

SMALL SCALE FOREST BASED ACTIVITIES IN KARNATAKA
WITH SPECIAL REFERENCE TO WOMEN.

SIX
CASE STUDIES

VOL. - 2

BY

THE INSTITUTE OF SOCIAL STUDIES TRUST
10th CROSS, R. M. V. EXT.
BANGALORE

FOR
THE DEPARTMENT OF PLANNING
GOVT. OF KARNATAKA

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C. CASE STUDY III

MUTHUGA

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C. CASE STUDY III

MUTHUGA

CHAPTER I

INTRODUCTION

Muthuga leaf collection and plate making constitute an important seasonal occupation for a large number of rural women in Dharwad Taluka of Karnataka State. Despite the fact that many thousands of women from over 30 villages in Dharwad are engaged in this seasonal activity which contribute to a major portion of their income, no record is available giving details of the information regarding this activity. A preliminary visit revealed that very few facilitative programmes to strengthen this activity exist. The present study is a modest attempt in the direction of understanding the social and economic implications of women's involvement in Muthuga Leaf Plate Making, an important forest based activity.

In Kannada *Butea Monosperma* is known as "Muthuga" and the leaf is known as "Muthugadale". Muthu in Kannada means "pearl". The terminal leaves are round and pearl like in shape, hence the name Muthuga. Another reason for the tree being named Muthuga is that the portion inside the calyx of the flower resembles a white pearl.

The tree is popularly known as 'Flame of the Forest' due to the characteristics of the reddish orange flowers which when densely crowded on a swollen node strikingly gives the appearance of a flame on a general leafless condition, in the months of February and March.

CHARACTERISTICS OF THE MUTHUGA TREE

Muthuga is a small to medium sized deciduous tree with crooked trunk and branches. In Karnataka, Muthuga grows in the deciduous forests of Dharwad, Belgaum, Shimoga, parts of Bangalore, Chitradurga, Chickmagalur, Mandya and Mysore. This tree grows in the periphery of the forest where the land is less fertile and the rainfall is less than 30 mm. The plant basically is a slow growing and hardy one. Even if the tree is cut once the shoots grow again and reach upto 20 ft. if undisturbed. The tree withstands frost and drought very well and grows well on saline soils. The wood of the tree is dirty white in colour, porous, soft with annual rings indistinct and weighs about 36 lbs per cubic feet. The bark of the tree is grey or light brown in colour.

LEAVES

The leaves are trifoliate, i.e., it consists of a stalk, 8-12 cms in length and 3 leaflets, of which 2 are 8-12 cms across being opposite to each other. The 3rd leaf is larger and is 12-20 cms across being some distance away from the others. The leaves are leathery and stiff, the terminal leaf is round and pearl like in shape and the lateral ones are irregular. The young leaflets are fine and silky while the older ones are more or less smooth but hairless. The tree sheds its old leaves in winter i.e., during the months of January and February and is covered with bright orange and red flowers in the beginning

of summer (February to March). The fresh leaves appear after March. However seasonal changes occur in different geographical areas. (Ref Annx.1-Fig 1,2,3).

FLOWERS

The flowers are large and densely crowded on the leafless branches. The flower stalk is velvety, dark olive green in colour and sometimes it is almost black. The calyx of the flower forms a sort of irregular cup at the base outside and is clothed with fine silky hair on the inner side. The rim of the calyx cup normally has five teeth, but is not visible as the upper ones are fused. The corolla is 3-5 cms long of a rich orange or solomon red colour with the silky hair outside (Annx.1-fig 4).

FRUIT

The fruit is a flat pod or legume about 12-18 cms long and 4-5 cms broad and narrow towards the tip with a large solitary seed enclosed. When young, the parts are velvety with dense hair. As they grow in length they become less hairy. Dry pods are not elegant as they hang downwards on the tree. The seed is brownish in colour and is broad and heartlike in shape (Annx.1-Fig 5).

MUTHUGA TREE - USES

In many parts of India this tree is used for the cultivation of lac insects. The quantity of lac produced from Muthuga tree exceeds that of any other tree, even though the quality is not

the best. The wood though porous and soft, is durable under water and is used for well-curbs and piles. The bark of the roots yield a coarse brown fibre which is used for rough cardage and for caulking boats. The roots are rich in starch and the wild animals uproot the small plants and eat the roots. The bark of the tree when cut or scratched gives out a reddish root which on exposure to air hardens into a glassy ruby red gum. Commercially this gum is known as 'Bengal Kino'. It is a powerful astrigent and is medically used in the treatment of many forms of chronic diarrhoea and in indigo heating in Bihar. The flowers give an orange dye and a decoction of them is used to keep out white ants from the fields. Seeds have a medicinal use and are used to cure round worm and tape worm infections. The leaves are used as plates, cups, and in packing food items. The leaves are also used as fodder for the cattle. In some parts of India they are also used as beedi wrappers.

HISTORY OF LEAF PLATE MAKING

The origin of the leaf plates is unknown so far. Initially the farmers in Karnataka used the tree branches as fodder for cattle and as manure for agriculture as it was available in plenty. Later it was identified that the leaf, even when dried up and crumpled, did not tear and maintained its smoothness. Due to this unique characteristic, the leaves were called "Esthiri Ele" meaning "ironed leaves". Later on due to the odourless characteristics of these leaves, women used them for serving food. However there is no evidence to prove as to when and where it started. During the research survey in Dharwad taluk,

village of Mugad, claimed to be the pioneers in Muthuga plate making. In this particular village, the plates were made from fresh leaves which were later dried and pressed by keeping heavy stones on them.

Another village Devarahubli, the women modified the process of plate making by drying the leaves first and later stitched and pressed them. By doing this the shape of the plate was round and the plates attracted a very good market and the village gained popularity.

The leaf plate making is generally undertaken by the women. Participation in the leaf plate making activity largely alters the living conditions of the persons involved in it. The present study is an attempt in the direction of analysing the social and economic implications of the Muthuga activity on the women participating in it.

OBJECTIVES AND METHODOLOGY

OBJECTIVES

Large scale participation of women in the forest based activity of muthuga leaf collection and plate making has resulted in taking up the present study, which was undertaken with the objective of studying the social and economic implications of this activity on the women involved.

Hence the study is set forth to collect information on the role of women in the collection, processing and marketing of Muthuga leaf - a minor Forest Produce and to assess the need, if any, for

relevant government policies and programmes which would help enhance the socio-economic status of women in this sector.

Another important objective of this study is to create awareness amongst people that the Muthuga leaf collection is a commercial activity which has so far remained unindented. The study also attempts to assess the extent of, and reason for the shortage of raw material by proposing some relevant policies for the further development of this activity, finally empowering the women involved in Muthuga leaf collection.

METHODOLOGY

The selection of the study area for the present study was based on discussions with the forest officials including Deputy Conservator of Forests, Asst. Conservator of forests, Dharwad, Block Development Office, Dharwad. From these discussions Dharwad emerged as the appropriate location for conducting this case study

The preliminary visit was conducted in Dharwad in December 1987 to get familiar with the place and to build up rapport with the villagers.

During this visit discussions were held with private agencies, like India Development Service (IDS), Dharwad, contractors and export agents, who were involved in the marketing of Muthuga leaves, to identify the actual villages engaged in Muthuga activity in Dharwad taluk. Altogether thirty villages were identified.

The research team visited Dharwad to make an indepth survey in May 1988, when the actual collection of Muthuga leaves had started. Of the total thirty villages participating in Muthuga activity a sample of fourteen villages were selected for the study's purpose. A brief description of the site and the list of the sample villages are presented in the last section of the present chapter.

After the preliminary survey of one village the research team was able to stratify the villages into three categories based on the actual involvement (in percentage) of the number of women in this activity. High level- above 50%, medium level-20%-50%, low level- below 20%. Altogether fourteen villages, 6 from high level, 6 from medium level and 2 from low level were surveyed for the present Study's purpose. Other aspects considered for sample selection of the sample area were:

- i) geographical location (refer Map 1 - Annexure 2)
- ii) methods of plate making
- iii) the existence and non-existence of a non-government organisation in the village.

Further in each of the 14 selected villages a minimum sample of 20% was chosen for an indepth analysis. However in some villages the sample was less than 20% due to some practical difficulty and altogether 196 households were surveyed. Sample selection was made with due consideration to provide a fair representation of all the castes in each village, representation from landless, marginal, small and big farmers, and that of beneficiaries of government schemes.

Table I presents the profile of the sample villages, the households, members engaged in Muthuga activity and also the actual members of the households selected for the purpose of sample.

TABLE I

Distribution of Sample Households in the selected 14 villages in Dharwad

Sl. No.	Name of the sample villages	No. of HH	No. of HH engaged in Muthuga	% of HH engaged in Muthuga	No. of HH surveyed	% of HH surveyed
1	Devagiri	68	50	73%	10	20%
2	Devarahubli	500	400	80%	40	10%
3	Hallikeri	138	100	72%	20	20%
4	Hullthikote	115	100	86%	20	20%
5	Mugad	598	300	50%	50	17%
6	Venkatapura	69	50	72%	5	10%
7	Kallapur	109	50	45%	10	20%
8	Kyarkop	260	60	23%	7	12%
9	Mandihal	148	50	34%	10	20%
10	Ramapur	179	50	28%	10	20%
11	Veerapur	114	25	22%	5	20%
12	Waranagalavi	114	24	21%	5	20%
13	Kalkeri	227	4	2%	1	25%
14	Mavinkop	49	4	8%	3	75%

Source: Census of India : Karnataka District Census Handbook
Dharwad Dist. 1981

Note: Though it was decided to survey a minimum of 20% in each village, the percentage was less than 20 in 4 villages due to the following reasons:

- In Devarahubli and Mugad as the number of HH engaged in Muthuga collection was comparatively larger, the team could cover only a smaller sample due to time constraint
- In Kyarkop the percentage surveyed was only 12% due to the non-availability of the respondents since many of these women had gone for agricultural work.
- The women of Venkatapura which is a dominant Muslim village were reluctant to give any information as their men folk were not at home to sanction permission to speak to outsiders.

Structured questionnaires were administered to the woman of the household who was the chief respondent involved in Muthuga leaf plate making. However in few cases when she was not available, other members of the family substituted for her. Group discussions were also conducted to collect community background information, also some of the head men in each village were interviewed with regard to information on Muthuga collection activity. In depth interviews and individual case studies were conducted with few elderly women to understand the trend of Muthuga collection in the past and the present.

SITE DESCRIPTION

Dharwad Taluka is one of the 16 talukas in Dharwad District which was selected as the case study site for Muthuga. It is about 460 Kms on the North of Bangalore, the capital city of Karnataka. Map I in the appendix gives a pictorial location of this district in Karnataka. From amongst the districts selected in the north of Karnataka, Dharwad district, especially its western portion is relatively rich in Flora and Fauna.

Of the total geographical area of 1,373,800 hectares only 10.46 forms the forest cover. The forests of the district are of three types: the monsoon forests, the accacia or thorn forests and the scrub forests. Map II gives a detailed picture of Dharwad Taluk showing the specific villages chosen for the study. The profile of the selected villages giving details pertaining to the total area, population, number of households is presented in Table II. The entire list of the villages participating in Muthuga activity apart from the sample villages is presented in Appendix.

TABLE II

Area, population and number of Households
in the sample villages

Name of the village	Total area (In Hectr)	Total population	No. of Households
Devagiri	760.78	377	68
Devarahubli	993.57	1547	500
Hallikeri	1138.67	860	138
Hulthikote	2710.65	685	115
Mugad	1311.07	3558	598
Venkatapur	360.30	399	69
Kallapur	413.01	670	109
Kyarkop	750.27	1676	260
Mandihal	541.16	895	148
Ramapur	894.55	1047	179
Veerapur	265.30	641	114
Waranagalavi	1192.20	600	114
Kalkeri	3464.62	1337	227
Mavinkopa	1438.47	279	49

Source: Census of India : Karnataka District Census Handbook : Dharwad Dist. 1981

CHAPTER SCHEME

Chapter I gives the introduction giving a brief history and characteristics of the muthuga tree and origin of plate making in Dharwad, Methodology and the Chapter scheme.

Chapter II discusses the socio-economic structure of the sample population, covering the aspects of family size, education, housing, asset ownership, occupational patterns, etc.

Chapter III contains the findings of the study which describe the raw material scenario, collection activity, processing and manufacturing of leaf plates, the marketing situation and income earned through leaf plate making.

Chapter IV provides an insight into the actual occupation of leaf plate making through 3 individual short case studies and also the role of Government and non-Government agencies in improving the living conditions of women involved in Muthuga leaf plate making.

Chapter V suggests some feasible policy recommendations for the government to encourage and empower the women involved in this activity.

CHAPTER II

SOCIO-ECONOMIC STRUCTURE

Majority of the sample villages have access to basic amenities like drinking water, electricity, primary school, road and bus facilities, with the exception of medical facilities.

CASTE COMPOSITION

TABLE III

Castewise Distribution Of The Muthuga Collectors

Villages	SC/ST	BC	FC
Devagiri	2	5	3
Devarahubli	5	16	19
Hallikeri	5	9	6
Hulthikote	-	5	15
Mugad	10	35	5
Venkatapura	-	5	-
Kallapur	-	3	7
Kyarkop	-	6	1
Mandihal	2	7	1
Ramapur	-	6	4
Veerapur	-	-	5
Waranagalavi	-	3	2
Kalkeri	-	-	1
Mavinakop	-	3	-
TOTAL	24	103	69

It can be observed from Table III that the backward community participates in the Muthuga activity to a large extent followed by the forward caste and lastly the scheduled caste/tribe. While 103 Backward Community households participated in Muthuga activity accounting for about 52.55 of the total sample that of scheduled caste/tribe is only 12.25%. On the other hand, the participation of forward caste amounts to 35.2 percent of the total sample.

LITERACY LEVEL

TABLE IV

Literacy Level Of The Sample Population

Name of the Village	No. of literates		No. of illiterates	
	Male	Female	Male	Female
Devagiri	12 (22.64)	10 (18.87)	15 (28.30)	16 (30.19)
Devrahubli	57 (28.22)	32 (15.84)	49 (24.26)	65 (32.18)
Hallikeri	19 (16.81)	12 (10.62)	38 (33.63)	44 (38.94)
Hulthikote	28 (23.93)	19 (16.24)	35 (29.91)	35 (29.91)
Mugad	43 (15.52)	27 (9.75)	94 (33.9)	114 (41.16)
Venkatapur	6 (25.0)	2 (8.33)	9 (37.51)	7 (21.17)
Kallapur	12 (19.05)	13 (20.63)	17 (26.98)	21 (33.33)
Kyarkop	4 (13.33)	1 (3.33)	8 (26.67)	17 (56.67)
Mandihal	6 (11.11)	5 (9.26)	19 (35.19)	24 (44.44)
Ramapur	6 (11.11)	6 (11.11)	17 (31.48)	25 (46.30)
Veerapur	10 (23.26)	9 (20.93)	10 (23.26)	14 (32.56)
Waranagalavi	1 (5.56)	1 (5.56)	11 (61.11)	5 (27.7)
Kalkeri	-	1 (20.00)	2 (40.0)	2 (40.0)
Mavinkop	5 (25.0)	3 (15.0)	4 (20.0)	8 (40.0)
TOTAL	290 (19.44)	141 (13.12)	328 (30.51)	397 (36.93)

Note: Figures in parenthesis denote percentages

It can also be observed that the literacy rate among the sample population is very less. Male literates number 209 accounting for about 19.44 percent literacy rate. Female literacy is much lesser than that of male literacy. The female literates number only 141, literacy rate being 13.12 percent. These findings imply that the degree of illiteracy is highly significant.

HOUSING CONDITION

The housing conditions of the sample villages are noticed to be by and large very poor with inadequate space. Majority of these houses are small huts with thatched roof. However the housing condition differed from village to village and in many a place poor sanitary conditions prevailed due to the presence of cattle shed within the premises of the household. The house they resided are their own, either self owned house or janatha houses. None of the villagers live in rented houses in these villages.

LAND AND LIVESTOCK OWNERSHIP

TABLE V

Asset Ownership By The Sample Household

Name of the villages	Landless	Marginal Farmers (upto 2.5 acres)	Small Farmers (2.5-5 acres)	Big Farmers (above 5 acres)
Devaqiri	6	2	1	1
Devarahubli	21	7	10	2
Hallikeri	13	1	4	2
Hulthikote	6	8	5	1
Mugad	35	5	6	4
Venkatapura	2	2	-	1
Kallapur	5	1	1	3
Kyarkop	-	6	-	1
Mandihal	9	-	-	1
Ramapur	5	4	1	-
Veerapur	1	1	2	1
Waranagalavi	5	-	-	-
Kalkeri	-	-	-	1
Mavinkop	3	-	-	-
TOTAL	111	37	30	18

Data presented in Table V indicates that of the total 196 households, 56.7 percent of the families are landless, 18.8 percent marginal farmers, 15.3 percent medium or small farmers, and only 9.2 percent are big farmers. Large scale participation of landless population in the muthuga activity reflects on their economic necessity. Few of the landless households also owned livestock, and 38 households of the 111 total landless owned cattle. This was mainly due to operation of the IDRF scheme in these villages as a result of which the poorest families were benefitted. In total 48 families had availed of the IRDF loan and the loan amounts were outstanding at the time of the survey ; but this does not indicate that the others never availed of the bank facilities. During the period of interview many families who

benefitted from this scheme had repaid their loans already.

OCCUPATIONAL PATTERN

Agriculture is the main occupation of these villagers (both men and women). Since a majority of them fall under the landless category, it is clear that agricultural labour is the main occupation of these families. Many families own 2 to 3 acres of land and grow Jowar as the staple food and cotton, groundnut and other cereals as cash crops. There is a clear shift in cultivation from subsistence to cash crops and many acres of private waste and forest lands are converted for cotton cultivation which is the main cash crop in Dharwad District. The practice of cotton cultivation in Dharwad District has increased the labour participation of women. During the cotton harvesting season mainly women are engaged in separating the cotton from the plant. The families owning more than 5 acres of land also work as agricultural labourers in other's fields. During the agricultural season it is interesting to note that even the big farmers (both men and women) exchange labour. The wage rate for female agricultural labourers is Rs.6/- and male is Rs.8/- per day.

Quarry was another important activity, especially in the two villages Mandihal and Waranagalavi and women work throughout the year in stone quarrying. Here too wage differences exist. Males draw Rs.12/- and females draw Rs. 8/- per day. Female involvement in Muthuga activity was not significant in these two villages. Few women were also participating in an income earning activity in the Forest Department nurseries. The Kalkeri village women gave up the Muthuga collection activity as they found it

more beneficial to work in the forest nursery in their village during the summer months. These women earn a daily income of Rs.10/- to Rs.12/+ from the nursery work. As a result the women of Kalkeri (except 4 families) gave up Muthuga leaf collection.

Collection of Minor forest produce (MFP) is another main source of income for the women. Round the year women collect one or the other MFP for self consumption or for commercial purposes.

Bamboo is considered to be a major forest produce and it is distributed to the women only through Forest Department depots for a nominal price. While some of the MFP collection is free of cost to the women (Muthuga as an example) there are some items where the contractors act as middlemen and consume a major portion of the income.

TABLE VI

Age & Sex-wise Processing Activity

Name of the villages	5 - 14 Y		15 - 60 Y		Above 60 Y		TOTAL	
	M	F	M	F	M	F	M	F
Devagiri	8	9	7	12	-	-	15	21
Devarahubli	17	17	23	47	1	7	41	71
Hallikeri	9	9	13	25	-	1	22	35
Hulthikote	4	6	9	25	-	-	13	31
Mugad	3	18	22	69	-	7	25	94
Venkatapura	2	1	2	6	-	-	4	7
Kallapur	-	8	-	11	-	-	-	19
Kyarkop	1	4	1	12	-	-	2	16
Mandihal	-	1	7	14	-	-	7	15
Ramapur	2	7	4	18	-	1	6	26
Veerapur	-	7	-	10	-	-	-	17
Waranagalavi	3	-	3	4	-	-	6	4
Kalkeri	-	-	-	1	-	-	-	1
Mavinkop	-	-	1	5	-	-	1	5
TOTAL	49 (9.9)	87 (15.9)	92 (18.6)	259 (52.2)	1 (0.2)	16 (3.2)	142 (28.6)	362 (71.4)

Note: Figures in parenthesis indicate percentage

With respect to the involvement in Muthuga activity it can be observed from Table VI that female participation is much higher than that of male. The figures presented under work participation category reveal that in almost all the villages under study consideration, the participation of women out numbers that of men. The total for all the villages show that while the percentage of men is as low as 28.6 percent, that of women is as high as 71.4 percent. These figures reveal that Muthuga is a female dominated activity.

The presentation made so far pertained only to the socio-economic status of the families involved and the quantum of involvement by male and female segments, in the Muthuga activity. The actual processing that occurs in Muthuga activity and the problems encountered therein are presented in the subsequent chapters.

CHAPTER III

RAW MATERIAL COLLECTION AND PROCESSING

Muthuga being a deciduous tree sheds leaves in the months of January and the tree bears fresh new leaves by the dawn of the summer and the collection of the leaves by the surrounding villagers is a daily ritual during this season.

Muthuga leaf collection becomes the main activity during this season as women are relatively free from the other agricultural activity during summer. Approximately 30 villages in Dharwad Taluk which are situated near the western ghats are identified by the researchers as the Muthuga activity area.

One important characteristic of these muthuga villages is that most of these villages are surrounded by forests, where the muthuga trees are available either nearby or within 20 to 30 Kms. Mostly the muthuga trees are available in western parts of Dharwad taluk and in places closer towards Belgaum District, Alnavar near Hanapar Taluk and towards Haliyal in Uttara Kannada District. Dharwad Taluk Map (Fig.1) shows clearly that all these 30 villages are clustered towards the border of Uttara Kannada district and Belgaum District.

Muthuga leaf collection starts early in the morning and continues till almost evening. Thus they spend their day in the forest. They collect the leaves in triplets wherever they come across and then hold the leaves in their arms in rows. When they are unable to hold large quantities they place them on the ground. They move on to other trees but come back and place the

leaves in the same area ; wrap the leaves in cloth and move forward to other places. On their way back home they collect some firewood from the forest for daily use.

While both women and men collect Muthuga leaves, the women are more dedicated to this work and out-number the men. In all the Muthuga villages, atleast one woman from each household goes to the forest to collect the leaves during the season. School going children also go for collection as they have vacation during the Muthuga season.

DISTANCE TRAVELLED AND MODE OF TRANSPORT

In the process of collecting the Muthuga leaves, women walk miles and miles and the distance covered varies between 5 Kms to 25 Kms. Yet others during the peak season go by buses, bullock carts and even hire trucks and go in a group. Initially the women folk, collect the leaves in the nearby forests, covering 5-6 kms per day by walk. After few days they even go further, upto 30 kms in search of leaves due to shortage of leaves in the nearby forests. When they go by truck or by bullock cart they even stay overnight in a nearby village and collect large quantity of leaves, say 30-50 chains of leaves and return after 2 days. However, when men participated in collection work they travelled by bus/lorry/truck. It is also mentioned by many women that the collection expenditure is more when menfolk go with them as they spend on tea and coffee and on food while women spend only on pan and at the most, for a cup of tea.

QUANTITY OF COLLECTION

The quantity of leaves and collection varies from person to person depending on the availability of raw material, the distance covered and the means of transport. For eg., when a woman goes for collection by walk she on an average can bring 3 to 5 chains of leaves per day. She can make about 150 leaf plates from one chain. On the other hand when they use other means of transport, they can collect 20-25 chains of leaves per person over a period of two days. However the expenses for such a trip were observed to be high and only twice a week could a person carry out such collection activity. The women while returning from the forest collect the bamboo sticks or Jowar waste wherever available. The first step before stitching the plate leaves is to chop the bamboo sticks into very tiny pieces and keep them ready for plate stitching.

PLATE MAKING

While only one or two persons from a household participate in leaf collection, leaf plate making is done by almost all the family members, both male, female and even by small children. In these sample villages, even children from the age group of 6 years onwards and old women above 60 years were engaged in the processing of muthuga leaves to a small extent.

The women in Dharwad follow two methods of plate making. While some villagers make the plate when it is fresh, there are others who stitch the leaves after drying the leaves in the hot sun. Of the 14 sample villages, 6 villages make the plate

while the leaf is fresh. Five villages dry the leaves first and then stitch the plates and the remaining 3 villages use both fresh and dry methods. While conducting the survey the researchers learnt that the leaf plates made with dry leaves secure a higher price than the fresh plates, as the gap between the leaves is lesser in the dry plates and the sticks hold stronger and tight if the leaf is stitched while it is dry. In the case of fresh leaves once the leaves become dry, a gap or a hole is formed between the leaves and the sticks often fall off.

The first step is to cut off the stems with a knife using the already processed tiny sticks, and start making the plate. (See fig.*). Once the plates are ready they are dried in the sun made into small bundles of 100 plates each and pressed by loading heavy stones on top of them for 2 to 3 days.

In the dry method the leaves are strung together on a twine and dried under the sun for 2 to 3 days till the colour changes to a faint grey. (See figure *) Once the leaves are dry they are stored in their houses (see fig. *). Whenever the women get time they take out these strings of leaves and soften them either by sprinkling water or by exposing the leaves to the morning dew. The stems are then cut off and the leaves are finally made into plates. Once the plates are ready they are placed in small bundles of 100 plates each and pressed by placing heavy stones on them for 2 to 3 days. When the plates are pressed properly, the edges are trimmed the leaf plates to get a round shape, using a round object as a stencil.

* Figures given in Annexure - 3.

During the survey the research team came to know that Devarahubli one of the selected villages, are pioneers in using the dry method of plate making. These plates have a very good demand in the market and fetch a higher price. It is even told by many villagers that they use Devarahubli village name and sell their product to obtain a higher price.

IMPROVED METHODS

One of the residents of Devarahubli village discovered a machine to press the plates instead of keeping the plates under the stones. The machine is assembled of 4 wooden planks and one iron rod and he has been using it for pressing the leaves for the past 2 years for which he secures double the price than the ordinary leaves. He could press 5 bundles (500 plates) of leaf plates at a time and it required only about 2 hours to press it. The leaves pressed by this machine are also observed to be lighter and as a result transportation becomes much easier. From long discussions with this family revealed that this particular family never sold their products to either the local market or to the middle man but they got orders (quotations in advance) from distant markets. From this it is clear that improvements in muthuga plate making could enhance the women's income by improving the quality and thereby promising a higher price.

MARKETING OUTLET OF MUTHUGA PLATES

The muthuga leaf plates change many hands before reaching the end user. The villagers who collect and process the plates sell their product either to the middlemen or directly in the

Dharwad or distant markets. Agents from different places like Dharwad, Hubli, Gadag, Bellary, Belgaum, Davangere and Bangalore visit these villages weekly or bi-weekly to purchase the leaf plates from the women. In some villages there are local agents within the village itself who buy the plates from the villagers which are stored in their houses during the season to be sold at a higher price later in the year either in the wholesale market at Dharwad or get orders from other places. However one or two families are exceptional as they directly market their produce.

For example one family in Devarahubli village which takes orders from Maharashtra and other places every year makes about 50 percent higher profit than the others. Hence the profit or the income earned by the collectors could be enhanced if they directly sell their products to the end user.

INCOME FROM MUTHUGA ACTIVITY

An attempt was made to calculate the approximate income earned by the families by taking into consideration the amount of leaves collected per week per family and the rate at which these leaves are marketed. The frequency of the number of households that fall under each range of income is presented in Table VII.

TABLE VII

Village-wise Income from Muthuga Collection

Monthly Income Of The Households

Name of the village	Upto Rs.100	100-200	200-300	300-400	400-500	Above 500
Devagiri	-	-	-	5	-	5
Devarahubli	1	20	7	9	1	2
Hallikeri	-	3	8	8	1	-
Hullthikote	1	8	4	3	1	3
Muga	-	16	17	-	15	2
Venkatapur	-	-	1	4	-	-
Kallapur	-	2	-	3	5	-
Kyarkop	-	2	1	3	1	-
Mandihal	-	2	5	-	2	1
Ramapur	-	1	2	-	2	5
Veerapur	1	-	2	2	-	-
Waranagalavi	-	4	-	1	-	-
Kalkeri	1	-	-	-	-	-
Mavinakop	-	1	1	-	1	-
TOTAL	4	59	48	38	29	18

The data reveals that the monthly income of the families from muthuga collection ranges between Rs.100 To Rs.500. However a maximum number of households fall in monthly income of Rs.100 To Rs.200 (59) followed by income range of Rs.200-300 (48) and about 38 households in Rs. 300-400 Range.

This income can be considered as the net income of the households, as Muthuga activity does not involve any input costs. In any case their labour charges should be accounted for.

However income the Muthuga collectors receive by selling the final products to agents is a gross undervaluation when compared to the market prices. Due to lack of storage facilities and economic necessity, they are forced to sell their products to the local agents also during the same season, hence do not reap the

full benefits. If they could only directly market the products that too during an off season, they would double their income.

CHAPTER IV

CASE HISTORIES

A few individual case studies are presented in this chapter to highlight the problems and perspectives of the Muthuga leaf collectors.

1. KASIAVVA

Kasiavva is 45 years old and lives in a small pucca house in Holthikote village. Her husband is 55 year old and works as an agricultural labourer also looks after the cattle. She has a son aged 18 years and a daughter aged 10 years. The family owns no cultivable land and is entirely dependent on their earnings.

Kasiavva is a very prominent woman in Holthikote village and is one of the main muthuga leaf collectors. She started this activity in her childhood and continued the same after her marriage. She gets up early in the morning and sets out each day during the season at about 5 AM with the other women of her village or sometimes alone to collect the leaf. She walks everyday walks 15-20 Kms and collects 3 to 4 strings of leaves. Her son and daughter also sometimes help her in collecting and processing.

Kasiavva is very efficient in muthuga leaf collection. If the tree is covered with some thorny bushes she clears the way to climb the tree with the help of a big stick. She is very careful in plucking only the big sized good leaves without lopping the branches. When she climbs up the tree

and plucks the leaves she makes the other woman accompanying her collect the leaves from the ground and gives her a small share while keeping a major share for herself.

During the muthuga season Kasiavva only does the collection and dries the leaves in the hot sun and stores the leaves in her tiny house. Once the collection season gets over, she does the plate making after she returns from the agricultural field or whenever she is free.

In the year 1986 India Development Services (IDS) organised a group of 10 women including Kasiavva and formed a muthuga sangha. These women collected muthuga leaves and stored the plates in a common place and contacted the Indian Bank, Dharwad Branch, for a bank loan. The first year 10 women received a loan of Rs.1000 each and they succeeded in obtaining Rs.1300 in the next year and applied for Rs.2000 in the third year. By doing this, these women were able to stock the leaf-plates during the peak season when the price was very low and market the same at the end of the year and secure a higher profit. This year the number of women in the group increased to 18 and the other women of the same village and from other villages are following the example set by this group and are getting organised to obtain the same benefit.

Kasiavva stored 20 bundles of leaf plates (20,000 leaf plates) in a rented house in 1986. All the 10 women in the group jointly hired a room for Rs.25/- monthly and sold the

products towards the end of the year for Rs.50 Per bundle. The income that she received was utilised for repaying the bank loan. Last year as she did not get a rented home, 4 to 5 women jointly stored the leaves in one of their house. The bank loan is used to meet her day to day expenses during the collection season. She stores a part of her product for repaying the loan and the rest she sells to the agents or in the market in small quantities for meeting her household expenses.

Kasiavva with the help of other women contacted the DFO (Deputy Conservator of forests) of the Forest Division, Dharwad and received half an acre of land for growing Muthuga seedlings. 17 Women of her group benefitted from this scheme. Kasiavva is very proud that she is now in a position to contact the Government officials without any assistance which was a dream about few years before. On the World Environment Day, June, she along with other women planted the Muthuga saplings on the land which was distributed to them.

GOWRI

Gowri, a 60 years old Harijan woman lives in the village of Mugad which is one of the oldest Muthuga villages. In this village around 300 households are engaged in muthuga activity and the speciality in processing is that these women make plates with fresh leaves and sell it during the season itself. So the price received by these women is lesser compared to the other villages where they make the

plates with dried leaves. Gowri lives with her husband, 3 sons, 2 daughter-in-laws and 2 grand children. She started this activity in her childhood, in her mother's place. According to Gowri, her grandmother started the muthuga leaf collection when she was 10 years old and those days there was not much commercial value for these leaves. Even when Gowri was 10 years old, she sold 100 leaf plates for 50 paise. Now when the commercial value of the leaves has increased, many persons have become involved in this activity and this has thereby created scarcity of raw material. Now Gowri walks 8-10 kms everyday to collect leaves and sometimes when there are no leaves in the nearby forests, she even goes by bus to distant places by spending Rs.5 Everyday. 10 Years before Gowri collected the leaves from the nearby forests, and she says that how the Eucalyptus trees have replaced muthuga trees. In Gowri's house only she goes for collection and her daughter-in-law and assists her in plate making. Every week Gowri sells 1 to 2 bundles of plates to the agent who comes from Hubli and earns Rs.35 Per bundle. Lack of storing facility and her immediate need for money forces Gowri to sell the muthuga plates during the season to the agents at a lower price.

CHANDBIBI

Chandbibi a 35 years old Muslim woman from Mavinkop village of Dharwad Taluk and is a mother of 5 children, 4 girls and 1 boy. The family owns no land and depends mainly

on agricultural labour for their survival. Her husband earns Rs.10 Per day whenever he goes for work and Chandibibi gets Rs.6 as wages.

The speciality of Mavinkop village is that only four households out of 49 are involved in muthuga collection inspite of the fact the raw material is available abundantly in the nearby surroundings. On enquiry it was found that majority of the residents owned cultivable land and there was no necessity for them to go to the forest. Another important reason is that the Forest Department under the social forestry scheme has employed many women in the nursery, so an alternative employment exists, which is more rewarding.

Chandbibi learnt this activity of Muthuga collection from her parents and she continued the same after her marriage. In fact she is the first woman who started this plate making activity for selling in Mavinkop village. Three other women of the same village acquired an interest through Chandibibi's work and started collecting muthuga this year. Further, the community organiser of IDS has also organised some women of Mavinkop to form a muthuga women sangha.

Chandbibi sets out early morning everyday to the nearby forests during the muthuga season. Her 2 daughters also assist her in both collection and processing. They walk only 2 to 3 kms to get the leaves as these trees are available in their vailage itself and collect enough leaves. According

to Chandbibi, there is no scarcity of raw material in her village since only few women are engaged in Muthuga work.

Since only 4 women are doing this work and Mavinkop is far off from Dharwad market, no middleman/agent is involved in the marketing. Chandbibi sells 2 bundles of muthuga plates (2000 plates every week directly in the Dharwad market. She gets Rs 60 per bundle and spends Rs.12 for transport (bus charge), which according to her is quite satisfactory.

CHAPTER V

ROLE OF GOVERNMENT AND NON-GOVERNMENT AGENCIES

ROLE OF GOVERNMENT

The Forest Department in Dharwad is very eager and willing to facilitate a proper supply of raw material to the poor women and efforts were also taken to translate this desire into action. In the past the muthuga tree was found mostly in the forest belts and in the village waste lands. With the introduction of cotton cultivation and conversion of these waste lands for agricultural uses, trees disappeared from nearby private wastelands. To combat the raw material shortage the forest department has been encouraging the village women to plant muthuga seedlings at their backyards. Under the social forestry scheme last year the forest official had distributed 3 crores of muthuga seeds. The women were given freedom to grow muthuga seedlings in their kisan nursery along with other seedlings distributed by the Forest Officials. They were paid 29 paise per seedlings after a certain growth. From this nursery scheme many women have been earning Rs.2000 to 5000 per year in addition to their regular work. The Forest Department had given 17 acres of waste land to the women of Hulthikote to grow muthuga plants, as these women had shown interest and willingness to take up such schemes. On the world environment day i.e., June 5th 1988 these women dug pits for planting Muthuga seedlings in the forest land. Under this scheme each woman was provided 1 acre of land and asked to

fence their allotted space and plant trees. They were also assured of pattas which would be given in their own names. The Forest Officials had expressed their willingness to distribute such lands to the other village women if the interest and initiatives come from the women themselves.

The nationalised and scheduled banks in Dharwad Taluk are financially supporting these women by granting them a differential interest rate loan ranging from Rs.1000 to Rs.5000. At present a group of 20 women in Holthikote and very few women from other villages who possess family property are able to avail of this bank loan. But this scheme is not reaching the poorest of the poor as the banks seek some sort of collateral security from these women. However IDS is trying to organise these women in the other villages and this year many women stored their leaves in the little space available in their small homes. Yet this kind of arrangement is not sufficient to meet their day to day household expenses as muthuga collection is their sole livelihood during the summer season, when there is no other work available. Therefore these women are forced to borrow from the money lenders at a higher rate if they are to store the leaves. During the household survey the research team came across a few women who with great difficulty managed to stock the leaves as the bank officials did not sanction the loans when they required.

The Block Development officer has implemented the DWCRA (Development of Women and Children in Rural Areas) scheme to

different groups of women in Dharwad Taluk. DW CRA is an integrated rural development programme that is aimed at improving families below the poverty line. DW CRA is designed to improve the survival position and quality of life of young children and women, increase the impact of on-going existing development programmes. In concrete terms, DW CRA will encourage income generating activities for rural women and build on existing local skills and occupations, utilise raw materials and marketing outlets to ensure a reasonable economic return to the women, a return that will not be eroded by technological changes in the rural economy. Although many successful stories about the DW CRA scheme in Karnataka are heard, it is painful to learn that the Block Development office has selected a group of women in Devarahubli as a DW CRA group with the main objective of utilising the local raw material, wherein the majority of the members of this group were the rich landlord's wives who tried to dominate the whole scenario and utilised the money among themselves not including the other poor women members in any of the DW CRA activities. This group got the official sanction in the last muthuga season ie, 1987-88 and Rs.4000 (Rs.10,000 was sanctioned as the rolling fund which was utilised only by the Chairwoman, Vice Chairwoman and Secretary who purchased leaf plates and stored them in a common place during the peak leaf collection season ie., March, April and May. During the lean season they sold the leaf plates and gained a net profit of Rs.450 (excluding all the expenses) and shared this among the three prominent

members ignoring the other members. What is more striking in this situation is that though the mukhya sevika is aware of all the misuse of funds, yet in the second year instead of withdrawing or discontinuing the funds they sanctioned Rs.5000 more which was supposed to be utilised for starting a creche for children. It is ironical that even though government has chalked out this scheme to help the people below the poverty line the actual beneficiaries are the rich people.

ROLE OF NON-GOVERNMENT ORGANISATIONS

India Development Service (IDS) - an action group committed to economic and social development has been actively involved in organising the poor and the socially oppressed sections of people in Dharwad. The rural poor are being organised either around specific issues of immediate concern to them or around an income-generating activity. Further, this group mobilises people to create awareness in building self-confidence and to promote self-reliance among the groups. Since its inception in 1978 IDS has been engaged in various projects such as Health, Dairy Development, fodder production, social forestry, kisan nurseries, shepherding, community project, rural industries, environmental issues (creating awareness), adult education etc. Special emphasis is placed on working with women's problems. In Dharwad Taluk IDS has incorporated a large number of women across caste, class and religion and promoted income earning activities for women. These women

have a higher degree of decision making power and higher status in the household. IDS had launched income generation projects for women like, the leather unit (chappal making) Agarbathi rolling and Muthuga plate making and has given other supportive facilities like credit and created marketing awareness. This organisation facilitates women to avail of all government schemes and services in the villages. IDS serves as an extremely useful facilitator for the rural women, especially to the poor illiterate women who otherwise never knew about the existence of any such scheme, or even if they were aware, never did they ever attempt to gain access to such programmes. Even if the benefits from such Government schemes are not much, what is more striking is that such women usually acquire knowledge to improve their social and economic status. One can now feel a great degree of confidence and a sense of control over their lives which enhanced their status. One such example is the Muthuga sangha women in Hulthikote village. Now these illiterate women are in a position to interact with the forest officials and express their grievances and articulate them individually. These women are able to stand on their own and make independent decisions about their lives. During a casual talk with these women, one of them explained saying "our contact with IDS and participation in women's training programme gave us the confidence to stand on our own feet without depending on others. There was a time when we were scared of even the forest guards when we went for Muthuga collection. But now we are very happy when we think that

some of us went to the forest office and sat on the chair in front of the DFO and had a face to face conversation. IDS had organised these women through forming sanghas. These sanghas meet every Friday in their village with the help of the community organisers. There are 5 such sanghas formed in 5 different villages namely Hulthikote, Mugad, Devarahubli, Mandihal and Mavinkop. There is an apex meeting every 9th day of the month and this meeting is held in a rotational turn in any one of these 5 villages. In such meetings the method of leaf making, the storing method, the credit and marketing facilities etc are discussed and ideas interchanged which in itself is a great step towards enhancement of women.

From these findings it can be observed that private agencies are playing a greater role in improving the living conditions of the poor women than the government agencies.

POLICY RECOMMENDATIONS

1. Change in Forest Policy

In this case study we have analysed the important role played by women in small forest activities. The statistics of muthuga collection shows the extent to which a large number of women in these villages are dependent on minor forest produce.

The hypothesis used in this case study is that both from the point of view of the amount of time spent and the type of work done, women contribute more than men in the collection and processing of MFP and the preservation of forests in general. However this role is often ignored or at the most given insufficient importance in the formulation of the forest policy in research studies and even in afforestation projects including community forestry scheme.

An over view of the Karnataka Forest Policy depicts that the forest management is undertaken according to industrial and revenue interests neither of which have a strong interest in the existence and preservation of forests. Official concessions and low priced raw material for industries create large scale destruction of forests and not in its preservation. For the Government the forest is seen as a source of revenue as the major portion of the forest revenue comes from timber which can be obtained mainly by destroying the trees. As a result of all these, forest dwellers who were traditionally known as the

preservers of forest environment are slowly moving towards destructive dependence. Today they treat forests as a non-renewable resource and destroy them for their survival forced by their poverty.

(a) The forest policy should be changed to suit the changed situation, according to the needs of the community who are dependent on these forest produce for their survival. The forest policy should be people oriented and the primary interest of the official policy should respond to the needs of the poor in general and to the women in particular.

(b) The forest department should use all forest waste lands to grow plants that are of direct use to the poor, both for their day to day needs (like firewood) and for rural economic activities. It is therefore essential that all afforestation programmes focus on the needs of local forest activities. In planting for afforestation, emphasis will need to be laid not only on revenue creation for the Government but also on the specific raw material requirements of rural women which calls for decentralised planning. If decentralisation can be taken a step further to meet the specific requirements of women i.e., if women can be involved in species selection for afforestation, then the serious problem of raw material shortage can be solved and their future on such forest based activities ensured.

(c) The Government of Karnataka is aware of the problem sited above. Several attempts at afforestation have been launched by the forest department giving importance to local

needs and women's interest in particular. One such example is the waste land development scheme in Holthikote where the forest land is distributed to women to grow their own seedlings. While such isolated efforts are laudable, they will not solve the entire problems of Karnataka. Probably the example shown in Holthikote may be due to the interest taken by the NGO and the village women together where the forest officials have good will and are in a position to initiate this interest. However this is not happening everywhere - when the people organise schemes, the government by and large, refuses to part with the land, the forest department does not give them the technical support they need and even if these things happen, the women find it difficult to get land in their names. Therefore land should be given directly in a women's name.

(d) The availability of raw material needs to be viewed not only from the point of view of economic viability but also in terms of their ecological viability. While commercialisation of MFP is an exciting avenue for rural income and employment generations, it can also result in indiscriminate and thoughtless abuse of the natural forests. Even if trees aren't lopped, increased human movement within the forests could hurt their natural process of regeneration. However what is also true is that, people living in and around forests have collected MFP without causing ecological harm (this is not true of fuelwood and fodder, but in some sense the main factors here are

population pressure and land and timber utilisation by development projects and industrialisation). The possibility of ecological harm is closely linked to the lucre of money. Therefore the possibility of ecological importance is, that any attempt to use MFP for employment and income generation should closely stimulate traditional and existing practices by local people and not through the contractors.

What is also extremely important to note is that women are likely to be less destructive than men - because it is not as easy for them to climb trees and to hack trees. Therefore encouragement given to women to collect MFP is likely to be more ecologically beneficial.

2. If the aim is to strengthen women in Small Forest Based Activities and to bring visibility, certain mechanisms of development will need to be stimulated. The dominant presence of women within the small forest based activities will need to be acknowledged. One of the most straight forward ways of making known the efforts and presence of women, would be to make them statistically visible. Our present data system particularly the census data which speaks of main workers as those who are engaged in an economic activity for six months (183 days) and the others as marginal workers or as even 'non workers' does not project these women like muthuga leaf collectors as 'workers'. Based on this calculation in Karnataka most women are considered as marginal workers. But the data presented in this case study shows that such a definition is

highly inadequate. Official data collection sources have so far paid very little attention to MFO collection. At the same time, micro information reveals how women participate in MFP collection, and how it is a seasonal, yet within the season an important alternative means of employment. At the National Industrial Classification followed by the census as well as National Sample Survey, all MFP collection is grouped into a single category ie., NIC Code 054 (gathering of uncultivated materials such as gums, resins, lac, barks, herbs, wild fruits and leaves by exploitation of forests). This does not do any justice to the variety of MFP actually collected. As a beginning, a list of MFP known to be collected could be compiled by Data collection agencies.

Information on output producing process based and collection based SFE also need to be strengthened. Eg., official Karnataka Forest Statistics on volume of collection of MFP make no reference to collection activity like Muthuga, Uppage etc.

3. What is absolutely important is that visibility should in no way adversely affect women's employment and income. There is a serious possibility of this happening. Women collect different MFP from the forests free of cost. However once a certain activity gains the limelight, it is possible that the Government will try to extract some revenue either directly from the collectors or through industrial contractors who are armed with monopoly rights, may be willing to pay th collectors lesser and lesser sums

of money. So far the collection of muthuga leaf is free of cost and when it is brought to visibility, the forest department should not try to extract money by giving muthuga trees to the contractors. Therefore, within official circles, the protection of the interest of the collectors will need to be accepted as being of primary importance.

4. Inclusion of the muthuga collection groups in the DWCRAs wherever possible should be encouraged. While selecting the DWCRAs care should be taken to identify the poorest actual leaf collectors who are interested and willing to work as a group. This scheme should provide storage facilities for the group as they need to store the plates in order to sell them for a higher price. The Mukhya Sevika or the person who is in charge of the finance should supervise and find out whether the money sanctioned is utilised properly for the general group and control factors like the domination by few women wherever the possibility exist.

5. Bank finance for the storage of the leaf plates during the lean period. A few banks in Dharwad Taluk are giving finance to these women on Differential Rate of Interest - a scheme introduced to improve the economic conditions of low income persons by assisting them in their productive effort through loans at concessional interest of 4%. But some of the banks hesitate to finance them since they are getting raw materials (muthuga leaves) free from the forests. The financial institutions should assist these women by granting concessional interest rate loans without any collateral

security.

6. Research Development on Technology

The existing system of pressing the leaf plates by stones is a time consuming and unscientific method. Leaf plates are pressed by a scientifically improved machine. The economic value of the plates also could be double the existing price. There are leaf cup making machines already in existence and effort is needed to introduce a proper instrument to press the muthuga plates and this should be made available to these women at a concessional and reasonable rate.

7. Creation of a very strong local market is a crucial factor for improving the economic condition of the women. In the present situation the entire marketing scene is dominated by a few middlemen who pocket a major portion of the profit of these women by giving a very low price. Many of these women prefer to market their products to the local agents at a lower price as they have to incur expenses on transport and waste a day's labour to market the plates in a distant place where they secure a higher price. Therefore it is not advisable to eliminate these middlemen from the market scene - without finding out or suggesting an alternative. The best alternative form of marketing to avoid these middlemen is to set up a marketing co-operative for a cluster of villages. Now our decentralised form of government - the Zilla Parishad, can take over this responsibility and utilise a portion of the budget which is

sanctioned for women's development activities setting up a
co-operative society.

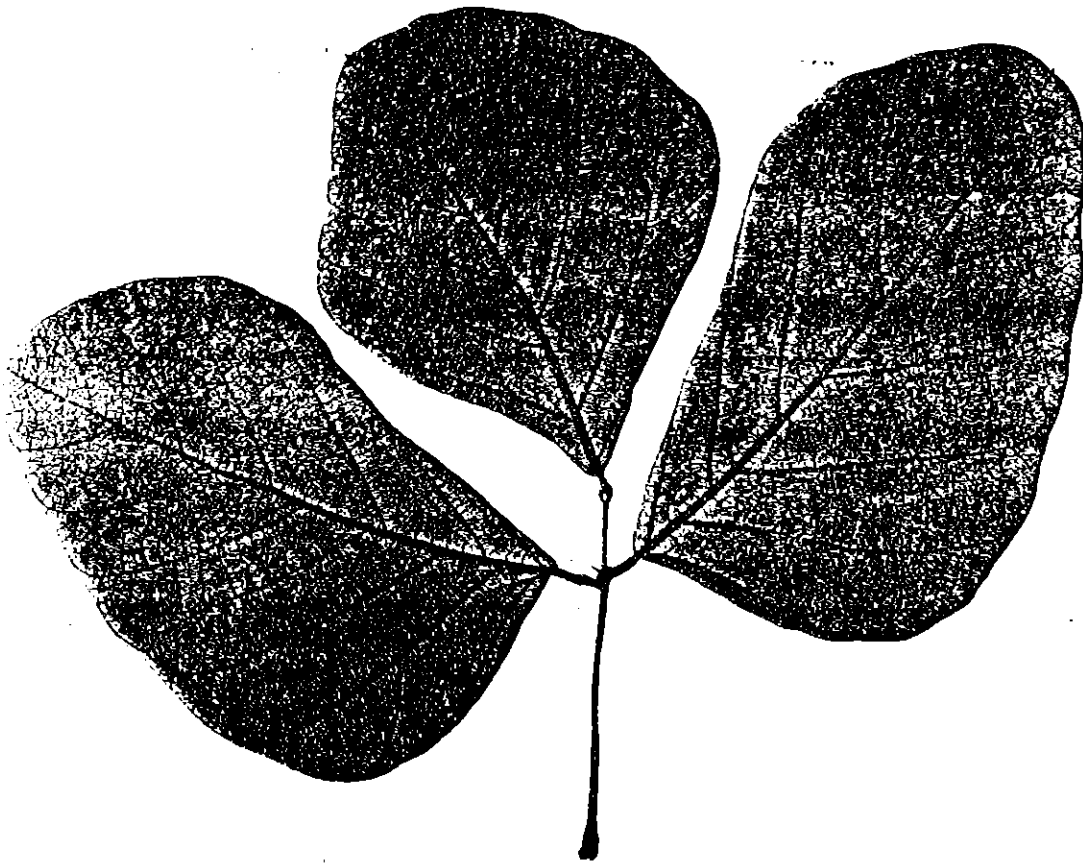
SUMMARY AND CONCLUSION

This case study highlights the role of women in Muthuga leaf plate making in Dharwad Taluks based on a sample study of 196 households spread over 14 villages. Leaf plate making has been found as a major means of livelihood of women in Dharwad Taluka. An attempt has been made to analyse muthuga activity scenario for the past few years.

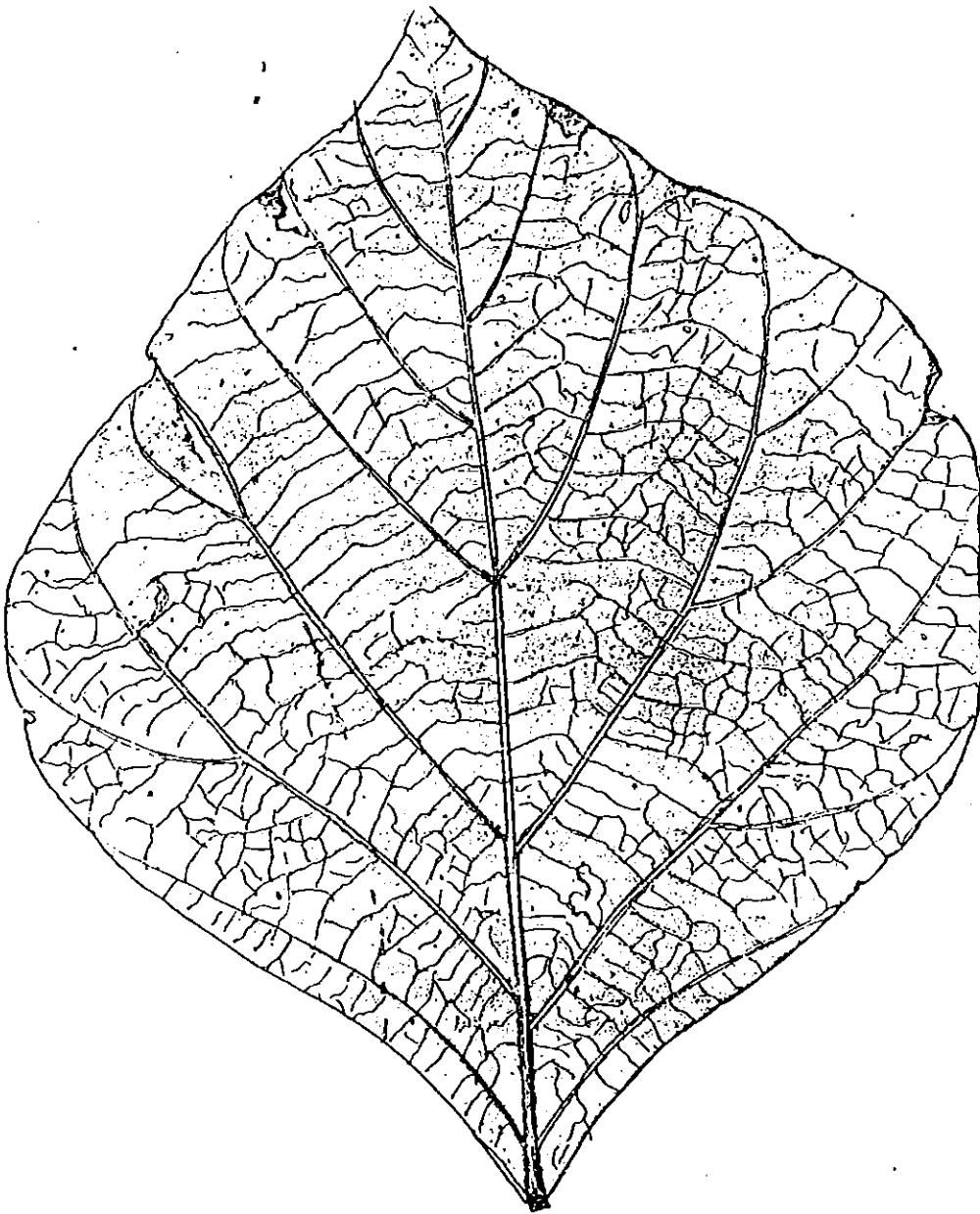
The prominent finding of this study is that women play a pivotal role in the collection and processing of muthuga leaves. Female participation ratio is a significant 0.70, on an average. The women are facing an increasing shortage of raw materials i.e., leaves, due to deforestation, conversion of forest and private land for commercial purposes and intense grazing causing lopping of trees. The important feature of the marketing set up is the fact that a major slice of profit is absorbed by the middlemen. Marketing is also characterised by a lack of storage facility and financial support on the part of the women. As women provide a substantial contribution to the family income through the income earned by muthuga collection, the status of women within the family is better off and they have a greater say in household spending decisions and have freedom to spend on their own. Another significant finding is that the income from muthuga plate marketing directly reaches the hands of the women and nearly all women spend on their own for household expenditure.

The forest department, Block Development Offices,

Nationalised Banks and Voluntary Organisations are floating schemes to help out leaf-plates makers, but this is not sufficient, and needs to be augmented. Regeneration of forest and proper utilisation of resources is possible only through species selection, formation of women's sanghas or groups and floating of marketing co-operatives for these women.

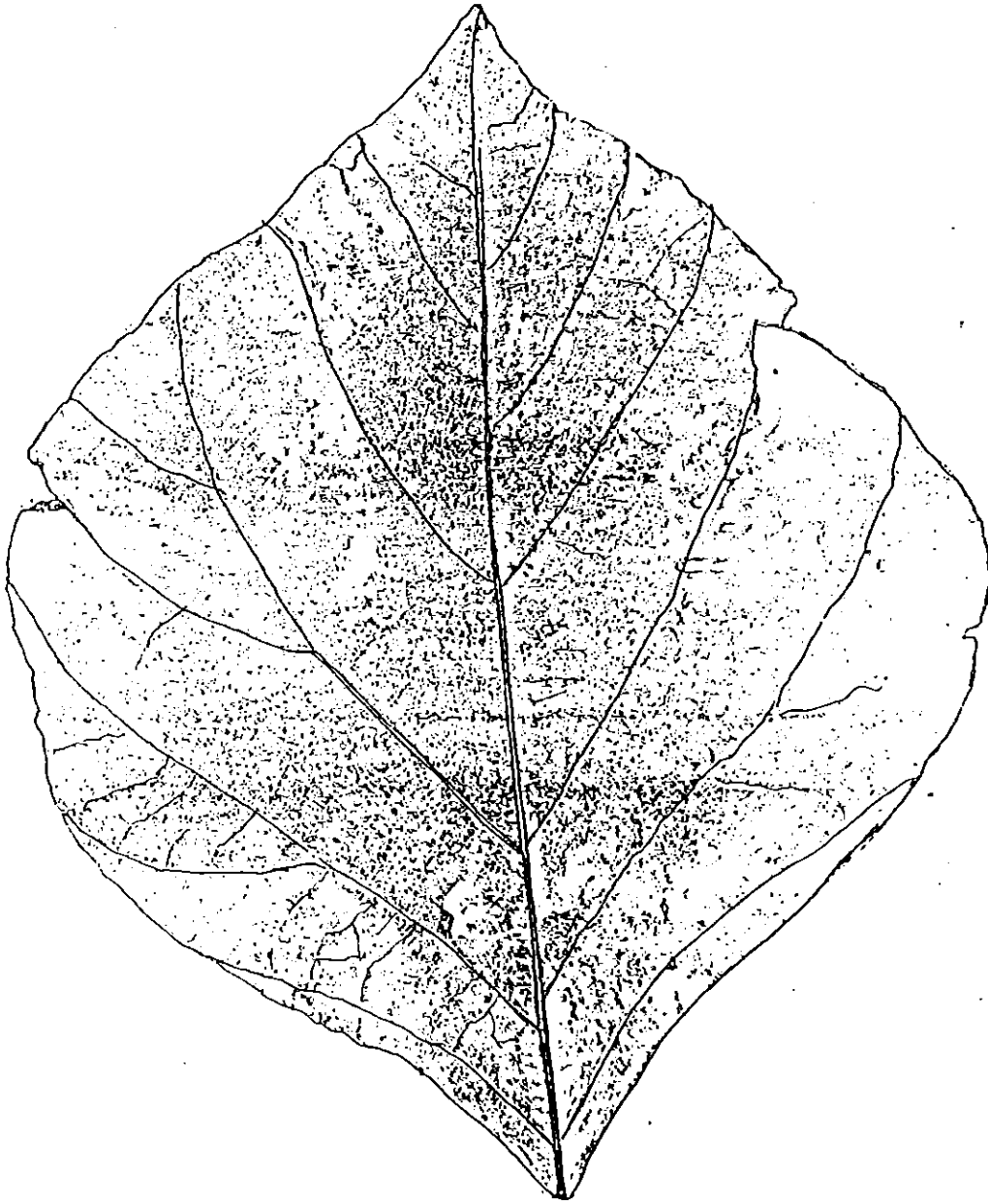


A TRIPLET OF THE MUTHUGA LEAF ; FIGURE - 1.



VENTRAL SIDE OF THE MUTHUGA LEAF ; FIGURE - 2.

Ventral. Side.



DORSAL SIDE OF THE MUTHUGA LEAF ; FIGURE - 3.

Dorsal side



A Solitary Muthuga Flower

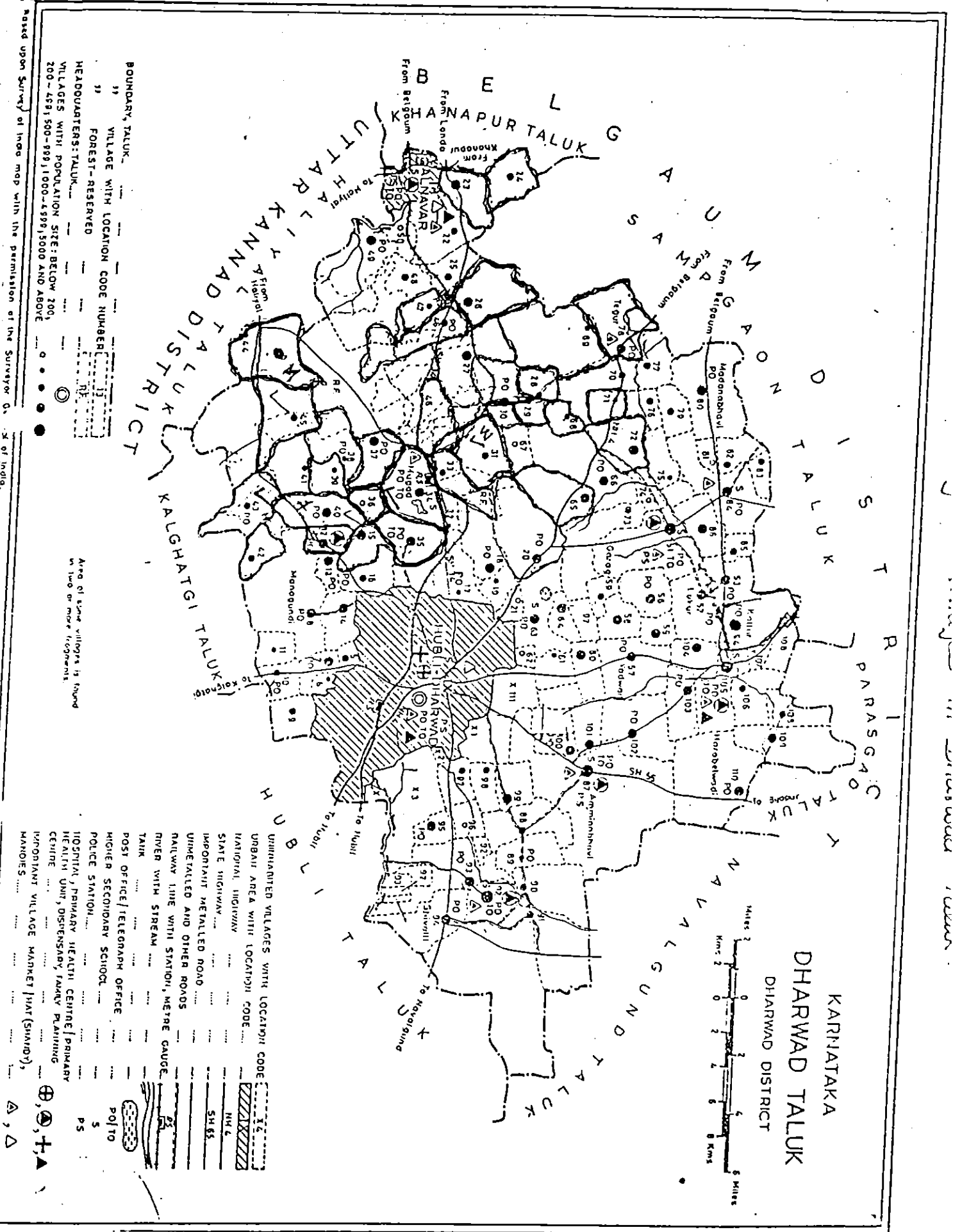
"Flame of the Forest"

A single shoot with cluster
of Muthuga flowers

FIGURE - 4.



MUTHUGA SEED ; FIGURE - 5.



BOUNDARY, TALUK
 1) VILLAGE WITH LOCATION CODE NUMBER
 2) FOREST-RESERVED
 HEADQUARTERS: TALUK
 VILLAGES WITH POPULATION SIZE: BELOW 200,
 200-499, 500-999, 1000-4999, 5000 AND ABOVE

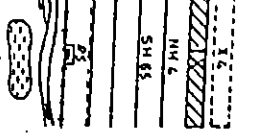
Based upon Survey of India map with the permission of the Surveyor G. S. of India.

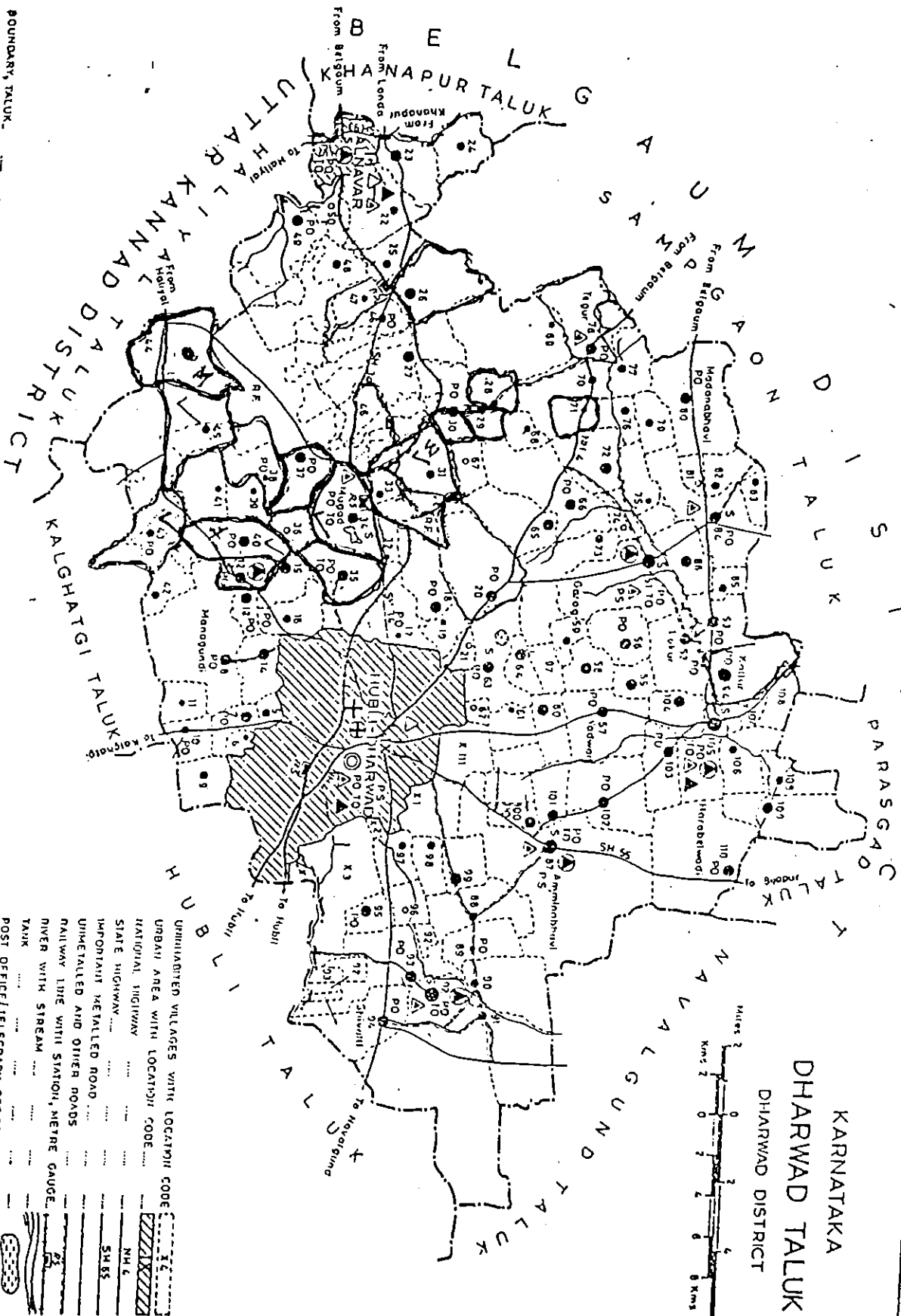
Area of some villages is shaded in two or more components.

KARNATAKA
 DHARWAD TALUK
 DHARWAD DISTRICT



- UNSHADDED VILLAGES WITH LOCATION CODE
- URBAN AREA WITH LOCATION CODE
- NATIONAL HIGHWAY
- STATE HIGHWAY
- IMPORTANT METALLED ROAD
- UNMETALLED AND OTHER ROADS
- RAILWAY LINE WITH STATION, METRE GAUGE
- RIVER WITH STREAM
- TANK
- POST OFFICE/TELEGRAPH OFFICE
- HIGHER SECONDARY SCHOOL
- POLICE STATION
- HOSPITAL, PRIMARY HEALTH CENTRE/PRIMARY HEALTH UNIT, DISPENSARY, FAMILY PLANNING CENTRE
- IMPORTANT VILLAGE MARKET (HAAT (SHAMBU)), HAATIES





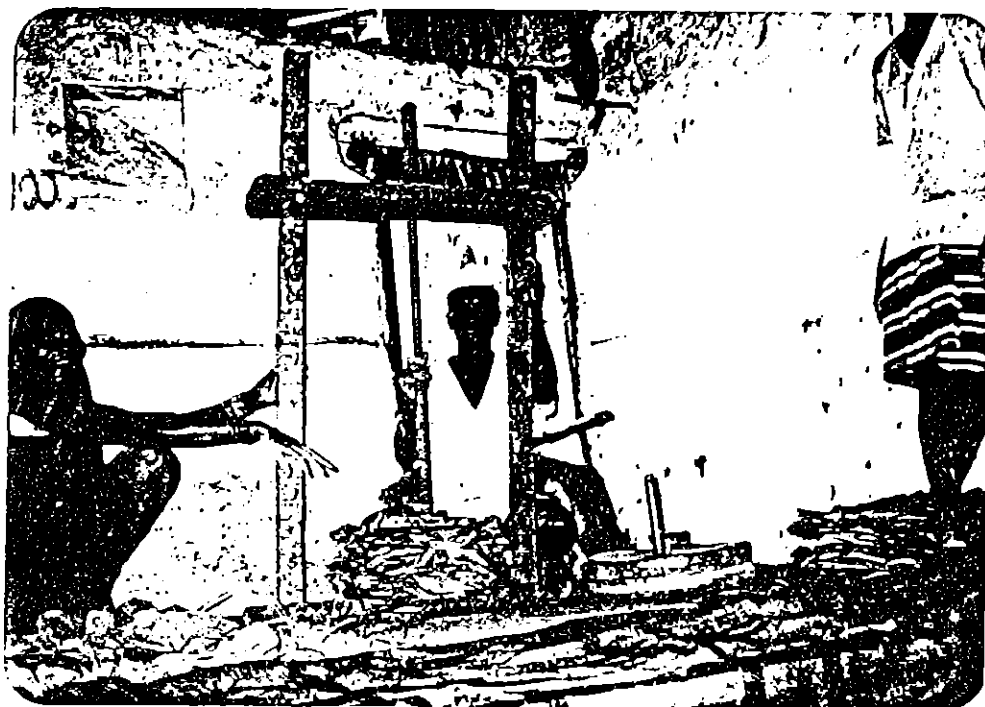
KARNATAKA
DHARWAD TALUK
DHARWAD DISTRICT

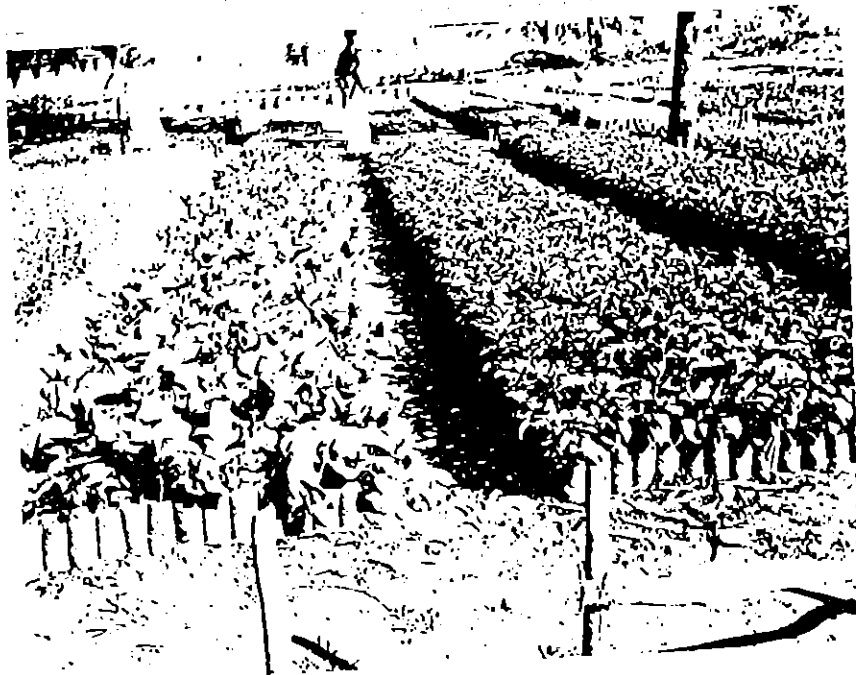


BOUNDARY, TALUK, ---
 11 VILLAGE WITH LOCATION CODE NUMBER
 13 FOREST-RESERVED
 HEADQUARTERS, TALUK, ---
 VILLAGES WITH POPULATION SIZE: BELOW 200,
 200-499, 500-999, 1000-4999, 5000 AND ABOVE

UNINHABITED VILLAGES WITH LOCATION CODE
 URBAN AREA WITH LOCATION CODE
 NATIONAL HIGHWAY
 STATE HIGHWAY
 IMPORTANT METALLED ROAD
 UNMETALLED AND OTHER ROADS
 RAILWAY LINE WITH STATION, METRE GAUGE
 RIVER WITH STREAM
 TANK
 POST OFFICE/TELEGRAPH OFFICE
 HIGHER SECONDARY SCHOOL
 POLICE STATION
 HOSPITAL, PRIMARY HEALTH CENTRE/PRIMARY
 HEALTH UNIT, DISPENSARY, FAMILY PLANNING
 CENTRE
 IMPORTANT VILLAGE MARKET (JVAI (SHAWAR)),
 MANDIES

Based upon Survey of India map with the permission of the Surveyor General of India.





MUTHUGA SAPLINGS AT THE FOREST NURSERY



WOMAN STITCHING THE LEAF PLATE
(PROCESSING)



WOMAN WITH A FINISHED LEAF PLATE
(PROCESSING).



COLLECTION OF MUTHUGA LEAVES





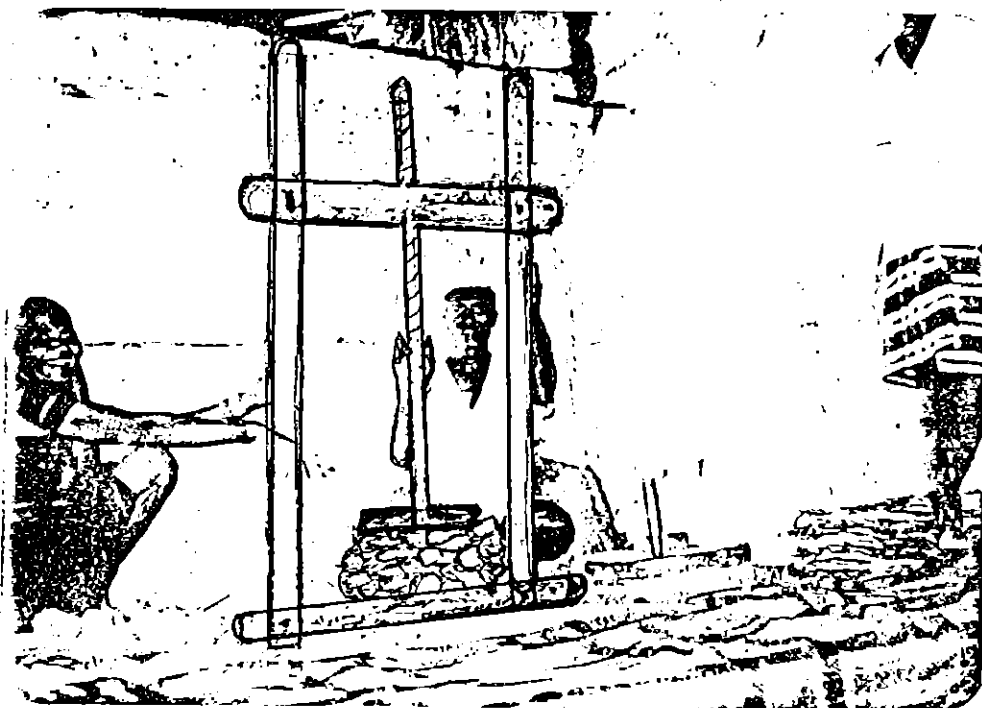
STORAGE OF THE DRIED MUTHUGA STRINGS
(PROCESSING).





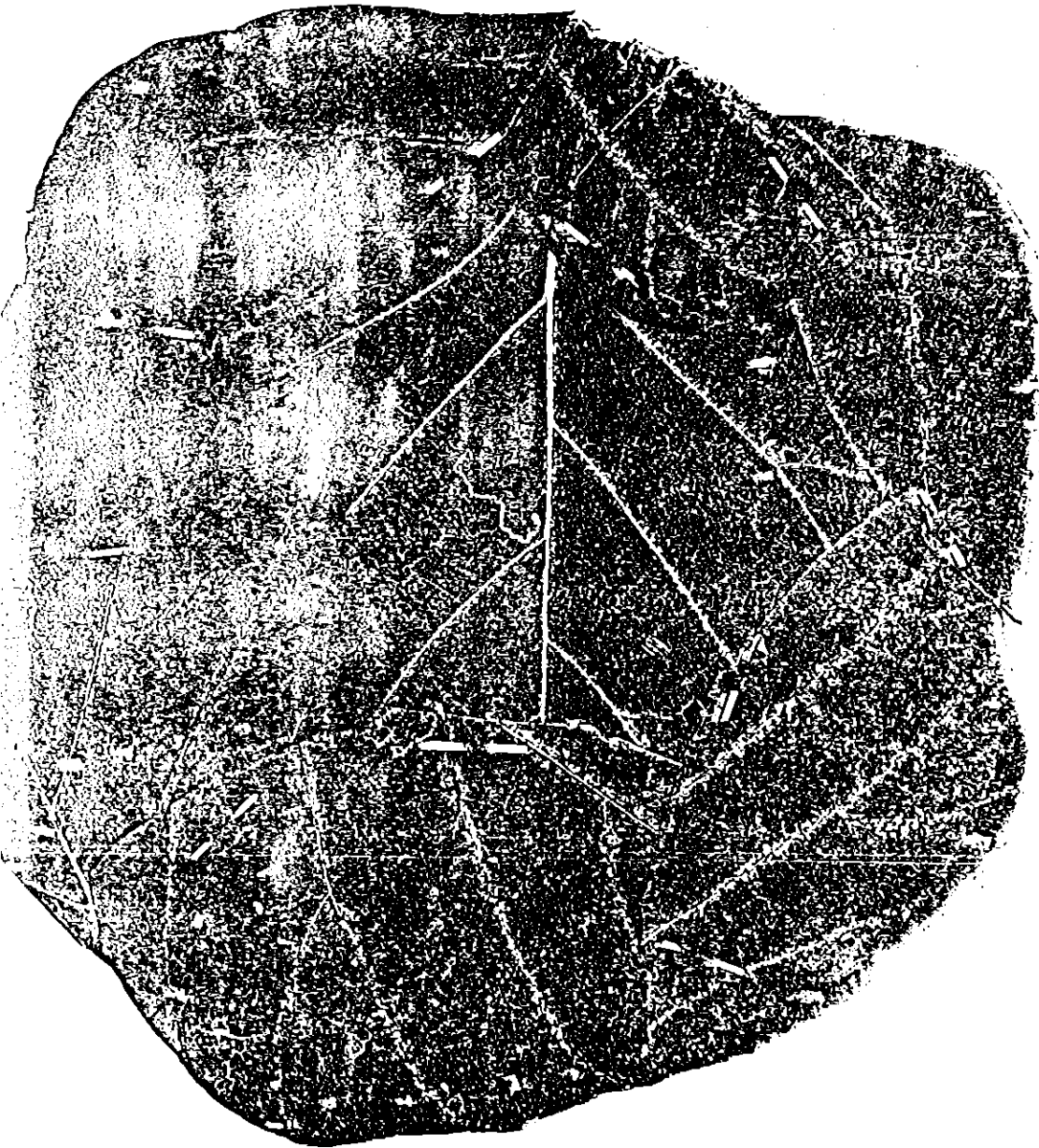
THE WOMAN DRYING THE MUTHUGA LEAVES





LEAF PLATE

THE MUTHUGA PRESSING MACHINE IN DEVARAHUBLI.



A Muthuga Leaf plate : Figure - 6.

LIST OF VILLAGES IN DHARWAD TALUK ENGAGED IN
MUTHUGA PLATE MAKING

APPENDIX

SL. NO.	NAME OF THE VILLAGE
1.	Mugad
2.	Waranagalavi
3.	Mandipat
4.	Hulthikote
5.	Mavinkopa
6.	Hallikeri
7.	Devarahubli
8.	Devagiri
9.	Kyarkopa
10.	Ranapur
11.	Veerapur
12.	Kallapur
13.	Venkatapur
14.	Kalkeri
15.	Amblikopa
16.	Amboli
17.	Aravattgi
18.	Baad
19.	Bellur
20.	Kumbarkopa
21.	Kambargoni
22.	Kadabagatti
23.	Lalgati
24.	Mallur
25.	Benegatti
26.	Shinganahalli
27.	Hullikeri
28.	Tegur
29.	Hoswal
30.	Durgakeri

NOTE: From Serial No. 16 to 30 the number of households are not written as we did not do the survey in these villages.

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CASE STUDY IV

BAMBOO STUDY

CHAPTER 1

INTRODUCTION

Bamboo was once considered as inexhaustible and the most aggressive forest species. Like weeds, they grew luxuriantly. However with the advent of paper mills in India, the abundant bamboo has started depleting. Grown extensively in the North-East and in the Western Ghats, bamboo covers nearly ten million hectares of India's forest area. They form rich belts of vegetation in well drained parts of the monsoon region at the foot of the Himalayas and rise into 4000 meters of altitude. Their distribution is quite dense in the Western Ghats, Bengal, Sikkim, Assam, Arunachal Pradesh and Andamans.

More than 100 species ranging from the gigantic 30 to 40 meters tall *Dendocalamus Gigantis* to the one metre high *Arundinaria ensifolia* with an eight millimetre girth, are found in the country. Its annual production is about 3.2 million tonnes.

Karnataka State too has a rich Bamboo potential, with an estimated annual yield of about 4.75 lakh tonnes. Although Bamboo grows all over the State, greater concentration is

observed in five zones - North Kanara, Coastal line, Malnad, Mysore Plateau, Eastern Ghats. North zone comprising of North Kanara and Belgaum district produces 2.8 lakh tonnes, central zone comprising of Shimoga and Chickmagalur district produce 0.9 lakh tonnes, Southern zone comprising of Mysore, Coorg and marginal area of South Kanara and Hassan district 1.3 lakh tonnes of Bamboo.

The area under Bamboo cultivation and the earning form the same in Karnataka are presented in Table 1.

TABLE 1

Area under Bamboo cultivation and Revenue obtained from Bamboo during the year 1977-1987

Year	Bamboo raised (in hectares)	Revenue from Bamboo (Rs. in crores)
1977-78	308.00	0.17
78-79	260.00	0.10
79-80	340.00	0.10
80-81	350.00	0.14
81-82	450.00	0.02
82-83	546.50	1.64
83-84	289.00	0.37
84-85	154.00	0.32
85-86	3025.14	0.23
86-87	3151.64	0.54

The area under Bamboo cultivation has increased from 308 hectares in 1977-78 to 3151.64 hectares in 1986-87. The revenue earned through Bamboo sales has increased from

Rs. 0.17 Crores in 1977-to Rs 0.54 crores in 1986-87.

As already referred to Bamboo is put to various uses. Among the Bamboo users, Medhars are an important community, who use Bamboo for their main activity. They make various articles like baskets, sieves, etc., with the bamboo which provide them the sustenance.

CHARACTERISTICS OF BAMBOO

The most common and economically important species of Bamboo are *Dendrocalamus Strictus* (Male Bamboo) and *Babbusa Arundinacea* mainly found in Orissa, Assam, Southern and Western India.

Bamboos are tall perennial aborescent grasses. They are mostly woody perennials ranging from stiff reeds to giant species, while few climb and sprawl over other vegetation.

ROOTS AND RHIZOMES

The root system is shallow and extensive and is restricted to the upper 12" soil profile. The underground system of a bamboo is a rhizome which has intricate branching. Assimilating roots are developed from the distal ends of the rhizome and culms from the upper surface of

the distal end Rhizomes are large and bulbous, full of starch.

CULMS

Bamboos are characterised by woody pointed stems called culms arising from their rhizomes. Generally rhizomes are densely clustered so that culms grow in clumps. Growth of the culms may range from 3" to 15" per day in various species. A clump bears 30 - 100 culms. The culms are generally round and smooth, they may be hollow (female bamboo) having transverse septa at the nodes. But the culms of *Dendrocalamus strictus* are solid (male bamboo). The culms may attain a girth of a foot or more in some species after maturity. The culms have prominent rings bearing sheaths characteristics of each species.

Ordinarily culms do not bear any branches for considerable height above the base ; but the culms of some species have branches arranged alternately in dense clusters. The lateral branches have false rootlets at lower nodes which harden into spines and give natural armour to clumps.

LEAVES

Leaves are alternate, ditrichous, often petioled,

attached coriaceous sheath. Usually oblong, lanceolate in shape. Margins smooth or scabrid. Veination of the leaf blade is longitudinal or tessellate.

INFLORESCENCE

Inflorescence shows a wide range of variation. It may be a raceme, or a panicle; dense clusters or terminal head. Spikelets are all alike one to many flowered. There are usually two glumes, the lemma resembles glumes and is extended from them and the palea when present may be keeled or keelless. There are usually three well developed nodicules which represent perianth. Flowers hermaphrodite with 3, 6 or more stamens with filaments free or more or less connate and style with a single column and 1-3 stigmas.

FRUIT

The fruit may be a caryopsis with large endosperm and a small embryo connected to the endosperm by the scutellum or a large fleshy fruit. There is no endosperm or very little in the true seed. The cells of the pericarp enlarge and multiply to a great extent and such cells are packed with starch grains. The fruit is edible.

OBJECTIVES AND METHODOLOGY

OBJECTIVES

Present study is an attempt in the direction of perceiving the socio-economic implications of involvement of Medhars in Bamboo activity. This study has been set-forth with the following specific set of objectives.

1. Perceiving the socio-economic living conditions of the bamboo workers.
2. To understand the processing procedure of Bamboo and the various problems encountered by the workers in procuring the raw materials, processing and in marketing the final products.
3. To suggest few policy recommendations for further improvement in the socio-economic living conditions of the bamboo workers.

METHODOLOGY

An initial survey of four taluks, Dharwad, Shimoga, Kolar and Belgaum, where large scale bamboo activity occurs, was to make a final selection of the study area.

Discussions were also held with various forest officials- Deputy Conservator of Forests, Assistant Conservator of Forests, Range Forest Officers, Block Development Officers and officials in India Development Service.

Based on the discussions, Dharwad was selected as the study area. Altogether, four villages were selected from Dharwad taluk for an indepth study of Bamboo activity. The study has however made an attempt to compare various aspects of Bamboo processing in the selected study area - Dharwad with that of other taluks referred to above. The villages selected for indepth analysis were: Dharwad, Mugad, Uppinbettagiri, Narendra, Mangalgatti and Hubli.

A random 20% sample has been considered from each of these villages and structured questionnaires were administered to elicit the information on bamboo activity. Adult female members of each family happened to be the main respondent. However the adult male members substituted in the event of non-availability of an adult female member.

SELECTIONS OF HOUSEHOLDS

A minimum sample of 20% were choosen to conduct the

survey taking the total number of households considered as members by the forest department. A random sampling method was used keeping in this criteria.

1. The number of households directly in contact with the forest department
2. The number of households members to the MEDAR society
3. Number of households purchasing bamboos from the outside agents.
4. Number of households selling goods only to agents.

CHAPTER II

Socio-Economic Structure of the Sample Population

This chapter gives the background of the study area and the socio-economic conditions of the sample population.

A. The Site Description - Dharwad

Dharwad Taluk 460 Kms from Bangalore was selected by the researchers as the study area. It extends over a total area of 102399.27 hectares and has 111 villages. According to the 1981 Census, the population of Dharwad Taluka is 160,186 of which 91.86% is rural with the female population being 78,472. Situated in the northern maidan of Karnataka State, Dharwad district, especially its western portion is relatively rich in flora and fauna. Of the total geographical area of 1,373,800 hectares only 10.46 forms the forest cover. The forests of the district are of 3 types:

- the monsoonal forests,
- the acacia or thorn forests
- the shrub forests.

(Source - Karnataka Forest Statistics 1986)

The researchers interviewed the adult female member of each household of the Medar community. Out of the 445 households, 110 households were chosen at random as the

sample. Table 2 presents the details pertaining to the total population households etc., of the sample villages.

TABLE 2

Total Number of Households, Population and Households surveyed in the sample area

Sl. No.	Name of village in Dharwad/oni	Total No. of HH	Total Population		No. Of HH surveyed	Percent surveyed
			M	F		
1	Dharwad	150	106 (48.40)	113 (51.60)	35	23.33
2	Hubli	250	180 (49.59)	183 (50.41)	55	22.00
3	Mugad	9	16 (51.61)	15 (48.39)	5	55.56
4	Narendra Mangalgatti	15	14 (50)	14 (50)	7	46.67
5	Uppinbetta giri	21	35 (60.34)	23 (39.66)	8	38.10
	TOTAL	445	351 (50.21)	348 (49.79)	110	24.72

Note: The figure in parenthesis indicate percentages

Total population of the sample villages is 699 of which 351 are males constituting 50.2% of total and 348 are women constituting 49.8% of the total.

The sample villages considered for the present study

are observed to be considerably developed as all the villages have access to various infrastructure like, schools, borewells, electricity, post-office, road and bus facilities.

Literacy level of the sample bamboo workers is considerably high when compared with the state average. Although female literacy level is lesser than that of male literacy, it is remarkably high. As the data presented in table 3 reveal that of the total population of 699 about 433 are literates and constitute about 61.95 percent of the total. Literacy rate of males is as high as 72.65 percent and that of female literacy rate is 51.15 percent.

TABLE 3

Literacy Rate

	Male	Female	Total
Dharwad Dist.			
Literates	255 (72.65)	178 (51.15)	433 (61.95)
Illiterates	96 (27.35)	170 (48.85)	266 (38.05)
*Karnataka State			
Literates	91,71,677 (48.61%)	50,57,270 (27.83%)	1,42,28,947 (38.41%)
Illiterates	96,97,817 (51.39%)	1,31,16,689 (72.17%)	2,28,14,504 (61.59%)

* Source: 1981 Census of India, Karnataka Dist. Census.

HOUSING CONDITIONS

In general, the housing conditions of the sample population are very poor with inadequate space and ventilation. Some households do not have even windows. The houses are highly inflexible. Majority of the houses are small, the other houses, but the conditions of the living space are not very good. The sample population is very poor and 11.03% of them live in own houses.

OCCUPATIONAL PATTERN

Characterizing of bamboo activities is the main occupation of this sample population. It has also been observed that they do not possess any other assets like land, house, etc. However, the households were observed to be possessing their own homesteads. Even though there is no supply of bamboo from forest department they buy from local agents who sell bamboo for a higher price. Table 4 reveals that nearly 35.73% of male and 25.69% of female are occupied in bamboo work of which 24.12% female whose occupation is bamboo are under the age group of 15-60 years while 19.88% of male whose occupation is bamboo fall under the same group of 15-

15-60 years.

TABLE 4

Occupational Pattern of Bamboo Workers

Place	Bamboo		Other Occupation	
	M	F	M	F
Dharwad	28	48	25	2
Hubli	82	99	18	1
Mugad	12	6	-	-
Narendra & Mangalgatti	7	8	1	-
Uppinbetta giri	23	18	1	-
TOTAL	150	179	45	3

CHAPTER III

PROCUREMENT OF RAW MATERIAL

A brief presentation of the mode of procurement of raw material within each of these categories is made below.

However, the discussions with the Bamboo workers revealed that in most of the places, the raw material has to be procured through Govt. Only in few places the workers themselves collected directly from the forests. In some places medars have formed into societies through which the Bamboo supply is enrouted. Private agencies are involved in supplying raw materials in some places.

Bamboo is generally grown on government land while few of the paper mills do grow their own bamboo to a small extent. Hence, the artisans in the villages and the paper mills get Bamboo through the government forest depot.

In the case of the present study area, the forest department of Dharwad district distributes the Bamboo to the craftsmen on their ration card. They distribute 30 bamboos per ration card, every month only for a period of 6 months. Supply of bamboo is withheld for the other 6 months due to the problems of harvesting and storing of bamboo during the

rainy season. The bamboo that is distributed is the 'Dowga' variety. Forest department does not supply the 'Medri' variety due to the problems of cultivating the same.

However, it was observed that the artisans in Dharwad region preferred the 'Medri' variety to that of Dowga as, the latter can be used only when it is fresh unlike the former which can be used even when dry. The artisans soak the dry bamboo of Medri variety in water for about 24 hours and use it for making Bamboo articles.

However it was observed that the forest department charges lesser price for the Bamboo bought by the Medar community than to the other communities. While it charges Rs.362 Per 100 Bamboos to the Medar community, it charges Rs. 406 for other communities. Here too, it has been observed that the price prevailing at Dharwad was lesser than the other area. For instance, the price of Bamboo in Karwar range was Rs.403 for the Medars and Rs. 447 for others.

In Hubli the Medars have formed a Society with the President and Secretary elected by its members. Membership eligibility is open for both males and females once they attain the age of 16, on payment of Rs. 11.25 towards membership fee. The office bearers of the society approach the forest dept., at frequent intervals and collect the

amount of bamboo allotted to their members. Here too one family gets 30 bamboos per ration card and the society takes up the responsibility of distributing bamboos to its members.

Belgaum is an example for direct procurement of bamboo and is a district where very few Medar are working. This district situated at the border of Karnataka and Maharashtra is subjected to conflicting policies from both the States. Moreover, it is neither equipped with a Medar society nor a government depot to distribute the raw materials, hence the Medar men procure raw material directly from the forests and sell the excess to people who come from the neighbouring Dharwad district at a profitable rate. Since these artisans themselves involve in collection of raw material from the forest, they get only the Medari variety which can be used even when dry after soaking it in water for 24 hours. The Medars here are quite happy with the prevailing conditions and do not complain of shortage of raw material.

The artisans in Dharwad district buy raw materials from local agents. Sometimes they also go to Belgaum to buy raw materials, especially the Medri variety of bamboo as they are not satisfied with the quality of bamboo supplied by the forest department.

Bamboo workers are also seen in parts of Kolar district. Medars here have formed a society wherein every individual, whether male or female, having attained the age of 14 years is considered to be a member of the society. The office bearers of the society with permission from the officials of the Bhadravathi forest dept., collect Bamboos from the depot for all the members at a time. The transportation costs is distributed among the members of the society.

Every member of the society gets 50 bamboos and the allotment is through membership in the society and not through ration cards. The members are complacent with this arrangement of obtaining raw materials. There is also no delay on the forest department's part to distribute the raw material.

In Shimoga Taluk, the bamboo is distributed from the forest department to the society situated in the Shimoga town. However, the Medars living inside the thick forests receive their quota directly from the forest depot. The depot distribute 50 bamboos to every household at a unit cost of Rs. 1.38 plus 14 percent tax.

In the town, Bamboos are distributed through a Registered Society. The society's office bearers get the total supply of raw material from the Depot and add the transportation charge to the cost of each Bamboo. Due to the transportation charges

and the taxes, the final cost of each Bamboo works out to about Rs.3. However the price of bamboo works out to be lesser for the Medars residing close to the forest depot as they do not have to incur the transportation cost.

RAW MATERIAL FROM PRIVATE SOURCE

While earlier it was referred to that the raw material was procured from private agents, the actual details were not presented. The data presented in Table 5 accounts for the actual procurement of raw material from the private source.

TABLE 5

Raw Materials from Private Source

Places	No. Of Bamboos per month				No.Of HH not purchasing bamboos	Total
	Upto 10	11-40	41-70	Above 70		
Dharwad	2	13	11	7	2	35
Hubli	4	12	4	21	14	55
Mugad	-	3	-	2	-	5
Narendra Mangalgatti	-	-	-	-	-	7
Uppinbetta-giri	-	-	1	7	-	8
Total	6 (5.45)	28 (25.45)	16 (14.55)	37 (33.64)	23 (20.91)	110

It can be observed that about 80 percent of the Bamboo workers buy raw material from the private source to supplement the scanty raw material they obtain from the government depots. The quantum of raw material procured however varies from ten Bamboos to about seventy bamboos per month. Only about 20 percent of the workers do not procure any extra Bamboo from private sources.

These details highlight that the workers are at a great disadvantage for not obtaining the adequate quantum of raw material at fair price. They are most often forced to buy the additional raw material from private sources bearing the brunt of higher prices. It is also a pity that the Medars whose main activity is Bamboo processing are placed in between the 'devil' and the 'deep sea' as they can neither shift their occupation nor can they afford to pay the exorbitant price for the additional raw material.

The dearth of raw-material and the high revenue earned by the government resulted in bamboo taking a proximal position as one of the income generating forest based activity. So the initial visit helped in identifying the activity and the area in which the study should be carried on and the second led to the primary data collection.

Interviews and discussions with forest officials,

artisans and contractors resulted in the researcher's concluding that to a certain extent, the bamboo basket weavers were being exploited. Thus the need to study this issue and to some extent strengthen the hands of the community engaged in this activity became rather important.

Discussions with Government officials from the forest department, the Tahasildar's office and the NGO members. In the other taluks covered, especially Shimoga, Belgaum and Kolar the researchers initially had discussions with the forest officials and the officials of the Block Development Office and interviews with the people of the Medar community. It was found that the problems faced by the Medar in all these areas were same with very little variations. Hence detailed probing on this issue was conducted only in Dharwad.

BAMBOO PROCESSING

Bamboo activity is observed to be the main activity of the Medhar community in all the sample villages considered for the present study. The households spend maximum amount of time throughout the year on either processing or making bamboo articles.

The information pertaining to the time schedule of bamboo workers as presented in Table 6 accounts for their main activity. It can be observed that about 88.18 percent of the total households spend about 5.8 hours on bamboo activity in a day. All the households work for a minimum of five days in a week on bamboo activity. Significant number of these households (65) work all the seven days in a week on this activity and they constitute about 59.09 percent of the total households. While another 26.36 percent of the families work for about 6 days in a week, only 14.5 percent of them work for five days in a week.

TABLE 2

WORKING SCHEDULE OF THE BAMBOO WORKERS

Places	No. of Hours per day			No. of days per week			No. of months			
	Upto 4 Hrs	5-8 Hrs	9-10 Hrs	Upto 5 days	Upto 6 days	Upto 7 days	Upto 6 months	7-8 months	9-10 months	11-12 months
Dharwad	2	33	-	11	12	12	10	2	16	7
Hubli	7	46	2	5	16	34	7	2	28	18
Mugad	-	5	-	-	-	5	-	-	-	5
Narendra & Mangalgatti	-	6	1	-	-	7	6	-	-	1
Uppinbetta giri	-	7	1	-	1	7	-	-	-	8
TOTAL	9	97	4	16	29	65	23	4	44	39

It can also be observed that about three quarter of the total (83) work for more than 9 months on Bamboo activity and only about 20.9 percent of them work for 6 months alone. However following census definition even the workers who work only for six months can be grouped under Bamboo as the main activity. Hence it can be inferred that Bamboo is the main activity for all the Medars covered in the study.

ARTICLES PRODUCED WITH BAMBOO

Variety of articles are produced using Bamboo as the raw material. Some of the articles are baskets of various sizes, sieves, ice-cream sticks, mats, partition, fans, yellamma items, chandrikae, chapathi baskets and ladder. In Dharwad majority of them, i.e., about 91.8 percent and nearly 50.9 percent of them produce sieves.

TABLE 7

Articles Produced With Bamboo As Raw Material

Places	Big Baskets	Small Baskets	Sieves	Chapathi Baskets	Others*
Dharwad	35	35	7	-	4
Hubli	51	48	34	19	13
Mugad	4	4	5	-	1
Narendra & Mangalgatti	3	3	2	-	1
Uppinbetta giri	8	8	8	-	19
TOTAL	101	98	56	19	38

*Others include ice-cream sticks, fans, yellamma items, chandrike and partitions.

Most of the Bamboo produced in Karnataka is used by the paper and the rayon industries. The west coast paper mills of Dandeli in Karnataka, makes 35,000 tonnes per year of printing, writing and wrapping papers from bamboo. The major portion of this bamboo is also used in rural cottage industries, usually used by the artisans of the Meda Community in the manufacture of articles like baskets, sieves, mats, fans, cradles, bins to store food grains and other kind of articles which are required by the farmers, and also sericulture articles like Chandrika's and trays are

manufactured.

The uses to which bamboo is put are innumerable. It is employed in shipping of all kinds in rafts, in betel gardens, in fishing, in the construction of bridges and for making agricultural implements and tools. It is used for making aqueducts, fences, yokes, axles, tool handles, cordage, basket, carrying poles, furniture, pegs, mats, sieves. As a living plant, it is used for defence works, for hedges and for ornamental purposes. In India Bamboo charcoal is used for pharmaceutical purposes. It is also used a raw material in cottage industries as the manufacture of Agarbathi sticks and ice-cream sticks.

The tender shoots of bamboo are used in making pickles. Gowligas use the tender shoots as fodder for their cattle.

With the ever increasing demand for bamboo both for industrial and domestic purposes greater and greater emphasis needs to be placed on its improvement to maintain and increase the diminishing resources.

MARKETING OUTLET

TABLE 8

Marketing Outlet

Places	HH Agents	Village	Shandy	Society	Jatra
Dharwad	19	5	31	1	1
Hubli	52	6	35	14	53
Mugad	3	5	1	-	5
Narendra & Mangalgatti	3	3	-	-	2
Uppinbetta giri	7	8	2	-	6
TOTAL	84	27	69	15	67

This table reveals that nearly 76.36% of the surveyed households sell their goods to the agents who come and collect it from their households, while 62.72% of them sell their products in the shandy and likewise 60.9% of the households sell their products in Jatra (Mela).

CHAPTER IV

SUGGESTIONS AND RECOMMENDATIONS

In the process of studying the living conditions of the Medars and the implications of their participation in bamboo activity, many problems were identified. In the present section an attempt has been made to suggest some recommendations for improving the working conditions of the bamboo workers.

At present more than 8 to 10 districts are getting the raw material only from Shimoga, Kodagu, and Mysore forests. There is always a complaint of shortage of bamboo by the Medar. Procuring the raw-material from a long distance has many formalities which is very difficult for the common man who depends on it exclusively for his cottage industry and livelihood.

Bamboo is an important raw-material for paper pulp industries. Besides it is extensively used in cottage industries by the rural population. Hence it should be one of the most important species for the social forestry programmes

Bamboo must be made available to the Medar and other poorer sections for working throughout the year at

concessional rates.

Unproductive lands are available for growing bamboo in the state and if these bamboo plants can be protected from illicit hacking and fires, substantial quantity of bamboos could be supplied in future.

The supply of bamboo to the Medar are done only during the extraction season and for a period of 3-4 months they are deprived of the raw-material. This could be avoided by storing bamboos in congenial conditions during the extraction season either in a artificially constructed pond or perennial river and effect supply as and when required.

It has been observed that often government (Forest Dept) supplies only Dowga variety of bamboo while Medars prefer Medri variety for it can be used even after it is dried.

Hence the forest department can make it a point to distribute Medri alternatively to these people so that they can use both Dowga and Medri together and produce more goods of better quality.

MARKETING

The artisans produce bamboo products like baskets, plate covers, chapathi containers, sieves, chandrike's and other articles which are easily sold in the market. But the

rates at which they sell the articles are very low. Moreover no one individual cannot raise the price of the article as everyone makes the same articles and decide on the same rate.

Previously the Government offices were using waste paper baskets made out of bamboo, but now they have opted for plastic baskets. So the government offices can revert back to bamboo waste paper baskets. They can also use window blinds made out of bamboo, thus opening new markets for these artisans.

The craftsmen sell their products in Jatras and Melas standing in the hot sun. Since these events are almost permanent fixtures, they feel that they should be allotted temporary shelters from where they can sell their goods.

SPACE

The Bamboo workers (Medar) live in small thatched huts which most often serve as their work sheds too. The bamboo being very long, say about 4 to 5 meters or sometimes 6 to 7 mts long, these people find it difficult to store but also even to work as they have to split the bamboos to small strips according to the items they produce.

So work sheds can be built for these people near their homes ; the work sheds should have provision for electricity so that these people can work late nights and produce more goods.

CREDIT FACILITIES

The bamboo workers do not have any access to Institutional credits. They would prefer the government collaborating with the banks to issue them loans, so that they can buy bamboo and produce more goods. With the help of these loans they could store the Medri and work on it during the rainy season.

The people are particular about the above form of collaboration as they do not trust the society officials even though they are elected by the people themselves.

Moreover any individual above 14 years should be considered eligible for membership in the society and should be given 50 bamboos so that he/she could make a living through it.

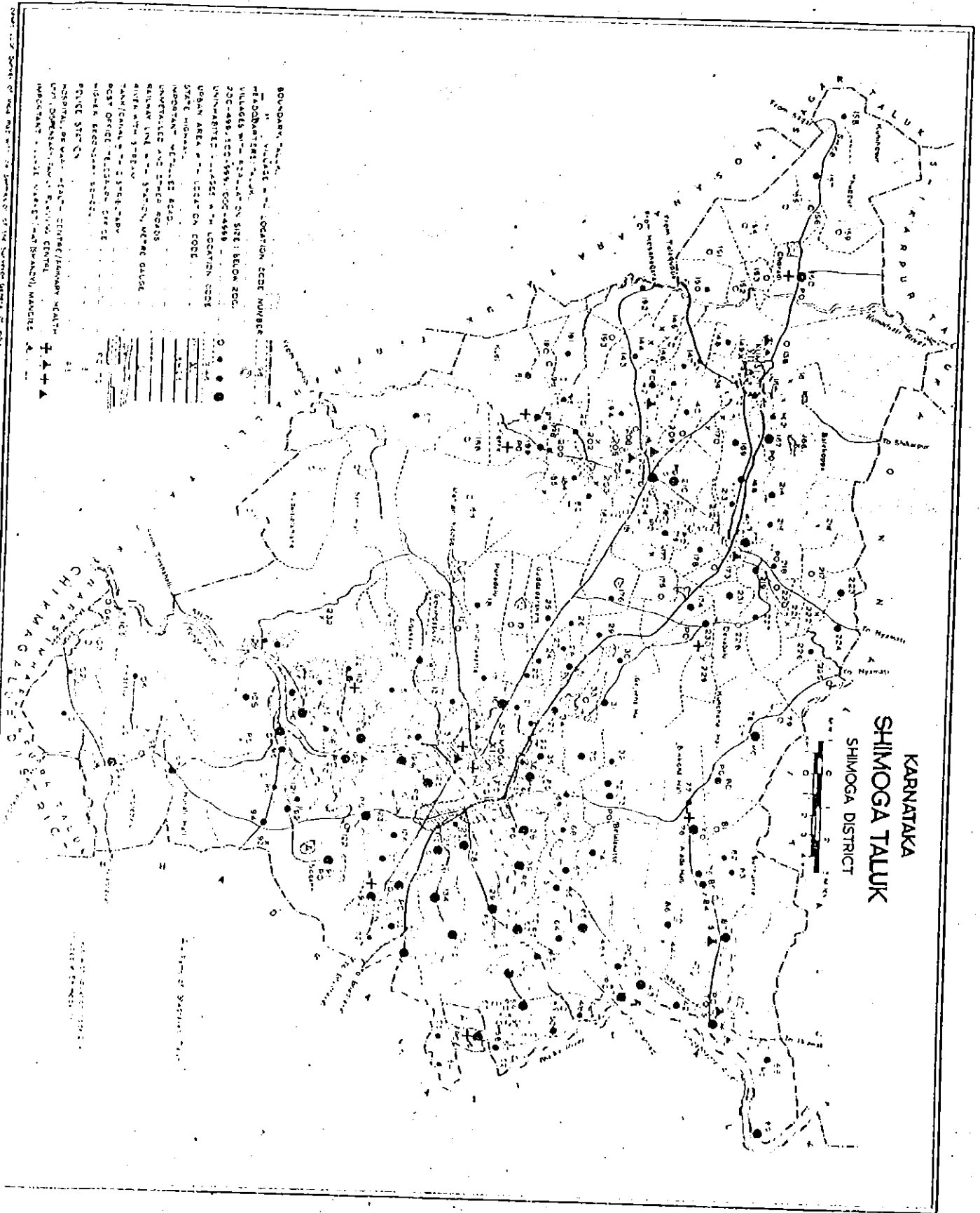
NEW TRENDS

From the genesis of the crafts it is evident that

the people are manufacturing the same old traditional articles whose market value has become significantly low over the years.

The handicrafts division can give specific training to these artisans in manufacturing new items that can be made by bamboo and whose demand in the market is quite high. If this training is given these people can make new items that they have learnt and also create new items. Thus they can find market for their goods in the handicrafts division also and can earn a better price for the items they produce.

Hence the handicrafts department of Karnataka can train the artisans at different centres in the districts to manufacture various attractive items. In this way, the government can help these people to chrysalise from the old traditional items to new improved goods in order to strive for a better living.



BOUNDARY: ...
 VILLAGE: ...
 ROAD: ...
 RAILWAY: ...
 CANAL: ...
 STREAM: ...
 RIVER: ...
 LAKE: ...
 TEMPLE: ...
 CHURCH: ...
 SCHOOL: ...
 POST OFFICE: ...
 POLICE STATION: ...
 HOSPITAL: ...
 GOVERNMENT OFFICE: ...
 JAIL: ...
 MARKET: ...
 WELLS: ...
 WATER TOWER: ...
 TELEPHONE: ...
 POWER LINE: ...
 FENCE: ...
 CULTIVATED LAND: ...
 UNCULTIVATED LAND: ...
 FOREST: ...
 SAND: ...
 ROCK: ...
 CLIFF: ...
 MOUNTAIN: ...
 HILL: ...
 VALLEY: ...
 PLAIN: ...
 MOUNTAIN RANGE: ...
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Scale of 1:50,000
 Date of Survey: ...
 Surveyor: ...
 Checked by: ...
 Approved by: ...
 Authority: ...

CASE STUDY V

LAMP SOCIETY

CHAPTER I

GENESIS

INTRODUCTION

Government of Karnataka initiated large sized Agriculture Multipurpose (LAMP) Societies for the Scheduled Tribes in different parts of Karnataka. The first LAMP Society was started in 1971 at Hunsur. Subsequently many more LAMP societies were started, as a result there are altogether 19 Lamp Societies at present in Karnataka. Details of the location and the year of Registration along with the number of members in each society is presented in Table I.

TABLE I

Lamp Societies in Karnataka

District	Location	Date & Year of Registration	No. Of Members
Mysore	Hunsur	24.03.1971	2225
	Kollegal	04.12.1983	2153
	Gundlupet	14.02.1982	1000
	Chamrajnagar	21.06.1982	706
	Yellandur	12.02.1982	216
	Heggadadevakote	30.12.1976	1951
Coorg	Thithimathi	18.12.1976	5150
	Basavanahalli	17.01.1979	1530
	Bhagamandala	09.09.1982	2217
South Kanara	Bhantval	24.01.1983	1073
	Soolya	17.02.1981	1112
	Mangalore	05.08.1982	513
	Futtur	05.03.1977	1250
	Karkal	18.07.1977	2819
	Udipi	12.01.1979	2827
	Belthangadi	12.01.1979	2760
Kundapur	30.06.1983	1315	
Chickmagalur	Mudigere	28.02.1979	2000
	Koppa	28.02.1979	1760
		TOTAL :	34537

The societies are multipurpose in nature and include varied objectives like:

1. Collection and marketing of Minor Forest Produce.
2. Provision of food articles to the Scheduled Tribes
3. Opening Processing Units
4. Opening fuel-wood Depots
5. Starting Handicraft units, suitable for the beneficiaries' occupation.
6. Providing Loan facilities
7. Selling equipments needed for agriculture at a reasonable price.

A more detailed note on Hunsur LAMP Society, the present report's area is given below:

LARGE SIZED MULTI-PURPOSE CO-OPERATIVE SOCIETY LIMITED : HUNSUR

The society, registered as Forest Labourers Co-operative Society Ltd, was started in 1971. Later it was renamed Hunsur, Periyapatna Taluk Scheduled Tribes Large Sized Multipurpose Co-operative Society Ltd., Hunsur, with suitable amendments made to the by-laws and approved by the Deputy Registrar of Co-operative Societies Mysore on 20.3.1979.

The jurisdiction of the society extends over Hunsur and Periyapatna Taluks covering a total population of 5101 (Male-2891, Female-2210 ; 1981 Census) scheduled tribes constituting Jeenu Kurubas, Betta Kurubas, Sholigas, Hakkipikkes and Yerubas. The society has three branches with the fourth to be inaugurated, two each in Hunsur and Periyapatna Taluk. The two branches in Hunsur taluk are at

Neralakuppe and Dodhahejur.

TABLE II

Schedule Tribe population in Hunsur Taluk

Name of the Tribe	Total No. Of families
Jenukurubas	605
Sholigas	312
Bettakurubas	10
Hakkipikkes	112
Yerubas	18
TOTAL	1057

Source: Block Development Office, Hunsur

Among the above mentioned tribes in Table II, the Jenu Kurubas numbering about 605 families in the Hunsur Taluk, actively participate in the collection of the Minor Forest Produce (M.F.P). Women too take an active part in the collection of MFP like Tamarind, Gum, Goosebury (Nellikayi) Harlekayi and Hongekayi.

The society operates by leasing the forest land for the collection of Minor Forest Produce in the Periyapatna Range and one unit of Hunsur Range. It has credited an amount of Rs. 2,50,000/- for the year 1987-1989 along with tax to the Forest Department as lease amount to facilitate legitimate collection of MFP. (See Annexure 1).

The members of the society (Tribals) are allowed into the forest to collect MFP only if they possess a labour pass (See Annexure 2) with their name written, duly attested by the

Forest Department and counter signed by the Secretary, LAMP society.

OBJECTIVES OF THE LAMP SOCIETY

As distinct from the general objectives laid down for all societies, the LAMP society at Hunsur concentrates on the following objectives:

1. Collection of minor forest produce (MFP) in order to provide labour for the schedule tribes.
2. To advance short term as well as medium term loans to the members.
3. To distribute consumer articles.
4. To open processing units

ORGANISATION

The staff pattern consists of a Managing Director who is selected from the Social Welfare Board and the Secretary, deputed from the Co-operative Society. The Managing Committee has 13 Directors (See Annexure 2) among whom 7 are elected through secret ballot. These directors are generally elected from among the tribals. The other 6 directors are nominated by the Deputy Registrar of Co-operative Societies, Mysore District, Mysore from different departments, in other words, are Government officials. The directors in turn elect a president through direct voting. The president is elected for a period of one year. The directors can be consecutively elected for six terms. The agents too are nominated by the LAMP society and the society enters into a stamp paper agreement with the nominated agents.

MEMBERSHIP AND SHARE CAPITAL

As on 30.6.1988 the society consisted of 2225 individual members (Class A) with a paid-up share capital of Rs.28,637 and a Class B (Government) member with a paid-up share capital of Rs.35,000.00. A total sum of Rs.28,125/- was sanctioned as grant-in-aid by the Government for the enrolment of members. Further, the Government has also apportioned Rs.75,000 as additional share capital for the benefit of members, during the years 1985-86, 86-87 and 87-88. The details of financial assistance rendered by the Government are presented in Table III.

TABLE III

Financial Assistance by Government

Sl. No.	Category	Assistance Sum (In Rs.)
1.	Share Capital	2,18,000.00
2.	Margin Money	50,000.00
3.	MFP lease subsidy	25,000.00
4.	Working capital loan	26,000.00
5.	Opening retail outlets loan subsidy	1,20,000.00
6.	Opening firewood depot loan subsidy	30,000.00
7.	Managerial subsidy	35,000.00
8.	Additional share capital	15,000.00
9.	Subsidy	50,000.00
10.	Building loan	75,000.00
11.	Towards salary	33,500.00
12.	Contingencies	8,000.00
13.	Welfare Fund	1,777.00
14.	For processing unit	1,500.00
15.	TOTAL	12,500.00
16.	Honey processing unit sanctioned by the Director of SC, STs, Bangalore during the year 1986-87	7,01,777.00
	GRAND TOTAL	1,50,000.00
		8,51,777.00

The members at present are paying an annual membership fee of Rs.11.25. Of late, a new proposal to increase the membership fee to Rs. 51.25 has been made to the Government by the secretary of the society. The proposed increase in the fee is to make good the losses incurred by the society so far.

ANNUAL MEETINGS AND ATTENDANCE

Despite the fact that the Society conducts its annual general body meeting, the response from the members is very poor mainly because they do not have enough money to commute from their "Haadi" to Hunsur. Moreover, they would lose a day's labour in the process. But when it was suggested that they should be given bus fare, the secretary stated that there was no such provision in the Co-operative societies act

FUNCTIONS OF THE LAMP SOCIETY

One of the important functions the society has been involved in, is to buy MFP from the tribals and sell the MFP collected by calling for tenders. Information on different types of MFP collected along with their buying and selling rates is presented in Table IV.

The society has also undertaken the responsibility of supplying ration to the tribals and to carry out this activity a supervisor designated as 'salesman' has been appointed. The salesman is also required to supervise the work of the agents.

Another main responsibility of providing loans to the tribals is fulfilled with the aid of the profits that accrue from the sale of the MFP and also by raising loans from other financial intermediaries like the District Bank etc. The society has issued crop loans worth Rs. 1,00,000/- to about 130 members since its inception, of which Rs. 50,000/- has been recovered so far. The society has also been issuing loan to the BDO, to the tune of Rs. 80,000/- Per annum to ensure regular monthly supply of ration to the SC and ST hostels.

The society has also come up with a new irrigation scheme, as per which the society would dig wells for each group of tribals consisting of 6 members each owning 4 acres of land. A proposal to this effect has been submitted to the Government. The society has also presented a proposal to the Government for the sanction of a tamarind processing unit

TABLE IV

Itemwise Buying and Selling Rates for MFP
collected during the year 1987-88

M.F.P	Season	Buying Rate	Selling Rate
Tamarind	Jan	0.70/Kg	1.82/Kg
Honey	Jun, July Nov, Dec	10.00/Kg	20.00/Kg
Nellikayi (Goose burry)	Nov	60.00/Bag	80.00/Bag
Tree Moss	* Round the year	6.00/Kg	14.00/Kg
Honge Seeds	March	1.65/litre	2.15/litre
Harle Kayi	March	8.00/12 Kgs	
Gum	March	10.00/Kg	18.40/Kg
Marati Mogu	March	10.00/Kg	
Beeswan	Jun, July Nov, Dec	25.00/Kg	38.00/Kg
Soapnut	March	6.00/Kg	6.80/Kg

Source: LAMP Society, Hunsur

* Growth of tree moss depends on the rains.

PERFORMANCE OF THE LAMP SOCIETY

Though the society has been able to meet most of its objectives, in effect, it has been a failure due to the following reasons.

It has ceased to advance loans to the members as it is still recovering from a loss of Rs. 50,000/- after having borrowed Rs. 1,00,000/- from the District Bank in order to distribute loans.

For the year 1987-88 the society did not get its regular sanction for distribution of ration to the SC, ST Hostels and Ashram schools as a result of which they could make only a marginal profit of Rs. 28,000/- with the MFP sales.

The society has also failed to open fuel depots and prevent the tribals from entering the forest illegally. The tribals are further harassed and severely beaten when caught by the Forest officials for stealing wood from the forest for fuel purposes.

Opening of Handicrafts units like basket making which is largely prevalent among the Sholigas living in Hunsur taluk, is an area that is totally ignored.

From conversations conducted with the tribals, the team discovered that they (tribals) had major grouses against the only activity that seems to keep the society on the move, i.e., MFP sales. Their first grouse is that they are not appraised of the revise in standard rates fixed by the society

for each of the MFP collected. Their second grouse is that they have no receipts for the amount of MFP collected by them and consequently they are open to all allegations and exploitation by the agents who act as middlemen between them and the LAMP society. The tribals also narrated a few instances of mishaps in the forests while collecting MFP, for which the society did not issue compensation.

Financially too, the society has incurred a lot of losses since its inception. Its only remarkable performance was in 1984-85 when it made a profit of Rs. 11,918.37. The details of the profit-loss structure are presented in Table V

The society had an accumulated profit of Rs. 14,876.56 as on 30.6.80. Losses incurred during the later years is as given below:

TABLE-V

Profit-Loss structure of LAMP society, Hunsur

Year	Loss	Profit
1980-81	3,996.00	-
1981-82	14,242.00	-
1982-83	6,036.00	-
1983-84	1,512.51	-
1984-85	-	11,918.37
1985-86	30,109.00	-
1986-87	69,000.00	-
1987-88	-	28,000.00

Source: Secretary, LAMP Society, Hunsur

Despite these draw-backs the society is going ahead with the opening of a tamarind processing unit and a new irrigation scheme for tribals owning four acres of land and above. This move on the part of the society cannot obliterate the fact that it has not only failed to meet the common objectives framed for all the societies, but also incurred large amount of losses since its inception. More important, the tribals too are not very happy with the functioning of their society. All these observations give credence to the fact that the LAMP society at Hunsur falls under the not-so-successful category.

IMPORTANCE OF THE STUDY

When the study on women's role in forest based activity was undertaken, it was observed that the activity chosen for the purpose of case studies involved private parties in its marketing process. Looking for a Government body that undertook marketing of any forest based activity, the team came across the LAMP Societies ie., Large Sized Agriculture Multipurpose Society, a Government initiated society that marketed minor forest produce collected by the tribals.

The existence of such a society provided a good opportunity for the team to probe into the functioning of the society in order to ascertain whether a Government initiated marketing process was more economically viable to its beneficiaries.

This study acquired greater dimension when it was observed that the women too participated in the collection of minor forest produce.

CHAPTER SCHEME

Chapter I looks into the Genesis of the LAMP societies in general, along with an indepth analysis of the society at Hunsur.

Chapter II delves into the kind of life the tribals led before they were evicted from the forest and the difficulties they face in trying to build a life away from their habitual surroundings, the forests.

Chapter III deals with the case histories of not only the members of the LAMP societies but also an Agent and a Director in order to highlight the role played by each of them in the functioning of the society and also to state their impressions about the performance of the society.

Chapter IV presents interviews with the Secretaries of the LAMP societies at Hunsur and Chamarajanagar along with an interview with the RFO, Forest Department, Hunsur.

Chapter V concludes with the Recommendations.

OBJECTIVES OF THE STUDY

1. To assess the impact of the existence of the LAMP society on its members, the tribals and to find out if the marketing facilities provided by this Government initiated society made the tribals economically viable.
2. To identify the various functions of the Society in order to see whether it fulfilled all the objectives with which the society was launched.
3. To make a comparison of a not-so-successful society with that of a successful one, highlighting the reasons for the latter's success when both the societies were governed by the same laws and organisational structure.
4. To identify relevant policies and programmes that are implemented with a view to enhance their socio-economic status, especially among the women.

METHODOLOGY

The LAMP Society at Hunsur having been the first society initiated by the Government in 1971, was a natural choice as the study area for this case study.

Information was sought in the form of meetings, interviews and discussions with not only the members of the LAMP society but also the Forest department and the local voluntary organisation, Development Through Education (DEED) at Hunsur Taluk. This and other secondary sources helped the

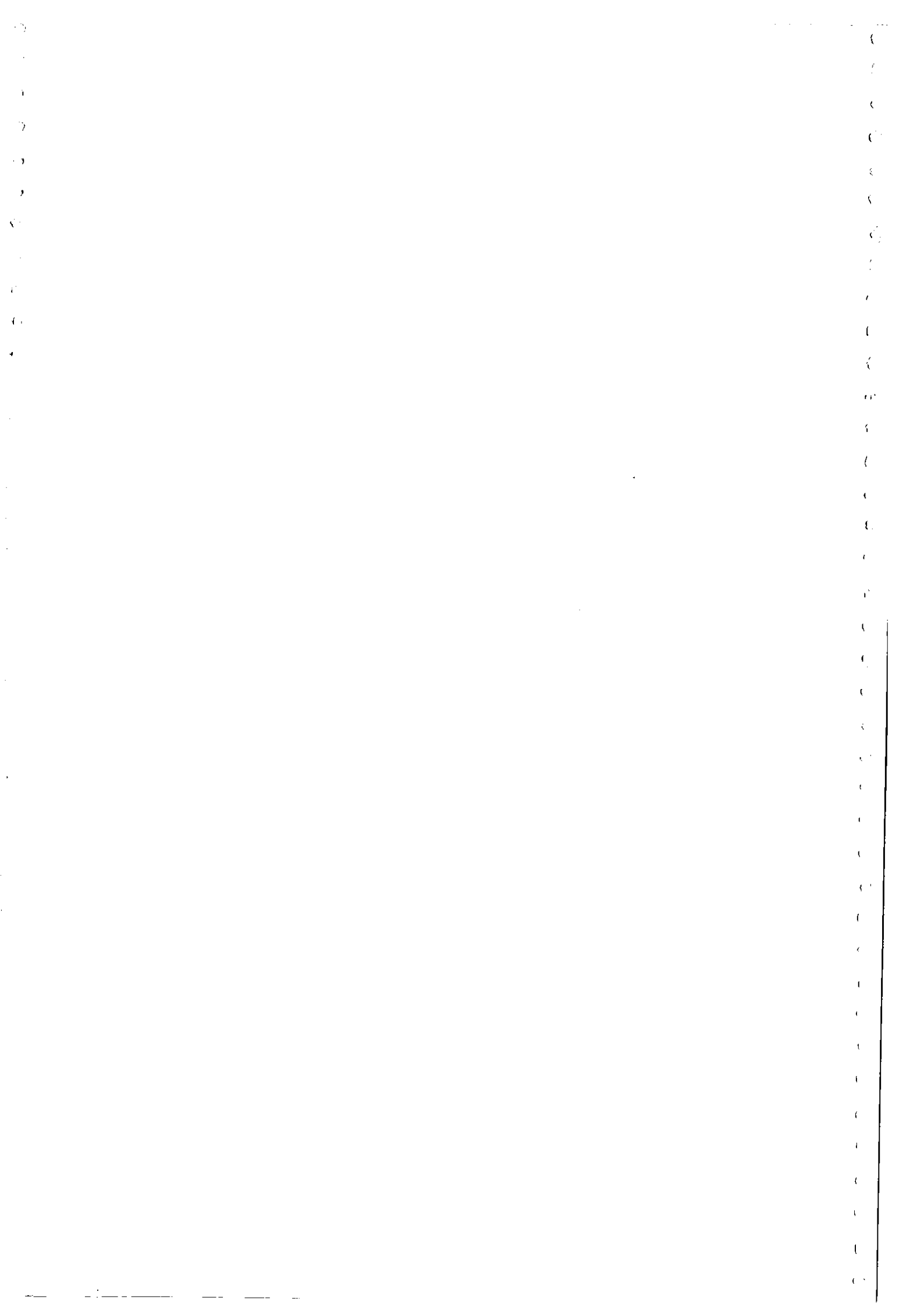
team to identify Chamarajanagar as a successful society in terms of profits accrued to it and the resulting benefits given to its members.

Observations made during the team's earliest visit to Hunsur revealed that the study was too qualitative in terms of information sought. Hence no questionnaires were administered as any kind of programmed format would have only resulted in a study that skimmed the surface without referring to the simmering discontent and the undercurrent of discord that formed a major set back in the day to day functions of the society at Hunsur.

It took two visits to Hunsur Taluk, one in early September 1988 and the other in early November, for the research team to probe into the details of the functioning of the LAMP Society. A meeting with the tribal *Yajamanas during the team's first visit to Hunsur, helped in obtaining an overview of the LAMP society. This exposure also gave an excellent opportunity for the team to get a clear insight into the kind of lives the tribals led.

To obtain at first hand, information on what the LAMP society meant to the tribals, the team visited Jenu Kurubas in Kolavige, Betta Kurubas in Billanahosahalli and Sholigas in Hemmige respectively. This was followed by a visit to Chamarajanagar in early November 1988. The information obtained there, helped the team in identifying the causes for the failure of the LAMP society at Hunsur. The team

* Traditional Headman of Tribal colony.



visited Anachavady and Veeranapura, villages in Chamarajanagara
Lamp Society Areas.

CHAPTER II

PERCEPTIONS OF TRIBAL LIVING CONDITIONS

Before launching into an indepth analysis of what the LAMP society means to the tribals, it is important to understand the kind of life the tribals led before they were driven out of the forests and the life-style they have been forced to adopt due to the changed circumstances.

Details of the life they led in the past has been obtained from conversations held with the Yajamanas, traditional headmen of their respective tribes. This information has also been substantiated from secondary sources like books and articles written on these tribes. Information on the kind of life they lead at present was obtained from holding discussions with the tribals themselves and also talking with the local voluntary organisation DEED which is involved in most of their (tribal's) developmental activities.

A brief note on the kind of lives the tribals led in the past is presented below:

BETTA KURUBAS

Betta Kurubas or Kurubarus are found in the Virajpet, Somwarpet and Mercara Taluks of the Coorg District, Mysore, Hunsur, Periyapatna, Heggadadevanakote and Gundlupet Taluks of the Mysore District and Hassan Taluk of the Hassan District. The name Kurubas which is common to all divisions is derived from Kuru which has its origin from Ko or Ku

which refers to mountain in the Dravidian languages. Kuruba itself connotes a mountaineer. There is a possibility that it is associated with the word Kurumbu (mischief) in keeping with their rather mischievous and arrogant demeanour. The prefix 'Betta' (hill) means that they are people of the hills and hunting continues to be an important means for obtaining food for their livelihood.

Kurubas have the institution of the Gauda (headman) as is popular with other divisions, and though his early status and popularity have considerably disappeared, he continues to be consulted and obeyed. He is consulted before marriages are finalised, because he is the competent person to certify whether a union is exogamous. Their social problems, especially disputes are discussed and decided by the Panchayat consisting of elders presided over by the headman. There is no definite rule regarding the choice of headman. It can be hereditary or by selection, but once elected, he holds office for life. Knowledge of the forest, roots and herbs with medicinal properties, competency to hunt and honesty are the requisite qualifications.

SHOLIGAS

Sholigas (Sholagas, Sholagara) reside in the Yalandur, Kollegal and Chamarajanagar Taluks of the Mysore District and Kanakapura Taluk of the Bangalore District. The name originates from the Tamil word Colai or Solai (thicket) and has reference to the dense thickets amidst which they

live. In the early years they were known as Kad Eraligarus and as Kad Chenchus in certain tracts. These names connote that they are dark coloured people of the forest.

Sholigas have numerous vocations. Some are agriculturists and their agricultural activity depends on the terrain and rainfall. Restrictions enforced by the Forest Department have forced them to abandon Kumari (shifting cultivation) which was popular in the past. Considerable members live by hunting and collecting hill produce. Their important implement is the axe and a man seldom wanders without one. They have nets, traps and sticks for catching rabbits and birds for consumption. Sholigas rear pigs, goats, poultry and pets. They are good trackers and assist visiting hunters.

Sholigas have the institution of the Yejamana or Gurukaram or Murudan (headman). The headman presides over the Panchayat, controls social affairs and participates in ceremonies especially marriages and funerals. References to the Panchyat are dealt with seriously and fines are imposed which should compulsorily be paid. Altogether he has three assistants, among whom the first is called "Kolkkar" and the other two are called "Cholvattus". Generally the three belong to different clans and each clan has a representative on the panchayat. The Headman is respected, his decisions are accepted and he receives no remuneration for his services. Marriages and new undertakings are only finalised after obtaining his approval. They also have a

pujari (priest) who plays an important role but receives payments for the services rendered.

JENU KÚRUBA

Jenu Kurubas are found in the Hunsur, Periyapatna, Heggadadevankote and Gundlupet Taluks of the Mysore District and Mercara, Virajpet and Somwarpet Taluks of the Coorg District. Some of them also live in the high mountains of Kerala.

The prefix 'Jenu' is the term for honey (theen) and has reference to their early ostensible occupation for a livelihood. Although Jenu Kurubas ethnologically belong to the category of Betta Kurubas, their vocations, dialects, habits and names considerably differ from that of Betta Kurubas. Despite the fact that Jenu Kurubas, Betta Kurubas and Shepherd Kurubas belong to the broad category of Kadu Kurubas, they do not entertain marital relationships each other.

Jenu Kurubas like the other divisions invite attention by the interesting and important role they have played in the early history of this country and the deplorable position they now occupy. They are acknowledged as the modern representatives of the ancient Pallavas whose supremacy in the south lasted till the beginning of the 8th century when they were defeated by the rising powers and finally banished by the chola king Adondai.

Not long ago, they were nomadic food gatherers who never thought of a settled life and home. They do not have the chavadies (community halls) now seen among the Betta Kurubas.

Their early ostensible occupation was honey collection, a part of the honey collected was consumed and the rest sold or exchanged to procure essentials especially grain. It appears that the scanty availability of honey, herbs and roots which formed their diet forced them as a matter of necessity to resort to other vocations like hunting etc. They are good trackers and are always ready to assist visiting hunters. Both sexes take an active part in the battle for food. Their resources are extremely disappointing and extravagance at the slightest provocation forces them to face lasting difficulties.

Jenu Kurubas have the institutions of the 'Naik' or 'Nayak' (headman). He plays an important role in their marriages and funerals. The office of the headman can be either hereditary or elective. Requisite qualifications for a tribal to be elected as headman include knowledge of the forests and medicinal herbs, competency to hunt and physical fitness.

Present Living Conditions Of The Tribals

The above facts indicate that the tribals are very quaint, with a lot of wisdom. Their dialect is very picturesque with appropriate similies used often in the

course of the conversation to emphasise and describe the situations they face. Their Yajamanas (headman) have a rich repository of knowledge with reference to diverse aspects like medicine (300 varieties of herbs are easily identified by them) and justice and are very good trackers as well.

These Yajamanas over the years have lost their hold on their respective communities due to the kind of culture shock that they faced when they were uprooted from their natural surroundings, the forest. In order to restore their lost identity to them, the DEED organisation at Hunsur calls for a monthly meeting of the Yajamanas, where their wise counsel is sought, to solve most of the major problems that the tribal population face. The research team attended one such meeting of the tribal Yajamanas conducted at Hanagudi on the 6th of September 1988, and it enabled the team to get a first hand information on the needs and the problems of the tribals. It also helped in perceiving the impressions of the tribals themselves on the functioning of the LAMP society.

In the course of the meeting a Yajamana gave a succinct description of the changes that time has wrought in the lives of tribals since the past, when they (to put in his words) - were as free as the deer that frolicked in the jungles, but now they were like frogs displaced from wells and have managed as best as they could.

In fact the tribals are going through a transition stage from a carefree nomadic existence to the so called civilized main stream and the day-to-day horrors that go with any economic structure. This is leading to a lot of mental frustration and adjustments which the tribals seem reluctant to cope with.

The talk also revolved around their land holdings (given to them by the Government as part of one of the schemes undertaken to rehabilitate them) and what best they could do with it. The tribals seemed offended by the fact that Government officials and other organisations blamed them readily for all the atrocities that takes place in the forest. For instance, they have been accused of smuggling, chopping down trees and illegal entry of forests when actually vested interests like the tobacco cultivators have been exploiting their innocence.

The team also observed that the tribals were quite unaware of the changes in the standard rates fixed by the society for each of the MFP collected. Moreover, in the interior villages of Hunsur Taluk, the tribals' only source of information on revised rates is the agent who serves as a link between them and the society. This gives ample opportunity for the agent to take advantage of the tribals' ignorance. Moreover the agent does not give a receipt to the tribals for the amount of MFP they have collected. Only the agent gets a receipt after having submitted to the society the entire amount collected in that season. Here

again there is a lot of scope for misappropriation of goods and the only person who stands to gain by these arrangements seems to be the agent. For, the agent not only gets the commission but also all the other fringe income as a result of poor supervision and management on the society's part.

Thus in effect the talk with the tribals was a two way process. While the team got an interesting insight into what the LAMP society meant for the tribals, they(tribals) were educated about general aspects like standard rates for the MFP collected compensation for the accidents encountered during collection, agent commission, profit margin that is accrued to the society when it finally markets the MFP, selection of agents and elections to the director's posts.

In fact, this pathetic ignorance of what the society can do to help them by its mere existence, reflects the almost childlike trust they have in people. Having lived away from civilization, amidst thick jungles, they are incapable of adjusting to the several nuances that exist in a competitive society.

Having dealt here with the tribals as a group and their impressions of the society in totality, the Chapter that follows deals with individual case histories of not only the members but also the agents and directors.

CHAPTER III

CASE HISTORIES

A better understanding of the roles played by the members, the agents and the presidents in the functioning of the LAMP society, was rendered by a visit to many villages which include Kolavige, a village where the dominant caste is Jenu Kurubas ; Hemmige, where Sholigas live and Billanahosahalli, dominated by Betta Kurubas.

Discussions held with the agents, members and presidents, in these villages revealed that the tribals were generally disgruntled by the low income they get from collecting MFP. In fact, the tribal women in Kolavige were eager to substantiate their income by learning to weave baskets and tailoring too. They hoped that the LAMP society would encourage them and help them in contributing more income to their families.

A more detailed account of their impressions are presented as case histories below:

Tammiah - MFP Collector

Tammiah, belonging to the Jenu Kuruba community lives in Koluvige with his wife and two children. His only occupation is collecting MFP from the nearby forest. His wife too assists him whenever he collects Marati Mogu, Honge Kayi and Nellikayi (Gooseburry). He first draws an advance from his agent, collects the MFP and then claims the

remaining amount accordingly. At the time of the team's visit, Tammaiah was collecting Marada Hoovu (Tree Moss). He could collect about 2-3 Kgs per day, getting a remuneration of Rs. 6/- Per Kg, thus making his daily earnings Rs.12 to 18/- .

Tammaiah stated that he could earn only Rs.100 Per week which totals his monthly earnings to Rs.400. His earnings were better during a good monsoon season when the yield of tree moss was good.

Collecting Tree Moss, said Tammaiah, was very strenuous and risky, as he had to climb to the top of the tree to locate a good deposit of Tree Moss. Also rains would make the tree very slippery, increasing the risk involved. He complained that the society does not really (there is no provision made for compensation in the LAMP society at Hunsur) compensate in case of accidents.

Tammaiah gave an account of a tribal who fell from a tree during collection and was hospitalized. On sympathetic grounds the society issued only Rs. 100/- which was not even adequate for his medical charges as he had to be hospitalised for 15 days. The victim in question got himself discharged earlier because he could not pay the hospital bills. Tammaiah felt that if he (the victim) had been sanctioned adequate compensation by the society his permanent limp could probably have been avoided.

CHIKRAMAAMA - A Tribal Basket Weaver

Chikramamma, belonging to the Sholiga tribe, lives in Hemmige with her husband, three sons and two daughters. All the families living here including hers, are occupied in basket weaving. Along with the other women in her village, she sheaves and bends the bamboo while the men weave the basket. Only ten women in her village are trained in basket weaving.

Like all the other families, her family too gets bamboo from the forest department during the months of November, December and January, a scheme that was started three years ago. Accordingly, she gets about eight bamboos per month out of which she can make only about Rs.100/-worth of goods. Like all the others in the village, she too finds that the quantity of bamboo supplied is insufficient to meet her needs. This forces the men in her village to enter the nearby forest which is about 4 Kms away, illegally once in 4 days at the risk of being caught by the guards and eventually beaten up mercilessly.

Along with the others in the village, she sells her baskets to the Muslims and local merchants, at prices ranging from Rs.3.50 to 5.50 as she does not have a licence to sell her goods at Hunsur. The muslims and other local merchants on the other hand are equipped with a licence and sell the baskets at Hunsur for a profitable rate of Rs.6.50 per basket.

Chikramamma is aware of the fact that she is being exploited both by the forest department who do not give them an adequate supply of bamboo and also by the middlemen like the Muslims and other local merchants who market her goods in Hunsur. Although she is cognisant of these problems, she is helpless because she does not know whom to appeal to. Surprisingly she was not aware of the existence of the LAMP society. When the research team mentioned it to her, she mistook it for the Government fair price depot.

Having been appraised of the functions of the LAMP society, she hoped that the society would expand its activities and open a handicraft unit, thereby giving them a regular supply of bamboo every month and also market their goods in exchange for weekly wages. She said that the women too were eager to be trained in basket weaving and hoped that the society would come to their rescue.

Although the above mentioned case history comes under the purview of the objectives framed for all the societies in general, it does not pertain to the individual objectives of the LAMP society at Hunsur. But this case study has been included here with the hope that the society would tap this potential among the tribals and help them get the benefits of the society that exists for their upliftment.

Ramamma - An Agent

Smt. Ramamma belonging to the Betta Kuruba tribe, has been an agent at Billanahosahalli for the past four years. She

lives with her husband Kempaiah who is a director. She is a mother of three sons and four daughters who are all married. At present she is the only female agent in the society. While her name has been registered as an agent, all the actual work is executed by her husband Kempaiah.

When asked for her impressions of the society, Ramamma complained that the income she receives from commissions was inadequate and highly unreliable as the MFP available in the forest was seasonal and wholly dependent on rains. Moreover she mentioned that the weight of the MFP collected and stored for over a long period was less when compared to the weight of the produce immediately after collection, for eg., Tree moss. This resulted in her getting a lesser income in the form of commissions.

She also complained about the lack of storage facility and hoped that the society would construct a godown in her village. She is presently storing the collected MFP in her hut.

According to the receipts she had in her possession her earnings for the year 1986-87 was as follows:

MFP	Total Qty Collected (in Kgs)	Comm.Rate during 1986-87	Total Commission Received (in Rs)
Honey	226	Rs. 1/Kg	226
Honge Seeds	1111	Rs. 5/Day	150
Honey	495	Rs. 1/Kg	495
		TOTAL :	871

But according to the records maintained by the society, Ramamma's commission for the year 1986-87 was as given below:

MFP	Total Qty collected (in Kgs)	Comm.Rate during 1986-87	Total Commission Received
Honey	179	Rs. 1/Kg	179
Honey	54	Rs. 1/Kg	54
Bee Wax	2.5	Rs. 2/Kg	5
Tree Moss	305.5	Rs. 1.50/Kg	458.25
		TOTAL :	696.25

Source: Secretary LAMP society, Hunsur

Kempaiah - Director

Kempaiah has been a director for the past three years. He attends a director's meeting once in a month where he is given Rs.10/- along with lunch and tea. According to him, the directors among the tribals do not actively participate in the discussions. The only contribution on their part is their thumb imprint for any decision taken during the meeting. His complaint is that even if they do want to have their say in the meetings proceedings, they are never given the privilege of a patient hearing. They receive the same treatment during the Annual General Body meeting too. He does not take all the 30 members in Billanahosahalli to the General Body meeting, but takes the most outspoken member among every six tribals to participate in the annual

proceedings of the meeting.

Thus, the position of the directors among the tribals who are dominated more often than elected due to the non-participation of the members in the General Body meetings appears to be only decorative.

From the case histories presented above, it is quite apparent that not only the members, but also the agents and the directors at the Management level too, have a lot of complaints to make against the way the Society is run.

While the members feel that they are literally the dogsbody of the society without even being entitled to a simple human sympathy like the sanction of compensation for accidents encountered during collection, the agents complain of inadequate commission rates and lack of storage facilities to store the MFP collected.

The society on its part needs to tighten the loopholes that exist even at its management level. Apart from training the agents to weigh the product accurately, they should also be trained to keep proper records of the collection made. Otherwise, the suspicion of having misappropriated goods would fall equally on both the agent and the society as is apparent from the receipts in Ramamma's possession and the records maintained by the society of her annual income by way of commissions.

There is also a vital need to involve the tribals and train them in the functioning of the LAMP society by

giving them an opportunity to freely express their opinion on various matters pertaining to their welfare and to gradually designate authority to the tribals themselves, within the organisational infrastructure.

CHAPTER IV

Performance of Lamp Society - A comparison of Hunsur
and Chamarajanagar

Performance of Hunsur Lamp Society has been observed to be (Refer Chapter I), unsatisfactory while that of Chamarajanagar was good. Mere identification as to whether a society is a success or a failure does not aid in solving the problem. Greater importance should be attached to identify the factors/causes behind the failure of a society and suggest the remedial measures to make it a success. This has been attempted in the present and subsequent Chapters of the study.

Present chapter has highlighted the reasons for the failure of Hunsur society and the success of Chamarajanagar. The discussions held with the secretaries of Hunsur society and Chamarajanagar assisted in identifying the causes for failure of the Hunsur society.

It was perceived that the dismal performance was largely due to non-co-operation on the part of the Forest department. For example, the tamarind trees in the forest are not numbered and recorded for easy identification and legitimate payment of royalties. The forest department, whose responsibility is to do so, has never done it.

Moreover, it was maintained that there was a remarkable amount of indifference shown by the Forest Department. For example, it was emphasised that the authority

to issue the transport permit for transporting the collected MFP from the forest area to the society rested with the Secretary of the Lamp Society. But this year the Forest Department has been harassing the Secretary by not acknowledging his authority to issue the permit.

In fact, on November 4th, 1988, during the team's visit to the Lamp Society a series of events were witnessed which resulted in a loss of Rs. 6,000/- to the Lamp Society only because of the Forest Department's delay in issuing the permit to transport truckloads of 'Nellikayi' which were being collected in the Veeranahosahalli forest area, within the jurisdiction of Hunsur Taluk.

The Forest department was informed on October 26th, that the tribals would start collecting 'Nellikayi' on the 31st in the Veernahosahalli area and that the society would require a permit to transfer the bags of Nellikayi once the collection was over. Meanwhile the society also called for tenders and agreed to sell the required quantity of 80 bags to a purchaser from Tallecherry in Kerala on the 3rd of November, at the rate of Rs.180/- per bag.

Despite taking all these measures to ensure smooth completion of the work undertaken, the Secretary was led through a most frustrating experience. The permit which was to be issued on November 2nd was not given till the midnight of November 3rd, when the Secretary was finally able to locate the RFO. Due to this delay, the tribals who were

waiting for their wages had to unnecessarily wait overnight on the roadside and to top it all, the wholesaler Yusuf who was buying the 80 bags of Nellikayi rejected about 33 bags because the Nellikayi had turned black, resulting in a loss of Rs.6000/- in all.

It was perceived that this could have been prevented if the Government nominated DCF for the post of a director -actively participated in the functions of the LAMP Society. This arrangement it was stated, would have definitely encouraged a better work atmosphere and resulted in a lot more co-operation between the forest department and the Lamp Society.

The Range Forest officer had his own reasons to state for the failure of this Lamp Society. He felt that the forest land should be leased to private contractors because there would be more competition with the contractors calculating in terms of the future crop. The same kind of business acumen was missing among the Government representatives in the Lamp Society. Moreover, he maintained that the society existed for the tribals in name only since the managing committee had no active tribal representative.

Referring to the alleged harassment by the forest department, the range officer said that they restricted the entry of tribals into the forest during the months January-May, because of the danger of fire erupting in the dry and humid weather conditions. He stated that they were on the defensive as the tribals had adopted the method of

chopping down trees to make the collection of tamarind and Nellikayi easier, resulting in a poor yield of the same crop for the next five years.

But, the Range Forest officer was quite honest about the irregularities in his own department, where private parties were encouraged to collect the forest produce from the leased forest land.

With this kind of mud slinging between the two departments who have to be working hand-in-hand for the benefit of the tribals, the actual purpose behind the existence of the society is lost. One actually wonders at the lack of insight shown by the two departments of the Government when co-operation between them would solve most of their problems and even increase their efficiency.

In fact, the proof of this statement lies in the existence and successful working of the Chamarajnagar LAMP Society. Here too, the society works with the same infrastructure that exists at Hunsur. The only difference being that the RFO is nominated to the post of the President of the Lamp Society. This gives an opportunity to the two departments to actively participate in the society's activities and also helps the forest department to understand the various functional problems encountered by the society and its members, the tribals. Only recently, since the tribals had acquired sufficient confidence to look after their own interests in the society, the RFO has

retired from active participation in the society's activities by relinquishing his role as President of the Lamp Society.

When compared with the Lamp Society at Hunsur, the following reasons for its success emerged:

1. With the RFO as the President of the Lamp Society, the Forest Department was equally responsible for the functioning of the society. As a result, there was no misunderstanding or conflict between the LAMP Society and the forest department.
2. Secondly, during the team's visit to the society and the two villages in the Chamarajnagar Taluk, namely, Amachavady and Veernapura, it was observed that the officials' contact with the members was more when compared to that prevailing at Hunsur.
3. Thirdly, it was observed that all the members actively participated in the functioning of their General Body Meeting and exercised their franchise in electing their Board of Directors. They were also vociferous in expressing their opinions and never hesitated to take a stand during the proceedings of the meeting. Moreover, they were advised to overcome their inhibitions and also given a patient hearing by the officials at the LAMP Society.
4. The women too were fairly well acquainted with the functions of the LAMP Society and consequently were

capable of claiming all the benefits that the tribals were entitled for. They too actively participated in the collection of MFP and contributed to the monthly earnings of their families.

Given below are the comparative figures for the LAMP Society at Hunsur and Chamrajnagar:

Details	Hunsur	Chamarajanagar
Members	2225	706
Member's share (In Rs.)	28107	7060
Government share (In Rs.)	21800	26800
MFP Sales 1986-77 (In lakhs) 1987-88	1.04 1.44	2.09 4.74
Food Distribution (In Lakhs) 1986-88:		
Food articles purchased	6.46	0.68
sold	6.18	0.57
1986-87:		
Food articles purchased	4.03	0.60
sold	4.85	0.50
1987-88:		
Total Turnover		
1986-87	23.41	9.0
1987-88	19.28	10.0

CHAPTER V

RECOMMENDATIONS

A set of recommendations are made in the present chapter in the wake of the arguments presented in the previous chapters.

1. Other than the Project Co-ordinator and the Deputy Conservator of Forests, Hunsur, the rest of the Directors should be tribals. The other nominated officials like the Tashildar, the Asst.Registrar of Co-operative Societies and a representative of Mysore Dist Co-operative Central Bank Ltd, Mysore could form an Advisory Committee in order to guide the Board of Directors till the tribals gain confidence and learn to guide the interests of the tribals in the society.
2. Most of the time the members are quite ignorant of the societies activities. They rarely attend the General Body Meeting where major issues concerning the tribals are discussed either because they are not notified in advance or because they cannot afford to travel to Hunsur losing a day's wages. If their travel expenses are met with and one day's wages compensated, the members' involvement in the proceedings of the General Body Meeting would considerably improve. This move would also help in the members' actively participating in the election of their Directors.
3. Women have also been actively participating in the collection of MFP, but they are not being represented in the

Board of Directors. In order to effectively initiate labour opportunities for the women in the tribal colonies, the society should reserve a Director's post for a tribal woman. The Advisory Committee consisting of Government officials should have a Mukhya Sevika as one of the members.

4. The agents are nominated by the Board of Directors and there are cases where the Director and the Agent belong to the same family. This system should be avoided to give equal chance of benefit to all the members.

5. Each 'Haadi' should elect their agent and the elected agent should in turn be appointed by the society on a two year contract with regular monthly salary instead of commissions. Regular incentives should be given to the agents who can mobilise their people, and store large amounts of MFP. This would ensure their commitment to the job and avoid malpractices like discrepancies in weighing the MFP collected by the tribals and the standard rates paid to the tribals for the MFP collected.

6. The agents only maintain the receipts of the collected MFP submitted to the society. They do not maintain records of the purchase made from the tribals and nor do they issue receipts to the tribals for the amount of MFP collected by them. These records should be maintained by the agents so that a lot of misappropriation of goods can be avoided. Efficiency here could be ensured by training the agents to maintain accurate records.

7. The authority to issue the transportation permit to transport the MFP collected to the society from the forest area, should rest with the Secretary, LAMP Society to avoid undue delay in delivering the collected MFP to the wholesaler, especially when the collected MFP is a perishable one.
8. Adequate storage facilities in the form of godowns should be constructed in the villages where the agent is stationed.
9. The society should issue a pass with all the names of the members in the family listed instead of issuing passes in the name of individual members. This move would enable all the household members in each family to enter the forest and help in collecting large amount of MFP to substantiate their family income.
10. A contact programme should be organised by the society, where the members are educated about the various benefits that the society could give them. The society should also use this opportunity to speak to them about maintaining the forest produce and also advise them against unnecessary shelling down of trees which would backfire in the form of poor yield in the subsequent years.
11. The society should sanction adequate compensation to the tribals in the case of accidents during the collection of MFP.
12. Though the society has two branches each in Hunsur and

Periyapatna Taluk, for the members to have easier access to the society, there should be a collection centre for every cluster of three villages. In each of these centres as already implemented in the branches mentioned above, a salesman should be appointed among the tribals to supervise the MFP collection made by the agents and to also distribute ration to green and yellow card holders among the tribals.

13. The Lamp Society should also take-up the marketing of Bamboo products which is the major occupation among some of the tribal groups, especially among the women. The society should be given the responsibility of distributing the bamboos regularly to the concerned tribes instead of the Forest Department. The society's involvement in this activity would avoid the tribals being exploited by the local merchants.

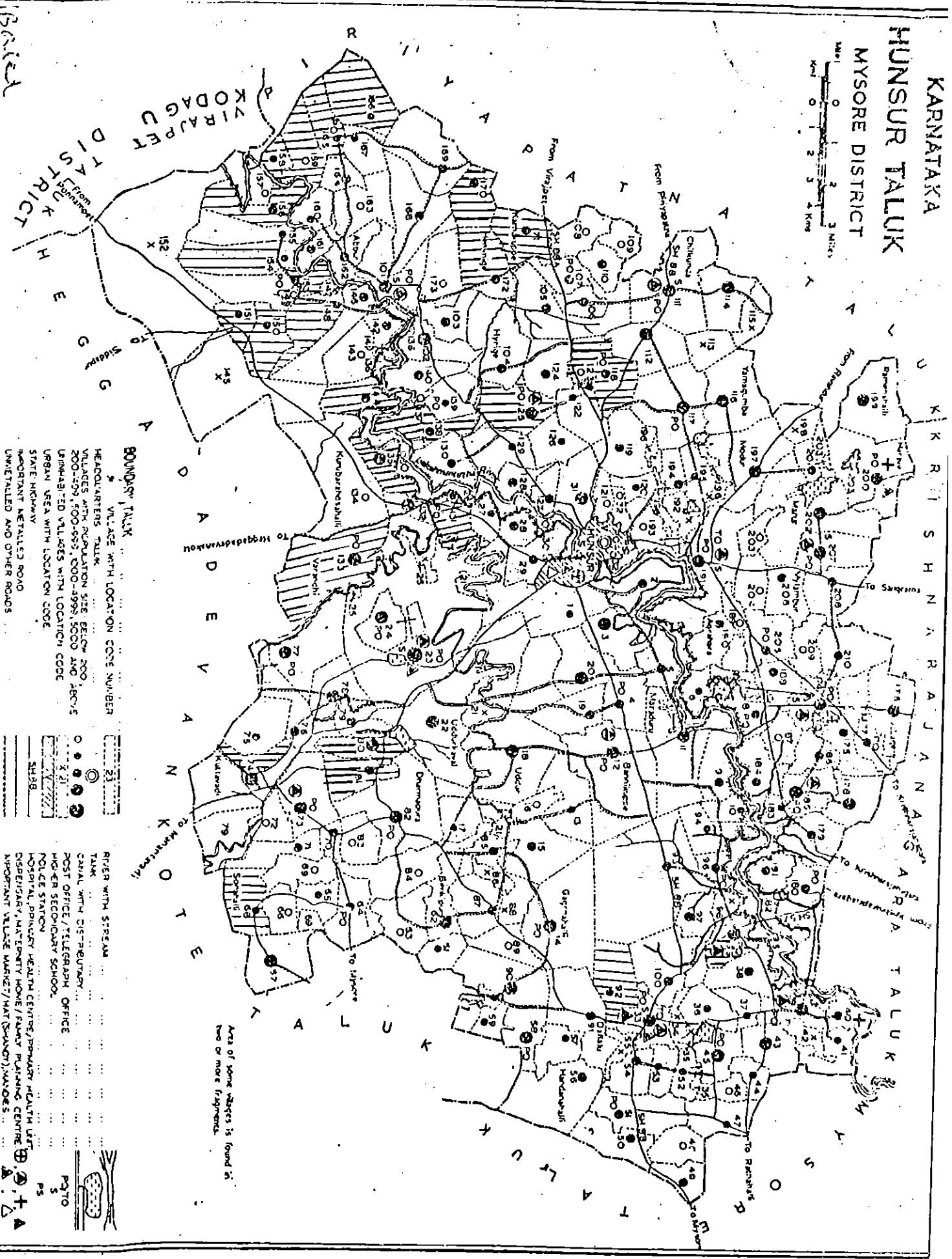
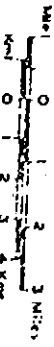
Since more and more women have shown a keen interest in Basket Weaving, the Society could also conduct a training programme for the tribal women in order to help substantiate their income accrued from the MFP collection.

14. A local voluntary organisation working for the upliftment of the tribals should be included in the Advisory Committee.

KARNATAKA

HUNSUR TALUK

MYSORE DISTRICT



BOUNDARY TALK

VILLAGE WITH LOCATION CODE NUMBER

HEADQUARTERS TALK

VILLAGES WITH POPULATION SIZE BELOW 200, 200-500, 500-999, 1000-9999, 10000 AND ABOVE

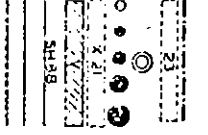
UNINHABITED VILLAGES WITH LOCATION CODE

URBAN AREA WITH LOCATION CODE

STATE HIGHWAY

IMPORTANT METALLED ROAD

UNMETALLED AND OTHER ROADS



RIVER WITH STREAM

TALK

CANAL WITH DISTRICT BOUNDARY

POST OFFICE / TELEGRAPH OFFICE

HIGHER SECONDARY SCHOOL

POLICE STATION

HOSPITAL / DISPENSARY / HEALTH CENTRE / PRIMARY HEALTH UNIT

DISPENSARY / NURSERY HOME / FAMILY PLANNING CENTRE

IMPORTANT MARKET / HAT (SHAWD) / MANDIES

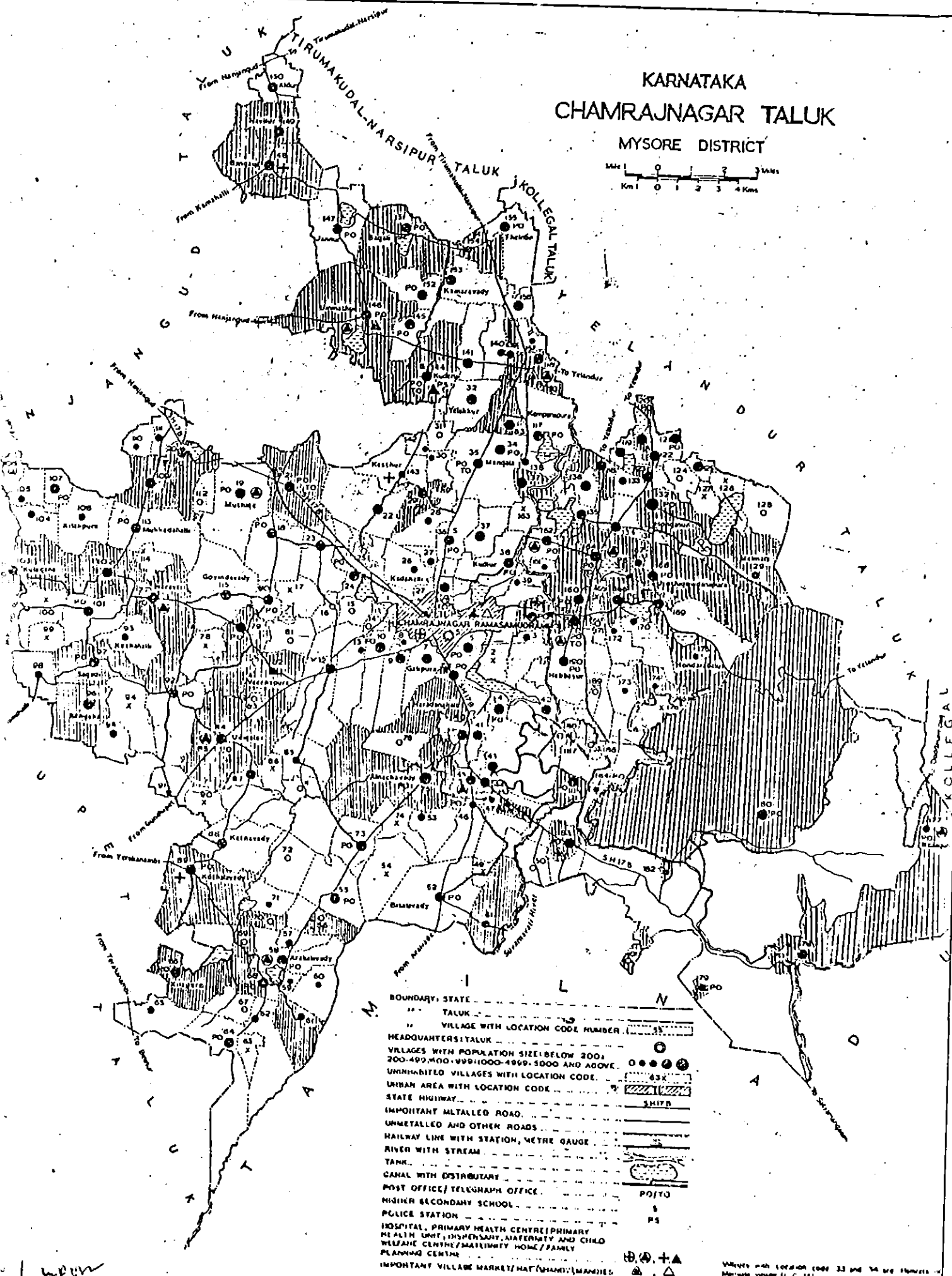
Area of some villages is found in two or more taluqs.

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1975

KARNATAKA CHAMRAJNAGAR TALUK MYSORE DISTRICT



- BOUNDARY, STATE
- TALUK
- VILLAGE WITH LOCATION CODE NUMBER
- HEADQUARTERS: TALUK
- VILLAGES WITH POPULATION SIZE: BELOW 200; 200-499; 500-999; 1000-4999; 5000 AND ABOVE
- UNINHABITED VILLAGES WITH LOCATION CODE
- URBAN AREA WITH LOCATION CODE
- STATE HIGHWAY
- IMPORTANT METALLED ROAD
- UNMETALLED AND OTHER ROADS
- RAILWAY LINE WITH STATION, METRE GAUGE
- RIVER WITH STREAM
- TANK
- CANAL WITH DISTRIBUTARY
- POST OFFICE/ TELEGRAPH OFFICE
- HIGHER SECONDARY SCHOOL
- POLICE STATION
- HOSPITAL, PRIMARY HEALTH CENTRE (PRIMARY HEALTH UNIT, DISPENSARY, MATERNITY AND CHILD WELFARE CENTRE/MATERNITY HOME/FAMILY PLANNING CENTRE)
- IMPORTANT VILLAGE MARKET (MATH/SHANI/SHANDE)

Villages with location code 33 and 34 are situated in Mysore taluk U. C. IV.

AGREEMENT

Agreement made this day the 11th day of January 1988 by the Managing Director, Hunsur Periyapatna Taluk Schedule Tribe Large Sized Multipurpose Co-operation Society Ltd., Hunsur (herein after called the contractor) which terms shall where the context so admits included his Heirs, Executors, Administrators, Legal Representative and Assignees of the one part and the Deputy Conservator of Forests, Hunsur Division, Hunsur which expression on behalf of the Government of Karnataka (herein after called the Government) of the 2nd part.

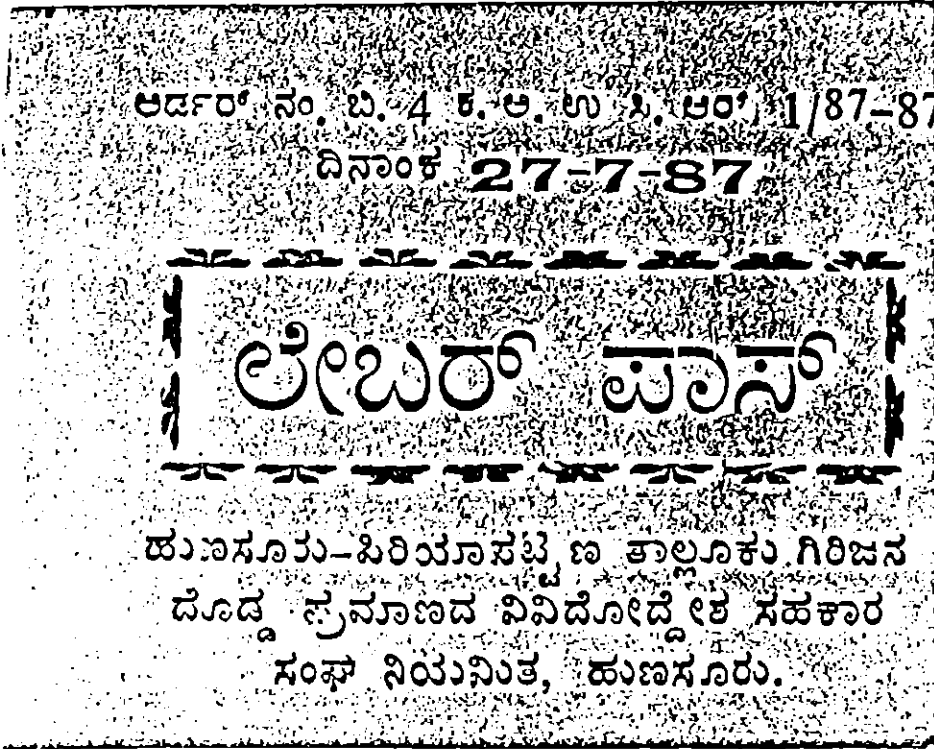
Where as the lease of M.F.P for the right of collection of M.F Produce of remit No. 1,4,5 And 6 in Hunsur Division, Mysore District referred in the schedules hither to undertaken below for the Year 1987-89 from the date of agreement upto 30.6.1987. Where as the tender has been confirmed by the Conservator of Forest Kodagu circle Vide D.O No. PS 23 No TPR/87/88 dated 25.6.87 whereas the contractor has paid security deposit of Rs.30,000.00 Plus taxes of Rs. 44,730.00 Total 74,730.00 vide challan no. 14 Dated 27.11.87 instead of Rs. 43,931.25 Plus taxes. Rs.44,730.00 Total 88,661.25 which has to be paid after observing the 35% concession on the estimated value of lease for 1 year ie., 1.4.87 to 31.3.88 vide GO.No. FFD7, FDP,85 dated 17.11.87.

Now these presents witness that for himself, his Heirs, Executors, Administrators, Legal Representatives and Assignee and the Deputy Conservator of Forests, Hunsur Division, Hunsur for himself his successor and his assignees do hereby actually agreed to execute this agreement on the following conditions.

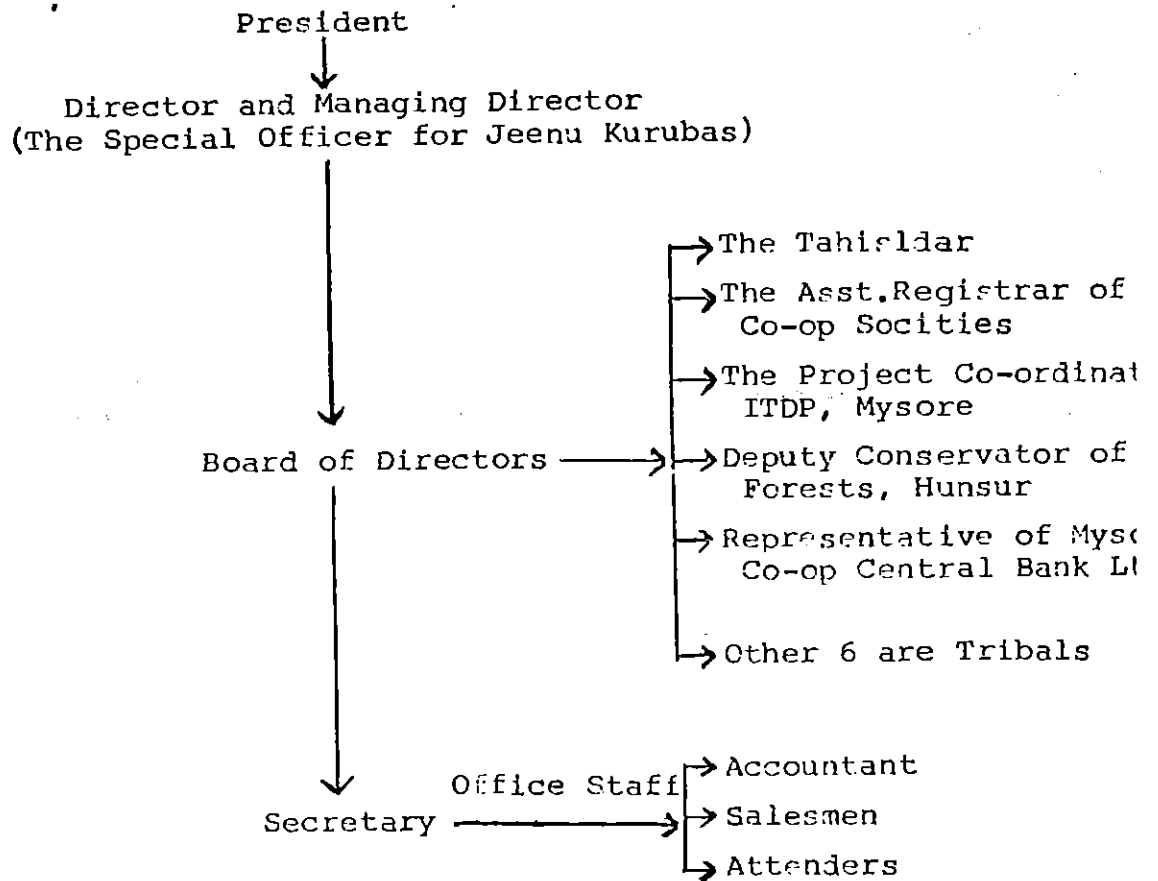
Witness

Contractor

Deputy Conservator of forests
Hunsur Division, Hunsur



COPY OF THE LABOUR PASS ISSUED BY THE SOCIETY.

ANNEXURE - 3ORGANISATIONAL STRUCTURE

SCHEDULED TRIBES POPULATION, 1981

LC No.	Name of village/ town/urban ward	Scheduled Tribes		LC No.	Name of village/ town/urban ward	Scheduled Tribes	
		M	F			M	F
	CHAMARAJNAGAR T	7941	7941	51	Bandigowdanahalli	1	2
	TALUK R	7380	7411	52	Bisalavady	-	-
	U	561	530	53	Channappanapura	-	-
				54	Yelachagere	-	Uninhabited
				55	Voddagalpura	-	-
	RURAL			56	Chowdahalli	2	1
1	Chamarajnagar	-	-	57	Linganapura	-	-
2	Ramasamudra	Uninhabited	-	58	Arakalvady	-	-
3	Basavanapura	-	-	59	Manchagundipura	-	-
4	Doddamole	-	-	60	Mudaluhosahalli	-	-
5	Karinnanjanapura	-	-	61	Voddarahalli	5	7
6	Somavarpet	5	3	62	Yenagumba	-	-
7	Galipura	-	-	63	Shindayyanapura	-	Uninhabited
8	Mudlapura	-	-	64	Yeraganhalli	-	-
9	Mallainapura	-	-	65	Madalavady	-	-
10	Uthavally	-	-	66	Kilagere	105	95
11	Sanegala	-	-	67	Achattipura	-	-
12	Shivapura	-	-	68	Yanagahalli	639	632
13	Yedapura	-	-	69	Melur	5	5
14	Managanahalli	-	-	70	Kutanapura	6	4
15	Munachanahalli	-	-	71	Narasamangala	-	-
16	Kattepura	-	-	72	Bokkepura	-	-
17	Somasamudara	Uninhabited	-	73	Honnahalli	-	-
18	Heggotara	-	-	74	Hagalabele	-	Uninhabited
19	Muthige	-	-	75	Amachavady	492	488
20	Bendaravady	110	91	76	Kotaganahalli	-	-
21	Badanaguppe	289	295	77	Harave	108	93
22	Kellamballi	-	-	78	Kaggalipura	-	Uninhabited
23	Bedarapura	-	-	79	Nanjedevanapura	133	126
24	Mariyala	-	-	80	Kalanahundi	-	-
25	Gangavady	-	-	81	Somanapura	-	-
26	Kadahalli	-	-	82	Veeranapura	4	3
27	Masagapura	-	-	83	Hangarepura	-	-
28	Kiragasur	-	-	84	Udigala	47	57
29	Bhogapura	93	93	85	Badagalpura	-	-
30	Sappalahnapura	-	-	86	Kumbaragundi	-	Uninhabited
31	Hanahalli	-	-	87	Uganedahundi	-	-
32	Yalakkur	-	-	88	Kataavady	-	-
33	Hullepura	34	41	89	Kothalavady	23	33
34	Yediyur	-	-	90	Maduvinabeedu	-	Uninhabited
35	Mangala	-	-	91	Devalapura	-	-
36	Madapura	1	1	92	Thammadahalli	362	380
37	Handarakally	-	-	93	Kethahalli	-	-
38	Kudlur	3	1	94	Kanchanahalli	-	Uninhabited
39	Boodithittu	-	-	95	Kumachanahalli	-	-
40	Haradanahalli	360	343	96	Kengaki	328	329
41	Bandigere	-	-	97	Sagadi	554	589
42	Byadamudalu	-	-	98	Bettadapura	-	-
43	Basavapura	-	-	99	Haraganapura	-	Uninhabited
44	Ankanasettypura	-	-	100	Padnakodu Hosahalli	-	Uninhabited
45	Venkataiahnachatra	-	-	101	Mudnakodu	-	-
46	Kodi Ugane	-	-	102	Maleyur	35	39
47	Bevinathalapura	-	-	103	Kulagana	132	131
48	Srirangapura	4	4	104	Hirebetur	-	-
49	Basthipura	Uninhabited	-	105	Chikkabegur	-	-
50	Bommanahalli	-	-	106	Kebbepura	-	-

SCHEDULED TRIBES POPULATION, 1981

LC No.	Name of village/ town/urban ward	Scheduled Tribes		LC No.	Name of village/ town/urban ward	Scheduled Tribes	
		M	F			M	F
107	Aralikatte	-	-	158	Chandakavady	15	7
108	Kilalipura	-	-	159	Kodimole	58	61
109	Kerehalli	66	54	160	Saragur	3	8
110	Bhujaganapura	-	-	161	Mallupura	-	-
111	Heggavady	-	-	162	Alur	-	-
112	Nanjahalli	-	-	163	Hosahalli	Uninhabited	-
113	Mukkadahalli	-	-	164	Kagalavady	60	65
114	Kethanapura	Uninhabited	-	165	Vagarapura	Uninhabited	-
115	Govindavady	-	-	166	Nagavally	415	448
116	Santhemarahalli	3	2	167	Ammanapura	84	74
117	Kempanapura	-	-	168	Jyothigowdanapura	348	337
118	Gulipura	125	114	169	Nallur	8	9
119	Boodambally	-	-	170	Puttanapura	-	-
120	Irasavady	14	23	171	Hanchithalapura	-	-
121	Suthur	-	-	172	Kokkanahalli	-	-
122	Chatipura	-	-	173	Iyyanapura	-	-
123	Masanapura	346	320	174	Malledevanahalli.	30	25
124	Kallipura	-	-	175	Hondarabalu	15	8
125	Gangavady	-	-	176	Haradanahalli	Uninhabited	-
126	Hosapura	Uninhabited	-	177	Bedaguli	5	9
127	Bettahalli	Uninhabited	-	178	Punajanur	154	159
128	Thimmegowdanapalya	-	-	179	Mukanapalya	9	8
129	Melmala	128	128	180	Punajur State Forest	645	659
130	Hanumanapura	-	-	181	Honnegowdanahalli	1	2
131	Nanjaraapura	-	-	182	Kulluru	38	38
132	Honganur	103	102	183	Attugulipura	43	61
133	H. Mukahalli	-	-	184	Hongalavady	-	-
134	Rechambally	-	-	185	Haradanahalli Dist. Forest II	26	17
135	Kotambally	-	-	186	Karadihalla	-	-
136	Homma	-	-	187	Kanikere	-	-
137	Kannegala	150	127	188	Dollipura	-	-
138	Singanapura	-	-	189	Devarajapura	-	-
139	Deshavalli	19	13	190	Hebbasur	-	-
140	Heggavadyapura	-	-				
141	Heggavady	-	-				
142	K. Mukahalli	-	-				
143	Kesthur	-	-				
144	Kuderu	62	71				
145	Mudala Agrahara	-	-				
146	Ummathur	397	429	15/II	Chamarajnagar Ramasamudram(M)	561	530
147	Jannur	-	-				
148	Cangaur	57	79		Division A	23	28
149	Navilur	36	37		B	140	120
150	Aldur	-	-		C	398	382
151	Bagali	14	11				
152	Demahalli	-	-				
153	Kamaravady	-	-				
154	Banahally	22	21				
155	Theinur	-	-				
156	Kavudavally	-	-				
157	Basavatti	1	-				

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Communities of the Wynad Christoph Von Furer-
Haimendorf

Village-wise details of the tribals in Hunsur Taluk

LC No.	Name of the Village	No. Of Families	Name of the Tribe
	Yashodarapura	127	Sholiga
	Pakshirajapura	70	Hakkipikki
	Pakshirajapura	32	Hakkipikki
156	Kolavige	70	Jeenukuruba
154	Chikkahejjur	17	"
153	Doddahejjur	31	"
150	Bharathvadi	33	"
	Kerehaadi	16	"
148	Dasanapura	26	"
	Bettadahaadi	22	"
144	Haralehalli	51	"
172	Hemmige	33	Sholiga
171	Karnakuppe	9	"
137	B.R. Kaval or Hebbala	15	"
	Bettahalli	18	Yeruba
159	Chandanagiri or K.G. Habbanakuppe	22	Jeenukuruba
165	Neralakuppe (1 colony)	33	"
	(2 colony)	30	"
151	Veeranahosahalli	35	"
133	Varanchikaval	21	"
80	Tharikallu	80	"
81	Halladakoppalu	10	"
74	Kuttavadi	32	"
68	Sonahalli	20	"
	Hosapura	3	"
	Billanahalli	50	Jeenukuruba
118	Kallahalli	30	"
135	Penjahalli	20	"
131	Kottigekaval	34	"
166	Uduvepura	45	"
158	Billanahosahalli	10	Bettakurubas
170	Beerathammanahalli	20	Sholiga
138	Beeranahalli	13	"
99	Bolanahalli	30	"
92	Jeelahalli	9	"
125	Thattekere	5	Jeenukuruba

Source : Block Development office, Hunsur.

HUNSUR TALUK

Total Population for ST's (As per 1981 Census)	Male	Female
5101	2891	2210
Name of the Tribe	Total No. Of families	
Jenukurubas	605	
Sholigas	312	
Bettakurubas	10	
Hakkipikkes	112	
Yerubas	18	
	1057	

Source: Block Development Office, Hunsur

CASE STUDY VI

AGARBATHI

CHAPTER I

INTRODUCTION ,

Agarbathi is a popular commodity of regular use among all sections of the society irrespective of their caste, creed, colour. Even though one cannot term it as an indispensable good, one can observe that it has become a routine part of human life as they use it for all the occasions. Gawankar, an Agarbathi businessman states, "today Agarbathi has moved out of the place of worship to drawing rooms, naturally demand has gone up and the traditional fragrances have given way to exotic fragrances" (quoted in 'The Agarbathi Business, Mysore Commerce, the Journal of FKCCI, JULY 1987).

The term Agarbathi is derived from the word 'Agaru' meaning Sandal Bathi. Agarbathi is generally defined as "any stick like object which burns emitting smoke but without emitting a non-odoriferous smell; manufactured from forest based raw materials consisting of powdered wood, charcoal, odoriferous roots, barks, seeds, leaves, flowers, etc., with some essential oil, mineral oil, resinoids and aromatic chemicals, the paste of which applied to bamboo sticks on which perfumes are added to emit non-odoriferous pleasing fragrance while burning on the coated portion of the stick (AIAMA 1987:10)

The available literature pertaining to Agarbathi reveals that the usage of Agarbathi dates back to early

civilization. It is stated that during the vedic times Agarbathi was used not only to mark an occasion but also to invigorate the physical and mental abilities of the users.

They also believed in the remedial values of Agarbathi sticks as it would aid in purifying air by acting as antiseptic agent. They even advocated usage of Agarbathi in the rooms of sick persons due to its curative qualities. It is argued that it has a scientific base, since volatile oils which forms an essential part of the raw materials used in the manufacture of Agarbathi are known to destroy airborne bacteria when used in a congregation. Reference to the usage of perfumes and incense sticks was also made in "The Lokapakara", a famous 11th century work written by a Kannada poet during the Chalukhya regime. The work contained a detailed chapter on "Grandha Yukti Klama" emphasising upon the importance of fragrance.

On the production front, there is a controversy regarding the origin and growth of Agarbathi Industry. While one school states the Agarbathi Industry was started and developed by the Muslim community, another school states the art of making Agarbathi was discovered and developed in the temple towns of Tamil Nadu, notably in Tanjavur where it was patronised by the Kings. However both the schools of thought concurred on the idea that the Agarbathi Industry originated in South. The families working on Agarbathi slowly shifted to Karnataka due to large scale availability of 'Royal Tree' which is botanically known as 'Santalum

Alum', Sandal that is extracted from these trees was used as one of the major ingredients in the manufacture of Agarbathi. They also had an added advantage when they obtained the patronage of the Royal family in princely state of Mysore.

During the later period Agarbathi business spread far and wide. Each unit's product differed in its quality as each one of them used different combination of the raw material making each one by itself. The combination generally remained a trade secret of each unit/family. AIAMA states "this secrecy went to the extent of concealing the identity of the items purchased as well as the quantum of such purchases since it was felt that any inkling with regard to such items or quantum would lead to the duplication of the Agarbathi manufactured by a particular family". (AIAMA: 1987:14). Hence a particular Agarbathi manufactured by a family was unique with a separate identity by itself as compared to the one manufactured by another.

RAW MATERIAL USED FOR MANUFACTURING AGARBATHI

The raw material used for the manufacture of Agarbathi is drawn mainly from the forests. About three hundred or more forest based raw material like Bamboo sticks, country drugs, herbs, perfumes, powdered wood, charcoal, odoriferous roots, barks, seeds, leaves, flowers, etc., with other raw material inclusive of some essential oil, mineral oil, resinoids and aromatic chemicals are used in the manufacture

of Agarbathis. Jigat which is generally extracted by stripping the bark of tree is used as a binding material. Jigat is found in dense forest areas. Mainly tribals are involved in collecting and processing the tree barks into the binding materials. The bamboo sticks used are also collected from the forest areas which are cut and split by the tribals.

The earlier practice involved complete usage of natural herbs and flowers for the flavour unlike the modern practice of using chemicals for good aroma, in the process of manufacturing Agarbathi.

Raw materials used in the earlier days included Civat, Musk, Saffron, Barneol, Cloves, Cassia, Agarwood, Sandalwood, Gum, Benzoin, Halmaddi and others like dry flowers and roots which include Rose, Vettwert leaves like Banana, Patchouli, etc., and attars of Rose, Sandal and Henna.

These days manufacturers have been complaining of shortage of raw material like Agarwood dust, white chips charcoal and natural herbs as they grow in small quantities in the forests. Their growth depends on various factors like climate and soil conditions prevailing in the areas. Scanty availability of natural products has led the manufacturers to use aromatic chemicals.

MANUFACTURING PROCESS: TECHNIQUE OF MAKING AGARBATHI

The process of Agarbathi manufacturing is highly labour intensive. The rolling of Agarbathi is mainly a manual work wherein the raw material used for Agarbathi making is rolled onto a Bamboo stick with the hands using the Agar wood dust. Hence, it does not require heavy engineering machines. Generally rolling of Bathi is done on a wooden plank and a small knife like instrument is used for cutting the dough. Since Agarbathi making is a simple job, the skills are easily acquired even by small children.

Manufacturing of Agarbathi involves a three phased operation:

1. Preparation of the raw material
2. Agarbathi rolling
3. Perfuming and packing

In the first stage, various fragrant wood products and country drugs are powdered either in a disintegrator or in a pulverizer. This mixture is commonly known as 'Nurva'. This mixture along with Halmaddy gums, styras, sambrani, guggula, aromatic chemicals, perfumery compounds, etc., are mixed with water and ground into paste. Jigat extract from the bark of a tree is added as an adhesive and kneaded. Usually manual labour is used to knead the raw-material.

It is learnt that Roller mixing mills could be used for grinding these ingredients into a paste. However, the manufacturers do not use it due to their belief that

Agarbathi paste, when ground in these mills does not retain the full fragrance. Hence they continue to employ manual labour for this job.

The dough of the raw material when left unused for more than 24 hours, cannot be used directly. They have to add more water and redo the dough. That may result in differences in the quality of Agarbathi sticks. Hence, the dough is generally made to suffice for a day.

(ii) Agarbathi Rolling

In the second stage, the mixture is rolled onto the Bamboo sticks. Agarbathis of various sizes - thick, medium, thin, long and short sticks are rolled. After rolling the stick with the raw material, it is coated with Agarwood dust. The sticks once coated would be sun dried for a day or two.

(iii) Perfuming and Packing

In the third stage, the bathis are dipped into a mixture of perfumes and later packed. Here, one comes across two varieties of Agarbathis being rolled, while some units mix the perfumes along with the raw material, others add perfume just before packing the Agarbathi. The former are popularly known as 'Masale bathi' and the latter are called 'Plain bathis'.

The latter practice, that is adding perfume in the end i.e., just before packing was started in the recent past. The shortage of natural products and entry of synthetic

aromatic chemicals as an easy substitute has resulted in a change in the mode of manufacturing. Hence the present day Agarbathi manufacturing is a combination of traditional products and aromatic chemicals.

The manufacturers these days are also opting for sophisticated packing material which includes box-boards, glassine paper, cellophane paper, etc. Agarbathi are finally packed in attractive packets to cater to the needs of the consumers. Since there is large scale competition in this field each firm tries to excel the other, hence offer the best products to the consumers. The producers are also spending large sums on publicising their products.

AGARBATHI - A HANDICRAFT INDUSTRY

The Agarbathi Industry was declared a Handicraft industry by the Development Commissioner for Handicrafts, Government of India during the year 1983 as a result of which the industry became eligible for certain concessions. The manufacturers have been requesting for some more incentives that are available for small scale industry sector, as Agarbathi business is also considered as a small scale operation.

However, in Karnataka Agarbathi business has been classified as an Industry and was brought under the regular laws of Factory Act and thus all the regulations of Factories Act were made applicable to Agarbathi unit also. While some factories are required to register with the

factories only if they employ a minimum number of persons, and if they use power in the manufacturing process. Agarbathi and few more factories including weaving of cloth, sawing of wood, rice milling, oil extraction processing of tobacco etc., have to register with the government disregard of the number of employees or usage of power.

The Government order, 1974 states, "the government of Karnataka hereby declares that all the provisions of the factories act, 1948, shall apply to any place in the state of Karnataka wherein a manufacturing process as specified in the schedule (copy of the Government Notification is presented in the Appendix) below is carried on, or is so ordinarily carried on, notwithstanding that

- (i) the number of persons employed therein is less than ten if working with the aid of power, and less than twenty if working without the aid of power
- (ii) the persons working therein are not employed by the owner thereof but are working with the permission of or under agreement with such owners. (Government of Karnataka Factories Rules 1969)

These activities have been grouped under a separate category due to the harmfulness of such activities. The chemicals used in Agarbathi manufacturing are proved to cause bad effects on the health of the persons involved, hence it has been counted as a special category to the compulsorily registered with the Government. Accordingly

Agarbathi units are expected to comply with all factory rules.

However, the industry as a whole questions the wisdom of classifying the business as industry, bringing it under the purview of the Factories Act, as the basis for including an industry under the Factories Act is by the amount of power used and machinery employed. In this business of manual rolling of Agarbathis none of these are applicable. They feel the Government is unable to fathom the logic. According to an Association spokesman, it is only in Karnataka that such a paradoxical situation exists, thereby pushing up operating costs, taking away the competitive price edge and depriving Karnataka of its price position, particularly on the export front. As an Agarbathi business man puts it, "we might one day even be booked for polluting the air by the pollution control board". (Mysore Commerce, The Journal of KCCI July 1988:5).

The manufacturers in Karnataka have also been complaining of the extra costs they have to incur due to the imposition of sales tax, 2% entry tax on packaging paper, polythene, glassine, foil, board etc., along with the central excise element of 16% on chemicals used, tax included cost of forest products- necessarily purchased from Forest Department agencies, turnover tax and other levies. It has been stated that, "these have definitely made Agarbathy manufactured in Karnataka 40 percent more expensive than those produced outside the state, the

operating conditions are more congenial in the other states, there being positive support from the Government". (Journal of FKCCI July 1988:7).

EXPORT EARNINGS FROM AGARBATHI

Although Agarbathi manufacturers complain against such government interventions which result in hike in their operating expenses, their earnings have been considerably high. Their Export earnings alone as presented in Table 1 account for their profits. It has also been observed that Karnataka's exports of Agarbathis constitute about 75-80 percent of the export earnings presented in the Table. More details on the status of Agarbathi Industry are given in subsequent sections.

TABLE 1

Export Earnings from Agarbathi

Year	Earnings
1980-81	8.93
1981-82	11.33
1982-83	8.61
1983-84	10.00
1984-85	7.50
1985-86	7.00
1986-87	8.40
1987-88	10.00

Source: The Journal of FKCCI,

CURRENT STATUS OF AGARBATHI BUSINESS IN INDIA

Agarbathi Industry is a thriving one with about 5000 registered and unregistered manufacturing units in India. This labour intensive industry employs over 2 lakh people directly or indirectly. The workers employed are mainly women who constitute about 90% of the total work force and are mainly drawn from economically poorer classes of the society.

Karnataka is one of the most pioneering states in Agarbathi business and accounts for about 70% of the Rs. 80 Crore business prevalent in India. In Karnataka too a major concentration of these units is in Bangalore and Mysore with few more important centres like Chintamani.

A cursory glance at the Table reveals that Karnataka has as many as 144 Agarbathi companies during 1985 which increased to 153 by 1988. The total number of employees has increased from 6599 to 6744 during the above reference period.

Years	Total No. of companies	Total No. of employees
1985	144	6399
1986	149	6586
1987	151	6706
1988	153	6744

This large scale involvement of women in Agarbathi industry evokes interest in observing the various aspects pertaining to Agarbathi Industry as also in asserting the reasons for the same and the working conditions of the employees.

It has also been often observed that living and working conditions of the organised labour is well probed into by researchers. The problems of unorganised labour has been by and large remained unexplored.

Of late, Government has taken cognizance of these aspects and as a result, National Commission on labour has recommended various remedies. Government has accepted the following recommendations, "A better understanding of the problems of different categories of unorganised labour is essential to the formulation of suitable measures. Detailed surveys about the conditions of work in these employments should be undertaken"(Quoted in Government of India,1981:2)

With these factors in mind, the following objectives are specified:

1. To identify and highlight the factors responsible for large scale participation of women in Agarbathi activity.
2. To perceive the working conditions of these women with special reference to the workload, welfare and social security amenities, economic returns from this activity.
3. To highlight the perceptions of the Agarbathi workers

themselves about the work and the hazards encountered therein.

METHODOLOGY

The primary interest of the present study being an observation of the social and economic status of the women who are working in Agarbathi industry as well as their working conditions. The study selected the women workers in various Agarbathi Units in Bangalore as the main respondents. Structured Questionnaires were canvassed to collect the information.

For the purpose of studying the socio-economic and demographic conditions of the women working in all the three categories, proportionate sample has been selected from each category. The category will further be referred to as Registered sector, Unregistered sector and Domestic sector. Study has identified a sample of eleven respondents from the registered sector and ten more from the unregistered sectors and about ten from the domestic sector. However names of the units selected for the present study are not revealed.

A questionnaire was canvassed on the sample respondents of all the categories probing into the socio-economic and demographic conditions, as well as their working conditions. The data collection spanned over a month during the months of October and November 1988.

The data has been analysed with the aid of simple statistical tools, no attempt has been made to build up complicated econometric models. The analysis would be by and large a descriptive one with a logical justification for the arguments.

CHAPTER SCHEME

Chapter I gives the background information on Agarbathi on Agarbathi Industry.

Chapter II presents the socio-economic and demographic profile of the Agarbathi workers.

Chapter III details the returns from Agarbathi work.

Chapter IV presents a critical picture of the working conditions of the women in the Agarbathi occupation. Perceptions about the Agarbathi work of the workers themselves, hazards encountered by the women on the work-front.

Chapter V concludes with the policy recommendations.

CHAPTER II

SOCIO-ECONOMIC PROFILE OF AGARBATHI WORKERS

The living conditions of the Agarbathi workers with special reference to their social, economic and demographic status as revealed from discussions with the sample Agarbathi workers are presented in the following sections.

To start with the demographic outline of the workers and their families, it can be observed that the average age of the workers is about 35 years in the registered unit, whereas that of domestic and unregistered units is about 32 and 25. (Table No. 3). The majority of the workers fall in the age group of 20 and 25 in the domestic sector, 15 and 39 in the unregistered sector and 15 and 29 and 45 to 54 in the registered sector.

TABLE 3

Age Distribution of Agarbathi Workers

Age Group	Domestic Sector	Unregistered Sector	Registered Sector
15-19	0	2	1
20-24	4	1	1
25-29	1	5	3
30-34	0	0	1
35-39	2	2	0
40-44	0	0	1
45-49	0	0	2
50-54	1	0	2
55-60	1	0	0
Average age of the worker	32	25.2	35

Discussions with the manufacturers/supervisors of the registered sectors revealed that they had been exerting extra care in employing either the middle aged or the unmarried young women. They avoided employing the women with small children as the organisers will have to provide the creche facilities as per the factories act. Even though they employed middle aged and young women, they took precautions that they were either unmarried or without small children. That may be one reason why the average age of the workers was greater for the workers in the registered unit.

On the other hand, the workers in the unregistered sector were allowed to take the children to the work spot and were made to rest next to them. Hence even the young mothers were found working in this sector. Even though they find it very convenient to undertake the work with their children next to them, it is apprehended that the children would develop health problems as through out the day they are exposed to dust. However, since the units are not registered they do not pay heed to fulfilment of the factories act requirements.

HOUSING CONDITIONS

Most among those who make Agarbathi live in "Kuchcha" houses, houses with mud walls and either sheet or tiled roofs. The common design of the house is just one room with a portion of it used as a kitchen. Other research reports also have come up with the similar results as they show that

87% of workers' families were living in one room tenement and only 10% in two room tenements. It was also noticed that almost all these houses had a bath room, in the premises whereas most of the houses did not have toilet. They also did not have access to other amenities like electricity, water etc. Water is generally taken from the public taps. Majority of the houses had scanty furniture. The location of the houses was also in a bad area in the sense there was no pucca road and no proper drainage facilities. The drain water was passing right in front of these houses and many a time it got clogged giving room for the mosquito and fly deposits in the area. To add to it women were also found washing clothes outside the house resulting in further augmentation of water. Quite often the children were found playing on these roads and sometimes in the water deposits, half clad in torn clothes.

LITERACY LEVEL OF THE AGARBATHI WORKERS

The general education level of the women Agarbathi workers is observed to be very low. However of late the trend was observed to be changing as by and large majority of the Agarbathi workers send their children to school if not to college.

Among the Agarbathi workers also the workers of the registered unit are observed to have a better literacy level than the workers of the unregistered and domestic sectors. The data presented in Table 4 reveals that, while only 46 percent of the women under study are illiterate in the

registered sector, that of unregistered and domestic sector was as high as 60 percent and 100 percent respectively. The education level of the literates ranged between 2nd and 8th standard.

TABLE 4
Socio-Economic Profile

Details	Registered Unit	Unregistered Sector	Domestic Sector
Average size of the family	4.27	5.00	4.89
Average age of the worker	35	25.2	32
Literacy level of the workers	54	40	0
Proportion of Backward classes	72.73	50	33.33

As Agarbathi making does not require special skills, majority of the women learn the work within a short time and as it does not require any knowledge of reading and writing, the women participate in this activity with ease. However, the formal education does not prevent people from taking up the job.

The wide spread illiteracy among Agarbathi workers reflects upon the abject poverty conditions these families are placed in. Despite the fact that the city dwellers have greater access to schooling facilities, they remain

illiterate, is mainly a consequence of the poor economic status of their families. Their families are not better today ^{is} their children are educated only upto the school level, but are prevented from pursuing higher education due to paucity of money. Utmost they pursue their school education after which they take up some employment. This reflects upon the level of economic and social development that the country has attained after a conscious plan efforts for over three decades.

SOCIAL STATUS OF THE AGARBATHI WORKERS

The majority of women who are occupied with Agarbathi rolling represent backward classes of the society. This is especially the case with the women who work in the registered unit under study. The data presented (Table 4) reveals that about 75 percent of the women working in this unit are from the backward classes. They include mainly Gowndars, Naidus and Adidravidas. The percentage of sample workers belonging to Backward classes was 50 percent in the unregistered sector. The group includes Bale Baligas, Adi Karnataka and Kudiyars. However, among the women who work in the domestic sector only 33 percent belong to the backward classes community. Other forward communities who have been working on Agarbathi rolling in the unorganised sector include Mudaliyar, Lingayats, etc. Their caste was observed to be a social barrier for them to work in the registered sector, as it involves going out for work. Hence they preferred to participate in such activities in their

residence itself.

In, the present situation, they could work at home and utilise their spare time for some income generating activity. In most of the cases, they would ask their children to procure the raw-material from the owner and send the rolled Bathi with their children and get the money. It was also observed that in some cases, their husbands are unaware of the fact that they undertake Agarbathi rolling as the men in their families would discourage them from doing the job. However, women are of the view that since they work at home it does not demean their status, at the same time they would be in a position to earn money. The inhibition on the part of the unorganised workers also posed problems to the interviewers, as they were very hesitant to respond and also made attempts to evade the interview by stating that they undertake the work only occasionally and that theirs is not a regular activity.

On the other hand, the women who worked on the registered and unregistered sectors did not exhibit any inhibitions to work and also respond. In fact, they preferred to work in Agarbathi making as it provides security, since mainly women are involved in this activity, the workers felt no difficulty at the work place unlike other jobs wherein they would be tormented by the men folk. Also they perceive Agarbathi work to be light unlike the construction work etc., which are difficult to undertake. It is preferred even to the domestic work as the latter

fetches them a meagre sum when compared with Agarbathi earnings.

ECONOMIC STATUS OF FAMILIES OF AGARBATHI WORKERS

TABLE 5

Family Income Distribution of Agarbathi Workers

Earnings (In Rs.)	Domestic sector	Registered sector	Unregistered sector
100-400	0	0	4
401-700	3	2	3
701-1000	1	4	2
1001-1300	1	2	0
1301-1600	1	1	1
1601-1900	3	1	0

As per the details presented in the Table 5, the economic status of the families of the Agarbathi workers as under the referred three categories is considerably different. The workers of the domestic and registered sectors are economically better off in relative terms as none of the worker's family income is less than Rs.400 per month. Four workers of the unregistered sector have their family income in the referred income range group.

The data also reveals that there are about 3 families each in the domestic sector and unregistered sector in the family income range of Rs.400 - 700, and two workers in the above income range in the registered sector.

The disparities are also widely evident from the number of families in the family income range of Rs.701 and Rs.1900. It is as high as six in the domestic sector, eight in the registered sector whereas only three in the unregistered sector.

These data account for a considerably higher economic status for the Agarbathi workers of the domestic sector followed by the registered sector and lastly the unregistered sector. Thus the economic condition of the workers in the unregistered sector is worse than the other two categories.

Field observations revealed that the women who are working in their houses, do not have the compulsion of working the entire day on Agarbathi rolling, since the income of the other working members of the family was considerably high. Hence, they worked for lesser number of hours on Agarbathi and earned lesser from Agarbathi occupation.

On the other hand, it was observed that the women who work in the registered units earn better than than the women who work in the unregistered sector and the domestic sector, as they are also eligible for other benefits like provident fund, bonus, employment state insurance etc., which adds to their standard of living. These benefits are not available for the women who work in the unregistered sector. Hence, the relatively higher earnings of the Agarbathi workers in

the registered sector and that of other family members in the domestic sector has added to their better economic status than the workers of the unregistered sector. The disadvantage for this group of workers is that on the one hand they are paid less and the other members of their families earn much lesser than that of the other categories. All these factors have added to the disparities in the economic status of the workers in different categories.

CHAPTER III

RETURNS FROM AGARBATHI WORK

Having discussed the socio-economic and demographic status of the Agarbathi workers in the previous chapters, a discussion of more specific information on the returns of the Agarbathi workers themselves is presented in the following sections.

Returns from Agarbathi work can be broadly grouped into two categories - economic returns and non-economic returns. Economic returns comprise of their salaries, bonus, provident fund etc. Non-economic returns represent the benefits in kind, if any, from the organisers. Other working conditions also reflect upon the welfare level of the workers. This aspect has been dealt in subsequent chapter.

EARNINGS

Earnings from the Agarbathi work range between Rs.3 and Rs.15 Per day. The wages are generally decided on the amount of work produced /piece work by the workers, even if they work for the stipulated hours fixed by the factory. In this case the amount produced is counted in terms of numbers of Agarbathi rolled per day. The wage rate is generally fixed for one thousand sticks rolled and it is observed to be in large variation from unit to unit. The registered unit under study's consideration pays Rs. 2.75 Per

thousand rolled Agarbathis. Apart from the wage rate, the workers are paid dearness allowance of Rs.3.05 for every 3700 sticks rolled per day.

On the other hand, the women who work in the unregistered sector are paid much lesser as they receive only Rs.2.40 per one thousand sticks rolled. Also they are not entitled to the benefit of dearness allowance. The wages earned by women who work in the domestic sector varied between Rs.2.30 and Rs.3.00 per thousand sticks. The difference in the wage rate was due to the fact that the workers were working for different units. These workers were also not eligible for any dearness allowance.

Provision of dearness allowance by the registered unit accounts for differential earnings and as a consequence the earnings of these workers is on a higher rung than that of the unregistered and domestic sectors.

RANGE OF INCOME EARNINGS AMONG AGARBATHI WORKERS

TABLE 6

Distribution of Earnings from Agarbathi Rolling

Range (In Rs.)	Domestic sector	Registered sector	Unregistered sector
3.1 - 5	4	0	2
5.1 - 7	2	1	5
7.1 - 9	1	3	2
9.1 - 11	2	3	1
11.1 - 13	0	3	0
13.1 - 15	0	1	0
Average earnings	6.26	9.51	6.75

As stated earlier, the earnings of the Agarbathi workers working in the registered sector are observed to be higher than that of domestic and unregistered sectors. The average earnings of the workers in the Agarbathi Industry, as presented in the Table 6 clearly reveal that there is a clear cut disparity in the earnings of the referred categories, while the workers in the registered sector earn Rs.9.52 per day, the workers in the domestic and unregistered sectors earn Rs.6.26 and Rs.6.75 per day respectively.

It can also be noticed that there are as many as six workers earning less than Rs.7.00 per day in the domestic sector and seven workers in the unregistered sectors, only one worker falls in this category in the registered sector. The distribution of workers in the Rs.7-9 income range is one, three and two in the domestic registered and unregistered sectors respectively. While there are seven workers who earn above Rs.9 per day in the registered sector, the workers falling in this range number only two in the domestic sector and only one in that of the unregistered sector.

It is understood from the field observation that the difference in the wage earnings between the three sectors is not due to the difference in the physical output of the workers, but to the difference in the pay scales in these respective sectors. The fact that the organised unit is

registered under factories act, binds them to pay the wage rates fixed by the government and hence the wages are higher than the unregistered units, wherein they are not registered and in most cases, are attached to a big organisation and function only as a supplementary unit to the main organisation. They do not strictly abide by the rules and regulations of the factories act, hence even though the workers in both the sectors produce by and large same quantity, there is difference in their earnings.

The difference in the earnings of the domestic sector can however be not meaningfully compared with the others as they are not regularly employed like others, also they do not put in the amount of time that is put in by the other two sectors since it is only a pastime occupation for them.

BONUS

Payment of bonus was prevalent among all the three sectors. Registered sector pays 12 percent of their workers pay as the Bonus. The Bonus is generally paid at the time of festivals, either Ugadi or Diwali. Bonus in the unregistered sector is calculated at the rate of 10 paise per every rupee, i.e., 10 percent, earned by the worker during the course of one year. Here too the bonus money is paid at the time of major festivals - especially Ugadi.

The workers in the domestic sector are not very clear about the procedure of Bonus payment. However they too are paid Bonus at the time of important festivals like Dasara,

Diwali and Ugadi. From the discussions it could be assessed that they had received, approximately 10 paise per every rupee earned in the process of Agarbathi rolling. However, employers did not strictly adhere to any particular mode as the women working in the unorganised sector were not too aware of the implications and also were not too insistent. The workers were also afraid that if they are insistent, the employers may withdraw their contract and others may be employed as there is no dearth of work force. These facts reveal that even though there is considerable difference in the wage rates of the three sectors, mode of Bonus payment is by and large the same.

PROVIDENT FUND

All industrial units employing 20 or more persons but less than 50 having completed 5 years of their existence or those employing 50 or more workers and having completed three years of their existence, are required to institute provident fund for the benefit of their employees. The scheme framed under the employees provident fund act 1952 is also applicable to the Agarbathi industry.

In reality the provident fund benefits are available for the permanent workers employed in the registered unit, only after completion of 5 years of their work in the unit. Even though, the workers contribute their share towards provident fund, from the date of their appointment, the employers do not give out the unit's share until the completion of 5 years of their work in the unit. The

provident fund sum is refunded to the workers at the time of her retirement from service. However the workers in the unregistered and domestic sectors do not enjoy the provident fund benefits.

GRATUITY

Under the payment of gratuity, act 1972, gratuity is payable to an employee on the termination of his employment after rendering continuous service for not less than 5 years on superannuation or resignation/disablement. The Agarbathi units that are under present study's consideration, however do not provide such benefit to their workers.

OTHER BENEFITS

The workers do not enjoy any other monetary benefits, like city compensatory, house rent, shift allowance, attendance bonus, production incentive bonus etc. At the same time they do not have to pay fines for their bad conduct. However the managers do take care to extract quality work from the workers by not accepting the Bathis which are not rolled well i.e., even size, too thin or thickly rolled sticks.

CONCESSIONS IN KIND

The women employed in Agarbathi rolling were not entitled for any benefits in kind like free supply of coffee/tea/food and clothes under all the three sectors.

CHAPTER IV

CONDITIONS OF WORK

Alongside the monetary benefits (discussed in previous chapter) the conditions of work play a decisive role in assessing the overall welfare level of the workers. The aspects to be considered here include duration of working hours, the available welfare amenities, leave facilities, etc. Presently the details of the working conditions for the Agarbathi workers as under registered and unregistered sectors are discussed.

WORKING HOURS

The workers employed in both the sectors work for 8 hours a day i.e., from 9.00 AM to 6.00 PM with a break of 1 hour for lunch. On the whole, they work 48 hours a week. This appears well within the limit of the factory act rules 1948. As per which, the maximum hours of work per day are 9 with a maximum limit of 48 hours per week.

However, the field observations revealed that, even though the workers have an hour off for lunch, as their wages are based on the number of sticks rolled per day, in which case, they would be exceeding the maximum limit of 48 hours per week. The working hours in the registered units nonetheless were strictly adhered to. In other words, the workers were not allowed to start the work before 9.00 AM and work after 6.00 PM. In the unregistered units there was no strict binding and the workers could work till late

evening, even though they have their working hours from 9.00 AM to 6.00 PM with one hour (1.00 - 2.00 PM) lunch break. Despite the fact that the factories act 1948 directs the factories to pay double the normal rates of wage for the overtime work they have not been following it.

LEAVE AND HOLIDAYS

The women involved in Agarbathi rolling under all the three sectors were not entitled for any holidays/leave with pay. Every sunday happened to be a holiday without pay. Similarly, festival days. Where holidays without pay, it implies that only when the workers roll Agarbathi sticks, they would get paid and the other days when the unit is closed on some occassion, the workers are not entitled for any monetary benefits.

EARN LEAVE

According to Factories Act, 1948, the workers are eligible for 20 days earned leave with wages, once they have put up 240 days continuous service in a factory during a calendar year. In the present case, neither the registered unit nor the unregistered unit has the earned leave provision.

SICK LEAVE

It was observed that only the registered unit had provision for the sick leave as it was covered under the Employees State Insurance Scheme. The workers as they regularly contribute to ESI every month they are eligible

for leave with pay when they fall sick and medical treatment from ESI hospital. The unregistered unit employees, however did not, enjoy these benefits.

MATERNITY BENEFITS

As per the agreement between Mysore Oodabathi manufacturers association and Agarbathi workers union, Karnataka State, every woman worker who has put in nine months continuous service is to be paid a cash assistance of Rs.40 at the time of confinement on producing a medical certificate. She is also entitled to maternity leave without any wages, for a period of six to eight weeks.

In the present case registered unit under study's observation is noticed to be giving maternity benefits to its employees as they are covered under Employees State Insurance Scheme. The workers are entitled for three months leave without pay and also medical benefits from the ESI hospitals.

These benefits were not available for the workers in the unregistered units. They had to forego their pay when they go on leave for their confinement. They are are not entitled for any other Medical Benefits.

WELFARE AMENITIES

The workers in both the units had good access to drinking water facility within the unit premises. They also had toilet facilities.

The registered unit has a creche on their record. However, it was observed that it was not functioning. The units were also taking care that they do not employ women with small children and women were also not allowed to take their children to the workspot.

On the other hand the women employed in the unregistered unit were not provided with creche facility. However, they were allowed to take their children to the work spot during the work time.

CHAPTER V

OCCUPATIONAL HAZARDS

Working conditions, wages and other monetary gains of the Agarbathi workers as presented in the previous chapters reflect the existing scenario of the system. However, the perceptions of the workers about the activity and the problems encountered in the process are equally important aspects for detailed consideration. In fact these aspects would help one to gaze further and recommend policy measures for improvements. This has been attempted in the following sections.

The investigations revealed a considerable amount of complacency especially on the part of the workers of the registered sectors. They expressed their willingness to continue in the same job. Unlike the workers in the registered sector, the unregistered workers were unhappy about the wages they received and also the leave facilities. They were aware of the fact that the women who work in the registered sector get better wages and also have access to other benefits like provident fund, dearness allowance, employees state insurance etc. They also expressed that even when they fall sick and during their confinement, they are not entitled for any leave with pay.

Similarly, the women who worked in their houses had complaint against the organisers about their low wages. However, they did not sound direct in their criticism, as

they were worried that the organisers would sense which may cost them their jobs.

The workers of the registered unit, though content with the benefits, had serious reservations against the personnel functioning in the Employees State Insurance hospitals. They feel large scale corruption prevailed resulting in deprivation of full benefits to the workers. Half the benefits were eaten away by them. It is also a great pity that the medical people in ESI hospitals did not examine the Agarbathi workers properly as they smelt of Agarbathi. They also had to waste a lot of precious time in long queues in the hospitals.

While these were the problems on the workfront the workers had to encounter many health problems.

Agarbathi work leads to lot of health problems as they continuously inhale the fine dust they use for rolling Agarbathi. Chemicals used are also harmful.

Hence Agarbathi manufacturing along with many other manufacturing processes like weaving of cotton, silk, sawing of wood, rice milling, oil extracting, processing of Arecanut, processing of tobacco, tanning of hides and skin, printing, manufacture of pesticides and insecticides have been identified as harmful activities and are put under special provision. The Act states, "Government of Karnataka hereby declares, that all the Provisions of the Factories Act, 1948 shall apply to any place in the State of Karnataka

wherein a manufacturing process as specified in the schedule below is carried on, or is so ordinarily carried on, notwithstanding that :

(i) the number of persons employed therein is less than ten of working with the aid of power, and less than twenty of working without the aid of power

or

(ii) the persons working therein are not employed by the owner thereof but are working with the permission of, or under agreement with such owner".

(Government of Karnataka : Factories Rules, 1969:355)

The reasons behind the special provisions is that manufacturing of these products has a harmful effect on the workers. Also the Agarbathi activity forms a part of the unorganised sector hence to safeguard the interest of the workers in the unorganised sector this activity have been grouped under special provision.

Continuous rubbing of their palms on the bamboo stick also results in cracks in their palms which at times bleeds and causes severe burning sensation.

The other problems include severe bodyache and numbness of the joints due to constant squatting at one place. The dust inhalation chokes their throats and results in cough. In fact, there were cases of women suffering from tuberculosis for having constantly worked on Agarbathi work for more than twenty years. They also complained of burning sensation in the eyes.

It was observed that they were not given any dust controllers. The situation in the unregistered sector was still worse as they were allowed to take their young children to the work spot. Hence along with the mothers, children were also prone to inhaling the dust. The children were also found eating the Agarbathi raw-material at times. The mothers if the children were breast feeding their children during the course of the work even without washing their hands. This also adds to dust deposits in the children.

The diseases takes a serious shape due to the fact that women start taking the assistance of their daughters at a very early age when they are hardly 6 or 7 years old. They acquire the skills and their work continues till they reach 55 to 60 years and sometimes even later. Only in few cases they may discontinue after marriage and in some more cases, they may pick it up after marriage. In any case they would work for a minimum period of 20 to 25 years which is a sufficient enough period for their health condition to deteriorate.

RECOMMENDATIONS

From the observations made in the previous chapter it can be stated that, the Agarbathi units that are registered with factories department are more or less complying with the factory rules on the minimum wage fixation etc.

However, by enforcing these rules in the registered factories not all the Agarbathi workers are benefitted. Since in Bangalore the existing number of unregistered Agarbathi units is much larger than the registered ones, the wages and other benefits that are given by the unregistered firms are much lesser than the registered units.

Hence, there is a need to enforce registration of all the existing units and strict implementation of factory rules without these measures, no amount of legislation would ensure improvement in the standard of living of the workers.

Also Agarbathi being a harmful activity which has been notified under a special provision requires extra caution on the part of the government officials to register all the units compulsorily.

It has been observed that many big Agarbathi units supply the raw-material to smaller units wherein the rolling of Agarbathi would take place and the final product would be supplied to the main unit, which would undertake only packing. Hence, main unit does not employ any women for the purpose of rolling. The supplementary units that organise rolling of Agarbathi do not register themselves with the Government. Hence, the units fall outside the purview of factories act, government taxes, etc. The units also manage to pay the employees lesser wages and deprive them of other benefits. Though the present study cannot exactly give out the number of such units in Bangalore, it was learnt that within Bangalore city there are good number of such units.

These aspects assign an important role to the government. It is essential that Government prevents starting of such units even if they are started they are registered with the Government.

Research findings of other studies also referred to the child labour problems. To quote Government of India, "During the enquiry it was however observed that children were working in almost all the units visited by the field staff, though this fact was not mentioned in the registers maintained by the employers. It was also found that some of the units were showing such workers as adolescents and accordingly they were treated as adolescents. (1981:5)

Despite the fact that employment of children below 14 years of age is prohibited under Factories Act 1948, the Agarbathi units continue to employ children below the age of fourteen. In the case of the registered units they play safe by recruiting them on a temporary basis till they attain the age of 18 and then make them permanent.

On the other hand, the unregistered units are accepting the services of young girls as these units are not registered hence do not run any risk of getting trapped. Even though some may argue that Agarbathi rolling is not a heavy work, they have to be in the midst of dust throughout the day which may in the long run affect their lungs.

The workers were not provided any dust controllers

which caused large scale health problems to the women doing Agarbathi work. Some were suffering from tuberculosis. Hence, there is every need for dust prevention by providing the workers with dust controllers.

To continue further, the workers should also be given medical aid at a subsidised rate. One may be surprised to learn that the women who work in the unorganised sector do not face the health problems that others face to the same extent. Important reason being the work of the unorganised workers is more flexible and also since they do not work in a group, the accumulation of dust would be less. However, they only have to take care that the Agarbathi powder they use while rolling Agarbathi does not get into their system. Government could also consider levying more taxes on the Agarbathi manufacturing units.

It may also be suggested that Agarbathi manufacturers should adopt a scientific approach, modernise the technique without displaying the large scale labour force sustaining on their occupation. This would not only help in improving the quality but also in the productivity.