees during special occasion and as and when.
- About 83.33 per cent of the weavers sold their sarees directly to the master weavers.
- Selling price of Molakalmuru saree were ranged from Rs.2200-4500.

Implication and recommendation

The present study gives clear idea about socio-economic status, historical background, weaving technology, problems faced by the weavers. Merchandising practices and economic feasibility of different sarees. Irrespective of socio-economic status, the problems faced by all the weavers were more or less similar. Poor marketing facility for the sarees were the major problem faced by the weavers. Necessary measures should be taken to give wide publicity for the sale of the Molakalmuru sarees such as advertisement, exhibition, organization of museums, Co-operatives, allied institution and installation of showrooms. There is a need to improve the existing weaving technology through training

programme to the weavers and provide adequate financial assistance and other necessary inputs. The hand loom weaving sector has to be centralized to enhance the production rate and the quality of the sarees.

Suggestions for further study

1. Socio-economic status of the weavers working under master weavers and Co-operative societies.

2. Employment pattern and indebtedness of the weavers community.

3. Comparative study in handloom silk sarees and power loom silk sarees.

4. Physical parameters of Molakalmuru sarees.

5. Adoption of computerized motifs in Molakalmuru sarees.

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*Original not seen.

Appendix

APPENDIX

SILK SAREES OF MOLAKALMURU

I. GENERAL INFORMATION

1. Name of the respondent :

2. Age :

3. Education :

4. Caste :

5. Family type :

6. Family composition :

Sl. No.	Name	Relationship with respondents	Age	Education	Occupation	Annual Income
1						
2						
3						
4						
5						
6						
7						

7. Annual income of the family

8. How did you choose this profession

a) Hereditary
b) First generation
c) Migration
d) Job opportunity
f) Interest
g) Training
h) Any other

II. SPECIFIC INFORMATION

9. Historical background of Molakalmuru sarees :

11. Weaving Technology (It includes pre-loom, looming and post loom processes)

12. Information on existing looms

Type of loom	Dimension	No. of looms	Year of install	Cost/loom	Repair charges

13. Raw material used : (Constructional details)

A. Yarn information

Sl. No.	Saree type	Yarn type		T.P.I.		Amount of silk yarn (g)		Cost of silk yarn/kg (Rs.)		Place of pur-chase
		Warp way	Weft way	Warp	Weft	Warp	Weft	Warp	Weft	

B. Zari Infomration

Sl. No.	Saree type	Type of zari	Amount of zari	Cost of zari/marc (Rs.)	Place of purchase

14. How often do you purchase the raw materials

Sl. No.	Frequency of purchase	Filatur	Charaka	Zari
A	Weekly			
B	Fortnightly			
C	Monthly			
D	Bimonthly			
E	Quarterly			

15. Procurement of raw material and mode of payment

Sl. No.	Problems	Filature			Charaka			Zari		
		A	S	N	A	S	N	A	S	N
1.	Untimely supply									
2.	Scarcity									
3.	Hike in pirce									
4.	Non-availability of required counts									
5.	Delay in transport									
6.	Inferior quality									
7.	Any other									

16. Colour and colour combinations

Sl. No.	Saree type	Colour combinations		
		Body	Border	Pallu

17. Motifs used

Sl. No.	Saree type	Motifs employed		
		Body	Border	Pallu
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

18. How did you get the designs/motifs

1. Master weavers
2. Professional designers
3. Friends
4. Neighbours
5. Elders
6. Self

19. Factory influencing while designing the motifs

a. Fashion
b. Demand
c. Cost
d. Order
e. Ease of weaving
f. Any other

20. Which type of dyes do you use

a. Acid dyes
b. Basic dyes
e. Direct dyes
c. Reactive dyes
d. Natural dyes

C. Fabric information

Sl. No.	Saree type	Threads/inch		Length of the saree	Width of			Total width	Total weight	Production rate week
		Ends	Picks		Body	Border	Pallu			

21. Have you made any changes in the sarees ? Yes/No, If yes

a) Yarn type
b) Reed number
(c) Zari
d) Length of saree
e) Motifs

22. What are the problems do you face ?

23. Which is market for your products ?

1) Local market
2) Show room
3) Outside state
4) Export

24. How often do you sell your sarees ?

1) Weekly
2) Monthly
3) As and when

25. Marketing channels for distribution of products

26. Cost and returns of different types of sarees

(Rs./Saree)

Sl. No.	Particular	Saree type									
		Type-A	Type-B	Type-C	Type-D	Type-E	Type-F	Type-G	Type-H	Type-I	Type-J
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											

SILK SAREES OF MOLAKALMURU

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Major Advisor

ABSTRACT

The present investigation entitled "Silk sarees of Molakalmuru" has been conducted during the year 2000 in Molakalmuru city of Chitradurga district with the objectives, to study the historical background of Molakalmuru sarees, to enumerate the existing weaving technology and to assess the economic viability of different types of Molakalmuru sarees. The sample comprised of 120 independent weavers and interviewed personally. The results revealed that nearly one third of the respondent had education upto higher secondary. Majority of them were belonged to middle income group. Weavers purchased raw materials from Bangalore, Rayadurga and local dealers. Weavers always faced problem of hike in price, inferior quality of filature and charaka silk, untimely supply and scarcity of zari. Geometrical, temple and intricate designs mango buttas, peacock, parrot, hamsa, lotus, diamond, rudrakshi beads, deepa, banaras, venki and phenoix were the common motifs used in Molakalmuru sarees. More than ninety per cent of the weavers used acid dyes to dyed the silk yarn. Molakalmuru silk sarees were of medium weight ranged from 650-950 gm. A saree of 5.5 to 6 mts consumed 400-600 g of raw silk and about 150-360 gm of pure/tested zari and had a double sided border ranged from 2" to 10" and width of the saree was 48". Annual production of the sarees were 28,000. About ninety five per cent of the weavers faced problems of poor marketing system for their sarees. Majority of the weavers sold their sarees to the local markets, during special occasion. Selling price of Molakalmuru sarees were ranged from Rs.2200-4500.