

COIR YARN SPINNING UNITS OF PANOOR WARD

THE REPORT

Submitted to

The Evaluation Division, Kerala State Planning Board

Trivandrum, Pattom

May, 2015.

DECLARATION

This report, “Coir Yarn Spinning Units of Panoor Ward” is a bonafide work done by me under the supervision of Dr V. Vijayakumar, Chief Evaluation Division, Kerala State Planning Board, Thiruvananthapuram, and has not been previously formed the basis for award of any degree, diploma, associateship, fellowship or other similar title or recognition.

Thiruvananthapuram

May, 2015

Sachin Varghese Titty

Dr. V. Vijayakumar

Chief

Evaluation Division

Kerala State Planning Board

Thiruvananthapuram- 695004

Kerala

CERTIFICATE

This is to certify that this report, “Coir Yarn Spinning Units of Panoor Ward” is a record of bonafide work carried out by Sachin Varghese Titty under my supervision. No part of this report has been submitted for the award of any degree or diploma of any university.

Thiruvananthapuram

May, 2015

Dr. V. Vijayakumar

Disclaimer

The study has been prepared by Mr. Sachin Varghese Titty, student of Christ University 3rd year BA Economics Honours as part of his internship programme. The facts and figures in this report is based on primary data collected by the Author from the study area based on questionnaire and secondary data collected from various sources and do not reflect the views or policies of Kerala State Planning Board.

Contents

Title	Page No.
Chapter 1 – Introduction	1
Chapter 2 - Review of Literature	8
Chapter 3 – Analysis	15
Chapter 4 - Findings and Suggestions	31
Chapter 5-Appendix	34
References	43

Acknowledgement

I Thank God Almighty for his abundant grace which helped me to complete this study successfully.

I extend my heartfelt gratitude to Mr.C.P John Sir, Member of Kerala State Planning Board who granted the opportunity to conduct the research study as part of the internship. I also like to express my sincere thanks to Dr.V.Vijayakumkar Sir, Chief Evaluation Division, State Planning Board for his guidance and support.

A special word of thanks to A. Selina, Ward member, Harris.E, Sub-officer of Kshemanidhi office and K.A Hameed President of Co-operative society for their whole hearted support and cooperation. I take this occasion to thank all the respondents for their co-operation and help in collection of relevant data.

I also remember with gratitude the support extended by Abidha and K.Vasu who took the pain in helping me gather information

Finally I'm short of words to express my gratitude to my family and friends for the support and encouragement which was the driving force in completing the study.

Abstract

The study is an attempt to understand the socio-economic conditions of coir yarn spinning workers and the institutions which affects their state of affairs. Through the research the investigator tried to study the effectiveness of the schemes and projects implemented by the government. The main problems of the sector are lack of adequate capital, inadequate availability and fluctuating price of raw materials, low wage rates, poor working conditions and high incidence of other risk and uncertainties. The findings of the study are based on both primary and secondary data. Information from 50 respondents and the office bearers of the institutions were analysed to understand the reality and to put forward suggestions. Pannoor Ward in Thrikunnapuzha Panchayat was opted as the case study for the research.

List of Tables

Table	Title	Page
1.1	Performance of Coir Sector during last 5 years	3
2.1	Composition of Coir Fibre	9
3.1	Status of the society (A-549) from 2013-2014	25
5.1.1	Personal Details collected from Respondents	35
5.1.2	Work Details collected from respondents	38

List of Figures

Figure	Title	Page
1.1	Export of Coir and Coir products during the last 10 years	3
1.2	Major Areas in which Coir Units face problems	5
3.1	Flow Chart explaining the Functioning of Coir Yarn Spinning Sector	23

CHAPTER 1

INTRODUCTION

1.1 Coir Industry

Coir industry is an agro based rural industry in India. It is one of the leading traditional industries sustaining more than half a million workers, predominantly women in the country and an equal number or more get indirectly employed in the industry. India is the largest coir producer in the world accounting for more than 80percent of the total world production of coir fibre (2007-2008). The coir sector in India is very diverse and involves households, co-operatives, NGOs, manufactures and exporters. Coir industry is a labour intensive industry, employing more than 7 lakh persons of whom a lion's share of work force belongs to the economically and socially backward sections of the society.

Coir making is considered to be more economical in comparison with the economies of other natural fibres like jute and sisal because other competing fibres are solely cultivated for its fibre values while coir is a by-product from a fruit which has other edible values making it more economical. The golden fibre undergoes activities ranging from de-husking, retting, defibering (de-pithing), and weaving and also the manufacture of coir goods.

Coir is ought to be a future pollution controlling instrument specifically fighting soil erosion. It is also used as substitute for peat moss which is an integral part of horticulture thus adding to its robust demand. These uses making high probability of future demand increase.

Coir's unique texture, its hard and rigid nature, its rot resisting nature, extra ordinary endurance capability, and weather resistance capacity widens its scope of application and makes it a versatile commodity, which finds multiple applications in both agriculture and industrial sector. It has a wide range of products touching every facet of life with multitude of end use applications starting from coir door mats, carpets, ropes, rubberized coir products, pillows , cushions, coir geo textiles , coir pith , rugs, coco logs for erosion/sediment control , apparel, foot wears, shopping bags, ornaments and other bio-engineering applications and lot more. It is unfortunate that the technical possibilities of this wonder fibre have not been systematically explored or potentials fully exploited or evaluated commercially. (V. Jose, 2002)

'Natural' 'eco-friendly' and bio-degradable are the striking features of coir and coir products. In this modern era where consumers are also inclined towards sustainability and environment protection, whose consumption patterns are affected by thoughts about future and not just utility, these feature adds a golden feather to its crown. This change in trend in thought

process of the consumers opens up and expands the market boundaries of coir and coir products.

Coir sector has made substantial improvement in its production (Table 1.1) and exports (figure 1.1) throughout the years.

Table 1.1

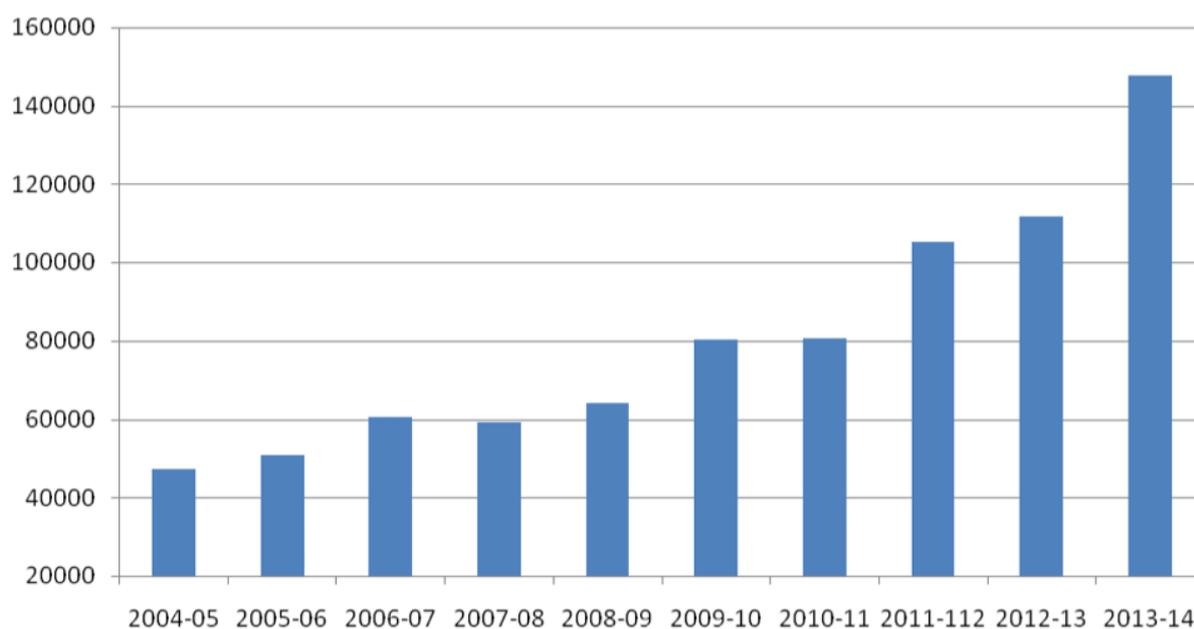
Performance of the Coir Sector during the last 5 Years

Year	Coconut Production ('000MT)	Coir Fibre Production (MT)	Employment Generation	Cumulative Employment
2013-14	N.A	539815	3630	713450
2012-13	15609.4	536185	7810	709820
2011-12	14940.00	531500	5320	702010
2010-11	10840.00	525000	13340	696690
2009-10	10824.30	515500	8450	683350

Source: Ministry of Micro Small & Medium Enterprises Government of India, A Handbook on Schemes and Services of Coir Board

Figure 1.1

Export of Coir and Coir products during the last 10 years (Value in Rupee lakhs)



Source: Coir board Export of Coir and Coir Products from India Yearly Statistics.

Coir and coir fibre products sustain the livelihood of a significant segment of the population in the coastal belt of southern India, especially Kerala. The State of Kerala accounts for 70 per cent of the production of coir products, and other states, who produce coir products are Tamil Nadu, Karnataka, Andhra Pradesh, Orissa West Bengal and North-eastern states. Coir industry continues to be a major cottage industry in Kerala. For historical reasons coir industry has taken deep roots in the State. It is an important sector for Kerala economy as the industry provides direct employment to more than 4 lakh individuals, majority of whom are female. (S, 2014)

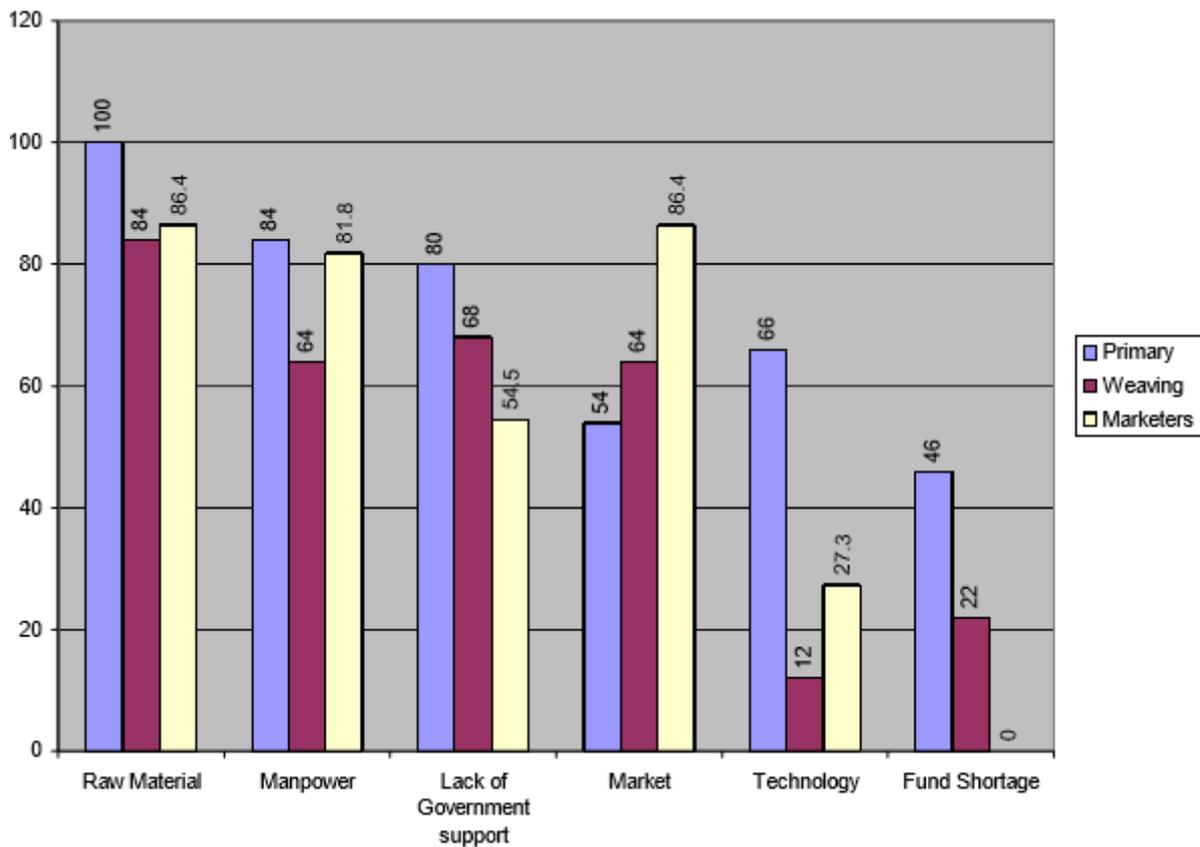
The following study would be focused on the 'Coir Yarn Spinning Sector' that constitutes primary workers of the coir industry. Nearly 80 percent of the sector is occupied by woman. It is a traditional cottage industry with an expanding market of possibilities. It provides a scope of generating maximum employment from minimum investment, with the aid of an electronic spinning device costing around Rs2500 employment for two women spinners can be created, thus per employment cost in the coir yarn spinning sector is comparatively low.

1.2 Statement of the Problem

Coir industry though more than 150 years old, is still to achieve professional approach and strength to be competitive in the field. Despite the investment (Research Institutes like CCRI, CICIT), promotional activities ('Coir Kerala 2015', 'Coir Awards') undertaken by both central and state government and the 'progressive statistical data' mentioned above, the real quality or standard of living of the workers have not improved. In other words, the efforts have failed to trickle down to the lower section. The main problems confronting the coir industry are inadequate availability of raw material, man power issues, lack of exploration of markets, failure of integration of technology into production process lack of funds etc. 91.8 percent units face raw material shortage, whereas 76.6 percent have manpower problem as illustrated in the figure below (Survey on Status of Coir Industry by Kerala) (Figure 1.2)

Figure 1.2

Major Areas in which Coir Units face problems



Source: Survey on Status of Coir Industry in Kerala by KITCO Consultants

The focus of the study would be narrowed down to ‘Coir Yarn Spinning’ sector and the issues relating to it. The sector is facing problem of raw material shortage despite the efforts of the government (86,000 Tonnes of fibre are brought in from outside the State).The societies are not even able to provide 100 days of work in an year , which makes it a less viable option and unattractive. From the thorough literature review ,it can be inferred, a wide gap between the performance of the coir sector and coir yarn spinning sector is seem to exist . When the stats of coir sector shows and steady increase in exports the spinning units still haven’t recovered from its sad plight. The following study tries to unravel this paradox. (About Coir India, n.d.)

The high involvement of middle man has cut short the income of the primary coir workers. On an average a single coir worker earns less than Rs130 (employed with private parties) which least is fair considering the amount of work they put in. The level of income is much

low compared to other sectors. Majority of the primary coir workers are constantly suffering from with different kinds of water borne diseases and other health issues related to work, in Kerala 17.8percent workers are suffering from some form of allergy due to the nature of work.(Source: Survey on Status of Coir Industry in Kerala by KITCO Consultants)

Government schemes have failed to meet its ends. It is not on the formulation part where government have failed but rather on the implementation side. In the year 1950, the government of Kerala launched a scheme to bring the coir sector under co-operative framework but less than nearly 50percent of the units are registered with Coir Board.(Source: Survey on Status of Coir Industry in Kerala by KITCO Consultants)

Coir industry as a whole is confronting a serious issue of market limitations. On an average about 20percent of the total coir products manufactured are exported from the country, mainly to West European countries, United States of America (USA) Canada etc. Unfortunately, the exports in the recent past show a declining trend. Increased competition from other countries, use of substitutes, traditional methods of production, delay in executing orders, etc. are some of the major reasons mentioned for reduced exports. Because of this, the manufacturers have started to pay more attention to the internal market that was not fully exploited earlier and is also not fully developed. Poor performance of the industry would be reflected in the primary sector in the form of low wages, lag in the system etc. (Coir Sector Statistics, n.d.)

Coir workers are accustomed to the use of orthodox methods; there is least modernisation of production process. Even though there has been introduction of new technology, trends of resistance to adopt these are seen among the primary workers. A survey conducted in Kerala showed that in the coir industry 51percent of the units are working in primary sector and out of which 48.4percent of units are non-mechanised and 19percent are partly mechanised and 24percent units are mechanised.(Source: Survey on Status of Coir Industry in Kerala by KITCO Consultants)

1.3 Objective of the Study

- To identify the reason behind the gap between macro (coir industry as a whole) and the micro (specific to coir yarn spinning sector) image of the coir industry.
- To provide a literature base to the spinning sector which lack substantial literary source at the current time.

- To suggest recommendations to practitioners and in respect of future studies

1.4 Methodology

The research is based on primary and secondary data. Random sampling method is followed in selecting sample respondents. Pannoor ward in Thrikunnapuzha is chosen for my case study to understand the research question. This particular ward has more than 50percent of its woman population dependent on coir spinning for their lively hood and presence of coir societies within the same territorial boundaries make it an ideal location for my study.

As part of my primary source of data 50 respondents from the coir yarn spinning sector was chosen and enquiry was conducted respectively (primary workers) through interviews and questionnaires. Personal interviews with the Panchayat member, sub-officer of Kshemanidhi and President of coir society were also undertaken to understand the functions of these institutions and the role they played.

Other research studies, journals, books in this field were considered as my secondary source of data and guideline.

1.5 Significance of the Study

The study reflects the current situation of the primary level of the coir industry. The research piece points out the lagging areas of the spinning sector which results in it poor performance. The study also provides an in-depth knowledge about the sector and its various aspects which would prove itself to be pre requisite it future policy formulation and implementations.

The study can be a considered as a stepping stone in analysing the plight of primary level of traditional industry and for addressing the larger question of whether there is a need of structural change or organisational framework.

1.6 Limitations

Status as a student itself will be a restraining factor as my access to information will be limited. Other hurdles like time constrain, limited knowledge about data analysis which would affect the study. One of the major drawbacks of the study would be that the focus will be on a particular location and there is a chance of sampling error.

CHAPTER 2

REVIEW OF LITERATURE

2.1‘Comprehensive Reference Book on Coir Geo Textiles’ by Centre for Development of Coir Technology gave insights into the history and variances in coir industry.

- History

The word “coir” is obtained from the Portuguese word “coiro” which itself is a adaptation of the Malayalam word “kayar” or “kayer”. “Kayer” is also the word for rope in ancient Tamil or ancient “adidravidian language”. In early Arabic writings this is mentioned as “kanbar”.

The traditional coir industry in Kerala dates back to very early times as a may be seen from the chronicles of Arab writers and early European traders. It is in its first phase, essentially a cottage industry, employing more than half a million workers, most of them are from the underprivileged sections of society. The first factory to manufacture the products appears to have been started by European entrepreneur named ‘Darrgh’. He set up his factory in 1859 at Alleppey in Kerala. Soon other foreigners followed and other companies were set up,fore.g., Pierce Lesley & Co, William Good acre &sons,VolkatBrothers,Aspinwall& Co. Etc. The industry flourished in Alleppey and surroundings. The availability of cheap labour, abundance of raw materials, good infrastructural ambiance etc. helped in industrial growth.

- Coir itself can be broadly divide into 3 categories:

- i. Fine yarn Fibre: this is obtained carefully retted husks. It finds use in making fine yarns, woven baskets and mats etc.
- ii. Coarse fibre: this is got from dry coconut husks and is used for making brushes, brooms etc. It is sometimes referred to as “bristle coir fibre”.
- iii. Mattress fibre: this is extracted from fully ripened and dried husks and is used as filling material in coir-based mattress and upholstery manufacture.

- Composition of Coir fibre

Table 2.1

Lignin	45.84
Cellulose	43.44
Hemi-cellulose	0.25
Cold Water Soluble Components	5.25
Pectin(Soluble in boiling water)	3.00
Others	2.22

Source: Literature review

Lignin: is the major non- Carbohydrates part of the wood. It acts as a natural binder of cellulose fibres. It is the source of strength of the coir fibre(N.Balakrishnan Nair.)²²

2.2 Report on the Survey on Coir Industry in Household Sector, (1975-76)' by the Bureau of Economics and Statistics shed light on the situation existed in the coir household sector during 1975-76.

It brings into attention new aspects and also helps to undertake a comparative study between 1976 and 2015.

Scenario in 1975:

- Coir Retters

It was point out that the large retters who form about 10 per cent among the retters, ret nearly 74 per cent of the husks. They have the actual monopoly in retting business. Chirayinkil, Karunagapally and Karthikapally Taluks are the centres where monopoly retting is concentrated.

Coir industry can broadly be divided into four major sections:

- a) Retting and fibre extraction sector
- b) Spinning and weaving sector
- c) Manufacturing sector
- d) Trade or marketing sector

Retting sector is controlled by large retters. There are 23000 retters in Kerala, of which 45 percent of them are in Alleppey District alone. Mechanical spinning is still in its infancy or rather in an experimental stage. During the time half the numbers of ratts are two spindled and three workers are required for operating a ratt of these type- i.e. two workers to spin the yarn and one to rotate the wheel. Children are mainly engaged in rotating the wheel. Three spindled ratts are used for making 'muppiri' yarn for which four workers are required – 3 to spin and one to rotate the wheel.

- Spinning sector

Women and children together formed 87 percent of the labour force of the spinning sector. On an average they worked for 18 days in a month.

- Literacy

29.5percent of the members in the spinning households were illiterates. Nearly 66.4percent of Primary standard only 3.4percent were seen having a standard above S.S.L.C.

- Economic status

Broadly speaking 19.4percent of the members were earners and 35.4percent were earning dependents and 45.2percent were non-earning dependents. So the dependency was very high in the house hold of the spinning sector.

- Consumption Pattern of spinners

About 73percent of the income was spent on food, 5percent for clothing, 4percent for fuel and 18percent for miscellaneous items. From their family budget spinners in the households can earn only 27percent of their income from the coir industry.

- Production

So many variety of coir yarn are produced in Kerala. The names of each variety is derived from its traditional place of spinning and related to the traditional methods of manufacturing. As many as 28 varieties are reported.(Board, 1980)

2.3 Thomas Isaac T.M.(Dec., 1983).Class Struggle and Transition to Specifically Capitalist Form of Production: Some Conclusions of a Study of Coir Industry in Kerala. Social Scientist, Vol. 11, No. 12 (Dec., 1983), pp. 35-46.

This particular article has attempted to explain the class struggle evolved in coir weaving sector from the Marxian framework and thus highlighting the growth of capitalist organisation of industrial production. The author has analysed the structural transformation of the sector from a 'simple corporation' to the introduction of 'division of labour' as stages of manufacturing as stated by Marx.

The transformation mentioned above is just an abstraction of the following analysis. With historical evidence and t

imely precision the stage in the coir industry is explained in accordance with Marx Schematic description of capitalist development. According to the author, Marx analysis understands the relationship between the 'higher forms' (bigger player) and 'lower forms' and also there

competition for survival will explain the changes in technology and work organisation in the course. The relationship that put forward by Marx is one of sub ordination of the weaker players to the bigger ones where there exist as adjucants to higher forms.

To understand the above arguments the coir weaving sector is observed as the subject of the study. Coir weaving industry is thus an example of the extreme complexity of the process of transition from lower to higher form of capitalism and emergence of specifically capitalist form of production. to begin with the industry have no indigenious tradition on the Malabar coast as it was introduce by the Europeans in the mid nineteenth century with major share held by the European Mercantile house and only by the trade boom of the inter-War period Indian participants have entered into the industry. The three broad phases proposed under the study are: (1) Manufacturial industrial structure: which is characterised by existence of large number small scale and large scale coir- manufactories and both of which were characterised by handloom technical base of production.(2) here the former owners of large scale establishments have now transformed into mere exporters. What distinguishes the first phase from the second is not the level of the technology but rather the way production is organised. (3) The third phase is currently underway where the technical base itself transformed. The various macro socio-economic factors influence the industrial structure through medium of class struggle-they create pressure for change, determine the relative bargaining power of the capitalist and the workers and set limits to the options available to either party. This fashion of class struggle between the labour and capital becomes central to the analysis of the structural transformation and the course of capitalist development.(Isaac, Dec., 1983)

2.4Prakash B. A. (Aug., 1977), Coir Manufacture in the Doldrums. Social Scientist, Vol. 6, No. 1 ,pp. 30-40.

The article tackles the issue of decline of the private manufacturer-cum-exporter type coir firms at Alleppey since the 1940s brought about by mounting labour costs, led to the emergence of about 3500 small-scale handloom units. At present, all mats and mattings come from these handloom units (and 14 cooperatives) the former manufacturing cum exporting firms acting as coir traders. The labour force in these 3500 handloom units is estimated at around 20,000. The central problem faced by these units is lack of demand, resulting in acute unemployment and underemployment. A survey of 20 handloom units in different areas of Alleppey district shows that six units did not get any work for the last one year, while eight got less than two months and the rest below four months. The workers have no alternative

jobs available in the area. The equipment possessed by the units were of value ranging from Rs 200 to Rs 300 per loom, and factory sheds from Rs 300 to Rs 500. Most of the owners had no more than 10 cents of land. The poor housing conditions are underlined by the fact that of the 20 handloom producers, eight owned thatched houses valued at below Rs 1000. The survey also showed that because of the existence of dual prices for export and for domestic markets, the handloom units were realizing very low prices, in most cases less than one-third of the rates fixed by the Coir Board. An added reason is the absence of any form of price control for products meant for the internal market. The private

Coir traders can compete with government trading agencies by buying cheap at Vazhicherry. Only the fixing of floor prices for handloom products for the Indian market (as in the case of exports) can assure economic returns to small-scale producers. Since mats and mattings face stiff foreign competition, it is desirable to mechanize the production of creel which is earmarked for export. The small-scale handloom sector of .The small-scale handloom sector of the coir industry is heading for total collapse unless the Coir Board and the state government comes to the rescue with immediate action carefully thought out.(B.A.Prakash, Aug., 1977)

2.5 Meera.V.. (Dec., 1983). Women Workers and Class Struggles in Alleppey, 1938-1950. Social Scientist, Vol. 11, No. 12 , pp. 47-58.

This particular literature piece focuses on the weaving sector of the coir industry. The study attempts to analyse the historical context of struggles of coir weaving sector in Alleppey. The plight of the woman folk who was indulged in the corresponding economic activity in the frame work of Communist led movement in Kerala. The situation is dealt in the back drop of many crucial political and social movement in the state of Kerala during 1938-1950, Ezhava social movement, the trade union movement and class struggles, the ideological and organisational growth of the communists, the movement against the arbitrary rule in the princely state, and the anti-imperialist struggle.

The article specifically dealt with the issues and hardship undergone by the Ezhava community bothy in the political and social sphere, which according to the census of 1921 constitute 65percent of workers in the weaving sector. The traditional Hindu hierarchy which place them in a lower level added to the downtrodden situation. Against the sad situation many waves of rebellion has trodden across the layer of society, Women general strike of 1938, Vaikkomsatyagraha, SNDP movement etc. class consciousness developed from shared

experiences which helped workers to articulate organisationally the identity of interest at three levels (1) trade unions (2) woman organisations (3) interaction of trade union and political party.(V.Meera, Dec., 1983)

2.6Kannan.K.P.. Implications of Technological Change. (Oct. 2, 1976),Economic and Political Weekly, Vol. 11, No. 40 pp. 1581-1584.

The article attempts to bring into its scope of study the implication of technology at in the coir retters sector, which determine the uninterrupted flow of raw materials for all functioning of coir industry. The retters sector are divided into small medium and big retter which operates at different magnitude. According to the data 15000 small retters where operating in Kerala, on an average retting 1600 husks a year.These retters, while forming 63 per cent of the total number,accounted for hardly 4 per cent of the retted husks.The second group of medium-scale retters number about 6,300, retting on an average 22-25,000 husks a year. The majority of them own retters and they at best manage their spinning business without dependence on outside supply of retted husks. They formed 27 percent of the total number of retters and accounted for 22 per cent of the total number of retted husks.

The real power to exercise monopoly control lies with the large-scale retters who number about 2,400. This small group forming about 10 per cent of the total number of retters accounted for 74 per cent of the retted husks. Each one of them rets more than 2 lakh husks a year.

Rate of surplus become a prerequisite for the survival and growth of the sector. It can achieve this the goal with an introduction of technological change.The rate of future employment is therefore dependent not only on the absolute amount of surplus generated but also on the marginal propensity to save of those who derive the surplus.Once a changeover from the traditional method to the mechanised method is made, the organisation and ownership of production and therefore the composition of the beneficiaries of the higher surplus will also undergo a change. In the present method, production is mainly carried on in the household sector. Therefore, whatever little surplus is generated is enjoyed by the worker-households. A switchover to a mechanised system involves larger initial investment on fixed capital.Only if a co-operative organisational system is envisaged, can one reasonably expect the benefits of the larger surplus to accrue to the workers.(K.P.Kannan, Oct. 2, 1976)

CHAPTER 3

ANALYSIS

3.1 Location

Thrikkunnappuzhais a village near Harippad in Alappuzha district in the Indian state of Kerala. Thrikkunnappuzha is the north-west part of Alappuzha district. Thrikkunnappuzha is one of the gateways to the inland water ways of Alleppey, Cruise through small canals, villages and small water lodged town-ships to enjoy the scenic beauty and to get a glimpse of the unspoiled rural life of Kerala. It is the land of fishermen. Pannoor ward (ward 13) will be the nerve centre of the study and analysis below will be based on the case study of the particular ward.

3.2 Features of Coir Yarn Spinning sector

3.2.1 Change in Demographics:

Coir yarn spinning remained a traditional cottage industry for more than three generations in Pannoor ward (ward 13) in Thrikkunnappuzha Panchayat. 95 percent of the workers in the sample survey were a part of this sector from a very young age as it was an integral part of their social and economic life. Currently the Hindu Muslim share in the total labour work force is more or less equal but this wasn't the case before. Earlier Hindu's were the major share, but by the passage of time Muslim woman came forward and improved their participation. This has proved to create self-pride and empower the Muslim woman community, who were earlier hidden in the veil.

The share of male workers in the total work force in Coir Yarn Spinning sector has seen a declining trend over the years. Better source of income from alternative occupation like coolie, construction are some of the main driving forces behind it.

A declining trend in total labour work supply is also a major issue, due to uncertainties and low wages the sector has become less attractive.

3.2.2 Quality and Price

The price of the coir and the wages paid varies depending on the quality of coir produced. Quality of coir differs according to the thickness and quality of fibre used. If the coir is thick it would carry a low price and if it is thin vice versa. Thus the thickness of coir and its price share an inverse relationship. Thickness of coir dependson the quality of fibre used. Different types of fibre are prevalent in the market for example 'Vaikkom coir', 'Arattupuzha coir' etc. (the names are associated with traditional place of its origin).

Run-Age is a yard stick used to measure quality and determine the price.

Calculation of Run-Age

From 1kg of fibre on a standard rate 27Coir yarns can be produced that is 4mudi (1mudi=6coir yarns) plus 3coir yarns. It is fixed by the coir board that 1 coir yarn necessarily has to be 11meters and the spinners have to make sure this to make the sale in the society. Any yarn less than 11 meters will be rejected by the society as it won't be possible for them to make further sale in Coir fed. On calculating run-age, from 1kg of coir a standard rate of 300Run-Age ($27*11=297$ approximately) is expected. Any change in the standard rate will be reflected in its price.

3.2.3 Mobile Ratt

Instead of old spinning wheel which requires minimum of two peoples assistance to operate is completely replaced in this particular ward with electric ratt(mobile ratt) , which could be operated by a single person. Technology doesn't seem to be the issue here. Even though the new electric ratt increases the productivity it has adverse effects on efficiency due to its: (i) dependence on electricity, (ii) difficult to use in rainy seasons, (iii) increased risk of getting electrocuted during monsoons.

3.2.4 Informal Relationship between the Workers

Coir spinning sector are established in the form of household units where informal relationship between the workers are very strong. This feature ensures unity and cooperation among the employees.

3.2.5 Part time Job

The golden feature which make makes the industry attractive despite of its issues is that woman folk are able to earn an income without leaving their home. The working hours is structured in such a way that they are able to earn without compromising on their family.

3.3 Coir Yarn Spinning Sector and Issues

Act 34 of 1987 defines a “Coir Worker” as a person who is employed for wages to do any work in connection with the various process in coir industry and who gets his wages directly or indirectly from the employer, dealer, or producer of coir products and includes any person employed by or through a contractor or through an agent and depends mainly on coir industry for his livelihood, and includes any other person employed in the coir industry, “ whom the Government may be notification in the Gazzette from time to time declare to be a coir worker for the purpose of this Act. The following study is based on coir yarn spinning workers. Some of the main issues relating to the workers are listed below:

3.3.1 Education

Education opens up the door to the world of possibilities. Social stigma, gender discrimination, social setting of those ages which gave least priority to education is some of the main reasons which denied this privilege for woman folk. Ignorance has kept them in the dark and imparted sufferings. Only less than 20percent (10 persons) of the respondents have attended 10th grade and 80percent have not even achieved primary education (including 20 persons that have not attended school at all). This scenario widened the gap between the government and workers. It was identified that the primary workers were not aware about the policies and schemes provided by the government institutions (which was made public through writings in newspapers and journals) and unable to follow the line of procedures to access these benefits due to lack of education. This affected the efficiency and the effectiveness of government undertakings. (More than 70percent of the research subjects were not aware of any government schemes or support provided other than pension plan) This weakness was taken into the advantage of private parties and other authorities and led to their exploitation. 90percent of the respondents receiving pension was unaware of the pension amount, as they received the payment once in 4-6 months. Thus this incapacity held them back in moving along with modern world.

3.3.2 Insufficient Remuneration

Coir workers are paid low wages compared to other sectors. It is one of the lowest paid industries in India. Especially the coir yarn workers who constitute the primary sector is the section where incidence of this issue is high. The labour wages are decided on the basis of ‘mudi’ calculation. Usually a labour is paid for 50mudi of coir, in private Rs260-290 and

society Rs530-550 (depending on the quality of the coir).(In the payment made by society 200 will be paid by the government which directly goes into the account of the worker and remaining will be given by the society)

1 mudi= 6 coir yarn

In normal cases a single worker would take two days to complete 50mudi which means on an average an employee earns Rs135-270 a day. Even though the amount looks reasonable, the monthly salary is very less as the workers on an average are only employed for 10 days in a month. (Source: Table 5.1.2). Thus monthly a normal worker earns around Rs1350-2700, which is far too less to look after their family and health problems. From the response of the interviewees it was gathered that Coir yarn spinning sector didn't have the capability to generate income to run a whole family. All of the respondents accepted to have a secondary employment to fall back due to the uncertainty and low income issues.

3.3.3 Issues with Raw Material Supply

Lack of availability of required amount and good quality of fibre (raw material) is a prominent issue in coir yarn spinning sector. Kerala is accounted to produce around 680crore tone of coconut of which only around 300crore is required for smooth functioning of coir sector. But the situation is so ironic that a state with such rate of production purchases its entire supply of raw material from neighbouring states like Tamil Nadu etc.

In Pannoorward entire supply of fibre is purchased from Pollachi in Tamil Nadu. The society brings in 2-3 loads per month depending on its financial stand.

1 load=160 bundle, 1 bundle =30kg = 100mudi

160*100=16000 mudi= 1load

This amount is not enough to employ the entire members of the society and not enough to ensure work throughout the month, leaving out the willing workers jobless.

3.3.4 Role of Middlemen and Private Parties

Coir industry has a structure with a long chain of middleman in play. The high involvement of middle man has cut short the income of the primary coir workers and is subjected to exploitation in various ways. These parties play the role of contractors, Coir Merchants (who perform the same function as Societies), Coir factory owners etc. and affect the lives of the

workers directly or indirectly. Workers who are employed with the private parties are paid much less compare to the societies (260Rs for 50‘mudi’).

3.3.5 Weak financial position of Society and Kshemanidhi

Weak financial position of society and Kshemanidhi is the central reason for many other related issues. Insufficient funds provided from government in the form of grant and loan, low workers contribution to the share capital, failure in marketing of produced coir, less alternative sources of finance are some of the primary reasons for weak financial position.

Society A-549 in Pannoor ward is only able to purchase two load of fibre (raw material) every month, costing around Rs2-3lakh.

Cost of one load

1 bundle cost Rs650(based on current fibre price)

1 load=650*160= Rs104000

This provides employment for only 100members for 5 to 8 days in a month wherein total membership exceeds 200. Even though the rest of the members are more than willing to work, the society fails to provide employment due to financial reasons. Due to this even though society pays more wages (Rs630 for 50 mudi while private pays Rs260 for same), only 20percent are employed with society while rest of the respondents are solely dependent on private parties for employment. It was observed from this situation that workers prefer consistent income over high inconsistent income. Shortages in funds are also reflected in payment of wages, irregularities in collection of coir from household units, payment of bonus etc., which leaves workers in a pathetic situation. 60percent of the household units were recognized with more than ‘300 mudi’ of coir stacked and had wages due for the same from the employer. Lack of funds cause disturbance in the structural frame work in the form of overdue payments, failure in marketing of produced coir etc.

The society above comes under the jurisdiction of Kshemanidhi office in ward 10. It was pointed out, that lack of financial backing as a significant hurdle even Kshemanidhi had to overcome. Hundreds of request is remaining pending and there was also delay in payment of amount in relation to schemes and provisions due to this.

3.3.6 Lag in the Structural Frame Work

Workers, Coir Society, Kshemanidhi office, Coir fed and private parties are all points on the same line, malfunctioning of one can lead to the disturbance of the entire structure. Coir fed failing to clear their stock and purchase coir from the society will affect the functioning and the payment capability of society and thus adversely affect the coir primary workers. Respondents reported of wages pending for the work they had done months before and also Society with payments due from Coir fed for sale made earlier. This lag in the system affected the working and efficiency of the structure.

3.3.7 Schemes and Policy issues

It was duly brought into the attention the flaws in schemes and policies. Monetary value of the schemes was very low in comparing with existing price level and standard of living. Paying Rs2000 as marriage assistance is not a sufficient amount. The workers found themselves spending more money in the process of accessing than the granted amount which made it less viable and unattractive. Long chain of process and delay in sanctioning of the amount is also an acute problem in the system. As listed in Table 5.1.2,3 out of the entire 50 respondents were the few who were able to acquire one or another form of benefits (other than pension). There was also high incidence of unawareness about the policies and schemes over which they had right. It was revealed in the study that 5 out of 7 workers who were eligible for pension in the sample survey failed to receive the amount till now (shown in Table 5.1.2). The policies and schemes which are supposed to improve the working conditions failed in fulfilling its objective.

3.3.8 Health Issues related to the Work

Health issues are one of the major concerns of the government and the workers. 88 percent that is 44 out of the entire 50 respondents reported one or the other health issue related to the work. Allergies, Asthma, Osteo Arthritis are some of the common diseases found among the workers. These are mainly caused due to the nature of work. Chemicals used in processing the fibre, Constant exposure to dust, walking continuously to and fro to spin coir are the root cause of these diseases respectively.

Even though the retirement age fixed by the government is 60 years many workers were forced to leave the work force due to health issues. It was revealed in the study that 6 employees between the age of 50- 60 have left the work due to ill-health (illustrated in Table

5.1.2). Closely looking at this issue will reveal the plight of the bigger picture, that more and more workers are withdrawing from the work force way before the retirement age due to health issues.

3.3.9 Infrastructural defects

Basic infrastructure like electricity and sheds have become a necessity in the work to ensure continuous and efficient work. Only one out of the entire 50 respondents had a well-constructed shed (got loan passed) under which spinning were undertaken. During monsoon seasons workers found it difficult to function without work shed as their work place were set up outside in an open area (with electric ratt).

Mobile ratt or electric spinning ratt same time when it improves output it has disadvantages. It is dependent on electricity. Regular power failure affects the productivity and efficiency. As the coir yarn spinning units are established in villages where power failure are a usual phenomenon this become a huge issue.

3.3.10 Adverse effects of climate

The location adopted for case study Pannoor ward is a coastal area. The coastal wind has high salt content which erode metal machinery. Because of this the spinning Ratt, work shed all go out of use faster than usual. Money sanctioned for building shed for the workers are fixed according to the estimation that, it would be made of metal and aluminium. But this is not suitable for the location and constructing a shed with wood and asbestos sheet would exceed the loan amount which is sanctioned. Thus the some geographical attributes also adversely affect the workers. All the 50 respondents were given ratt from the society which has turned out of use due to disintegration.

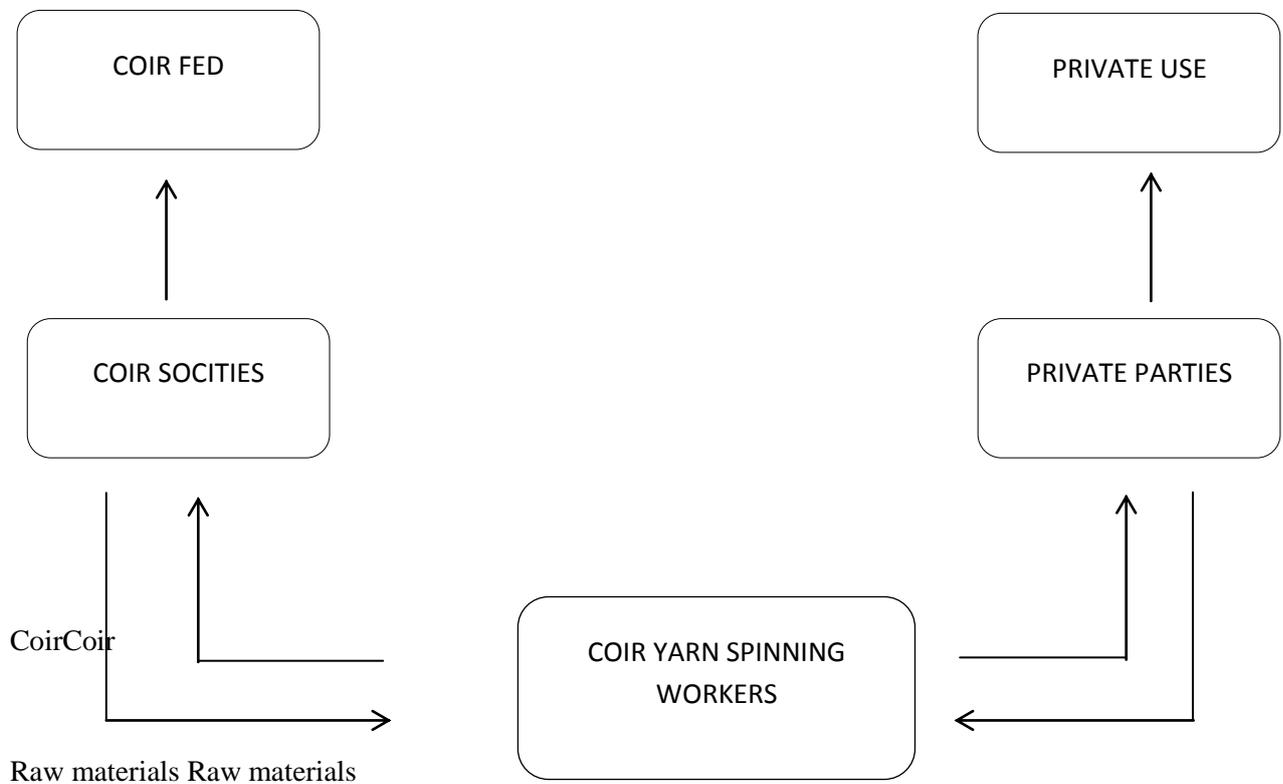
3.4 Functioning of Coir Yarn Spinning Sector

Theraw material purchased from Pollachi is brought into the private or society mill. Each load of fibre will contain 160 bundles of 30kg each. Here the bundle of fibre is soaked in water for two days and on the third day with help of machinery it will be softened (in Malayalam it's called 'chikuka'). The processed fibre will again be made into a bundle of 30kg each and distributed to different house hold units by society or private parties accordingly.

The workers purchase a spinning wheel and set up a place for working. That will be only investment that they make. Raw materials will be brought to them by societies or private parties. According to the order, coir of different quality and amount will be produced and kept at the unit. At regular intervals the employee (society or private parties) will come and collect the produced coir and pay the wage according to 'mudi' calculation. Private parties will pay Rs260-290* and society Rs530-560* for 50 Mudi depending on the quality. The structure is explained in the flow chart below:

Figure 3.1

Flow Chart explaining the Functioning of Coir Yarn Spinning Sector



Source: Primary Data collection

*wages shown here are subjective to changes

3.5 Institutions which directly influence the Workers in the sector

3.5.1 COIR SOCIETIES: Society A-549

After independence with the coming in of local industrialist and middleman and the withdrawal of foreign capital created immense problems in this arena. Local capitalist and middleman knocked off profits from the industry and led to the exploitation of primary workers whose sole livelihood depended on this industry. These incidents directed the attention of local and central government towards these issues.

Consequently the government of India (1945) appointed a Committee under the Chairmanship of K.C Karunakaran and the Government of Travancore (1949) constituted another committee under the chairmanship of Smith to study the problems related to the coir industry in the country. Thus these committees recommended re-structuring and re-organising of the coir industry into co-operatives.

In the light of the objectives of Co-operativisation, 23 primary societies particularly in the field of yarn making, husk collection and distribution were organised with a financial assistance of Rs.1lakh from the Government. Subsequently the Government has considered the development of coir sector and industry through co-operatives and this has been specifically mentioned in all Five Year Plans.

3.5.2 Formation

Coir society is a semi government organisation which can be set up by a group of people (not less than 25) registering with the registrar associated with the coir board, Coir Project Officer. Association of workers to the society is voluntary. Initially a 6 member Promoting committee from the initial members with an elected Convener as the head is appointed. They will be responsible for administrative and financial duties of the society until the permanent administrative committee is elected. On due course of time a permanent core committee (Administrative Committee) will be elected by the Promoting Committee with a secretary post, occupied by a person with a qualification of JDC, Bcom corporation or Mcom corporation. The secretary post will be the only one with a regular monthly salary. New members can join the society on paying the amount fixed by the committee as share price. A provision is provided to allow not more than 7percent of the total member to be outsiders, who doesn't engage in coir industry directly or indirectly.

Coir society A-549 is a B graded society which is responsible for Pannoorward (ward 13). Around 200 coir yarn spinning workers have membership in the above society. Male workers share in the total labour force is not more than 5 per cent. New member can admitted to the society on payment of Rs10 as share price. The society has a history of 38 years and in its journey it had made loss of Rs13lakh in total

Table 3.1

Status of the society (A-549) from 2013-2014

PARTICULARS	AMOUNT
Grant permitted (lakh) (average)	1.75
Produced (kg)	42400
Expenditure (including wages , raw material and other expenses)in lakhs	30
No. of days work provided	Less than 100
Bonus (Lakhs)	3
Assets (lakhs)	95
Profit (lakh)	2.5

Source: Accounts of Society (A-549)

3.5.3 Objectives:

- i. Solving the problems of the actual workers and small producers engaged in the industry
- ii. To ensure them regular work and a living wage
- iii. To stabilise the industry on a sound and stable footing by cutting out middlemen and to stop all corrupt practices,
- iv. To establish improved standards and quality so as to attract and ensure a better market for coir product.

3.5.4 Functions:

- i. Purchasing of raw materials
- ii. Distribution to house hold units
- iii. Ensuring work and regular payment to workers
- iv. Procuring the coir produced and selling in the coir fed
- v. Accessing the quality and ensuring minimum of 300 run age for the coir produced from 1 kg of husk

- vi. Work for the upliftment of the workers both in economic and social sphere of their life
- vii. Extending additional support in the form of , (i) distributing ratts (ii) conducting training programs

3.5.5 KSHEMANIDHI

Kshemanidhi or Kerala Coir Workers Welfare Fund board is a statutory body undertaken by government of Kerala, constituted under the Kerala Coir Workers Welfare Fund Act 1987 (act 34 of 1987). It has jurisdiction which extends to whole of Kerala. Even though around 4lakh coir workers are registered members with Kshemanidhi but it is estimated that only 50,000 thousand members are actively working coir workers. The act was passed by the Kerala State Legislature to uplift the welfare of the coir workers from its destitute state. It is through this body, the government schemes and policies to improve the social and economic conditions of the workers are executed. To redeem the schemes, workers have to place a request accordingly with Kshemanidhi which would be passed within the time limit of 3 months.

Membership in Kshemanidhi is not mandatory for coir workers, but it is necessary for workers to avail government benefits .It is statutory for employer, dealer, or producer of coir products to have membership.

3.5.6 How to acquire membership:

Any person who satisfies the definition of coir woker by the act of 1987, between the age of 18 and 55, can acquire membership with Kshemanidhi on submission of birth certificate and job verification certificate.

3.5.7 Source of income for Kshemanidhi:

(i) All the registered members are obliged to pay Rs85 per year, which includes Rs60 for the pension fund and the rest Rs25 as instalments for the ratt that the Kshemanidhi have distributed.

This amount is fixed in considering Rs5 per month as the contribution of the workers. The amount was decided during 1998 when the pension was Rs75 per month after which the

contribution hasn't revised even though the pension has increased to Rs600 per month. This payment has to be made yearly till attaining the age of 60.

(ii) Matching Grant: are funds that are set to be paid in double amount to funds available from workers as yearly payment (Rs85). For example if Rs1 lakh is collected from the entire work force as their yearly share by the Kshemanidhi, the government will pay Rs2 lakh as Matching Grant to the Kshemanidhi. This fund is provided by government to meet its expenses other than pension. For the year 2014-2015 Matching Grant granted for Kshemanidhi is Rs442.50 lakhs.

(iii) Special grant: these funds are provided by government to meet the pension obligations of Kshemanidhi. For the year 2014-2015 Special Grant granted for Kshemanidhi is Rs100 lakhs.

3.5.8 Kshemanidhi structural framework

The fund is administered by a Board having 15 directors of whom 5 are to be from among the Coir Workers and self-employed persons, 5 from employers, producers and dealers and 4 officials of State Government, 1 from Coir Board, and the Secretary. The day to day administration is vested with the Chief Executive appointed by Government who is also the Secretary of the Board. The Board started functioning from 2.02.1989.

Kshemanidhi office, Pallipattumuri in Thrikkunnappuzha Panchayat is responsible for the entire Karthikapallytaluk. It has over 25000 member registered out of which 4582 members are from Thrikkunnappuzha Panchayat (includes 1366 workers who attained pension). Male coir workers contribution to the entire work force is less than 2 percent in Karthikapallytaluk. Narrowing down to Pannoor ward (ward 13), has 287 coir workers including 86 workers who attained pension registered to the Kshemanidhi.

Schemes

Welfare schemes:

The Fund constituted is utilised for the following purposes as per Chapter VI (19) of Act 34.

- Education Scholarship:

(i) Children of the members studying in government approved Educational institutions for +12, DC, PG, ITI, ITC, Nursing etc. will be eligible for 750Rs per year as per the scheme.

(ii) Children of the members studying in government approved Educational institutions for engineering and medicine will be eligible for 3000Rs per year as per the scheme.

- Marriage Assistance: woman members for own marriage / member for their daughters marriage are eligible for this scheme. 2000rs per marriage will be granted.
- Maternity Assistance: Rs1000 per woman worker during maternity.
- Medical Assistance: 1000 per year can be sanctioned for member, father, mother, and spouse, unmarried Sons and Daughters, Dependent Grandchildren.
- Permanent Disability: members can claim this benefit worth 2500 on being permanently disabled from working.
- Temporary disability: member can claim 600 per month on account of being temporarily disabled.
- Accidental death: spouse of the deceased member will be credited with a onetime payment of 10000Rs on account of death of the member.
- Funeral Assistance: monetary assistance of 1000rs will be provided in the case of funeral of member or family members.
- Members Pension: members who attain the age of 60 are eligible for pension, 600rs per month. Old coir workers (OCW) will also be eligible for this pension
- Family Pension: spouse of member pensioner and the minor child will be eligible for pension for 100/- per month.

CHAPTER 4

FINDINGS AND SUGGESTIONS

4.1 Summary

Coir Yarn spinning sector is a cottage industry mainly supporting the weaker section of the Kerala economy. The coir industry has shown improvement in exports and production but the situation of the primary workers still continues to be problematic. Despite the effort and time they have invested, still they are not able to meet a bare minimum living. Large numbers of economic and social issues have tailed them throughout the years. Government is trying to revive the coir industry and improve the condition of workers by ensuring a handsome amount of budget allocation, yet the industry continues to face several challenges and uncertainties. The Coir Board is a statutory body established under the Coir Industry Act, 1953 for promoting the overall development of the coir industry and upliftment of the living conditions of workers engaged in this traditional industry. The board hasn't been fully successful in achieving its desired objectives. Conditions of the workers are yet to achieve a desired level. As part of Co-Operative scheme, local coir workers have organised themselves in the form of co-operative societies to achieve the above ends.

Very few of the total families engaged in the coir yarn spinning depend on this sector as a primary source of livelihood. The remuneration or earnings from the sector is not enough to support an entire family, it is just an additional income to meet their minor needs. The problems that the spinning sector in Kerala confronts are lack of availability of raw materials, poor financial backing of Kshemanidhi and society, poor wages, failure of workers welfare schemes which make it less attractive, lag in payments, health issues and high wage rates of alternative occupation.

For understanding the scenario and suggesting measures for solving the issues and the above challenges faced by the coir yarn spinning sector the following objectives were framed for the study. The findings of the study are based on both primary and secondary information. For furnishing primary information, 50 coir yarn spinning workers, society, Kshemanidhi and Panchayat were examined and information were gathered from the above respondents. The sample random method was followed in identifying 50 workers. In addition to this proper review of books, journals, research paper related to topic were undertaken.

4.2 Case Study Findings

- Majority of the workers were females who belonged to the backward section in the economy.
- Identified illiteracy as the prime issue which widened the gap between workers and government.
- There has been a declining trend in the male share in the total labour work force.
- Currently the Hindu Muslim share in the total work force tends to be equal.
- As the sector operates as a house hold unit the informal relationship is very strong in the sector which is an added advantage.
- Even though the retirement age fixed by the government is 60, many of the workers are forced to withdraw from the workforce due to health issues at an earlier age.
- The average daily wage of a worker varies from Rs135-165.
- There is a failure in implementing welfare schemes and policies.
- Some climatic features turn out to be an issue for the workers and indirectly affect their efficiency.
- Health issues are common among the workers.
- The societies are not able to provide even 100 days of minimum work.
- Majority of the workers are employed with the private parties even though the wages are low compared to societies.
- A well laid out structure is in existence.
- The sector has the potential to improve production without changing the technology implemented. Unemployment is a much severe issue than technological improvement. Most workers remain idle most of the month due to several reasons. This unemployed group can be tapped to increase production.
- Raw material supply issues are widely prevalent.
- Lag in the functioning of the system is a dampening element in the sector.
- Hospitals are not available in close vicinity which aggregates their health issues.
- Traces of redtapism and corruption in the structure.
- Improvement in working conditions is a necessity to attract new employees towards the sector.
- Wide range of welfare schemes are implemented by Kshemanidhi. The monetary value are far too less to meet the needs

- In the current scenario coir yarn spinning sector is not a viable option to support an entire family.
- There is also a declining trend in labour supply.

4.3 Conclusion

Over 93 countries have coconut plantation, but only 10 of them including India produce coir even when the demand for natural fibre products is growing the world over. Thus coir industry has the potential for further growth and expansion. Coir Minister Adoor Prakash during the inauguration of Coir Kerala 2015 stated “coir exports were worth Rs807 crore in 2010-11, they have increased significantly to Rs1, 476 crore in 2013-14. The government has targeted exports worth Rs2500 crore by 2016-17,” The statement proclaims the positive attitude with which the government approaches the industry and hope to move towards a brighter future. The golden feature which makes the industry attractive despite of its issues is that woman folk are able to earn additional income without leaving their home. The working hours is structured in such a way that they have enough time to look after their family as well. Thus this becomes a perfect employment of the woman folk.

Real growth and success of an industry can only be measured by taking into consideration the state of the workers. Steps have to be undertaken to ensure qualitative improvement of the workers. As James H. Douglas, Jr. have stated “A good job is more than just a pay check. A good job fosters independence and discipline, and contributes to the health of the community. A good job is a means to provide for the health and welfare of your family, to own a home, and save for retirement.” Coir yarn spinning sector have miles to go before achieving the above objective and becoming a perfect employer. But to achieve is not a far fetch goal. With proper implementation of policies and schemes, measures to ensure healthy and satisfying working conditions the sector can take a leap for its ultimate objective.

4.4 Suggestions

- Improve working conditions through efficient implementation of schemes through Kshemanidhi and society.
- Increase the monetary value of schemes according to the economic and social conditions prevailing in the society.

- Measures have to be taken to improve the financial base of both Kshemanidhi and society. Funds should be passed on time to improve their efficiency and eradicate lag in the system.
- Structural change is not required rather strengthening of the existing structure is necessary.
- Government has to keep a constant check on the private employers and workers
- Measures can be undertaken to ensure better wages with private sector.
- Societies should be empowered to provide enough employment to all its members for at least 100 days a year. To achieve this goal financial base of the society has to be strengthened and management have to be made more efficient.
- For old coir workers who lack formal education, awareness should be provided regarding the prevalent schemes and benefits.
- Ensure education for new generation so they would be empowered to take care of themselves.
- Funds should be allocated to society on time according to their performance and membership.
- Work shed should be provided to all units to improve their production capability.
- Steps have to be taken to resolve Shortages of Raw Materials. Coconut fibre production in the state should be exploited rather than depending on neighbouring states
- Government employee can be appointed to be a mediator between the workers and government and to keep a constant check on their performance. The particular employee can make sure proper implementation of schemes and policies.
- Sufficient supply of Skilled labour through regular training should be ensured
- Ensure Payment of wages on time from Societies.
- Hospitals should be established in close vicinity to make their access easier.

CHAPTER 5

APPENDIX

5.1 Data Collected from Sample Survey conducted on Coir Yarn Spinning Workers (Primary Data Collection)

5.1.1 Personal Details collected from Respondents

*NFE: No Formal Education

*NW: Not Working

Table 5.1.1

No.	Name	Gender	Age	House Name	Religion/ Caste	Education	Marital Status	Children		Spouse Occupation
								Male	female	
1.	Safiyath	F	52	Parayil	Muslim	NFE	Married	2	1	NW
2.	Asma Beevi	F	58	Kuduthingal Padeettathil	Muslim	NFE	Married	3	1	NW
3.	Fathima Bevi	F	55	Manivelil	Muslim	NFE	Married	4	1	NW
4.	Isha Beevi	F	55	Manivelil Padeettathil	Muslim	NFE	Married	1	1	NW
5.	Ayisha	F	25	Manivelil Padeettathil	Muslim	10 th	Married	1	-	Coolie
6.	Humlath	F	41	Koodathingal Padeettathil	Muslim	7 th	Married	-	3	Foreign employee
7.	Isha Beevi	F	60	Vembattu Padeettathil	Muslim	NFE	Married	5	-	Coolie
8.	Rafeka	F	42	Vembattu	Muslim	7 th	Married	-	3	Fisherman
9.	Isha bevi	F	60	Kannattu	Muslim	NFE	Widow	-	-	NW
10.	Isha beevi	F	52	Parethekkathil	Muslim	NFE	Widow	-	2	NW
11.	Isha Beevi	F	60	Kottampalli Vadakkathil	Muslim	NFE	Widow	2	-	NW
12.	Khadeeja Beevi	F	60	Chirayil Padeettathil	Muslim	NFE	Widow	2	1	NW
13.	Nadeera	F	38	Kottampalli Padeettathil	Muslim	NFE	Married	3	-	Coolie
14.	Jameela	F	47	Kottampalli Padeettathil	Muslim	NFE	Married	1	2	NW
15.	Shareefakunju	F	38	Kottampalli Padeettathil	Muslim	NFE	Married	1	1	NW
16.	Suhra Beevi	F	38	Kottampalli Padeettathil	Muslim	NFE	Married	2	1	Fisherman

No	Name	Gender	Age	House Name	Religion/ Caste	Education	Marital Status	Children		Spouse Occupation
								male	female	
17.	Remlath	F	45	Kottampalli Pallivadakathil	Muslim	NFE	Married	2	-	Fisherman
18.	Sheeja	F	31	Kottampalli Pallivadakathil	Muslim	10 th	Married	-	3	Coolie
19.	Naseera	F	26	Chirayil	Muslim	10 th	Married	1	1	NW
20.	Najeima	F	28	Isha Manzil	Muslim	10 th	Married	-	2	Coolie
21.	Shamna	F	32	Manivelil	Muslim	7 th	Married	1	1	Fisherman
22.	Nehila	F	30	Pereth	Muslim	9 th	Married	1	1	Business
23.	Habeeba	F	37	Vembattu Padeettathil	Muslim	10 th	Married	2	-	Fisherman
24.	Sheeja	F	30	Koodathingal Padeettathil	Muslim	7 th	Married	3	-	Fisherman
25.	Sourya	F	41	Parethekkethil	Muslim	4 th	Married	1	1	Fisherman
26.	Shamsumma	F	52	Parel	Muslim	4 th	Married	-	3	Fisherman
27.	Isha Beevi	F	60	Manthalasseri Padettathil	Muslim	NFE	Married	6	-	NW
28.	Rahiyath	F	48	Manthalasseri Padettathil	Muslim	NFE	Married	2	2	NW
29.	Bijeena	F	27	Manthalasseri Padettathil	Muslim	10 th	Married	1	1	Fisherman
30.	Rajeena	F	33	Manthalasseri Padettathil	Muslim	10 th	Married	-	2	Business
31.	Raheema	F	50	Valayil	Muslim	NFE	Married	-	2	Fisherman
32.	Myinoonath	F	42	Thyputhuvalli	Muslim	4 th	Married	1	3	NW
33.	Mymoonath	F	43	Aryanthara	Muslim	4 th	Widow	-	-	NW
34.	Rahmath	F	32	Rashida Manzil	Muslim	9 th	Married	1	1	Fisherman

No	Name	Gender	Age	House Name	Religion/ Caste	Education	Marital Status	Children		Spouse Occupation
								Male	Female	
35.	Seenath	F	30	Ajmal Manzil	Muslim	10 th	Married	2	1	Fishing
36.	Haseena	F	32	Manthalasseri Padeettathil	Muslim	7 th	Married	1	-	Electrician
37.	Isha Beevi	F	56	Manthalasseri Padeettathil	Muslim	NFE	Married	2	3	Driver
38.	Shareefa	F	63	Manivelil	Muslim	NFE	Married	5	1	NW
39.	Indira	F	56	Kurathara	Hindu/ Ezhava	4 th	Married	1	1	Coolie
40.	Vasanth	F	45	Kaattaseri Padeettathil	Hindu/ Thandan	10 th	Widow	2	-	NW
41.	Radha	F	61	Kuathara	Hindu/ Ezhava	4 th	Married	2	-	NW
42.	Chandrika	F	60	Kaattaseri Padeettathil	Hindu/ Ezhava	4 th	Widow	1	1	NW
43.	Vasumathi	F	50	Tharayil	Hindu/ Thandan	7 th	Married	2	2	Coolie
44.	Ambika	F	50	Tharayil	Hindu/ Ezhava	4 th	Married	1	1	Fisherman
45.	Radha	F	51	Kaattaseri Padeettathil	Hindu/ Ezhava	3 rd	Married	2	-	Coolie
46.	Seleena	F	33	Chelakkattu Padeettathil	Muslim	4 th	Married	1	2	Farmer
47.	Saraswathi	F	50	Tharayil	Hindu/ Thandan	4 th	Married	-	1	Fisherman
48.	Devaki	F	50	Tharayil	Hindu	3 rd	Married	1	2	Coolie
49.	Rahiyath	F	44	Tharayil	Muslim	10 th	Married	1	1	Fisherman
50.	Sukumari	F	48	Tharayil	Hindu/ Thandan	5 th	Married	3	-	Carpenter
50.	Naseenath	F	40	Tharayil	Muslim	7 th	Married	2	1	Coolie

Work Details collected from Respondents

Table 5.1.2

Pension:P	Marriage Assistance: MA
Loan: L	Maternal Assistance: MT
Equipment: E	Funeral Assistance: FA
Working: W	Not Working: NW
Not Eligible:NE	Not Traditional :NT

No.	Name	Current work status	Association with work	Daily working hours (hrs.)	Daily income (RS)	No. of working days in month	Health Issues	Secondary Occupation	Membership in Kshemanidhi	Employed with		Government aid					
										Society	Private	P	MA	MT	FA	EQ	LO
1.	Safiyath	NW	Traditional	5-8	130-265	5-20	Yes	No	Yes	-	-	NE	-	-	-	-	-
2.	Asma Beevi	NW	Traditional	5-8	130-265	5-20	Yes	No	Yes	-	-	NE	-	-	-	-	-
3.	Fathima Beevi	NW	Traditional	5-8	130-265	5-20	Yes	No	Yes	-	-	NE	-	-	-	-	-
4.	Isha Beevi	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
5.	Ayisha	W	Traditional	5-8	130-265	5-20	No	Yes	Yes	-	Yes	NE	-	-	-	-	-
6.	Humlath	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
7.	Isha Beevi	W	Traditional	5-8	130-265	5-20	Yes	No	Yes	Yes	Yes	No	-	-	-	-	-
8.	Rafeka	W	Traditional	5-8	130-265	5-20	Yes	No	Yes	Yes	Yes	NE	-	-	-	-	-
9.	Isha bevi	NW	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	-	Yes	-	-	-	-	-
10.	Isha beevi	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
11.	Isha Beevi	W	Traditional	5-8	130-265	5-20	No	Yes	Yes	-	Yes	No	-	-	-	-	-
12.	Khadeeja Beevi	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	No	-	-	-	-	-
13.	Nadeera	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
14.	Jameela	W	NT	5-8	130-265	5-20	No	Yes	Yes	-	Yes	NE	-	-	-	-	-
15.	Shareefakunju	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
16.	Suhra Beevi	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
17.	Reemlath	W	Traditional	5-8	130-265	5-20	Yes	No	Yes	-	Yes	NE	Yes	-	-	-	-

No.	Name	Current work status	Association with work	Daily working hours (hrs.)	Daily income (RS)	No. of working days in month	Health Issues	Secondary Occupation	Membership in Kshemanidhi	Employed with		Government aid					
										Society	Private	P	MA	MT	FA	EQ	LO
18.	Sheeja	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	Yes	Yes	NE	-	-	-	-	-
19.	Naseera	W	Traditional	5-8	130-265	5-20	Yes	Yes	No	-	Yes	NE	-	-	-	-	-
20.	Najeima	W	Traditional	5-8	130-265	5-20	No	Yes	Yes	-	Yes	NE	-	Yes	-	-	-
21.	Shamna	W	Traditional	5-8	130-265	5-20	Yes	Yes	No	Yes	Yes	NE	-	-	-	-	-
22.	Nehila	W	Traditional	5-8	130-265	5-20	No	Yes	Yes	Yes	Yes	NE	-	-	-	-	-
23.	Habeeba	W	Traditional	5-8	130-265	5-20	No	Yes	No	-	Yes	NE	-	-	-	-	-
24.	Sheeja	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
25.	Sourya	W	Traditional	5-8	130-265	5-20	No	Yes	Yes	Yes	Yes	NE	-	-	-	-	-
26.	Shamsumma	W	Traditional	5-8	130-265	5-20	No	Yes	Yes	Yes	Yes	NE	-	-	-	-	-
27.	Isha Beevi	NW	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	-	No	-	-	-	-	-
28.	Rahiyath	NW	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	-	NE	-	-	-	-	-
29.	Bijeena	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
30.	Rajeena	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
31.	Raheema	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
32.	Myinoonath	W	Traditional	5-8	130-265	5-20	Yes	Yes	No	-	Yes	NE	-	-	-	-	-
33.	Mymoonath	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
34.	Rahmath	W	Traditional	5-8	130-265	5-20	Yes	Yes	No	-	Yes	NE	-	-	-	-	-
35.	Seenath	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-

No.	Name	Current work status	Association with work	Daily working hours (hrs.)	Daily income (RS)	No. of working days in month	Health Issues	Secondary Occupation	Membership in Kshemanidhi	Employed with		Government aid					
										Society	Private	P	MA	MT	FA	EQ	LO
36.	Haseena	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
37.	Isha Beevi	NW	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
38.	Shareefa	W	NT	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	Yes	-	-	-	-	-
39.	Indira	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	Yes	-	-	-	-
40.	Vasanth	W	NT	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
41.	Radha	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	Yes	-	-	-	-	-
42.	Chandrika	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
43.	Vasumathi	W	Traditional	5-8	130-265	5-20	No	Yes	Yes	Yes	Yes	NE	-	-	-	-	-
44.	Ambika	W	Traditional	5-8	130-265	5-20	No	Yes	Yes	Yes	Yes	NE	-	-	-	-	-
45.	Radha	NW	NT	5-8	130-265	5-20	Yes	Yes	Yes	-	-	No	-	-	-	-	-
46.	Seleena	NW	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	-	NE	-	-	-	-	-
47.	Saraswathi	W	NT	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
48.	Devaki	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
49.	Rahiyath	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-
50.	Sukumari	W	Traditional	5-8	130-265	5-20	Yes	Yes	No	-	Yes	NE	-	-	-	-	-
50.	Naseenath	W	Traditional	5-8	130-265	5-20	Yes	Yes	Yes	-	Yes	NE	-	-	-	-	-

5.2 Questionnaire

1) Questionnaire for Interviewing Primary Coir Yarn Spinning Workers

Personal Details

Name: Gender: Religion / Caste: Marital Status: Occupation of Spouse:

Age: House Name: Education: Children:

Work Details

- Current Work Status:
- Association with the work? Traditional or not traditional?
- How long have they been engaged in this particular work?
- What are noticeable changes in the sector regarding technology and income?
- Did they receive training regarding the use of the new electric spinning wheel?
- Daily income earned by the respondents?
- No. of days employed in a month?
- Are the workers able to meet a minimum standard of living with the current wage?
- Do the respondents have membership in Society and Kshemanidhi? If not why?
- Amount paid by the workers as yearly instalments in Kshemanidhi?
- Health issues concerning the worker?
- Issues with raw material supply? Reason?
- Are the workers engaged in a secondary occupation?
- Initial cost to set up a coir yarn spinning unit?
- Who provide the raw materials and to whom do they sell? Functioning of coir yarn spinning sector?
- What are the benefits that you receive from the government and co-operative societies?
- Are you aware of the welfare schemes provided by Kshemanidhi? Have you availed any of the schemes in particular?
- What are the reasons which discouraged them in claiming the schemes if they are aware of it?
- Other issues faced by the workers?

2) Questionnaire for Interviewing the Authority of Co-operative Society.

- How is a society formed?
- How does the Society Operate?
- History of society?
- What are the changes that have been brought about in the Coir yarn spinning sector?
- What is the current situation of the Coir Yarn Spinning sector?
- How does the sector operate?
- What are the main functions of society?
- Financial position of particular society?
- What are the government supports available?
- Information regarding Pannoor Ward and its members.
- How does Coir yarn Spinning sector operate?
- What are the issues faced by society?

3) Questionnaire for Interviewing the Authority of Kshemanidhi.

- Information regarding history and formation of Kshemanidhi.
- Administrative structure of Kshemanidhi?
- How to acquire membership in Kshemanidhi?
- What are welfare schemes provided by Kshemanidhi?
- Source of finance?
- Relation between Kshemanidhi and workers?
- Problems faced by Kshemanidhi?

References

- *Comprehensive Reference Book on Coir Geo Textiles* by Centre for Development of Coir Technology gave insights into the history and variances in coir industry. (2000). Alleppy.
- *About Coir India*. (n.d.). Retrieved from Coir India: http://www.ccriindia.org/lib_future_vision.html
- *About Current Coir Statistics*. (n.d.). Retrieved from Coir Board: <http://coirboard.gov.in/aboutcoir.html>
- *About Coir India*. (n.d.). Retrieved from Coir India: http://www.ccriindia.org/lib_future_vision.html
- B.A.Prakash. (Aug., 1977). Coir Manufacture in the Doldrums. . *Social Scientist*, 30-40.
- Board, P. (1980). *Report on the Survey on Coir Industry in Household Sector, (1975-76)* by the Bureau of Economics and Statistics. Trivandrum.
- *Coir Sector Statistics*. (n.d.). Retrieved from Coir Board: http://coirboard.gov.in/resources_statistics%20yearly.html
- Isaac, T. (Dec., 1983). Class Struggle and Transition to Specifically Capitalist Form of Production: Some Conclusions of a Study of Coir Industry in Kerala. *Social Scientist*, 35-46.
- K.P.Kannan. (Oct. 2, 1976). Implications of Technological Change. *Economic and Political Weekly*, 1581-1584.
- N.Balakrishnan Nair., C. N. (n.d.). *Comprehensive Reference Book on Coir Geo Textiles*. Thiruvananthapuram: Centre for Development of Coir Technology(C-DOCT).
- S, A. (2014). Indian Coir News.
- Survey on Status of Coir Industry by Kerala. (n.d.). KITCO Consultants.
- V.Jose. (2002). A Study Of Coir Vyavasaaya Co-operative Societies in Kerala Performance, Problems and Prospects.
- V.Meera. (Dec., 1983). Women Workers and Class Struggles in Alleppey, 1938-1950. . *Social* , 47-58.