CEC Working Paper

WORKERS IN BAMBOO BASED TRADITIONAL INDUSTRY

Binu George

1998



Centre for Education and Communication

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Introduction

The demands articulated collectively by the traditional reed-based households in Kollam district through organisations like HUMUS, a centre for promoting indigenous workers movement, have attracted much public attention. The reed workers have long been demanding adequate and fine quality of reeds, reasonable wage rate, better marketability of the product, a stable price level, etc. The time was felt apposite to assess the intensity of the problems and to verify whether these problems caused a drain of manpower from the traditional reed-based industry. It was against this background that this study was conceived. Due to non-availability of data/ information on reed workers, especially of Kollam, an exploratory survey was conducted during the first week of July 1999, to assess the gravity of the day-to-day problems faced by them. Some information was also collected about the supply of raw material and marketability of the finished products. The household survey was conducted during the following month.

Objectives

The study was undertaken with the following specific objectives:

- To examine the sources of reed and the nature of reed work
- To understand the socio-economic profile of reed workers
- To assess the impact of reed-based activity on the economic status of the reed households
- To compare the incomes from different reed related activities
- To make policy recommendations that may improve the position of reed-based activity and the reed workers

Methodology

In Kollam district, reed-based activity is scattered across the district. Of 71 gram panchayats in the district, only 21 panchayats have been covered (Table 1). The coverage was based on the degree of the concentration of the reed-based activity. All the panchayats have 9 to 15 wards. Reed-based activity is confined to a few of these. It is found in 5 and more wards in Poruvazhy, Anchal and Edamulackkal and in other panchayats it is less than 5. In Kunnathoor and Aryankavu the reed households are concentrated only in one ward and in Pathanapuram, the concentration is found in 2 wards. On the basis of general information collected from five other panchayats it was learned that in Ittiva, Sooranad North and Eroor the concentration is found in three wards. In Karavalloor and Chadayamangalam it is four and six respectively.

S.N.	Panchayat	Total no. of wards	No. of wards where reed workers are concentrated
1	Sasthamkotta	12	3
2	Kunnathoor	10	1
3	Poruvazhy	11	6
4	Pavithreshwaram	12	3
5	Mynagapally	13	3
6	Kulakkada	12	3
7	Kottarakkara		
8	Pathanapuram	12	2
9	Mylam	12	
10	Alayamon	9	4
11	Anchal	12	7
12	Piravanthoor	13	3
13	Edamulackkal	13	5
14	Chithara	15	
15	Thenmala	11	4
16	Aryankavu	9	1
17	Ittiva	13	2
18	Sooranad North	11	2
19	Eroor	13	2
20	Karavalloor	10	4
21	Chadayamangalam	10	6

Those panchayats having reed households in two and less than two wards are the ones having more concentration of the reed households. Panchayats having more than 50 reed households are Kunnathoor, Poruvazhy, Anchal and Pathanapuram and between 25 and 50 reed households are Sasthamkotta, Kulakkada, Piravanthoor, Edamulackkal, Thenmala, Ittiva and Eroor. 25 and less than 25 reed households are found in the remaining panchayats.

A proper survey was conducted in the following 16 panchayats (Table 2) and only general information was collected from the remaining five panchayats.

A total of 113 households have been surveyed from 16 panchayats. Though no systematic procedure¹ was applied in selecting the sample households, effort was made to ensure that a fair number was chosen from each panchayat, mainly on the basis of the total number of reed households in each panchayat. A sample of 10-20% of the reed population from each panchayat was originally contemplated. However, with the reed population relatively smaller in some panchayats, a greater percentage had to be allocated to them. The other discrepancies observed are due to time constraint and other inconveniences. The general profile of the reed households exhibited considerable degree of commonalities except in the case of their economic status. It may also be mentioned that as it was not easy to collect

¹ Systematic procedure cannot be applied because of the high disparity in the concentration across wards and

variations in the number of members in the household in each panchayat. Another important problem was due to the non-availability of any government documents regarding the population statistics of the traditional reed households.

the individual reed income of the 113 households, it was the household income, which was used as the instrument to find the contribution from reed to a reed worker.

			Table 2:
Pancha	yat-wise Distribi	ution of Reed House	eholds
Panchayat	Total no. of reed households	No. of surveyed households	Percentage
Sasthamkotta	35	12	34
Kunnathoor	60	6	10
Poruvazhy	85	13	15
Pavithreshwaram	12	4	33
Mynagapally	17	4	24
Kulakkada	40	6	15
Kottarakkara	-	4	-
Pathanapuram	215	11	5
Mylam	-	6	-
Alayamon	24	8	33
Anchal	77	10	13
Piravanthoor	38	7	18
Edamulackkal	34	6	18
Chithara	-	6	-
Thenmala	36	6	17
Aryankavu	25	4	16
Total	698	113	16

Information on the total number of reed households was collected by HUMUS, Kottarakkara. The total number of reed households in the case of three panchayats could not be gathered but it was learned that the number of reed households fall in the range of 25-35 in each.

Instruments of Observation

- Schedules canvassed with 113 traditional reed households
- Interviews with five reed cutters, the piece-rate workers of the KSBC Ltd., of Goodrical forest range under Ranni Forest Division
- Interviews with six depot workers who include both distribution depot workers and procurement depot workers
- Interviews with four plant workers of the Bamboo Board Factory, Angamaly.
- Interviews with five registered mat weavers of Nedumangad depot, Thiruvananthapuram
- Interviews with the officials of the KSBC Ltd., Angamaly; Forest Office, Thiruvananthapuram; local body representatives in Kollam and representatives of independent reed worker associations, Kollam.
- Qualitative notes prepared on the basis of observation

REED & BAMBOO INDUSTRY: AN OVERVIEW

Reeds and their Characteristics

The genera, Ochlandra, popularly known as reeds, are a type of bamboos (family Graminae). These tropical or subtropical shrubs, requiring heavy rainfall for healthy growth, are found abundantly in the tracts of the Western Ghats of Kerala in scattered, dense or pure patches. On the basis of their habit of flowering in December-January, reeds are divided into two types: (1) Sporadic flowering reeds and (2) gregarious flowering reeds. The former, e.g., Ochlandra rheedii, reed culms flower annually and do not die after flowering. In the case of gregarious flowering reeds, culms flower once in 25 years on an average. After the flowers dry off, fruits appear on the flower stalk and the culms turn brownish yellow. Eventually, the whole plant dies.

Germination of seeds start within a week after seed fall. The plants attain a height of 50 centimetres within a year. In the process of growth, the germinated seedlings produce only one shoot and it may take six to eight years to develop a cluster of culms of good quality from a fully developed cluster of rhizomes of equal number having a circumference of six to eight metres. The removal of the mature culms from the clump (cluster of culms), stimulates the rhizomes (underground stem) to produce young shoots. Thus, in addition to seeds, the existing, fully developed, strong and vigorous rhizome itself produces shoots which form culms. The clump generally lasts for 20 to 30 years and each consists of 10 to 50 culms which attain a height of 10-15 metres with some even reaching a maximum height of 30 metres.

System of Organised Reed Harvesting

The first industrial use of reeds, started in 1888, when a paper mill² was set up at Punalur. As the quantity of reeds available then in the forest for exploitation was more than what was actually required, any scientific approach to the cutting of reeds was not stressed upon. The contract agencies resorted to intensive felling or concentrated extraction of reeds. Most of the felling was confined to the accessible pockets of the area where naturally the proportion of immature culms would be more due to successive fellings. This practice was continued after other industrial units like Grasim Industries Ltd. (GIL),

² Punalur Paper Mills is closed since August 21, 1987. The latest negotiations in January, 1999 for selling and reopening, got stalled because the green signal from the government will come only after the clearance of the electricity bill and tax arrears from the existing promoter, Dalmia.

³ The major recommendations were formation of a "Bamboo Industries Corporation" for the consolidation and

Hindustan Newsprint Ltd. (HNL) and Kerala State Bamboo Corp. Ltd. (KSBCL) were established. Though the reed concentrated areas were earmarked and forest guards deployed to ensure sound silvicultural practices, felling was more intensive in accessible areas. Now, the reed forests of Thiruvanthapuram, Thenmala, Ranni and Munnar divisions are devastated, with little stock for the present needs. As per various successive agreements, GIL were to be supplied with 40,000 metric tonnes (mt) of bamboos and 1.1 lakh mt of eucalyptus. Similarly, HNL gets an annual quota of 1.05 lakh mt of bamboos and reeds and 1.5 lakh mt of eucalyptus and acacia.

KSBCL was formed on the basis of recommendations³ of the Committee appointed by the Government of Kerala in 1969 to revive the deteriorating bamboo-based industry. The main reason for the deterioration was the exploitative situation which prevailed during that period. The private traders, who used to sell the reeds in wholesale and retail to individuals and bulk purchasers, arranged contractors for transporting reeds from the forests to their godowns. Bulk purchasers include retail sellers, owners of private weaving centres, tiny industrial units, etc. These traders also used to supply reeds to the mat weavers at arbitrarily fixed rates on credit basis and buy mats from them, at relatively low prices. The fluctuations of these arbitrary rates used to affect the returns of the workers. This was a major handicap to the workers but a boon to the traders who used it as a pretext to provide low wages. This practice led to heavy exploitation of the workers and ultimately, deterioration of the mat industry as a whole. Initially the Bamboo Corporation was set up as a subsidiary company of the Handicrafts Development Corporation (HDC) of Kerala, with a share capital of Rs. 15 lakhs. Subsequently, as business increased, it's subsidiary status was altered in 1978 and it was registered as a company under the Indian Companies Act with a share capital of Rs.1 crore. KSBCL has around 170 sub-depots all over Kerala carrying out a three-tier business⁴: collection of reeds, supply of reeds and collection of mats.

Initially, the reeds were supplied to the KSBCL at a seignorage rate but later even this subsidised rate was waived on the argument that the charges affected the financial viability of KSBCL, formed as it is for the promotion of traditional reed-weavers. So, according to G.O. (M.S) 33/91, Forest and Wild Life Department of 04/05/1991, KSBC Ltd. can extract 30,000 m.t. of Neitheeta (reeds) per year free of cost from 01/11/1990 to 31/10/2000. The agreement was signed on 19/05/1991 by KSBCL and Forest Department. They can cut the culms even during rainy season i.e., June, July and August. But an official in the Forest Department, Thiruvanthapuram said that this privilege of cutting during regeneration period may not be extended beyond October 2000 if the innovative methods⁵ of storing the harvested reeds developed by scientists of the Forest Research Institute, Peechi (Trichur) could be put successfully into force. On the other hand, an official of the KSBCL said "this may not be possible immediately as its implementation requires huge investment and KSBCL is not in a position to bear the heavy burden in the short run".

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⁴ Initially, the function of KSBCL was to collect mats but later, it did extend its function to collection and supply of reeds and since 1977, KSBCL is having the exclusive right of procurement from the forest and distribution to the traditional weavers.

⁵ The different experiments conducted were outdoor storage of reeds, treating reeds in running water, treating reeds in stagnant water, treating reeds with bleaching powder, treating reeds with potassium permanganate and treating reeds with boric acid or copper sulphate solution. Of this, the best experiment was treating reeds with boric

Felling Series and Felling Rules

The entire tract of reed forests has been divided into six felling series⁶ mainly in consonance with reed concentration for an even distribution of reed supply to the 'major' reed collectors. These are again sub-divided into 3 annual coupes each because this is the period required for the development of culm and rhizome. This period is called the felling cycle (interval between successive harvest or felling in a given area). This division is also done for an even tapping of the yield so that repetitive or intensive cutting from the same area can be avoided. It should be noted that each divided coupe is taken up for extraction during the scheduled year and it shall again be taken up after three years, including the year of extraction. This is done because the thinning out of culms at regular intervals would stimulate the rhizomes to produce young shoots in plenty and create conditions favourable for growth and development.

Important rules regarding felling are - felling and collection of reeds should be restricted within a prescribed annual coupe only; no culm less than two years should be cut and removed; in addition to all new culms, 25-40% of the old culms should be left in the clump; no clump should be clear-felled except after flowering and seeding have been completed; position of cut should be at the second internode, leaving the first internode with the septum above intact and cutting should commence from the side opposite to where new sprouts are emerging. But these rules are not complied with scrupulously.

The contract agencies of all the companies give faint regard to silvicultural practices in their earmarked reed concentrated areas. As payment for the out-turn is on a weightage basis, many of the contract agencies practised the extraction of immature culms and silvicultural requirements of the species were not adhered to. Moreover, it should be added that the felling rules are not even insisted upon scrupulously by the forest guards. But, on the other hand, it is alleged that contractors send everyday hundreds of semi-skilled workers into the working coupes and so, it is humanly impossible for a guard to have control over the workers who collect reeds according to their choices and benefits.

Allocation of Forest Areas

The companies tender application every year to the Forest Department for collecting reeds. This would be discussed at the Cabinet level and in the Assembly. Finally, the decision of the Forest Ministry will be handed over to the Chief Conservator of Forests who is entitled to the allotment of forest areas to the different large scale collectors. In their application they would mention their preferences for the forest ranges or the forest divisions. (Forest circles are divided into divisions and divisions into ranges and ranges into several beats). The allotted areas are called the coupes of the ranges. For instance, certain forest ranges in Punalur, Konni and Thiruvananthapuram forest divisions are allotted to HNL for the year 1999-2000 for the collection of bamboos, eucalyptus, acacia and reeds.

acid or copper sulphate at 2% concentration level in stagnant water. It was found that reeds treated in such a solution are fungus free and glacing. They also provide stain free mats (Big India Bulletin, Vol. 3, No. 1, pp 1-6).

.6 A forest area forming a whole or part of a working circle is delimited so as to distribute felling and also to maintain a normal distribution of age-class.

Initially reeds were given to HNL and KSBC Ltd. at a subsidised fees of Rs. 12 per m.t. The revised and subsidised charge for the year 1998-99 was Rs.185-200 per m.t.⁷ which includes forest development tax and sales tax whereas the market price of the standing reed plants that could provide raw material of one tonne is Rs. 875 (excluding tax)⁸. These subsidised charges are less than the prices charged from a bonafide reed worker who collects reed directly from the forest or a traditional weaver at the reed distribution depot of the KSBC Ltd. They are justified in the name of the promotion of the industry.

Reed Collectors or Cutters

Reed is harvested from the forest by two categories of people: reed collectors of KSBCL and minor direct collectors who are traditional weavers. A bill-hook is used by the reed cutter to cut the culms from the clump. The cutters, especially of KSBCL, identify the maturity of the culm by knocking the culm with bill-hook. Using it, they also clean the culm by removing sheath and small branches.

The Bamboo Corporation has around 50,000 full time piece-rate reed cutters all over the State. Quite a good number stay in and around the forest. Payments are based on a grading system i.e., the reeds extracted are graded on the basis of its productivity unlike the other cutters where payment is made on a tonnage or weightage basis (based on the maximum out-turn extracted). Payment on tonnage basis often gives rise to over-exploitation disregarding silvicultural practices. Anyhow, collection of reeds is an arduous job and some cutters have to stay in inhospitable conditions for days together.

The cutters⁷ are ordinary male labour in the vicinity and the deficiency is made up by recruitment from the adjoining places who have to ply a distance of 10 to 20 kilometres. These men set out for the collection of reeds early in the morning and work till 2 p.m. If the harvesting takes place in the interior of the forests, these cutters make temporary sheds in the forests at a lesser cost. They stay continuously for a week depending upon the availability of reeds and the intensity of work. Their role involves felling, collection and dragging of reed stacks to the nearest loading point. They also clean the culm by removing the sheath, small branches, twigs, etc.

The collected reeds are carried as head-load, lorry-load and in rafts. Hand-dragging of 2 to 4 bundles are carried out by cutters to a maximum distance of one kilometre to the loading sites. In places where facilities for water transport are available, they transport the bundles in raft and stack them on river banks. About six to eight tonnes of reeds will be loaded in a truck depending on the size of the culms.

Minor direct collectors are traditional weavers who stay near the forest areas. They collect reeds from the local forest areas, generally with the permission of the respective forest range officers. The forest department issues a pass to the worker, after verifying the community certificate issued by the concerned village officer for collecting 25 to 35 reed

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⁸¹ metric tonne is approximately equal to 800 reed sticks (culms) and a regeneration cost of Rs. 25.7 Christians, Nairs, Ezhavas and the tribal men are involved in reed cutting activity. The participation of the traditional weavers, the Sambavas (refer footnote no. 10), in this activity is poor.

sticks (a bundle). In a week two passes (permits) are issued generally to bonafide domestic consumers after realising the seignorage value which is currently Rs.12 (per pass). The validity of the pass is only for 24 hours. Within this stipulated time they have to go to the inner forests and collect the reeds. They are carried as head-loads.

Profile of Reed Industry in Kollam

Reeds: Availability and Procurement

The reed forest ranges in Kollam (Quilon) forest circle are the Anchal, Goodrical, Vadasherikkara, Ranni, Neduvathumoozhy, Mannarapara, Pathanapuram, Punalur, Thenmala, Aryankavu and Achankovil. Most of these, now are in a devastated and depleted state. Of these, the only forest range which has quite a good quantum available is Goodrical forest range under Ranni forest division in Pathanamthitta district. The reed forest beats in Anchal, Aryankavu, and Thenmala (all located in the east) were not earmarked in the year 1999-2000 for industrial users as in the immediately two preceding years. For instance, Thenmala was allotted to HNL in the year 1998-99. The next allotment will be after two years (see felling series). Currently, the available reeds in these areas are of very poor quality and are accessed only by local traditional weavers.

Reed-weavers obtain their raw material diversely, from middlemen (private traders), or local forest ranges or the Reed Distribution Depots, at Parakot (Pathanamthitta district) and Sasthamkotta (Kollam district). The weavers of Kottarakkara and Pathanapuram taluks in the eastern and southeastern parts of the district are the ones who depend more on local forest areas. The weavers in the northern and northeastern part of the district depend more on depots. The activity of the middlemen at the procurement level of reeds is quite prominent in the central part of the district where the accessibility of reeds is relatively poor in comparison to those in the eastern part (e.g., weavers of Aryankavu depend on forests) and in the northern part (e.g., weavers of Sasthamkotta and Kunnathoor depend on Sasthamkotta depot and those of Poruvazhy depend on both Sasthamkotta and Parakot depots). In the reed distribution depots, accessed by the traditional unregistered weavers and private traders (the bulk purchasers), the available reeds are supplied from the Goodrical forest range in Ranni forest division under Kollam forest circle. The collection office of KSBCL of this range is at Angamoozhi in Pathanamthitta district.

Traditional Weavers

In Kollam district, the traditional unregistered weavers (more than 2000) are spread everywhere, with some panchayats having high concentration. These are Sasthamkotta, Kunnathoor, Poruvazhy and Sooranad North in Kunnathoor taluk in the northern part of the district; Mynagapally and Karunagapally in Karunagapally taluk in the western part of the district; Kulakkada, Mylam, Pavithreshwaram and Kottarakkara in Kottarakkara taluk in the central part of the district; Ittiva, Chadayamangalam and Chithara in Kottarakkara taluk in

the south-eastern part of the district; Pathanapuram in Pathanapuram taluk in the north eastern part of the district; Karavalloor, Piravanthoor, Aryankavu and Thenmala in Pathanapuram taluk in the eastern part of the district and Anchal, Eroor, Edamulackkal, Alayamon and Kulathupuzha in Pathanapuram taluk in the south eastern part of the district.

The weavers of Kollam belong mainly to the Sambava caste⁹ (a very few are Kurava). All are Hindus except a few Christians living in Chithara panchayat and a few scattered families in other panchayats like Mylam, Kottarakkara, etc.

Production Process and Products

The reed culm collected in person as well as from KSBCL depot, normally has 4 to 6 internodes (muttu). One internode is approximately 2.5 ft. in length. Each culm is sliced (peeled) into different varieties of slivers (polies) such as vellapoly¹⁰, karikapoly and karimpoly. The peels from the hollow core are rejected. These splints of reed fibres (polies) are coiled and warped to give rise to different type of products. A knife is used by the weavers for peeling or slivering the culms.

Traditional weavers mainly make household and commercial articles such as mats, baskets, winnowers, sieves, other wicker works and tiny fancy articles from reeds. Among the various products, the remunerative ones are mats and baskets unlike winnowers. A special species of reed, namely, Ochlandra Rheedii is the best in the making of baskets and only the relatively thick outer surface of the culm can be used. The main area where the basket making is flourishing are the panchayats in Kunnathoor taluk, namely, Sasthamkotta, Kunnathoor and Poruvazhy. They are used for the collection of products like coconut, paddy, cashew nut, colocasia, tapioca, etc. Winnower, is a subsidiary product in this area unlike the panchayats in Pathanapuram taluk such as Pathanapuram, Alayamon, Anchal, Edamulackkal and Karavalloor and the panchayats in Kottarakkara taluk such as Pavithreshwaram, Kulakkada, Mylam and Ittiva. Winnowers are used for the separation of the best and the next best quality of the products like paddy, pepper, etc. Mats are main products in certain panchayats in Pathanapuram taluk such as Piravanthoor, Thenmala and Aryankavu. They are used as roofs, walls, drying grains, etc.

Market

The main market points for the weavers of the covered panchayats in Kollam district are Sasthamkotta (market days - Wednesday and Saturday), Kadampanad (Tuesday and Friday), Puthoor (Tuesday and Friday), Pathanapuram (Tuesday and Saturday), Karunagapally (Monday and Thursday), Thevalakkara (Tuesday and Friday), Kalayapuram (Wednesday and Saturday), Anchal (Wednesday and Saturday), Punalur (Monday and

*Deshabhimani, June 7, 1999.

⁻

¹⁰ The traditional bamboo or reed workers (weavers) belong to the Paraya caste. Parayas in Southern Kerala are usually called as Sambavas. They are included in the list of scheduled castes. According to the 1991 Census, the scheduled caste population in Kerala is 28.87 lakhs, 9.92 % of the total population (India 1996, GoI). In Kollam district, the total scheduled caste population is 3,05,727, of which males constitute 1,50,894 and females 1,54,833 (Panchayat level statistics, Kollam district, GoK, 1996).

¹¹Vellapoly which is white in colour is divided into first and second quality. The first quality vellapoly, used for the production of special paya (face mat) is used as the outer layer in the production of bamboo ply boards. The second quality poly that has 'marupu' on its two sides, is used for the production of 'Chikpaya' (core mat), which forms the inner layer in the production of ply boards.15Total household (reed) income divided by the total number

Thursday) and Valavuvacha (Monday and Thursday). Other markets include Kundara, Mulavana, Karavalloor, Paruthiyara, etc. The weavers of Kunnathur taluk access the Sasthamkotta and Kadampanad market. Kadampanad market is mainly accessed by the weavers of Poruvazhy panchayat. The main market point of the weavers of Pavithreshwaram and Kulakkada is Puthoor; for Alayamon, Anchal, Edamulakkal, etc. it is Anchal; for Piravanthoor and Pathanapuram it is Pathanapuram; for Chithara it is Valavuvacha and for Thenmala it is Punalur.

In various panchayats of Karunagapally, Kottarakkara and Pathanapuram taluk there are cooperative societies, established mainly to mediate and create a market for the products of the basket weavers. They also distribute reeds to the workers and the workers have to return the finished products. But, now many of the societies are not functioning properly because the weavers hardly deal with them and instead deal directly with the people in the market, mainly because of low prices fixed on the baskets, winnowers, sieves and mats by the societies. The market prices are also considerably low as a result of dwindling demand for these products during a period when modern cheap and durable plastic products and other synthetic items are penetrating deeply into the market.

The Bamboo Corporation started for the promotion of the traditional reed-based industry has not worked towards market promotion of bamboo products of the traditional weavers in Kollam district but only supply reeds to them. Even the Handicrafts Board of Kerala do not recognise the traditional bamboo products as handicrafts. Therefore, it becomes the responsibility of the weavers themselves to find a market for their products like winnowers, baskets, mats, etc.

Sources & Prices of Reed

Sources

In Kollam district, generally, reeds are acquired from middlemen, local forest areas and reed distribution depots of KSBCL. The prevalence of these sources for the weavers of 21 panchayats in Kollam is found on the basis of survey (Table 3). Of the 21 panchayats, the delineation about the source of reed for the weavers in 16 panchayats was done through household survey undertaken on a random basis, and in the other 5 panchayats it was done on the basis of general information acquired by interaction with a few members involved in reed based activity.

		Panchayat-w	ise Sources of Reed		Table
S.N.	Panchayat	Taluk	S	ources of Ree	d
			Depot - Parakot(P) /Sasthamkotta (S)	Local Forests	Middlemen**
1	Sasthamkotta	Kunnathoor	Yes (s)	No	No
2	Kunnathoor	Kunnathoor	Yes (s)	No	No
3	Poruvazhy	Kunnathoor	Yes*(s/p)	No	Yes
4	Pavithreshwaram	Kottarakkara	Yes (s)	No	No
5	Mynagapally	Karunagapally	Yes (s)	No	No
6	Kulakkada	Kottarakkara	Yes (s/p)	No	Yes
7	Kottarakkara	Kottarakkara	Yes(p)	No	No
8	Pathanapuram	Pathanapuram	Yea (p)	No	Yes
9	Mylam	Kottarakkara	Yes (s/p)	No	Yes
10	Alayamon	Pathanapuram	No	Yes	No
11	Anchal	Pathanapuram	No	Yes*	Yes
12	Piravanthoor	Pathanapuram	No	Yes	No
13	Edamulackkal	Pathanapuram	No	Yes*	Yes
14	Chithara	Kottarakkara	No	Yes*	Yes
15	Thenmala	Pathanapuram	No	Yes	No
16	Aryankavu	Pathanapuram	No	Yes	No
17	Ittiva	Kottarakkara	No	Yes*	Yes
18	Sooranad North	Kunnathoor	Yes (s)	No	No
19	Eroor	Pathanapuram	No	Yes	No
20	Karavalloor	Pathanapuram	No	Yes*	Yes
21	Chadayamangalam	Kottarakkara	No	No	Yes

^{*}The main reed collection point

^{**} Can be those who collect from the depot or from the local forest area.

Middlemen implies any agency which distributes reeds to workers, other than the depots. They include private traders, a few co-operative societies and forest-goers (who stay nearby forests). In Poruvazhy and Kulakkada it is the private traders who collect from the depot of KSBCL in mini-trucks, and sell in retail. In Anchal, Edamulackkal, Ittiva and Karavalloor, the forest goers collect reeds from local forest areas and sell. The cost of a reed culm charged on the weavers varies from Rs.1.8 to 2. In other words, a bundle of 20 sticks cost Rs.36 or above. It should be noted that in Alleppey district where there are no depots of KSBCL, a bundle of 20 costs Rs.50 and above. Thus, there is clear-cut exploitation by middlemen at the procurement level. Reed culms (sticks) available from the above sources are of poor quality and yet this does not reduce the price.

Collection from the forests is, generally, with the permission of the respective forest range officers. The forest department issues a pass to the worker, after verifying the community certificate issued by the concerned village officer. In a week, two passes are issued at a fee. For example, the Anchal Range Office charge Rs.12 (includes sales tax of Rs.2) for a pass which is issued mainly to the tribals of the area. In Madathara ward (Chithara panchayat), passes were issued freely, as they were on the basis of identity card issued by the Bamboo Corporation. But now that has been stopped as the validity of the I-cards have expired. During the validity period, the card holders were not even the piece-rate workers of the Bamboo Corporation. Validity of the pass is only for 24 hours within which they have to go to the interior of the forests and collect reeds (25 to 35 sticks). Transporting is a slow process because they carry reeds as head-loads.

The third way of getting reeds is through KSBCL. It undertakes distribution of reeds to the weavers and traders through its Reed Distribution Depot, Sasthamkotta, which is the only depot in the whole of Kollam district, and the Parakot Reed Distribution Depot in Pathanamthitta District. The Parakot depot is opened daily except Sunday. The annual average collection of Sasthamkotta depot, since its inception is around 5 lakhs of reeds. The depot opens twice in a week, Wednesday and Saturday. Currently, a bundle of reed culms of 20 sticks is available from the reed distribution depot for Rs.32 (excluding tax) and if the reed culm is strong and matured i.e., if it has quite a good length, diameter and wall thickness, it is priced around Rs.38. No tax is imposed up to 10 bundles. It is to be noted that the price of a bundle, determined by KSBCL, is taken as the benchmark for the price fixed by middlemen who collect reeds from the forest or from the depot. People getting reeds from the depots arrange mini-trucks for transporting. Most of the weavers of panchayats who are very near the depot collect twice a week, depending upon the availability of reeds. Weavers who are far-off from the depot collect two or three times in a month. A mini-truck generally carries the reed bundles of 8 to 10 households situated in a far-off panchayat. A household may carry, on an average, 5 bundles.

Cutting Charges

Reeds, the basic raw material required by the traditional weaver for making the products, are available in different types and sizes. Accordingly, there are differences in the cost of the reed or the cutting charge per reed. The size in a particular range may not be identical with the size of another reed in the same range or in a different range. Grading of the reeds is done on the basis of the sizes of reeds. For instance, thirteen sizes of reeds are available from the Goodrical forest range varying from A grade to K grade. The reed collection offices, Angamoozhi collect A-2 grade reeds (best size) from the reed cutter at the rate of

Rs 1.61 and a K grade reed (the lowest grade) at 37 paise. The charges for different forset ranges, effective from 1 April 1998 are given at Table 3.

Table 3 Grade-wise Cutting Charges (Rs.per reed)									
S.N.	Grade	Kalikavu (Nilambur)	Thannithodu	Sholayar	Angamoozhi	Anakulam, Mankulam, Adimaly	Pooyamkutty	Vallithodu	
1	A6						2.34		
2	A5						2.12		
4	A4			1.97			1.97		
5	A3			1.85		2.51	1.85		
6	A2	1.56		1.82	1.61	2.38	1.82	1.56	
7	A1	1.32		1.69	1.46	2.22	1.69	1.32	
8	Α	1.18	1.2	1.65	1.38	2.1	1.65	1.18	
9	В	1.09	1.09	1.56	1.28	1.97	1.56	1.09	
10	С	1.01	1	1.42	1.2	1.82	1.42	1.01	
11	D	0.94	0.91	1.33	1.12	1.58	1.33	0.94	
12	E	0.86	0.81	1.2	1.03	1.54	1.2	1.86	
13	F	0.77	0.62	1.06	0.81	1.2	1.06	0.77	
14	G	0.7	0.5	1.01	0.73	1.05	1.01	0.7	
15	Н	0.55	0.39	0.87	0.64	0.91	0.87	0.55	
16	1	0.55		0.67	0.55	0.67	0.67	0.47	
17	J			0.64	0.47		0.64	0.7	
18	K			0.56	0.37		0.56	0.63	
19	L			0.52			0.52	0.55	
20	M			0.4			0.4	0.47	
21	Odakkuzhal specialM size						0.31		

But, the grades generally provided are F and G, charges for which are only 81 paise and 73 paise respectively per reed. For 20 reeds (a bundle) the reed cutter of KSBCL gets an average of Rs.15.

A PROFILE OF SURVEYED HOUSEHOLDS

Sex-wise Distribution

In Kollam district, there are no registered piece-rate weavers of KSBCL unlike Thiruvanthapuram, Ernakulam or Pathanamthitta district. The traditional weaving community are scattered across the district. From the 113 surveyed households from 16 panchayats, there are around 514 members, of which 405 are earners. Their sex-wise division is 190 males and 215 females. 361 are involved in reed-based activity i.e., weaving. The sex-wise division of the earning members from reed-based activity is 157 males and 204 females. This includes even the members that have diversified into other activities, especially, casual labour work. Those that depend only on reed-work are 124 males and 191 females. In percentage terms, the reed-dependent male members constitute just 65% of the total earning males. (Table 5).

Table Sex-wise Distribution of Earning Members								
Sex	Total Earning members (A)	Reed workers * (B)	% B over A	Reed dependent workers (C)	% C over A	Non-reed workers (D)	% D over A	
Male	190	157	83	124	65	33	17	
Female	215	204	95	191	89	11	5	

.

The table above shows that 18% of the earning males are involved in both activities and 17% in only non-reed based activity, generally, casual labour. It is the women earning members who engage more in reed-based activity (95%). This includes even the diversified female workers which are 6%. The female workers involved in non-reed based activity only is just 5. The number of females who have diversified or shifted completely into other works are less with respect to males because of the household work which they have to engage in. They remain at home and carry out both the remunerative and the non-remunerative work. Weaving, the remunerative work, is carried out within the home premises.

Age-wise Distribution

The age-wise distribution (Table 6) of the reed-only earners and reed earners including diversified workers shows that there is a high proportion of diversified workers in the age group 25-45 years. If a sex-wise division of this group is attempted we find that the reed earners including the diversified workers in the case of males are 60% for the age-group of 25-30, less than 50% for the age group of 30-35, 80% for the age group of 35-40 and 100% for the age group of 40-45. In the case of females of the age group 25-45, it is 100% for all except the age-group, 35-40.

										Table 6
Age-wise Distribution										
	Male					Female				
Age group	Total earner A	Total reed worker B	Total reed only worker C	% B over A	% C over A	Total earner A	Total reed worker B	Total reed only worker C	% B over A	% C over A
15-20	19	14	14	74	74	26	23	22	88	0.85
20-25	35	29	25	83	71	31	28	28	90	90
25-30	35	21	16	60	46	27	27	24	100	89
30-35	14	6	3	43	21	18	18	16	100	89
35-40	15	12	8	80	53	16	15	13	94	81
40-45	15	15	7	100	47	14	14	12	100	86
45-50	15	15	11	100	73	22	22	20	100	91
50-55	6	6	4	100	67	21	21	20	100	95
55-60	19	17	16	89	84	15	15	15	100	100
60 +	22	22	21	100	95	21	21	21	100	100

The number and proportion of women solely dependent on reed-work is significantly higher in practically each age group as compared to males in same age groups.

Table 7 gives distribution of diversified and non-reed workers in the sample. The age-group 30-45 has more number of diversified workers compared to any other age-groups. This is around 30% of the total earning members of the age-group.

					Table 7		
Distribution of Diversified and Non-Reed Workers							
	0-15	15-30	30-45	45-60	60 and above		
Diversified workers	0	13	27	5	0		
Non-reed workers	0	37	7	0	0		
Helping children	8/76	0	0	0	0		

The main reason for diversification in the age group 30-45 is that it is these people who are having more responsibility, especially towards non-earning dependents like the aged and children forcing them to explore other, more remunerative 'seasonal' employment opportunities. It was also revealed during the survey that quite a number of workers in the age-group 50-55, have returned to reed-based activity from other work. This is mainly because after a particular age their bodies do not permit them to engage in activities other than weaving. The other reason that can be attributed is the shifting of their children above 15 years of age to other work. But, the return of diversified members of the present 30-45

age-group is quite unlikely unless there is a revival of this traditional industry. Earning members that do not engage in reed-based activity is more in the age-group 15-30 than in the subsequent age-group of 30-45. This also indicates that there may not be a come back to reed-based activity from this particular age-group earners as they are not in practice with this traditional work.

8 out of 76 (10.5%) children are providing a helping hand to their parents. Many of the parents said that the remuneration is very meagre in this sector while the work is quite arduous and above all, they are disregarded and disgraced in the society. So, they do not want to send their offsprings into this drudgery.

Source of Livelihood

A division of the households on the basis of the reed workers (including the diversified workers) in each household shows that in 70.8% of the households, all the earning members are reed workers. But if diversified workers are not considered, only 45.1% of the households have all the earning members involved in reed-based work (Table 8).

Table 8 Dependence of Households on Reed-based Activity							
% of total reed	Total Reed	based households	Reed dep	endent households			
earners in each household	No.	Percentage	No.	Percentage			
<50	2	1.77	9	7.14			
50 - 74	14	12	38	33.4			
75 - 99	17	15	15	13.4			
100	80	70.8	51	45.54			

Only in 7.14% of the households, less than 50% of the earning members are depending on the reed only which denotes a higher dependence on reed-based activity. When seen in the light of preceding data (Table 6&7), one can conclude that this is mainly because of the age-groups who are involved in reed-based activity since the sixties.

Education

An age-wise classification of the educational level of the members in 113 households have been undertaken (see table10). From the table below, it is discernible that 89% of the males of the age-group, 15-30 and 87.9% of the females of the age-group, 15-30 have reached secondary school. Of the age-group, 30-45, the percentage of males who have reached secondary school is 66% but the percentage of females is less than 50% but still greater in comparison to the education level of the females of the same age-group (Tables 9 &10).

						Table 9:			
	Reed Family Members Reaching Secondary School								
	Male			Female					
Age	Total	Reached Secondary level	%	Total	Reached Secondary level	%			
15-30	100	89	89	99	87	87.88			
30-45	44	29	65.91	47	21	44.68			
45-60	40	7	17.5	57	10	17.54			
60 +	27	0	0	24	1	4.17			

In the case of age-group 45-60, a noticeable point is that more males had reached upper primary levels whereas more females had reached only upto lower primary. In the case of 60 and above age group, more males had reached lower primary, but more females are illiterate (Table 10).

							Table 10
Educational Status							
Age	Sex	N	LP	UP	Sec	HS	Above
5-15	M	-	18*	9*	9*	-	-
5-15	F	-	4*	7*	10*	-	-
15 20	M	-	2	9	64+4*	5+7*	4+5*
15-30	F	-	3	9	65+6*	2+6*	2+6*
30-45	M	4	5	6	27	1	1
30-43	F	4	10	12	21	-	-
45-60	M	5	11	17	7	-	-
43-00	F	13	25	9	10	-	-
60 .	M	10	13	4		-	-
60 +	F	16	7	-	1	-	-

: Illiterate; LP: Lower Primary; UP: Upper Primary; Sec: Secondary; HS: Higher Secondary; *undergoing education

66.7% women of the age group 60 and above are illiterate whereas among men of the same age group, the proportion is 37.04% (Table 11). What one could infer from the above analysis is that though number of males are above females in terms of education a sexwise discrepancy is not found in the age group below 45 years.

				Table 11		
Illiterate Reed Family Members						
	Male			Female		
Age class	Number	% of total	Number	% of total		
15-30	0	0	0	0		
30-45	4	9.1	4	10		
45-60	5	12.5	13	22.81		
60 +	10	37.04	16	66.67		

Loans and Assets

The number of reed households that have received loans are 60 (Table 12) of the 113 households, spread in all the covered panchayats. They have received loans through IRDP scheme and/or the people's planning programme. Of these, 11 have received through both the schemes. But, only 40 have used it for reed work, and of 11 who have received loans through both the schemes, only 4 have used it for reed work.

		Table 12					
Indebted reed households according to source and use of loan							
	Source of Loan/Benefit	No. of Households					
1	IRDP (includes those who have received PPP also)	34					
2	IRDP loan for reed work	24					
3	PPP (includes those who have received IRDP loan also)	37					
4	PPP for reed work	20					
5	IRDP loans and benefits under PPP	11					
6	IRDP loans and benefits under the PPP for reed work	4					
7	IRDP loan for reed work and PPP benefits not for reed work	4					
8	Both not for reed work	3					

Of the 17 landless households, only 6 have received loans on application. These households, generally, fall in Mynagapally and Thenmala. The landless who have not received loans fall in Chithara, Aryankavu, Alayamon and Kulakkada. Almost all the landed reed households, except two, possess 2-5 cents land. Majority of them possess gold and a few possess gold to the extent of what they wear, about 2-5 gms.

Basic Amenities

A panchayat-wise distribution of sample households, according to the availability of electricity and toilet facilities (Table 13) reveals that the surveyed reed households of Chithara, Thenmala, Mynagapally and Kottarakkara do not have electricity while 40% of those in Kulakkada and Alayamon have it. In Anchal, Mylam, Poruvazhy and Pavithreshwaram electricity facilities are available in 50% of the households. Toilet facilities of these surveyed households are very poor. The households of Chithara and Thenmala do not have any toilet facilities at all while less than 25% of the households in Edamulackkal, Mylam, Kottarakkara and Mynagapally have them.

Table 13 Electricity and Toilets							
Panchayat	No. of Surveyed reed households	Electrification (%)	Toilet facility (%)				
Sasthamkotta	12	70	60				
Kunnathoor	6	70	35				
Poruvazhy	13	50	70				
Pavithreshwaram	4	50	60				
Mynagapally	4	0	25				
Kulakkada	6	40	40				
Kottarakkara	4	0	25				
Pathanapuram	11	73	82				
Mylam	6	50	20				
Alayamon	8	38	40				
Anchal	10	50	50				
Piravanthoor	7	71	87				
Edamulackkal	6	67	17				
Chithara	6	0	0				
Thenmala	6	0	0				
Aryankavu	4	0	50				

Health

Of the 102 weavers of 50 years and above age a significant number suffer from occupation-related ailments like back ache, poor eye sight, chest pain, head ache, coughing, hand pain, body ache, etc. Back ache is the most commonly found problem with 51 people reporting it (Table 14).

Health Problems among the Elderly								
Age class	Back ache	Back ache and Poor eye sight Poor eye sight Other				Total		
50 and above	36	15	6	15	30	102		

In ill-lit environs, women weave even in the night, after finishing their household work. Light from the small kerosene lantern is hardly sufficient and many of them complain of eye strain. Injuries due to chipping of the sharp splinters and peeling of the skin are quite normal. Most workers are affected by the above mentioned health problems because throughout their work, they are sitting on the floor in a bending posture and there is no movement along with this work.

REED WORKERS AND THEIR INCOME

The reed workers comprise the registered and the unregistered weavers, the reed cutters, the registered piece-rate depot workers and the organised plant workers of the Bamboo Board Factory, Angamaly. Registered weavers are those who are registered with KSBCL. These are basically the weavers of Thiruvanathapuram, Ernakulam and Pathanamthitta districts. In Kollam district, there are only unregistered weavers. Quite a few of the unregistered weavers work as labourers in tiny cottage industries like small private basket and mat weaving centres and others are self-employed weavers.

Unregistered Weavers

Wage Labour

Tiny cottage industries are found especially in Kunnathoor taluk in Kollam district. Of the covered panchayats, Sasthamkotta, Kunnathoor and Poruvazhy are the ones that fall in Kunnathoor taluk. 31 households are surveyed from these three panchayats and 5 households have weavers working as labourers in private weaving centres. The rural artisans of these centres work, on an average, 12-14 days in a month, especially during the rainy season and are paid at the most Rs.50 per day (on an average, wages for weaving a basket is around Rs. 7.5). More than half of them are women. There are bonuses, to be paid at the end of the year. But they are paid in two installments over a period of one-and-a-half years (Bonuses are based on number of baskets woven. An average labourer weaves around 1700 baskets in a year and the bonus is in the range of 70 paise to 90 paise). Members of these households work for themselves also, in the night, after the household work.

Self-employed Work

The unregistered weavers of the remaining 108 surveyed households do not engage in tiny cottage industries. They involve themselves in self-employed weaving work. Of 113 surveyed reed households, there are altogether 52 reed households completely engaged in reed work (Table 15). The other 61 reed households contain diversified workers and/or non-reed workers as earning members. The monthly household income per earning member of 52 reed-only households is Rs. 505 which is also the monthly reed income per worker (weaver)¹¹. But, in the case of 61 diversified households, the household income and the reed income are different. The monthly household income per earning member¹² is Rs. 700, including the contribution of diversified and non reed workers. The monthly reed

¹⁵Total household (reed) income divided by the total number of reed workers.16Total household income divided by total number of workers in 61 diversified households.17Total household income of the surveyed households in

income per worker of 61 diversified households is Rs. 413. This shows that though the reed income per worker of 61 diversified households are lesser than the reed income of 52 reed only dependent households, the household income per earning member is more by 39 per cent.

Table 15 Monthly Income Distribution of Reed-Only and Diversified Households							
	Number of households	Household income per earning member (Rs)	Reed income per reed worker (Rs)				
Reed-only	52	505	505				
Diversified	61	700	413				

This is because of the non-reed income which is greater than the reed income. It should be noted that the non-reed income per worker (including the non-reed income of the diversified worker also) is Rs.991 and if we exclude the non-reed income of the diversified workers we find that the non-reed income per worker (excluding the diversified workers) is Rs.1039. In other words, when a worker is fully engaged in non-reed work his contribution to household income increases.(Table 16)

Table 1 Monthly Per Capita Income of 61 Diversified Households								
Reed worker	income	per	reed	Non- reed income per non- reed worker (includes the non- reed income of the diversified workers)	Non-reed income per non-reed worker (excludes the non-reed income of the diversified workers)			
	413	•		991	1,039			

It was also found on a break-up of the total monthly household income of the 61 diversified households that the non-reed income contributed by 85 members (includes diversified workers) are more than the reed income contributed by 186 members (Table 17).

Table 17 Total Monthly Income of 61 Diversified Households								
Total reed income Total reed depending earners		Non-reed income	Total non-reed earners (include diversified workers)					
76,878	186	84,210	85					

These facts become more clear when the income of the 61 diversified households are analysed at the household level (Table 18). Of the 61 diversified households, 36 households have their other income (non-reed income) greater than or equal to reed income. This is more than 50% of the households. In the case of 8 households, the contribution from other income is 75% and above of their total income. Another point to be noticed is that a majority of the households of 61 diversified households are having non-reed income per worker (includes the contribution of the non-reed income of the diversified

workers also) more than 100% of their reed income per reed worker (Table 18, col. 7). From this analysis one could conclude that the casual work like agricultural labour or construction labour is more remunerative than traditional reed work, and on an average, monthly income per reed worker is between Rs. 400 and 500.

	Total many	lbly income	analysia of the f	24 diversified be	ahalda	Table 18
	TOTAL MON	uniy income a	analysis of the t	61 diversified ho	usenoias	_
1	2	3	4	5	6	7
S.N.	Total household income	Total non- reed income	Reed income per reed depending	Non-reed income per non-reed worker	3/2	5/4
1	3,000	1,000	500	1,000	0.33	2
2	3,000	1,000	500	1,000	0.33	2
3	2,650	1,000	1,650	1,000	0.38	0.61
4	3,760	2,600	580	867	0.69	1.49
5	3,750	3,000	750	3,000	0.8	4
6	3,000	2,000	333	1,000	0.67	3
7	2,900	2,300	600	1,150	0.79	1.92
8	2,800	1,600	400	1,600	0.57	4
9	3,200	2,400	400	-	0.75	-
10	4,160	3,360	400	1,120	0.81	2.8
11	5,300	1,800	700	900	0.34	1.29
12	3,400	1,500	633	500	0.44	0.79
14	2,200	1,000	600	1,000	0.46	1.67
15	2,800	1,600	600	800	0.57	1.33
16	2,600	1,600	500	800	0.62	1.6
17	2,000	800	600	800	0.4	1.33
18	2,000	1,000	333	1,000	0.5	3
19	3,400	2,000	280	1,000	0.51	3.57
20	2,500	1,500	333	1,500	0.6	4.5
21	3,250	1,000	750	1,000	0.31	1.33
22	2,400	1,200	300	1,200	0.5	4
23	4,200	1,200	750	1,200	0.29	1.6
24	1,600	800	267	-	0.5	-
25	3,500	1,000	625	100	0.29	1.6
26	2,350	750	533	750	0.32	1.41
27	3,300	2,300	200	1,150	0.7	5.75
28	2,800	2,000	200	1,000	0.71	5
29	1,438	550	296	550	0.38	1.86
30	1,650	1,150	250	1,150	0.7	4.6

31	1,050	250	267	250	0.24	0.94
32	2,300	1,700	300	1,700	0.74	5.67
33	1,800	1,000	200	1,000	0.56	5
34	2,100	2,100	300	300	0.43	1
35	2,900	1,800	550	900	0.62	1.64
36	3,450	700	688	350	0.2	0.51
37	2,000	900	275	450	0.45	1.64
38	1,700	1,100	300	1,100	0.65	3.67
39	2,800	1,600	400	1,600	0.57	4
40	1,660	900	253	900	0.54	3.55
41	3,000	1,000	1,000	1,000	0.33	1
42	2,020	1,000	340	1,000	0.5	2.94
43	3,750	1,000	688	1,000	0.27	1.46
44	3,600	2,850	250	2,850	0.79	11.4
45	2,000	1,250	250	1,250	0.63	5
46	2,500	250	1,125	250	0.1	0.22
47	3,300	2,500	267	1,250	0.76	4.69
48	3,075	2,400	225	1,250	0.78	5.33
49	1,600	1,000	300	1,000	0.63	3.33
50	2,200	1,000	300	1,000	0.46	3.33
51	2,350	1,600	250	1,600	0.68	6.4
52	2,425	1,600	206	1,600	0.07	7.76
53	2,050	900	230	900	0.44	3.91
54	1,350	800	275	800	0.6	2.91
55	2,100	700	350	700	0.33	2
56	4,000	2,800	600	933	0.7	1.56
57	1,900	1,500	200	750	0.79	3.75
58	2,000	500	375	500	0.25	1.33
59	1,700	500	400	500	0.29	1.25
60	2,200	1,200	200	1,200	0.55	6
61	3,300	1,000	383	1,000	0.3	2.61

Panchayat-wise Income Distribution

The monthly reed income per worker¹³ varies from Rs.263 to 830 across the 16 panchayats. The lowest income is found in Pathanapuram in Pathanapuram taluk and the highest in Poruvazhy in Kunnathoor taluk. The reed distribution depot of KSBCL also falls in Kunnathoor taluk. Other panchayats where the monthly reed income per worker falls below the poverty level income are Piravanthoor, Thenmala and Alayamon. The ranges of the

monthly reed income at the household level show that the lowest reed income is realised by a household in Chithara and the highest by a household in Poruvazhy.

The weavers of Poruvazhy and Kunnathoor are comparatively better-off and the weavers of Pathanapuram, Alayamon and Thenmala are worse-off. The main reason is the proximity of the weavers to the reed distribution depot. It should be noted that this is an advantage enjoyed by the weavers of Sasthamkotta, Poruvazhy and Kunnathoor.

In Poruvazhy, Kottarakkara and Mylam less than 50% of the surveyed households have monthly reed income per worker at Rs.500 and below. Five panchayats have households that did not have monthly reed income per worker less than the poverty level income. They are Sasthamkotta, Kunnathoor, Poruvazhy, Kottarakkara and Aryankavu. There are also a few households who are receiving Rs 1000 and above from reeds. They are found in Sasthamkotta, Kunnathoor, Poruvazhy, Kottarakkara, Mylam and Anchal (Table 19).

	Pancha	yat-wise [Distribution of N	<u>,</u> Г	ncome useholds having r	eed income
Panchayat	House-holds	Reed income per	Range of reed income (Rs)	Rs. 500 and below	Rs. 1000 and above	At poverty line* and below
Sasthamkotta	12	6200orker	333-1650	6	2	0
Kunnathoor	6	69 \$Rs)	400-1250	3	1	0
Poruvazhy	13	830	400-2000	3	4	0
Pavithreshwaram	4	354	280-600	3	0	3
Mynagapally	4	521	300-833	2	0	1
Kulakkada	6	521	267-750	3	0	1
Kottarakkara	4	672	400-1250	1	1	0
Pathanapuram	11	263	200-400	11	0	10
Mylam	6	553	250-1250	2	1	2
Alayamon	8	316	253-400	8	0	5
Anchal	10	511	225-1125	6	3	4
Piravanthoor	7	289	206-600	6	0	6
Edamulackkal	6	438	250-783	4	0	2
Chithara	6	443	150-600	4	0	1
Thenmala	6	312	200-417	6	0	3
Aryankavu	4	529	383-1000	2	1	0

^{*}Monthly poverty line of Kerala for 1996-97 is Rs.327.48

In Pathanapuram panchayat all the surveyed households have their monthly reed income per worker less than the poverty level income. But all the households have compensated the reed income with other works. This is true in the case of all other households whose income is relatively poor. In Table 20 it can be found that the monthly income per earning member is more in comparison to the monthly reed income per reed worker due to the contribution to the household income from other works. This is because of the monthly non-reed income being greater than monthly reed income per worker.

Table 20 Panchayat-wise Distribution of Monthly Income Per Earning Member and Monthly Per Capita Income							
Panchayat	Number of households surveyed	Per earning member income (Rs)	Per capita Income (Rs)				
Sasthamkotta	12	726	687				
Kunnathoor	6	794	650				
Poruvazhy	13	984	699				
Pavithreshwaram	4	707	550				
Mynagapally	4	633	452				
Kulakkada	6	589	447				
Kottarakkara	4	704	572				
Pathanapuram	11	435	373				
Mylam	6	607	445				
Alayamon	8	454	328				
Anchal	10	868	635				
Piravanthoor	7	521	434				
Edamulackkal	6	476	357				
Chithara	6	571	511				
Thenmala	6	442	383				
Aryankavu	4	556	417				

None of the panchayats have monthly per capita income below the poverty level income. Those panchayats which have reed income per worker (and not the per capita reed income) below poverty level income also have crossed the poverty line income at the per capita reed and non-reed income level. This denotes that the contribution of non-reed income is significant. In the monthly per capita income calculation, both the earning and the non-earning members of the households are included. It should be noted that if the calculation of the per capita reed income of the 61 diversified households are attempted many more households of the 16 panchayats would have fallen below the poverty level income and it is only due to other seasonal work that the remuneratively poor traditional source of livelihood is being compensated.

Factors Influencing Reed Income

The factors that influence reed income are the selling points, the products derived out of reeds, the number of reed earners, the number of bundles collected (a function of purchasing power), and the middlemen, generally at the procurement level of reeds (purchasing point).

The weavers of Sasthamkotta, Kunnathoor and Poruvazhy panchayat are at an advantage in terms of the purchasing point (depot), the products and the selling point (cf. Tables 4

and 21). But panchayats like Pavithreshwaram, Piravanthoor, Edamulakkal, Chithara, Mylam, Alayamon are at a disadvantage due to lack of easy access to the purchasing point as they live in far-flung areas; lack of market facilities in the vicinity and due to the fact that they mainly make a low-priced product, the winnower. This disadvantage becomes quite evident if their reed income is observed (refer table 20). The weavers of Pathanapuram and Anchal, though at an advantage in terms of market, are not favourably influenced by other factors. Therefore, the weavers of these panchayats are also having comparatively poor reed income. The weavers in the eastern part of the district are also equally affected by the lack of favourable factors like proximity to the market, the products weaved, etc.

Table 21 Panchayat-wise Distribution of Main Product and Main Market				
Panchayat	Main Product	Subsidiary Product	Main Market	
Sasthamkotta	Basket	Winnower	Sasthamkotta	
Kunnathoor	Basket		Sasthamkotta	
Poruvazhy	Basket	Winnower	Sasthamkotta, Kadampanad	
Pavithreshwaram	Winnower		Puthoor	
Mynagapally	Basket		Sasthamkotta, Karunagapally, Thevalakkara	
Kulakkada	Winnower		Kalayapuram, Puthoor	
Kottarakkara	Winnower	Basket	Kundara, Mulavana, Paruthiyara	
Pathanapuram	Winnower		Pathanapuram	
Mylam	Winnower		Kundara, Parithiera	
Alayamon	Winnower	Mat	Anchal	
Anchal	Winnower	Basket	Anchal	
Piravanthoor	Mat	Winnower	Pathanapuram	
Edamulackkal	Winnower		Anchal	
Chithara	Basket		Valavuvacha	
Thenmala	Mat	Winnower	Punaloor	
Aryankavu	Mat		Punaloor	

The other factors such as the number of reed earners, the number of bundles collected and the middlemen also influence the reed income. A regression analysis has been attempted to find out their influence on the monthly household reed income of 113 households. It is hypothesised that an increase in the number of reed earners in the household and the number of bundles of reed collected by the household would lead to an increase in the reed income of the household. An inverse relation between the presence of middlemen at the level of procurement of reeds and the reed income of the household is also hypothesised.

The estimated equation is as follows:

$$Y^{=298.43+179.38} X_1 + 55.84 X_2-217.92 D$$
 $R^2=0.712$ $(t=4.2)$ $(t=14.3)$ $(t=-1.725)$

t=t-value and =the corresponding level of significance where $Y \cap =t$ household reed income, $X_1 =t$ number of reed earners, $X_2 =t$ number of bundles collected and D =t presence of middlemen

The t-value results associated with the variables - the number of weavers and the number of bundles collected- show that they are highly significant in determining the reed income. The positive signs of the coefficients in the above equation show that the number of reed earners and the number of bundles collected are directly related to reed income. Since the number of bundles collected reflects the reed earners' purchasing capacity of reeds, its coefficient in the equation suggests that the better the financial soundness of a reed household, the greater is its potential to earn reed income. The dummy variable, which takes the value zero in the absence of middlemen at the procurement level of reeds and, one in the presence of middlemen at that level, has negative coefficient which is significant at the 10% level. This implies the presence of middlemen in transacting reeds depresses the net reed income by inflating its cost to the reed worker. The estimated R² which is 0.712 implies that the model explains almost 70% of the variation in household reed income.

Major Occupational Problems

The major problems of unregistered weavers of Kollam district include the non-availability of adequate amount of reeds, availability of low quality reeds and the dwindling demand for the traditional bamboo or reed products. As there are no registered mat weavers in Kollam district, the only role of the Bamboo Corporation is distribution of reeds through its only depot in Sasthamkotta. The depot has to distribute up to ten reed bundles without tax as it is the raw material for the traditional workers' works. But many weavers do not get the required amount and the limited amount of reeds which they get (2 bundles, on an average) are poor, dry and worn-out. This is because of the bulk purchasers, including retailers and other finished good traders. They purchase 100 to 150 bundles of good quality reeds from the available stock, in several consignments of less than 10 bundles to evade tax (10 paise per reed stick). Such practices are carried out through an agreement between the dealers and the depot officials. Another reason for the shortage of reeds at the depot level is the poor frequency of transportation of reeds to the reed distribution depot. It is alleged by a depot worker that payment for the transporting agent is just Rs.50 for transporting reeds from Parakot (a relatively big reed distribution depot in Pathanamthitta district to be kept open 6 days a week, but 5 days in practice) to Sasthamkotta, a distance of around 20 kms. So the agent may not transport the reeds as he would incur a loss. Therefore, he disposes of the load at Parakot itself through or the connivance of the contractor and the depot officials. The load from Ranni Forest Division or Konni Forest Division has to cross Parakot to reach Sasthamkotta.

Another reason for shortage of fresh and fine quality reeds at the depot is due to non-availability of the annual quota of reeds. KSBCL has to feed both the registered and unregistered weavers from it's annual quota of 30,000 m.t. availed free of cost. An official of KSBCL stated that KSBCL itself is facing shortage in realising the required quantum of

reeds for supply to its registered weavers in Thiruvananthapuram, Ernakulam or Pathanamthitta districts, thus affecting not only the annual sales of the company but also the very existence of registered weavers who make mats required for production of the high value-added product, bamboo ply.

Even the unregistered weavers are dependents of KSBCL. They also have the right to avail of a share of the good and fine quality reeds at a fair price from the annual quota available free of cost to KSBCL, the sole supplier. But it is alleged by traditional weavers that let alone good and fine quality, adequate quantity itself is not provided. They say that the role of KSBCL in Kollam district is posing a threat to the majority of the traditional weavers' community as KSBCL (formed in the name of traditional weavers) is only feeding its employees (factory workers and other official staff) at the expense of the traditional workers. Though the threat perception is a foregone reality, it mainly arose due to the unfair treatment meted out to the different sections of workers associated with KSBCL. This anomaly has not been looked into by the authorities of KSBCL for many years and it has led the traditional weavers to think that the factory workers and the other staff members are cutting into their subsistence.

Another major problem is the dwindling and narrowing of the market for bamboo products which compels the weavers to sell the products at a loss. The new industrial policy and technological developments in small scale and cottage industries have changed the tastes and preferences in general. The one-time major consumers of eco-friendly bamboo/reed products like the cashew industry, the fishing sector, etc. have shifted to durable and cheap consumer items in plastics like baskets, bags, covers, mats, etc. For instance, in Neendakara harbour, it is the plastic basket which is used on a large scale. The bamboo/reed products were used largely by the agricultural sector also but the decline in the importance of agriculture in the rural areas has also affected the development of bamboo work. The problems mentioned above, faced by the unregistered weavers are agreeable to the local body representatives of the respective panchayats, too. But, the initiative from their side is very poor and according to them, it is the government of the State that has to take up the initiative.

Reed Cutters

The reed cutters (cf. Section 1) are spread across the forests in the State. The KSBC Ltd. itself has around 50,000 registered reed cutters. They are paid the rates set by KSBCL which are based on a grading system i.e., the reeds extracted are graded on the basis of its productivity. The good quality reeds have proper length, diameter and wall thickness of the fibres. The reed cutter gets Rs.32.2 (w.e.f. 1-4-1998) for a bundle of A-2 graded reeds. But, generally, the collected reeds are of F or G grade, and therefore he gets Rs.16.2 or Rs.14.6 on a bundle. It is alleged that the grading official, who has the ability to pre-assess the output from a reed, downgrades the reed. An average healthy reed cutter gets Rs.105 per day and on an average he cuts for 20 days in a month.

A forest-goer can collect only one bundle (around 30-35 sticks) in a day on the basis of a pass issued by the concerned forest range officer. For the pass, a forest goer goes to the range office on the previous day of collection. Issuance generally gets delayed because of the temporary absence of the officers. Sometimes, the forest-goer has to wait for hours together or has to go again the next day. It is also a time-consuming process because of

the distance involved in traveling to the range office and frequent collectors even make such visits twice or thrice in a week. Finally, the collection from the forest, an arduous job, is itself a time consuming process. Mainly because of the reasons cited above, a middlemen activity has emanated in the eastern part of the district, too. Here, the collectors sell a stick for Re.1 and above. A bundle is collected for Rs.12 which works out to 40 paise for a stick. It is pertinent to note the price at which the industrial users collect reeds. HNL collects a ton of reed sticks (800 reed sticks) for Rs. 185-200 (including forest development tax and sales tax) which works out to be less than 25 paise for a stick and the KSBC Ltd. gets it free of cost. These highly subsidised rates are justified in the name of promotion of the industry and the welfare of the workers.

The reed cutters do not receive any social security benefits. The only benefit they used to avail of until 1998 was the food assistance under the World Food Programme of the UN. From 1982-83 onwards, these piece rate workers are getting supply incentives. Currently, it is 12% of the wage. It should be noted that in Kollam district, there are no reed cutters of the Bamboo Corporation (but according to the forest department, Ranni, Konni, Punalur and Achankovil forest divisions fall under Kollam forest circle).

Depot Workers, Registered Weavers and Plant Workers

The other reed workers, in addition to the unregistered weavers and the reed cutters are the registered depot workers and the mat weavers. They are the piece-rate workers of KSBCL and total around 2.5 lakh workers. The only proper, organised reed workers are the plant workers in the Bamboo Board Factory at Angamaly.

Depot workers

The depot workers are, mainly, the loading-unloading workers. They include both casual and regular depot workers. Regular workers are found only in the mat procurement depots of KSBCL. They are involved in other reed-based activities like measuring, stacking, drying and bundling the mats. In Kollam district, there are no mat procurement depots and the only depot, as stated earlier, is the reed distribution depot in Sasthamkotta. Here, there are seven (loading-unloading) depot workers. They are members of Centre of Indian Trade Union (CITU). These piece rate workers are deprived of all social security benefits and other claims. They receive just Rs. 193.15 from a load which has to be divided among workers who are present (currently four) and also Rs. 2 per bundle as service charge (fixed by depot workers) for handing over the stacked bundle from the depot to the buyer. This amount also has to be divided, in theory, among the workers (see Table 24 for the average monthly income of a depot worker of Kollam).

Table 22 Some Depots of Thiruvananthapuram District					
Depot	Main/Sub	Frequency of Reed-	Frequency of	No. of Depot workers	
		Mat-loads	Regular	Casual	
Nedumangad	Main	Once per month	Twice per month	1	7
Kurumangalloor	Sub	Once per week	Once per week	2	0
Aryanad	Main	16 loads in a month	Once per week	1	0
Luthergiri	Sub	Once per week	Once per week	2	0
Kuttichal	Sub	Once per week	Once per week	1	0
Kottayam	Sub	Once per week	Once per week	2	0

In the main and sub-depots of Thiruvananthapuram¹⁴, there are at the most two regular depot workers. In Nedumangad main depot, there are eight depot workers and only one is regular (Table 22). Here, the unloading rate of reeds is the same ie., Rs.193.15, which is to be divided among eight workers. Currently, the frequency of the reed load is once in a month. The rate for loading mats in a truck, which is around 90,000 to 100,000 square feet, is Rs.203 and the frequency of the truck-load of mats in a month is twice. This amount of Rs.203 is also to be divided among the workers. The loading rate of mats in other depots of Thiruvananthapuram is also the same. In addition to this, the regular depot worker receives Rs.40 for measuring stacking, drying and bundling for the first 1500 sq. ft. of mats For the next 1500 sq. ft., he gets Rs.4.8 (as per a depot supervisor in personal communication). During the rainy season Rs. 2.88 is given more for measuring and stacking. Unlike the depot workers of Kollam, the depot workers of Thiruvananthapuram district receive benefits. Their monthly reed income is also higher than the reed income of a Kollam depot worker (Table 24).

Registered Weavers

Registered mat weavers are in Thiruvananthapuram, Ernakulam and Pathanamthitta (around 80,000 reed families¹⁵) districts. For instance, there are 95 registered mat weaving families depending on the Nedumangad main depot. KSBCL distributes reeds from the reed distribution depots and procures mats from them. Here, the reeds are distributed on a credit basis (unlike in Kollam district) and when the mats are procured, the payments are squared off. In other words, the difference between the arbitrarily fixed price of mat and arbitrarily fixed cost of the raw material would be given as wages to the mat weavers. There are no procurement depots in Kollam district. Here, the traditional workers buy reeds on cash and sell different types of baskets and winnowers in the market and in the next week the raw materials can be bought from the depot, Sasthamkotta or Parakot, only if they realise money from these products.

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¹⁹ The main depots of Thiruvanathapuram district are Nedumangad , Aryanad, Mangalackkal and Ottashekharamangalam. The sub-depots of the district are Kurumgalloor, Mundella and Chullimanoor under Nedumangad main depot; Luthergiri, Kuttichal and Kottayam under Aryanad main depot; Pattakulam, Ooruttambalam and Veliyankodu under Mangalackkal main depot and Chenad, Amboori and Chembur under Ottashekharamangalam main depot.

Depot (1)	No. of registere d househol ds (2)	Bundles received per house- hold (3)	Price of a bundle (4)	Average monthly income per household (5)	Benefits from the Corporation (6)	Benefits received through PPP (7)
Nedum-angad (main)	95	5	Rs.34 (20 sticks) Rs. 24 (10 sticks)	600	* Medical / ESI, EPF **, Incentive, Concessional loans, advances, fin. assistance for education, marriage etc.	
Kurum- angalloor (sub)	350	5	Do	600-700	Do	No
Aryanad (main)	100	5	Do	600-700	Do	Loans sanctioned
Luthergiri (sub)	345	2	Do	600-700	Do	No
Kuttichal (sub)	201		Do	600-700	Do	
Kottayam (sub)	184		Do	600-700	Do	

Generally, fine woven mats are expected from one bundle of reeds. The mats are classified into three categories: special mat (fine type), core mat (coarse type) and commercial mat (coarse type). For an 8.5 X 4.5 feet special mat, the weaver gets Rs.41, whereas a core mat fetches him Rs.24 and a commercial mat of 6 X 4 feet, Rs.14.05. Without receiving mats of Rs.400, the depot authorities may not give reeds from the depot. 20 sticks are, generally, given at the rate of Rs.34 (Table 23). It should be noted that the special and core mats are used for further production in the Bamboo Board Factory, Angamaly and the commercial mats are sold to the buyers. The big buyers include Central Warehousing Corporation, State Warehousing Corporation, sugar mills, etc.

			Table 24	
Monthly Income of Various Reed Workers				
Reed worker	Average monthly reed related income (Rs)	Other work (casual)	Benefits	
Weaver (Kollam)	400-500	Yes	No*	
Registered mat weaver (Thiruvananthapuram Dt.)	600	Yes	Refer col.6, table no. 24	
Sasthamkotta depot worker (Kollam Dt.)	800	Yes	No*	
Nedumangadu depot worker (regular) (Thiruvananthapuram Dt.)	1,000	Yes	Refer col.6, table no. 23	
Plant worker, grade 2 (Angamaly)	4000-5000	No	PF, LIC policy, EPF, ESI, Loans at concessional rates, Housing loans at 9% interest rate, etc	
New plant worker	Rs. 80 per day	No	Refer col.6, Table 23	

^{*} A welfare scheme for the traditional weavers has been launched. According to the plan, initially, the worker in wage labour or in self employed work can become a member by paying a fee of Rs.10. Thereafter, he/she should contribute a part of the amount (probably, Rs.7) each month and after 60 years of age, the worker could avail the monthly pension.

Incentives and benefits received by the registered mat weavers are in consonance with the number of mats collected by the procurement depot of KSBCL. Mat weavers and regular depot workers both receive medical benefits which is around 9% of their income. Some of the mat weavers of Thiruvananthapuram have also received benefits through People's Planning Programme (PPP).

Plant Workers

The plant workers are new, scheduled workers of KSBCL employed by the Bamboo Board Factory, Angamaly. It employs only eighty full time, regular and organised workers, mostly not from Sambava community. A good chunk are from other communities like Christian and Nair. They work in two shifts: 8 a.m. to 4 p.m. and 4.30 p.m. to 12.30 a.m.

Plant workers, itself, are divided into two categories: plant workers (grade II) and the new plant workers. Plant workers (grade II) receive a monthly income of Rs.4000-5000 (Table 24). They are entitled to receive benefits like LIC policy, EPF, ESI, loans at concessional rate, housing loans at concessional rate (9%), etc. The new plant workers, 43 in number, employed on a contract basis, are paid Rs. 80 per day. ESI and EPF deductions are made. It is said that they may be employed permanently after a year.

Thus, among all the different categories of reed workers mentioned above, the factory (plant) workers are the only recipients of all the benefits. The worst affected are the traditional unregistered weavers who compensate their poor reed income to some extent by involving themselves in other seasonal work.

CONCLUSION AND RECOMMENDATIONS

The Survey covered 113 reed-working households in 16 gram panchayats of Kollam district. There are four categories of reed-workers: reed cutters, the depot workers, the plant workers and the traditional weavers (registered and unregistered). There are no registered weavers in Kollam.

The sources of reeds for the weavers are the reed distribution depots of the KSBC Ltd., the local forests and the middlemen. A traditional weaver gets, on an average, two bundles of very poor quality reeds in a week due to shortage in supply. A bundle of reed culms (20 reed sticks) are sold for Rs. 32 (without tax), which works out to be Rs. 1.6 for a single stick. But a middleman sells the same kind of stick for Rs. 1.8 and above. The main products of the weavers are baskets, mats and winnowers. Winnowers are low priced products compared to baskets and mats. The main markets for bamboo products are Sasthamkotta, Kadampanad, Puthoor, Pathanapuram, Anchal, Karunagapally, Punalur, etc. But all the weavers do not have easy access to the market.

The profile of the weaving households surveyed shows that the involvement of females is more in reed-based activity. There is a good number of diversified male workers in the age-group of 30-45. A division of the households on the basis of the reed workers (separating out the diversified workers) shows that only 45. 1% of the households are having 100% of the earning members in each household involved in reed-based activity. This indicates a decrease in the interest in reed-based activity. The educational profile of the weavers shows that the weavers of age-group 45 and above are less educated. But in the 15-30 age group, 88-89 % of the members of the weaving community has reached secondary school and all the children below 15 are undergoing schooling. Of the 113 households surveyed, 60 reed households have received loans through IRDP and/or the people's planning programme. But of these, only 40 have used it for reed work. Of the total 17 landless households, only six have received loans. All the landed households, except two, possess land to the tune of 2-5 cents. Toilet facilities are poor or nil in the reed households in Mylam, Chithara, Edamulakkal and Thenmala and the reed households of Chithara, Thenmala, Aryankavu and Mynagapally do not have electrified houses. Of the various health problems, backache is the most commonly found problem. 36 of 102 aged workers are suffering from backache.

The monthly household income per earning member of the 61 diversified households (Rs.700) is greater than that of the reed-only households (Rs.505). This is mainly because of the contribution to the household income from other non-reed based activities, mainly

'seasonal' casual works, which are more remunerative than the reed-based work. Monthly reed income per worker varies from Rs. 263 to Rs. 830. The major factors that influence the reed income are the markets, the products, the number of reed earners, the number of bundles collected - a function of purchasing power - and the middlemen, mainly at the procurement level of reeds.

Comparison of the reed income of various types of workers such as weavers of Kollam, registered mat weavers of Thiruvananthapuram district, depot workers of Kollam and Thiruvananthapuram districts and plant workers of Angamaly shows that the weavers of Kollam district are earning relatively poor reed income. All others are receiving benefits from KSBCL except the reed workers (weavers) of Kollam district. The reed workers of Kollam district are depending on KSBCL only for the raw materials as it is the sole distributor of reeds for the traditional weavers. But even at the distribution level of reeds, the role of KSBCL as a promoter of welfare of these weavers, spread across the district, is comparatively negligible as it has only two reed distribution depots, one in the north of Kollam district and the other at its northern border. Therefore, exploitation by middlemen is thriving in all parts of the district except the north. Moreover, the presence of middlemen has also led to the non-availability of the required amount of reeds for the traditional weavers from the depot and the available reeds are of very low quality.

Declining markets for the reed or bamboo products have also added to the problem of the weavers. The one-time major consumers of reed products like the cashew industry, the fishing sector, etc. have shifted to durable and cheap consumer items of plastics.

It is a sad fact that the new generations are hardly willing to join this traditional handiwork as it has become very unremunerative. The existing workers or labourers in this sector are also unwilling to remain because of the low income or wages and poor marketability of the products. They are shifting to other sectors like construction, agriculture, etc., which provide higher wages. It should be recalled that in the 1950s the wage of a bamboo worker was more than that of an agricultural labourer. But in the 1990s things have reversed and this informal sector has now become totally neglected, both by KSBCL and the Government. The negligence of KSBCL is evident from their lack of interest in starting mat procurement depots (mats are required for the manufacture of bamboo ply board). They proclaim that the initiation should come from the local democratic bodies. According to the local bodies, it is the government, which should take the initiative.

Recommendations

- Open a main mat procurement depot and at least three sub depots of the Kerala State Bamboo Corporation Ltd. and bring the traditional weavers under the ambit of KSBCL.
 For a start, the existing reed distribution centre (depot) in Sasthamkotta should be converted into a mat procurement depot.
- Reduce the price of a bundle of reed culms supplied by the KSBCL and maintain the previous mat price level.
- Ensure availability of better quality reed culms.
- Avoid delay in the issuance of passes to the forest goers for collection of reeds.
- Protect livlihood of reed workers (weavers) by substituting the reed products for plastic products, partially at least in the government owned agro-processing, fishing, etc. This can be made effective by fixing a quota for the reed products.

- Ensure the right of the weavers to receive all benefits like EPF, ESI, concessional loans, advances, etc.
- Ensure the development of skills of the weavers so as to meet the demands of the market and reduce their dependence on subsidies.

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