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# **A STUDY OF COIR VYAVASAYA CO-OPERATIVE SOCIETIES IN KERALA – PERFORMANCE, PROBLEMS AND PROSPECTS**

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## **Certificate**

I certify that the thesis **A Study of Coir Vyavasaya Co-operative Societies in Kerala- Performance, Problems and Prospects** was written by Sri. Jose V.S. under my guidance and supervision. I further certify that the thesis is worth submitting for the award of the degree of **Doctor of Philosophy** in Commerce under the faculty of Social Sciences. The thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title of recognition.



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# CHAPTER I

## DESIGN OF THE STUDY

### 1.1 Introduction

Coir enjoys its dignified status as a fine decorative material in the mansions of the rich and as an article of utility in the huts of the poor. It thus caters to the needs of all classes of the society. Coir industry is one of the traditional agro-based cottage industries concentrated in the coconut producing states in the country. Coir, the golden clean fibre extracted from the fibrous husk covering the inner shell of the coconut, is the raw material for coir industry. The industry is important for the country, as it provides direct employment to more than half a million people and indirect sustenance to an equal or more number. Moreover, it is mostly export-oriented and fetches foreign exchange worth Rs. 303 crores [1999-2000] annually<sup>1</sup>. Coir industry continues to be a major cottage industry in the State of Kerala. For historical reasons coir industry has taken deep roots in the State. Natural facilities like lakes and lagoons are available in plenty all along the coast for retting coconut husk. Traditional expertise that abounds in the countryside helped to flourish this industry in the State. Coir industry is labour-intensive and provides direct employment to 3.80 lakhs people<sup>2</sup> of the coastal belt. An equal number or more get indirect employment in this industry. The employees in this industry are largely drawn from the backward classes and weaker sections. The industry stood all the vicissitudes of time on account of the protective approach followed by the State and the facilities extended by the Central Government through Co-operativisation.

“Rescue through Co-operativisation” is a cry often heard in the case of traditional industry facing sickness. Consequently a plethora of Co-operative Societies came into existence. In India, 5,03,962 co-operatives (at all India level), with a membership of 209.127 Million[All level] existed during 1998-99.<sup>3</sup> About 70 per cent of the members of these societies belong to the weaker sections of the society. In Kerala, during the past eight decades, the message of co-operatives has received wide acceptance from almost all classes of people. As a result 20,785 co-operatives were registered in this State upto 2000-2001<sup>4</sup>.

Coir industry functioned in Kerala on the initiative, enterprise and financial strength of individuals. A long chain of middlemen are also engaged in providing different services at various stages of production and distribution. The workers and small producers fully engaged in this industry, neither have adequate capital, nor any organisation to support their common cause. So they were left to the mercy of capitalists and middlemen. The actual workers were denied regular work and a living wage. It was to solve the problems of the actual workers and small producers, Co-operativisation was recommended by the various High Level expert Committees appointed by governments. The Scheme for organising the Industry on Co-operative basis was evolved even before the formation of Kerala State. However, Co-operativisation Scheme for the developmet of Coir Industry at the national level was started by Central Government from 1982 onwards only.

## **1.2 Statement of the Problem**

Coir industry, essentially a cottage industry, is located in the densely populated, poverty- stricken coastal areas of Kerala. Coir workers are usually underpaid and the coir industry is one of the lowest paid industries in India.

Since 1945, the governments [both central and state] have appointed several Committees and Task Forces to study the problems of the industry and they have recommended various measures to solve such problems. But the efforts of the government in solving these problems did not produce the expected results. In the year 1950, the government of Kerala launched a scheme to bring the coir sector under co-operative framework. As a result a number of coir co-operatives were established in the state. The basic objective of the Scheme was to solve the problems of actual coir workers and small producers engaged in coir industry and to ensure them regular work and a living wage. This was expected to be realised by eliminating the middlemen from the coir sector. The centrally sponsored Co-operativisation Scheme of 1980, gave an impetus to the Co-operativisation Scheme of the state. Under this Scheme, an amount of Rs. 13.91 crores was spent by central government for the development of coir co-operatives in the country for the period from 1982-83 to 1999-2000, of which Kerala's share constitutes 85 per cent.<sup>5</sup> A lot of protective measures were also implemented by the government to safeguard the interests of co-operatives and worker members in co-operatives. This included ensuring continuous supply of raw materials to the co-operatives in the state. Besides, on the basis of the recommendations of a High Power Committee [1993] under the chairmanship of Thachadi Prabhakaran, coir co-operatives were classified into three groups, viz; A, B, and C. This was done to reduce the disparity among societies and to channelise assistance on the basis of their working efficiency.

In spite of five decades of developmental measures implemented by the central and the state governments and with all positive factors such as immense production of coconut husk, (basic raw material), availability of cheap labour force with traditional expertise, domestic as well as overseas market for coir

products, the conditions of most of the coir co-operatives in the State remain to be extremely pathetic and some of them are even on the verge of liquidation. Vis-à-vis to the situation mentioned above it is a paradox that most of the societies are facing problems such as raw material shortage, labour shortage, working capital shortage and marketing. As a result, the coir co-operatives, cannot even offer 100 days of regular employment to their member workers. The wages paid to workers are far from the minimum wages fixed by the government and the working conditions are quite unsatisfactory. Even in this machine age, most of the coir co-operatives are working with labour intensive technology. The drudgery connected with this sector resulted in repulsing the youth from entering this sector. The above mentioned situations warrant a thorough study to chalk out clearcut programmes for the development of coir industry in the State.

### **1.3 Objectives of the Study**

The objectives of this study are:

- ◆ to evaluate the performance of coir *Vyavasaya* co-operative societies in Kerala with reference to the objectives of Co-operativisation.
- ◆ to analyse the socio-economic background of the worker members of the coir *vyavasaya* co-operative societies in the State.
- ◆ to examine the extent of member's participation in coir *vyavasaya* co-operative Societies, and
- ◆ to identify the major problems of coir *vyavaya* co-operatives and to ascertain the coir workers attitude towards mechanization and rationalization of production process in the state.

## **1.4 Methodology**

Primary as well as secondary data are used for the study. Primary data were collected through a sample survey. The sample design and coverage are mentioned below.

### **1.4.1 Sampling Design**

Enquiry revealed that there were 829 coir societies in Kerala. Of these only 481[excluding COIRFED] were functioning during the period of 1998-1999. Among these functioning societies, 434 [90 %] fall under the category of coir vyavasaya co-operative Societies[CVCs]. The CVCs were categorised into A, B and C. The number of working coir vyavasaya co-operatives comprised in the respective categories were assessed as A-165, B-156 and C-113. They remained scattered over the 10 project areas namely, Chirayinkeezhu, Kollam, Kayamkulam, Alapuzha, Vaikom, North Parur, Thrissur, Ponnani, Kozhikode North, Kozhikode South and Kannur in Kerala. The societies located in Ponnani and Kannur were excluded from the survey because of their poor performance. For the survey, out of 434 CVCs, 45 societies [A-17, B-16, and C-12] were selected for the study by the application of Simple Random method.

In order to check their socio-economic status, 275 coir worker member households, [100 each from A, B and 75 from C classes of societies] were also selected for the study. The details regarding the selection of societies and coir worker member households on projectwise and categorywise are appended. [Appendix I and II ].

Consultation with officials of COIRFED, Coir Board, Project Officers and Marketing Managers of Coconut Development Board, and National Co-operative

Development Corporation enabled the researcher to delimit the scope of the study. Information relating to mechanisation was collected from trade union leaders having many decades of association with coir industry.

#### **1.4.2 Collection of Data**

Pre- tested structured schedules were used to collect data from 45 coir societies and 275 coir worker households. Information regarding collection of raw husk, processing methods, wages paid, number of mandays employed, demand for husk, availability of husk, problems of coir production and operations were collected from coir co-operatives. Data relating to the socio-economic variables of coir worker households were also collected. Discussions with various officials were also made use of for collecting data on specific issues. Primary data for a period ranging from 1994-95 to 1998-99 were also collected from 45 coir vyavasaya societies.

#### **1.4.3 Analysis of the Data**

The collected data were analysed with appropriate statistical tools like Averages and Indices. Ratio analysis is applied to assess the financial performance and operational efficiency. Trend value technique was applied in order to assess the trend of export of coir goods during the past 50 years and production of fibre during the past 20 years.

## **1.5 Scope of the Study**

The study has covered the entire state of Kerala except two project areas viz; Ponnani and Kannur. They were left out as number of societies were insignificant and their performance was so poor. The working of coir vyavasaya co-operatives [CVCs] were divided into 10 project areas for administrative convenience. The project areas have no relation with the geographical limit of any revenue district. Data relating to the functioning of CVCs. were collected for the period from 1994-95 to 1998-99 for the study. The study covered coir households of member workers of CVCs in order to examine their socio-economic background. The linkage of CVCs. to various institutions like Coir Board, COIRFED, Coir Directorate, Coir Corporation were also analysed. The study is pertinent in the sense that it will help to offer plausible suggestions for the improvement of the working of the societies, to pay fair wages to coir workers and to utilise maximum working days. This will also be of immense help to planners and policy makers and other agencies for framing the developmental strategies and policies in coir industrial sector and specifically of CVCs.

## **1.6 Limitations of the Study**

Major limitations of the study are noted below.

- ◆ The CVCs have a poor system of account-keeping and data-storage. So data prior to 1994-95 couldn't be traced out. This forced the researcher to fix the period of the study from 1994-95 to 1998-99.
- ◆ The CVCs are not maintaining records with respect to sales to private parties. So figures given by the secretary could only be taken into account.

- ◆ As some of the selected societies were not up to date in auditing their accounts the researcher had to depend on the unaudited statements of these societies.
- ◆ Since systematic inventory recording is not followed by societies, the researcher had to depend on the value of above items for analysis.

## **1.7 Scheme of the Study**

The study is organised under seven Chapters as follows.

The first chapter presents the significance of the study. Statement of the problem, objectives, methodology, scope, limitations and the scheme of the study also form part of this chapter. The second chapter forms the review of literature related to the study. The profile of Coir Industry in India with special reference to Kerala is the subject matter of the third chapter. While the fourth chapter analyses co-operativisation of coir sector, performance of coir vyavasaya co-operative societies and the socio-economic conditions of coir workers are presented in chapter five. The problems of CVCs, the level of participation of member coir workers in the affairs of their coir societies are the contents of the sixth chapter. Opinions about mechanisation of various target groups are also included in this chapter. The last chapter highlights the summary of findings, conclusions and suggestions emerging from the study.

## References

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## **CHAPTER II**

### **REVIEW OF LITERATURE**

In the first chapter, it is clearly mentioned that, the central and state governments have been nurturing the coir industry in Kerala since five decades with financial resources and protective measures. This was done in consideration of its relevance in the employment generation as well as India's export basket. Here an attempt is made to review the literature on the subject.

For convenience the literature reviewed for the study is organised under the following three broad heads.

1. Books
2. Reports
3. Articles, Research work and Seminar presentations.

#### **2.1 Books**

Unnithan [1970]<sup>1</sup> in his book examines the various factors related to coir industry in the country. Background of the setting up of coir industry like locational factors, the various processes in the manufacture of coir and coir products, marketing structure and organisation of the industry etc. are covered in his work. It presents an analytical study of the cost of production of different varieties of coir and coir products. According to him coir industry is not an organised industry in the modern sense of the term and functions under the set-up of an under-developed country. Coir production is multi-staged and extends

from the production of coconuts to the making of coir yarn for the manufacture of mats. The study is mainly of a general nature and does not analyse any aspects mentioned above in detail. As a result it does not suggest any policy measures for better prospects.

Pylee [1975]<sup>2</sup>, in his work examined the various aspects of the coir industry, viz., the structure, export, internal consumption of coir goods, marketing channel, labour force and crisis of the coir industry. The study stressed the necessity for strengthening the base for export production by manufacturing sophisticated coir products through modernisation. The report also stressed the need for making Kerala products cheaper than European coir products and developing a stable domestic market for coir products in India. The Report listed various government orders and notifications relating to coir industry in India. The study also emphasised the need for undertaking Research and Development in coir sector.

Thampan [1984]<sup>3</sup> also gives a detailed description of different varieties of coir fibre, scientific process of retting [Mechanical and Chemical Methods], process of extraction of fibre [White Fibre and Brown Fibre], use of piths etc. in his book. The book generated awareness of the varieties of fibre and grades, chemical composition, methods of spinning coir yarn (through traditional hand spinning and ratt spinning) and their advantages. It also gives an insight into the varied uses of coconut palm to the people.

Thampan [1988]<sup>4</sup> in another work offers a detailed account of production of coconut in various countries and states in India. He reveals that from an estimation, about 10 million people depend directly or indirectly on coconut cultivation and industry for their livelihood and this crop has profound influence on the agricultural economy of many states. His study also gives the rate of yield

per hector in various parts of India, number of retting yards, and copra processing units in Kerala.

Thomas Issac *et al.* [1992]<sup>5</sup>, in their book “Modernisation and Employment” explain the crisis in Kerala’s coir industry. This book draws the features of the industry during the fifties, traditional process of coir production, the relevance of coir industry in the economy of Kerala, the pitiable conditions of coir workers and improvement in the conditions of the workers through the leadership of militant trade unionism. It reviews the socio- political, economic and technological factors that effect trends in the coir industry in Kerala. To impart relevance of the industry it cites the value of shipments of coir from Malabar Coast from 1889-1950. It mentions the untapped husk potential in Kerala and suggests that through appropriate measures, the industrial utilisation of husk can be increased. This book expresses the view that the policy of unfettered mechanisation is not socially acceptable since coir production is the major source of employment after agriculture in the coastal tracts. However, at the same time it suggests technology choice for reducing the period of retting, mechanisation of fibre extraction and spinning process.

## **2.2 Reports**

Karunakaran [1945]<sup>6</sup>, examined the various aspects of the problems of coir workers and coir industry and in the report stressed the necessity for organising the coir industry on co-operative basis. The study clarified that for many years in the past attention of the Government was particularly on finding a solution to the disorganised state of affairs that existed in the coir industry of the

state in general and the resultant disasters on the labour class in particular. This report laid the foundation for co-operativisation of coir industry in the state.

Smith (1949)<sup>7</sup>, made a study on the feasibility of organising the coir industry on co-operative basis and underlined the need for re-organisation of coir industry on co-operative basis. On the basis of the report of the Smith Committee, the erstwhile Govt. of Cochin attempted to organise Coir Industry on co-operative lines.

The Coir Board [1955]<sup>8</sup>, appointed an Ad Hoc Committee for Coir Yarn, to study problems relating to production, marketing, grading and standardisation of coir yarn, role of co-operative organisation in coir marketing, role of producers [small and large-scale], method of spinning, production and labour conditions. Though the Committee could not go deep into the all aspects mentioned above, it recommended various measures for the development of the coir sector. The recommendations related to arrangement for a census and registration of spindles, participation of only licenced dealers in the coir trade, popularisation of spindle-spinning in Malabar and implementation of Minimum Wages in the Malabar area which was then a part of the then Madras State.

Theyyanni Menon [1959]<sup>9</sup>, critically evaluated the functioning of various types of coir societies in the state. His report threw light on the various malpractices connected with this sector. He highlighted the fact that co-operatives failed to gain any hold on the industry. The causes responsible for this, according to him, were drawback in the accounting system, administrative delays and multiplicity of societies. The Report suggested various measures to attract coir workers into coir co-operative fold, and stressed the necessity for appointing qualified secretaries for coir societies. A change in the audit system prevailing in coir co-operative system was also recommended.

The Coir Board has published two reports; one in 1960<sup>10</sup> and the other in 1962. The 1960 Report was the outcome of an in-depth survey of a number of coir households in Kerala. The survey covered aspects relating to occupational status, job satisfaction level, land owned, demographic particulars, income and expenditure of hand-spinning households etc. It also covered spindle-spinning sector in the Kanyakumari district of the then Madras state. The objectives of the survey were to study the socio-economic conditions of the people engaged in the industry, to estimate the total production of coir yarn and consumption of raw material and the total number of households and persons engaged in the industry. It also covered the manufacturing units in registered and unregistered sectors. The report contained several recommendations for the upliftment of the coir sector. But the report had not made an attempt to analyse the Co-operativisation Scheme of coir sector in India.

The 1962<sup>11</sup> report was based on information collected about husk retters all over Kerala and Kanyakumari district of the then Madras state. It covered the number of workers involved in retting activity in various areas on the basis of variety of yarn production and spindle-spinning. The report made the inference that, considering its contribution towards exports of the country, the importance of the coir sector cannot be ignored. It also stressed the need for diversifying this industry. But the study did not make any attempt to analyse the role of Co-operatives for the development of coir sector in the country

A Task Force was appointed by the Planning Commission under the chairmanship of M.K.K. Nayar [1973]<sup>12</sup> for evaluating the various types of assistance extended to coir industry and coir co-operatives during the IV th Five Year Plan. Basically the Task Force was intended to suggest suitable measures for co-ordinating the development programmes for the coir industry and for

making a proposal for the Vth Plan. The Committee covered all states producing coir and coir products in India and submitted its report. The report identified the importance of Research and Development, modernisation, and mechanisation in this sector. It also found out various other uses of coir products. But this report failed to give concrete suggestions for solving the problems connected with coir workers and coir co-operatives. However, the Task Force proposed some financial support to the coir sector during the fifth five year plan.

The report on mechanisation in coir industry in Kerala brought out by the government of Kerala [1973]<sup>13</sup>, identified the relevance of coir industry in Kerala to national economy. The report contained information regarding the structure of coir industry, wage structure, export of coir and coir products from India, internal market of coir products etc. It emphasised the necessity of research and development effort in coir sector so as to modernise it. The report also admitted the sensitiveness of the issue of mechanisation of coir production and assessed its problems and possibilities. The report stressed that without modernisation, India cannot produce attractive coir products with modern designs, and hence she may not be able to maintain even her present share of the international market. The report contained several recommendations for the revival of the industry. The most important among them is that co-operatives in these sectors have to be strengthened and mechanisation should be carried out in such a manner that none should be thrown out of employment.

Nair [1977]<sup>14</sup> Committee, in its report entitled "Coir Industry- a study of its structure and organisation with particular reference to employment in Kerala," has touched all areas of the coir industry. Classification of various types of societies, problems of these societies relating to raw material shortage, working capital shortage etc. of Coir Co-operatives, effectiveness of Regulatory measures,

estimate about employment, income from coir work and non-coir work, expenditure etc. of coir workers were discussed and analysed by the Committee. On the basis of this the Committee concluded that the performance of the co-operative sector was not encouraging. According to the Committee the employment provided by these societies cannot be justified *pari pasu* with the cost involved. The committee further suggested that the Kerala State Coir Corporation should take up the responsibility of distributing the orders received from exporters to small producers and supply yarn and other raw materials at economic cost to them and also provide common services like quality control, dyeing drying etc., for eliminating the middle-men who expropriate the surpluses. Even though the committee made a sincere attempt to study the problems of this sector, the committee failed to identify the causes for the weak performance of coir co-operatives in Kerala.

The High Powered Study Team under the leadership of B. Sivaraman [1978]<sup>15</sup> found out that, even after the enactment of the Coconut Husk Control Order the co-operatives could not succeed in the field due to non-availability of the required husk for their operations. On the basis of its findings the Committee urged the central and state governments to extend financial help to coir societies to implement the Coir Development Programme.

Kerala State Planning Board [1984]<sup>16</sup>, analysed coir industry as a part of studying various traditional industries in Kerala. It went through the structure of coir industry and made an all-India view about employment in coir industry, production of coir products, out-lay and expenditure in coir industry during the five year plans, progress of co-operativisation in coir sector, various govt. regulations in coir industry including prohibiting the use of defibering machinery etc. It also gave an account of the export statistics of various coir products from

1960-61 to 1982-83. The committee put forward some major recommendations for the upliftment of the coir industry. The most important recommendation of the Committee related to prohibition of women working in defibering and retting operations and standardisation of coir yarn produced in different localities into three or four groups.

Department of Economics and Statistics [1986]<sup>17</sup>, conducted a study on production and consumption of coir and coir products in Kerala. The study also examined the potential of coir production in other states in India. Production and consumption, nature of coir, employment in this sector, units engaged in organised and unorganised sector in various activities of coir work etc. were also assessed. The report also analysed distribution of workers in the coir producing units, nature of employment, classification of coir workers as regular wage paid employees and unpaid family workers and distribution of units according to the number of hours worked per day. The study revealed that, the coir industry still continues with unpaid family workers which constituted about 72 per cent of the total workers in the industry and there were considerable under-employment in the industry and the workers were getting only less than 181 days of work in an year. It also revealed that there is considerable under-utilisation of equipment due to lack of raw material at a reasonable price.

State Planning Board [1990]<sup>18</sup> appointed a Special Task Force headed by T.M. Thomas Issac. The Task Force examined the probable measures for increasing the economic availability of husk at reasonable price to coir vyavasaya co-operative societies in Kerala. It also analysed the performance of coir vyavasaya co-operative societies with special reference to export promotion and development of internal market of coir products. The report recognised some priority areas for Research and Development of which the important areas were

development of treadle rath, motorised coir spinning machine, semi automatic looms for weaving etc. But most of the suggestions were of repetitive in nature which could not bring any special advantage to policy makers in dealing with the problem of coir industry.

Coir Board [1990]<sup>19</sup>, in its survey report provided a detailed account of the coir industry in Andhra Pradesh. Details like coir fibre production, equipments used in coir production, employment, wages paid to coir workers, and the number of coir co-operatives functioning in that state were also provided. The study also highlighted, occupational status, social status, working hours and number of days worked, wages paid, income distribution of coir workers and capital investment in coir industry in the state. The study revealed that 58 per cent of the total coir workers were women and children constituted five percent. Even though the survey covered coir co-operatives, it failed to give any detailed information regarding their working.

The High Power Committee appointed by government of Kerala [1993]<sup>20</sup> under the chairmanship of Thachadi Prabhakaran, made an in-depth study about the working of coir societies in the State. It developed a formula to categorise coir co-operatives in to A, B and C. It developed a formula for finding out the number of man-days provided by coir societies on the basis of its production. The study also developed and adopted several criteria for evaluating the working of coir co-operatives in the State. It used a tool for collecting evidences about the drawbacks in working of coir co-operatives and suggestions from the public who were associated with coir co-operatives. But the report failed to suggest any policy for developing the weak societies or for the revival of sick coir societies.

Coir Board [1994]<sup>21</sup>, published a report on the coir industry in Tamil Nadu. This gives a detailed account of coconut production, status of coir

industry, number of coir co-operative societies functioning, employment, production of coir, capital investment etc. in Tamil Nadu. The study also revealed the presence of child labour in coir industry. According to the study children accounted for 12 per cent and women, 49 per cent of the total coir workers. The study further showed that income in the coir co-operative sector is less than in the other organised sector. Even though the survey covered coir co-operatives, its scope was limited to ascertaining the total number and their membership. So it did not touch upon the detailed working of coir co-operatives in the State.

The committee headed by Anandan [1997]<sup>22</sup> also examined the problems of coir vyavasaya societies in Kerala. The report made a category-wise analysis of the coir societies in Kerala. But the report presented only a general picture on issues like share capital, assets, liabilities of coir societies in each category. The report did not highlight any particular merit with respect to any category of the societies. The study also failed in identifying the exact cause of failure of coir societies in the state. In spite of these shortcomings the report contained several recommendations for the upliftment of the coir co-operative sector. The major ones among them were :-

- ◆ The dues of the societies to the government should be converted into shares,
- ◆ Government should stand as surety for the loans taken by coir co-operatives, and
- ◆ The Govt. should appoint a committee to study the existing poor service conditions of employees of the coir societies.

Kerala Statistical Institute [1997]<sup>23</sup> conducted a survey on coir industry in Kerala. The report gives deep insight on matters relating to the number of coir workers in the state, coir households, quantity of production of yarn, fibre, consumption of fibre, socio-economic aspects of workers in the coir industry in Kerala, etc. The report also gives a picture of the demand for fibre, yarn and coir products, its movement from Kerala, and various traditional and non-traditional equipments applied in the industry. The study further revealed that the under-utilisation is more discernible in the co-operative sector where more than 50 per cent of under utilisation of equipment was reported. But it has not given any detailed account of the working of coir co-operatives in Kerala.

Kerala State Planning Board [1998]<sup>24</sup>, has made a brief review of the coir industry during the past four decades. The review related to out-lay and expenditure on coir industry up to 8<sup>th</sup> five year plan, progress of co-operativisation of coir industry, activities of coir co-operatives, Govt. regulation on coir industry etc. The review concluded with an assessment with respect to future prospects of the industry, which included various advantages of geo-textiles and its world-wide market in future. The report estimated world market for geo-textiles as 1000 Million Sq. meters annually and 98 per cent of which was dominated by geo-synthetics.

Even though the reports of various committees and task forces were aimed at exploring the root cause of the different problems that existed in coir industry and coir co-operatives in general at different periods and to suggest measures to solve them, none of them succeeded in suggesting lasting solutions to the problems of coir vyavasaya societies and their workers.

### 2.3 Articles, Research Work and Seminar Presentations

In an editorial [1967]<sup>25</sup> published in the Journal of Industry and Trade, an unidentified writer emphasised the importance of pushing Indian coir goods in German market to compete with the substitute fibres. The article also highlighted the necessity for launching collective advertising campaign to effect a perceptible change in the attitude of the public. The article recommended new designs and techniques to suit the European market and suggested that such changes can be introduced preferably through collaborations with German manufacturers and importers. It further suggested that production of rubberised coir, particularly in India, must be given priority as the most prospective line of export promotion. The article also suggested that different methods of advertising techniques must be adopted to suit the tasks in different countries.

Vimal [1976]<sup>26</sup>, described various uses of Coconut pith, which was considered to be a waste. The areas where this can be used include building industry, manufacture of gasket, agriculture, storage batteries, electroplating, and in rubber compounding. The divergent uses of the pith, which was considered as a waste material holds great potential.

Alexander [1976]<sup>27</sup>, unveiled the economic and social importance of coir industry in India. According to him no cottage industry in Kerala engages so many people in manufacture and trade as in coir industry. He opined that maintenance of a uniform quality is the most important factor in stabilising and improving exports and the only way to achieve this is through evolving suitable standards for different types of products and ensuring that export conforms strictly to these quality standards. He stressed the necessity of introducing mechanical spinning and defibering from unretted husk in India. He emphasised the importance of diversification and modernisation of coir products and hoped that

Coir Development Scheme could ameliorate the conditions of workers in societies and the necessity of expanding domestic market for the development of coir industry. The author also claimed that Indian coir yarn has good reputation in the foreign markets and there is a tendency of preferring natural fibres to artificial fibres. He also accepts the complexity of the problems of coir as it vitally concerns the lives of tens of thousands of people while it is an industry with great potential for export as well as for internal consumption. He concluded the article stating that as long as coconut palms tower high in the coastal belt of Kerala the coir industry can exist in the country.

Kunhikrishnan [1977]<sup>28</sup>, in his article examines the historical relevance of the coconut tree and its various uses. He also mentions that classical literature of India has glorified coconut tree as 'Deva Vkrisha ' or Godly tree as it provides a variety of products useful to daily life. The name of the state 'Keralam;', itself comes from coconut, Kera+alam [Kera = coconut, alam = land]. It is stated that research conducted so far shows that coconut is ideally suited for a balanced plant- animal- human eco-system in which perfect harmony between these three life patterns can be achieved to their natural advantage. The coconut growing areas are characterised by a high density of population and so this crop is a boon to the small farmer.

Economic Review [1978]<sup>29</sup>, of Kerala, while mentioning different traditional industries in Kerala, states that, when coir co-operatives have started to give reasonable wages, the private coir producers have also been forced to hike the wages. It also advocates various control measures in the industry enforced by Coir Directorate.

Economic Review [1980]<sup>30</sup>, highlights that as this industry is a highly labour intensive one, any attempt of modernisation will bring labour

displacement. What is required is the expansion of external and internal market, which will add a new dimension to the development of coir industry.

Robin [1984]<sup>31</sup>, in his article narrates the historical background of coir industry, features of labour movement in this sector of Kerala state etc. The article throws light on the caste system that prevails in the Kerala society and how it decays the society and the coir workers. The role and influence of 'moopan' among coir workers is also touched in the article. He also tries to link the labour movement [their militancy and stamina] in coir industry with Punnappa- Vayalar Revolt in 1946 in Kerala.

Seetharaman [1985]<sup>32</sup>, Attwood, Baviskar and Santi [1987]<sup>33</sup>, Rao [1988]<sup>34</sup>, Anna Saheb Shinde [1988]<sup>35</sup>, Shyam [1988]<sup>36</sup>, Khanna and Singh [1988]<sup>37</sup>, Leelamma [1988]<sup>38</sup>, Bhajan [1989]<sup>39</sup>, Bharadwaj [1989]<sup>40</sup>, Daman [1990]<sup>41</sup>, Sarma and Sushil [1990]<sup>42</sup> have recognised the relevance of co-operative education and expressed the importance of co-operatives in general as an economic institution with social content, which has great potential for achieving the national objective of growth with social justice.

Shah. [1983]<sup>43</sup>, Ojha. [1988]<sup>44</sup>, U.M Shah. [1988]<sup>45</sup>, Anjaneyulu and Deshinamurthy [1990]<sup>46</sup>, Sarngadharan [1990]<sup>47</sup>, Thondarson [1990]<sup>48</sup>, have categorically stated that for the multi-dimensional development of co-operatives, professionalism is to be brought in all the functional areas of co-operatives. They have emphasised that co-operatives should develop their own cadre of personnel who are not only professionally competent but also are dedicated to the co-operative values and have stake in the co-operative organisation.

Kulandaiswamy [1986]<sup>49</sup>, Co-operative Fortnightly [Editor] [1987]<sup>50</sup>, Taimni [1988]<sup>51</sup>, Hynniewta [1989]<sup>52</sup>, have in their writings expressed concern over the undue influence of bureaucracy in co-operative management. They

have viewed that the statutory power granted to the Registrar of co-operative societies enables him to step into the shoes of the Board of Directors of the societies and wield virtual monopoly power which is against the cherished role of a friend, philosopher and guide to the Co-operative Movement. Since continuous progress of co-operatives should be based on local initiative, democratic leadership and managerial competence, it was suggested that deliberate and concerted efforts are called for to de-officialise and de-bureaucratise the co-operative movement.

Ajith Kumar [1987]<sup>53</sup>, in his work states that coir yarn is the chief item of consumption within the country which is marketed by private traders. According to him domestic market for coir goods has not fully been exploited, particularly for door mats and mattings. Therefore along with the intensification effort for expanding export market for coir goods, efforts should also be made to strengthen the domestic market for withstanding the stress and strain of a fluctuating export market.

Pillai [1987]<sup>54</sup>, In his article, while explaining various measures taken by the central and state governments for the development of coir industry and coir societies, reminds that 85 percent of the coir products are marketed in the internal market and finds it very difficult to catch the external market. He also suggests to implement mechanisation in the husk beating sector and to try to reduce the workers of this sector.

Gopalan Nair [1987]<sup>55</sup>, while explaining the relevance of coir industry and coir co-operatives in Kerala finds out that the traditional decentralised nature of the coir industry was the major factor that retarded effective quality control. He also has given a brief picture of the technology improvement attempted by the Coir Board and observes that it was essential for reducing human drudgery to a

great extent. He identifies that co-operatives are the best agency for effective transformation of results of research to the industry.

Editor [1987]<sup>56</sup>, "Kerala Industry" in a lengthy article relating to the Coir Rehabilitation and Modernisation for development of coir industry in Kerala, analyses the earlier steps taken by the Government for supporting coir co-operation and the problems faced by coir industry and coir co-operatives. The article has given a detailed account of co-operativisation scheme and emphasises the need for mechanisation and modernisation.

Malik. [1988]<sup>57</sup>, examined the historical background of coir co-operatives in Kerala. According to him until the starting of coir development scheme during 1950-51, there were no organised attempts made to stabilise and strengthen the industry. The industry was depending on the initiative, enterprise and financial resources of the private industrialists. He found out that the weaknesses of central coir societies [not existing now] were due to the shortage of working capital and concluded with a suggestion that coir co-operatives should be strengthened in order to protect foreign exchange earning and to prevent the throwing of workers out of employment.

Economic Review [1989]<sup>58</sup>, notes that in Kerala coir industry is the largest cottage industry where 4.3 lakh people are working and it adds that Co-operativisation programme would help to revitalise coir industry.

Subramonian [1989]<sup>59</sup>, is against politicians assuming positions in co-operatives. According to him they will utilise their positions for their own interest which may be against the interest of the society. Therefore according to him co-operatives must develop their own leadership, free from political, communal and other considerations. He also points out that the Registrar of Societies, who was originally visualised as the 'Brahma, Vishnu and Siva' of the co-operative

organisation has to perform his regulatory functions dispassionately and effectively. He concludes that we should diagnose the reasons for the failure of societies and find remedies rather than condemn the movement as having failed.

Sugathan [1995]<sup>60</sup>, in his study complains about the negation of the deserving share of assistance to Kerala from central government for coir societies. He suggests for the development of coir sector, restructuring of various agencies – Coir Board, Kerala State Coir Corporation, COIRFED, Form Mattings-functioning under central and state governments which were formed for the development of the coir sector. He also suggests re-structuring of the activities and giving a democratic working character to Coir Board for getting a deserving share of assistance and justice to coir co-operatives of Kerala. He hops that the new Economic Policy will help the coir export sector and thereby help coir workers.

Sasi [1995]<sup>61</sup>, reveals that the number of coir workers in coir industry has been reduced to 50% with the passing of 50 years. According to him this is due to the increased exploitation of labourers and lack of proper attention by authorities in the coir sector. He adds that the majority of coir co-operatives are not functioning and the functioning ones are unable to pay Minimum Wages to the workers. He stresses the need for ensuring co-operation between the private sector and the co-operative sector for the healthy growth of the coir sector. The article demands extension of Government assistance to private coir sector too.

Subhash [95]<sup>62</sup>, narrates the history of coir in India, and reveals that coir spinning started in Kerala during 1854 when two Europeans, having the knowledge of spinning were brought by James Darragh. It flourished because Kerala's coir products were cheaper than European products in the foreign

markets. It also mentions the Levy System implemented in Coir Industry and the reasons for its failure.

Sudhakaran [1995]<sup>63</sup>, in his technical article, highlights the technique of mechanical extraction of fibre from green husk by ensuring quality. The article has conveyed the information with flow diagram.

Balachandran [1995]<sup>64</sup>, narrates the different types of welfare measures adopted by the government for coir workers in Kerala and explains in detail the working of the Coir Thozhilali Kshemanidhi Board and the fund distribution to coir workers. It states that the distributed Fund so far was above Rs. 3 crores to coir workers on several accounts. It also reveals that only 70,000 workers took membership in the Kshemanidhi, which means that Three lakhs workers are yet to become members of this Skhemanidhi.

Anathalavattom Anandan [1995]<sup>65</sup>, in an article relating to the renovation of coir yarn sector portrayed the pitiable condition prevailing in the area of wages, working conditions etc. of coir workers. He categorically states that the prevailing production system should be changed so as to suit the domestic and foreign market even though there is some displacement of labourers, and urged that some steps need to be taken to remove the doubts and anxiety existing in the minds of coir workers at the time of modernisation. He also advocated for motorised ratt as the need of the day.

Chacko and Parameshwaran Nair [1995]<sup>66</sup> have explained in an article, the steps taken by central and state governments for renovation of coir industry in Kerala and recommended various measures for the welfare of coir workers.

Ajith Kumar [1995]<sup>67</sup>, examines the marketing possibilities of coir and coir products in various countries. European Union accounts on an average more

than 65 percent of India's annual export of coir. In Western countries the demand for eco-friendly products are growing. In U.S.A., Sweden and Korea there exists vast potential for using coir as geo-textiles. Ajit Kumar also complains that creative efforts have not been made for convincing the global market about the unique properties of coir, like high resistance to rotting, ability to withstand high velocity waterflow etc. He suggests that specific promotional efforts need to be taken to popularise Indian coir products in International market.

Kumaraswami [1995]<sup>68</sup>, in his article, after giving a short account of the rate of production of various coir products and utilisation of fibre potential in India, stresses the need for diversification of coir products manufacture from traditional lines. He also highlights the importance and superiority of Polycoir as a substitute to wood products.

Joseph [1995]<sup>69</sup>, holds the view that India cannot make a dent into the foreign market as her share of coir fibre in the world market is negligible. According to him it is essential to reduce the period of retting and to get rid of manual beating of husk so as to avoid most uncongenial and unhealthy atmosphere. He analysed the market of various items of coir products like coir yarn, coir geo-textiles, coir pith etc. and made certain suggestions for its development in the international market with the liberalised economic policy of the Government. He also reveals that there are several countries where coir is still unknown to many people.

Veitch [1995]<sup>70</sup>, in a seminar presentation paper, expressed his view that the specific qualities of coir have not effectively been communicated to neither retail traders nor ultimate consumers even in the world wide changing approach towards eco-friendly product. He conveys a message to Coir Board that it should vigorously embark on a programme to devise a promotional strategy

which will ensure the message to get across loud and clear and not keep the secret to ourselves.

John [1995]<sup>71</sup>, holds the view that coir industry can expect a bright future even in the midst of the cry about the various crises in the sector. World-wide change of attitude towards eco-friendly natural fibres and progress achieved in the diversified use of coir products made him to express such a view.

Damoderan, *et al.* [1995]<sup>72</sup>, in their article about the technologies for diversification of coir products, explains new uses of coconut pith and short fibres. They highlight the low water absorption capability of Polycoir and light-weight brick. They claim that, Polycoir is a potential substitute for wood based products and thereby can significantly contribute to growth of brown fibre sector of the coir industry.

Fernandes [1998]<sup>73</sup> gives a brief account of the various projects implemented by the Coir Board for modernisation and development of coir industry. He admits that only one fourth of the total husk is converted into fibre and the uncertainty of raw material availability creates interruption in coir industry.

Cherian [1998]<sup>74</sup> explains the various uses of coconut pith in his article, and if it is utilised properly the atmosphere pollution of coir industry can also be reduced considerably. He also reveals that in Tamil Nadu a person developed 'coir pith brickete,' which can be used as fuel substitute to LPG or firewood.

Rajendran [1998]<sup>75</sup> in his article stresses the importance of the export of coir products and the necessity of getting direct financial assistance to coir vyavasaya societies from Coir Board for the revival of sick coir vyavasaya

co-operatives. He also suggests that for boosting domestic market for coir goods the rebate details must be published through the media.

Viswambharan [1998]<sup>76</sup>, in his brief account of history of co-operativisation claims that, under this scheme the exploitation and monopoly practice of private traders and manufactures could be curbed to some extent. Even then he admits that in coir co-operatives several drawbacks have surfaced including malpractice of money, resulting in several societies running at a loss and some remaining dormant which are to be eliminated. He is against blaming coir co-operatives alone for this state of affairs, who carries 2.5 lakh worker members with 50 years of working, in a country like India where one individual alone committed a robbery of 100 crores of rupees from Govt. treasury.

Bavakutty [1998]<sup>77</sup> expresses his anxiety in an article, on decreasing the labour days provided by Coir Co-operative sector year by year even with very poor wages. While concentrating his observation in Thrissur District, he feels that this grim situation was due to the lack of availability of raw husk. He demands the involvement of local body Government for ensuring the supply of husk to the Cvc's that belong to their respective areas.

Dev [1998]<sup>78</sup>, highlights that the mechanisation implemented in the spinning sector contributed only harm to this sector and it created a new crisis in the sector.

Vijayachandran [1998]<sup>79</sup>, in his study on coir societies reveals that the majority of the coir co-operatives in Kerala are not able to meet the working capital requirements for purchase of raw material, payment of wages and meeting other expenses. According to him, the delay in releasing sale proceeds from government agencies, lack of working capital assistance from Government agencies and banks are the major hurdles, which hindered the performance of

coir co-operatives in Kerala. He concludes with some suggestion for the improvement of the present situation, of which the important ones are, delegation of authority to the lower levels for avoiding delay in sanctioning assistance and to extend working capital assistance to coir co-operatives on the basis of their performance.

Ajith Kumar [1998]<sup>80</sup> and [2001]<sup>81</sup> Sivaramakrishnan [1999]<sup>82</sup>, Ramanatha and Girish [2000]<sup>83</sup>, give an account of the unique quality of coir geo-textile in soil erosion control and stabilisation of existing slopes and cuttings in highways etc. They highlighted the properties of coir geo-textiles that include totally biodegradable, 100% natural, water absorbent, act as a wick in the soil mantle and five to ten years longevity. The high tensile strength of coir fibre protects steep surfaces from heavy flows and debris movement and restoration of terrestrial and aquatic riparian habit. They also find that high lignin content of coir makes it more stiff and durable than other natural fibres. Because of its quality, the green movement, increasing environment alertness, and growing preferences for natural products provide substantial opportunity for coir geo-textiles mainly in the industrialised countries of Western Europe, North America and Japan. They conclude that the versatility of coir and its products and end use applications have no bounds.

Kutty [1999]<sup>84</sup> in his article, stresses the vital importance of improving the marketing of coir and coir products in India and elsewhere for survival and growth of coir industry. He warns that severe competition facing from synthetic coir products and natural substitute, Machine spun coir yarn and mats from Sri Lanka, and European Countries may create problems to the industry. Therefore publicity about the unsurpassable quality of Indian coir products is to be accelerated.

Abdur Rahman [1999]<sup>85</sup>, Prabhu [2000]<sup>86</sup>, Ajith Kumar [2001]<sup>87</sup>, in their respective articles, explain the reasons for decreased demand of coir yarn in U.S.A., which was the major market for coir yarn in the globe. The reduction in the area under Hop cultivation, as a consequence of the use of high yielding hybrid varieties is one of the reasons for the reduced offtake of coir yarn. Another reason is lack of competition in Indian coir industry, and its continued use the traditional method of production which could not withstand the competition from Sri Lanka in the U.S.A. market and he broke the Indian monopoly in the matter of supply of coir yarn for Hop cultivation. The reasons for this situation were the emotional policies against modernisation and mechanisation of coir industry in India. For retaining the interest of consumers in coir products it is essential to ensure that items of specified standards of quality are produced and marketed. Earnest efforts on the part of the coir units to institute in-plant quality control [IPQC] on their own is also suggested. The articles conclude with the hope that, the lost market can be regained with the adoption of modernisation in all sections of the industry in the changed scenario when good quality yarn is available for export.

Tommy [1999]<sup>88</sup> and Bagchi [2001]<sup>89</sup> explain in detail the varied advantages of coirply and coir composites. According to them, considering the shortage of timber and wood products, coirply and coir composites will be an effective eco-friendly substitute. A small unit which produces 40 cubic metres of wood substitute can save 20 acres of deforestation every year. The articles highlights the advantages of coir composites such as 100 per cent wood free, biodegradable, agro-base materials, flame retardant, boiling water resistant and 10-15 per cent cheaper than corresponding grade material.

NCAER [1999]<sup>90</sup> study focussed on the impact of MEP and purchase price [Enforcement] scheme on export, employment and protection of wages. The study analysed the perceptions of the workers in the coir industry on various issues affecting the growth of export of coir products, employment and protection of wages. The survey result of the study revealed that MEP and PPES have a positive impact on the protection of their minimum wages and 100 per cent of them said that it was not logical to abolish MEP and PPES. Ten per cent of them opined that this system was helpful to ensure the quality of export products. The feed back from exporters revealed that MEP should continue indefinitely.

Chandrasenan [2000]<sup>91</sup>, in an article requested to the Central Government to retain Floor Price for coir and coir products in order to protect the interests of coconut producers, lakhs of poor coir workers and coir producers. This is not against WTO agreement as domestic market price is less than international market price. He puts forward several arguments for maintaining or raising M.E.P as it affects adversely lakhs of coir workers and small producers, most of whom live below the poverty line.

Fus- Lu- Dheen Huk [2000]<sup>92</sup> in his article opined the necessity of bringing all Directorates of traditional industries like coir, handloom etc under one Directorate for framing a common policy to help these industries effectively.

## **2.4 Unpublished Research Work**

Thomas Issac [1984]<sup>93</sup>, in his work gives a picture of labour movement in coir industrial scene of Kerala from 1859 to 1980. His study throws light on the activities of trade union movements among coir workers and explains how it helped to uplift the coir workers and to reduce their exploitation by middlemen.

The work also helps to get an insight into the labour movement in coir industry and how it was linked with the freedom struggle of India. He concluded his work stating that the labour unions were pledged to fight against any move to mechanise the industry without guaranteeing alternative jobs for the displaced workers. The agitation against the machine assumed a new momentum in the mid-seventies. But the study does not focus on the role of formal institutional arrangements like co-operatives for the development of coir workers and coir industry in the State.

Pyralal [1995]<sup>94</sup>, in the study on traditional industries in Kerala, mentions that, in the case of coir co-operatives, despite the large mobilization of workers in support of co-operatives, the performance shows a deteriorating trend over time in terms of employment generation as well as financial viability. The demand for coir products has declined over time and the raw material scarcity has become acute. The co-operatives which paid minimum wages were handicapped in competing with private sector in the input market. In order to make available raw husk at economical price to coir co-operatives government attempted to intervene in the husk market with various control measures. However this step could only worsen the raw material crisis. The study also opines that the prolonged stalemate has undermined the morale of the work-force and contributed to the bureaucratization of the co-operative structure.

Philip [1995]<sup>95</sup>, in his study on the role of co-operatives in tribal produce marketing gives a clear cut view of the measures undertaken by co-operatives in solving the marketing problems of the most down-trodden community of the state. The study reveals that the tribal participation in co-operatives is very poor and societies have also failed to produce at least 70 percent of the market value of the produce of tribals. However, the study reveals that only because of the

existence of co-operatives, the tribals are able to get a floor price for their products.

Neena [1999]<sup>96</sup>, in her dissertation examines the working conditions of women workers in the unorganised sector. She, along with portraying the geographical peculiarity of coir industrial area, types of coir yarn, and the hazardous nature of coir work, also examines the social problems connected with coir work and the suffering of women coir workers in the state. The study found out that, coir workers enjoy very low status in the society and the majority of them belong to a particular community and the economic necessity compelled young women coir spinners to engage in this work and work for 8 – 10 hours per day. It also adds that in the unorganised sector women workers are preyed upon by contractors and middlemen who exploit their ignorance.

Dhanya [1999]<sup>97</sup>, in her report on the problems of women workers in coir industry, focusses on the life style and social conditions of women workers in coir industry. It analyses the socio-economic profile, health problems, and the nature and status of women coir workers. The study reveals the demographic picture of the workers that they were illiterate in most cases. Moreover hard and irregular employment are common features coir industry. The study comes to a conclusion that the improvement of the conditions of coir workers should be the main considerations while thinking about improvement in coir sector and also adds that co-operative sector in coir industry should be revitalised with sufficient funds so as to benefit coir workers too.

## 2.5 Seminar Presentations

Suseela [1988]<sup>98</sup> in her seminar presentation, related to the problems and solutions of coir industry, mentions that mechanisation should be applied in sectors where women are not willing to work. In order to reduce the strain of women in running up and down during spinning with conventional ratt, treadle ratt can be implemented. Similarly husk beating machines shall be erected where there is shortage of labour for hand beating of husk and stressed the need for developing domestic market for coir goods. She also adds that in the marketing side a wide net work should be developed in order to market the products of coir primaries. The paper concludes with the forwarding of several recommendations for developing the coir societies.

Thomas Issac [1988]<sup>99</sup>, in his paper presentation in a seminar, categorically states that mechanisation in coir industry is not the sole way for increasing export. On the other hand coir products produced from traditional methods will be more in demand if they are popularised. At the same time a blind opposition against mechanisation of any type in the sector is also not an appreciable stand. He states that only one third of the husk potential is used in coir industry and there should be a husk collection machinery to collect the husk to make it available for the coir industry. He also mentions that workers in coir industry are over crowded and productivity of coir co-operatives is lower than that of private sector and criticises its fund utilisation.

Sarma [1998]<sup>100</sup> in his reported speech on the occasion of 8<sup>th</sup> State Science Congress in Kerala, opines that coir geo-textiles will not create environmental problems like synthetic materials. He claims that new attractive items can be manufactured by mixing coir fibre with wool, polyester etc.

Christy [2000]<sup>101</sup>, in his paper presentation relating to coir industry in India, categorically admits that traditional hand made coir products continue to be marketed at a premium price and therefore this section cannot be ignored and it requires development for that particular niche in the market. He expressed the view that export market for coir and coir products has not been fully tapped and promotional efforts are grossly inadequate and calls the managers to gear up their efforts in this area to help the industry to become globally competitive.

Venkatappa Rao, *et al.* [2001]<sup>102</sup>, Balan [2001]<sup>103</sup>, Tara [2001]<sup>104</sup>, Mohanan [2001]<sup>105</sup>, Anil Kumar, *et al.* [2001]<sup>106</sup>, in their respective paper presentations in the international seminar on coir, explain the use and the ways of applications of coir geo-textiles for soil conservation through erosion control. It works as a catalyst and holds soil till the vegetation takes over. Cost advantage of coir geo-textiles pari pasu with other conventional erosion control measures is also highlighted in their papers.

Tommy [2001]<sup>107</sup>, Gopakumar [2001]<sup>108</sup>, Kalra *et al.* [2001]<sup>109</sup>, Sharma [2001]<sup>110</sup>, explain through their presentation the superior quality of coir based products and the need of developing it for substituting timber. Coir, being a natural, environment friendly product should find many uses in building and construction industry. With the production of varied coir based products like coir-cement boards, coir-cement panels, coir-cement blocks, coir-cement tiles etc., it is claimed that in building construction tremendous exploitation of forest resources and destruction of wild life can be avoided. Coir composite board is also having packaging applications.

Lee [2001]<sup>111</sup>, in his paper holds the view that world needs of coconut fibre and coconut product have increased rapidly during the last 10-15 years and many developed countries have developed environmental industries in using

natural materials particularly after 1992 Brazil “RIU” declaration. Korea imported 50,00,000 sq. metres of coir geotextiles for the construction of roads. But that formed only 40 per cent of total market needs. Japan also has the same conditions like Korea. According to him Korea and Japan have the most rapid by increasing demands for coconut related natural material products in the world.

Mukharjee [2001]<sup>112</sup>, explains the varied uses of coir pith. Though coir pith is considered a waste, it is claimed that it is not at all a waste, it can be converted into wealth and can be utilised for various purposes because of its specific properties like high water holding capacity, bulk density, aeration, hydraulic conductivity, unique structure, moisture holding capacity and infiltration rate etc. It can also be used as manure, saline soil conditioner, fuel briquettes, particle boards etc.

Goel [2001]<sup>113</sup>, in his paper stressed the necessity of strengthening the domestic market for coir goods. She also explained the reasons why consumers are not attracted towards coir products. According to him the masses in general are not aware of the various uses and utility of coir and products made of coir. The Government owned undertakings have failed to generate that awareness and thereby attract consumers. Their showrooms are not well maintained and wear a shabby outlook. They do not have sufficient varieties and designs that are presentable. Their style of packing is crude, conventional and remote. He also added that, the participation of private sector in promoting sales of coir goods is a must and for this a suitable policy be chalked out.

Shyam [2001]<sup>114</sup>, points out the tiny role of India in the world market. According to him in the total export earnings [2000-2001] of India coir and coir goods constitutes only 0.15 per cent and coir industry does not occupy a place it deserves in India’s export basket. He emphasises the use of electronic media for

trade promotion particularly in the context of globalisation and liberalisation. The adequate flow of trade information, faster communication and e-commerce would be the key to success of any marketing strategy.

Gandhi [2001]<sup>115</sup>, draw a brief picture of the international business scenario of coir industry in his presentation. According to him global GDP may fall and settle at around 2.5 per cent, which is considered an indication of stagnation leading to the recessionary trends. The scenario has not been encouraging in three major economic regions. With the vast and strong domestic market India will ensure the required growth and insulate it from ill effects of developments in the rest of the world. He hopes that she can achieve export earning from coir related products with a target of Rs. 1000 crores in the next six years if required measures are taken. These varied measures include strengthening of marketing effort by ensuring the involvement of private NGO's for encouraging imports from developing countries, working for preservation of environment by discarding harmful synthetic production to replace them where natural substitutes are available and involve reputed chain stores to accept and promote such products more as a social obligation.

The above review of literature includes various studies, books and articles on different aspects of coir industry and coir workers in India and Kerala, but very few touches coir co-operative sector of Kerala, particularly coir vyavasaya societies. The present study would fill this gap to a certain extent.

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### CHAPTER III

## COIR INDUSTRY IN INDIA WITH SPECIAL REFERENCE TO KERALA

In the last chapter literature that is relevant to the present study was reviewed. In the following paragraphs it is proposed to examine the coconut economy, the tradition of coir industry, various stages of coir production, raw material potential and its utilisation in the industry, production, export and marketing channels of coir and coir products.

For coir industry fibrous husk covering the inner shell of the coconut is the raw material. Fibre extracted from coconut husk is known as coir or cocofibre.. The main coconut producing regions in the world are located in the tropics, particularly in South and South – East Asia and in East Africa. In most of the coconut producing countries, coconuts are mainly used for copra, and the husk is utilised either as manure, or burned as fuel or discarded. But in a few countries like India and Sri Lanka coir fibre is either exported or used for the production of yarn and other coir products like mat, mattings, carpet, geotextiles etc.<sup>1</sup> Development of coir industry has all along been in areas where there is concentration of coconut cultivation and availability of coconut husk. For historical reasons coir industry has taken deep roots in the state of Kerala, where coconut production is the highest in India. With the expansion of coconut cultivation, coir industry is also coming up in Tamil Nadu, Karnataka, Andhra Pradesh, Orissa, West Bengal and Assam.

### 3.1 Coconut Economy of India

As coconut is the basic source of basic raw material for coir industry, it is desirable to examine the scenario with respect to area, production and productivity of coconut in the world as well as in India.

#### 3.1.1 Global Scenario

Coconut is grown in 92 countries of the world in an area of around 1.9 million hectares with an annual production of around 54.18 billion nuts<sup>2</sup>. The major coconut producing countries are India, Indonesia, Philippines and Sri Lanka, which together contribute 78 per cent of the world production. India's share in the global coconut production comes to 25.57 per cent. The area of coconut cultivation in India is 15.92 per cent of the world total of 1.9 million hectare. In productivity India is in the fourth position but that is higher than the world average productivity.

#### **Area, Production and Productivity of coconut in major coconut growing countries**

The total area, production and productivity of coconut in the world are presented in Table 3.1.

Table 3.1 shows that Indonesia is the largest producer of coconut with 13,346 million nuts closely followed by India with 13,088 million nuts. While India accounts for 25.57 per cent of the world production, she has only 15.92 per cent share in the area. Indonesia leads in area with 3.68 million hectares [30.83%] under coconut, while her share in production is 26.08 per cent. Philippines ranks second in area[26.14%] and third in production with

10,905million nuts [21.31%]. Among the four leading coconut producing countries, India has the highest productivity with 6899 nuts/ha. followed by Sri Lanka[5706 nuts/ha]. Among the coconut growing countries in the world, Ivory Coast has the highest productivity [8364 nuts/ha.], followed by Myanmar[8,176 nuts/pa] and Ghana [7500 nuts/ha].

**Table 3.1. Area, Production and Productivity of coconut in the major coconut growing countries [1998]**

Sl. No.	Country	Area		Production		Productivity [Nuts/ha]
		['000] ha.	Share [%]	[Million nuts]	Share [%]	
1	Indonesia	3675	30.83	13346.00	26.08	3632
2	India	1897	15.92	13088.00	25.57	6899
3	Phippines	3116	26.14	10905.00	21.31	3500
4	Sri Lanka	442	3.71	2522.00	4.93	5706
5	Thailand	376	3.15	1135.00	2.22	3019
6	Vietnam	187	1.57	1115.00	2.18	5963
7	Papua New Guinea	260	2.18	858.00	1.68	3300
8	Brazil	237	1.99	811.68	1.59	3425
9	Mozambique	105	0.88	562.50	1.10	5357
10	Tanzania	310	2.60	425.00	0.83	1371
11	Ghana	40	0.34	300.00	0.59	7500
12	Ivory Coast	33	0.28	276.00	0.54	8364
13	Myanmar	32	0.27	261.63	0.51	8176
14	Sominican Republic	37	0.31	200.30	0.39	5413
15	Others	1172	0.31	5374.92	10.50	4586
16	Total	11919	9.83	51181.03	100.00	4294

Source: APCC Stastical Year Book, 1998

### The Growth in area and Production of coconut in the major coconut growing countries

The growth in area and production of coconut in the major coconut growing countries is given in Table 3.2.

**Table 3.2. Area and production under coconut in different coconut growing countries of the world [1990-98]**

Sl. No.	Country	Area[000 ha]			Production[million nuts]		
		1990	1994	1998	1990	1994	1998
1	India	1472	1635 [11.00]	1897 [16.00]	9359	11975 [27.95]	13088 [9.29]
2	Indonesia	3394	3681 [8.46]	3675 [-0.16]	11291	13245 [17.31]	13346 [0.76]
3	Malaysia	323	305 [-5.57]	230 [-24.59]	946	787 [-16.81]	600 [-23.76]
4	Philippines	3112	3083 [-0.93]	3116 [1.07]	11940	11207 [-6.14]	10905 [-2.69]
5	Sri Lanka	419	419 [0.00]	442 [5.49]	2532	2622 [3.55]	2522 [-3.81]
6	Thailand	393	397 [1.02]	376 [-5.29]	1140	1849 [62.19]	1135 [-38.16]

Source: APPCC statistical year book 1998.

Note: Figures in brackets show the growth rate

A detailed picture regarding the area and production of coconut in the major coconut producing countries are given as Appendix III.

The data presented in Tables 3.2 and Appendix III reveal that the growth in the global area under coconut during the decade starting from 1990 is five per cent, ie. From 11162 thousand hectares in 1990 to 11919 thousand hectares in 1998. However, production has registered an increase [8%] from 47328 million nuts in 1990 to 51181 in 1998. India's share in the area during this period [1990] was 1472 thousand hectares, which has grown up to 1897 thousand hectares in 1998, registering a growth of 29 per cent over a period of 12 years. Whereas the production in the corresponding years registered an increase of 40 per cent. Sources close to Coconut Development Board opine that, although India stands in a premier position with respect to area and production of coconut she could not compete in the international market due to the highest cost of production.<sup>3</sup>

### 3.1.2 Indian Scenario

India stands second with respect to production of coconut among the coconut producing countries of the world. [APCC statistical year book 1999] The crop provides livelihood to around 10 million people of the country who are engaged to cultivation, processing, marketing and other related activities. It contributes around Rs. 700 crores to the country's GDP. The crop earns valuable foreign exchange to the tune of about Rs. 313 crores by way of export, mainly coir and coir products<sup>4</sup>.

Small and marginal farmers dominate the coconut cultivation in India. It is estimated that there are around 35 to 45 lakhs of coconut farmers in Kerala alone.<sup>5</sup> The average holdings of more than 90 per cent of the coconut farmers are within five acres. They are unorganised, isolated and lack collective bargaining. In fact there are no organised wholesale markets for raw coconut in

the country. The end products such as copra and coconut oil determine the price of coconut. There is no say for the coconut farmers in determining the price of their primary produce, viz., coconut. It is the middlemen who determine the price of raw coconuts. In most cases, the farmers are bonded with the middlemen who have got standing arrangements with the farmers for the harvesting and disposal of the nuts.

Coconut is grown in most of the states and Union Territories in India. However, the major share of coconut production is contributed by the four southern states Viz., Kerala, Karnataka, Tamil Nadu and Andhra Pradesh.

### **Growth in area, production and productivity of coconut in India [1950-51 to 1998-99]**

The position of coconut in India during the last fifty years improved substantially with respect to area, production and productivity. This is especially true since the last two decades when the Coconut Development Board was set up in the year 1981. It was instrumental for such a tremendous progress of the coconut cultivation in the country. Table 3.3 presents comparative figures of coconut production during 1950-51 and 1980-81, when the Board came in to existence and the present situation.

**Table 3.3. Area, production and productivity of coconut in India[1950-51 to 1998-99]**

Particulars	1950-51	1980-81	1998-99	Growth over the period[%]
Area [Lakh Ha.]	6.27	10.83	19.08	304
Production [Million Nuts]	3282	5942	14925	455
Productivity [Nuts per Ha.]	5238	5485	7821	149

Source: Annual Reports of Coconut Development Board

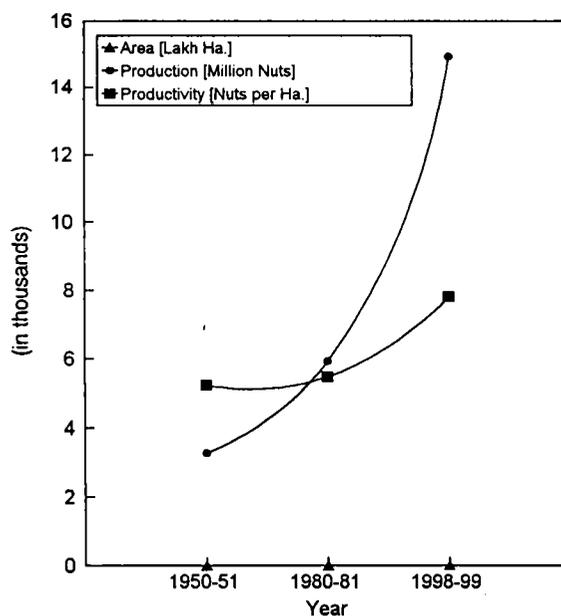


Figure 3.1. Area, production and productivity of coconut in India[1950-51 to 1998-99]

Tables 3.3 and Figure 3.1 give a clear view about area, production and productivity of coconut during the period from 1950-51 to 1998-99. In 1950-51, area under coconut was 6.27 lakh hectares only. The area increased to 10.83 lakh hectares in 1980-81 and in 1998-99, the area further increased to 19.08 lakh hectares. This was largely due to the efforts of the Board in giving the crop a national image. The efforts of the Board is also reflected in the case of production and productivity. Production of coconut increased from 3282 million nuts in 1950-51 to 14925 million nuts in 1998-99. Productivity also showed an increasing tendency, because of the measures taken by the Coconut Development Board.

#### **State-wise details of area, production, productivity and growth of coconut in India [1980-81 to 1998-99]**

Growth in area, production and productivity of coconut in various coconut growing states in India are given in Table 3.4.

Table 3.4. Area, production and productivity of coconut in India [1980-81 – 1998-99]

State	Parameters	1980-81	1985-86	1990-91	1995-96	1998-99
Kerala	Area [000 ha]	666.2	704.7 [5.88]	864.1 [22.62]	980.0 [13.41]	1078.2 [10.02]
	Production [Mill. Nut]	3036.4	3377 [11.22]	4527.3 [34.00]	5908 [30.50]	6672 [12.93]
	Productivity [nuts/ha]	4557.8	7492.1 [5.14]	5239.3 [9.33]	6028.6 [15.06]	6188 [2.64]
Karnataka	Area [000 ha]	171.5	205.6 [19.88]	232.9 [13.28]	278.8 [19.71]	287.8 [3.22]
	Production [Mil. Nut]	890.0	1062.0 [19.33]	1201.6 [13.15]	1450.9 [20.75]	1495.1 [3.05]
	Productivity [nuts/ha]	5189.5	5165.4 [-0.46]	5159.3 [-0.12]	5204.1 [0.87]	5195 [-.17]
Tamil Nadu	Area [000 ha]	116.0	149.6 [28.97]	226.4 [51.34]	322.5 [42.45]	266.5 [-17.37]
	Production [[Mil. Nut]	1354.4	1494.5 [10.34]	2358.3 [57.8]	3257.6 [38.13]	3096.7 [-4.94]
	Productivity [nuts/ha]	11675.9	9990.0 [-14.44]	10416.5 [4.27]	10101.1 [-3.03]	11620 [15.03]
Andhra Pradesh	Area [000 ha]	42.4	47.4 [11.79]	61.2 [29.11]	90.00 [47.06]	98.2 [9.11]
	Production [Mil. Nut]	175.3	195.8 [11.69]	730.6 [273.14]	1231.4 [68.55]	1922.1 [56.09]
	Productivity [nuts/ha]	4134.4	4130.8 [-0.09]	11937.9 [189.0]	13682.2 [14.61]	19573 [43.05]
Others	Area [mil. Nut]	87.2	118.3 [35.67]	129.3 [9.3]	159.6 [23.43]	322.6 [102.13]
	Production [mil. Nut]	485.9	641.0 [31.92]	882.4 [37.66]	1104.4 [25.16]	1965.7 [78.]
	Productivity [nuts/ha]	5572.2	5418.4 [-2.76]	6824.4 [25.95]	6919.8 [1.40]	6093.3 [-11.94]
All India	Area [000 ha]	1083.3	1225.6 [13.14]	1513.9 [23.52]	1830.9 [20.94]	1908.2 [4.22]
	Production [mil. Nut]	5942.0	6770.3 [13.94]	9700.2 [43.28]	12952.3 [33.53]	14924.8 [15.22]
	Productivity [nuts/ha]	5485.0	5524.0 [0.71]	6407.0 [15.98]	7074.0 [10.41]	7821 [10.56]

Source: Records of Coconut Development Board

Note: Figures in brackets show the growth rate.

Data analysis of the Indian coconut scenario reveals the following:

In Kerala, the area under coconut was 66.2 thousand hectares in 1981. It almost doubled in the year 1998-99. The production figures also account for the same trend. Data in respect of Karnataka, Tamil Nadu and Andhra Pradesh reveal that the growth was faster. The all India figure for the area under coconut during 1980-81 was 1083.3 thousand hectares. This almost doubled in the year 1998-99. The growth in production reveals that, production in 1980-81 was 5942 million nuts, which registered a three-fold increase in the year 1998-99.

Out of the total area of 1.91 million hectares in the country, Kerala stands first with 1.08 million hectares, which accounts 56.5 per cent of the total area. Karnataka stands second with 0.29 million hectares, Tamil Nadu, the third with 0.27 million hectares and Andhra Pradesh, the fourth with 0.098 million hectares. In terms of percentage, Kerala contributes 56.5, Karnataka 15, Tamil Nadu 14 and Andhra Pradesh 5.15. The accumulated figure for the four states comes to 91 per cent of the total area under coconut in the country. The remaining is the contribution of other states and the Union Territories.[See Appendix IV]

Out of the total production of 14924.8 million nuts in the country, Kerala contributes 6672 million nuts, which comes to 44.7 per cent, Tamil Nadu contributes 20.75 per cent, Andhra Pradesh 12.88 per cent and Karnataka, 10.02 per cent. Contribution of other states/ Union Territories towards area is 11.65 per cent only. However, with respect to productivity per hectare Kerala ranks only sixth<sup>6</sup> while Andhra Pradesh and Maharashtra hold 1st and 11<sup>nd</sup> position respectively.

The details regarding area, production and productivity of coconut in the major coconut growing states in India are given as Appendix V.

Graphical representation of Growth in area, production and productivity of coconut in major coconut growing states India is depicted in Figure 3.2, 3.3 and 3.4.

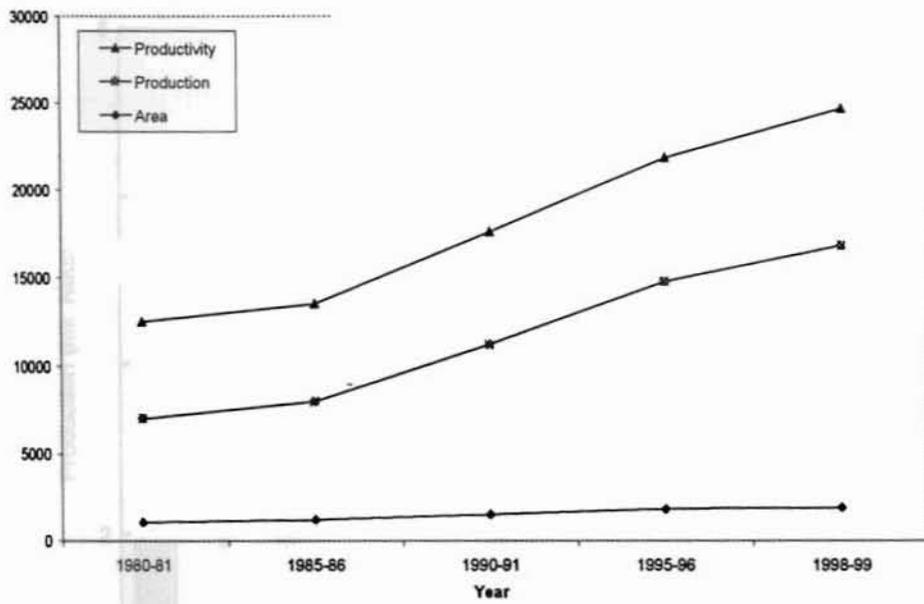


Figure 3.2

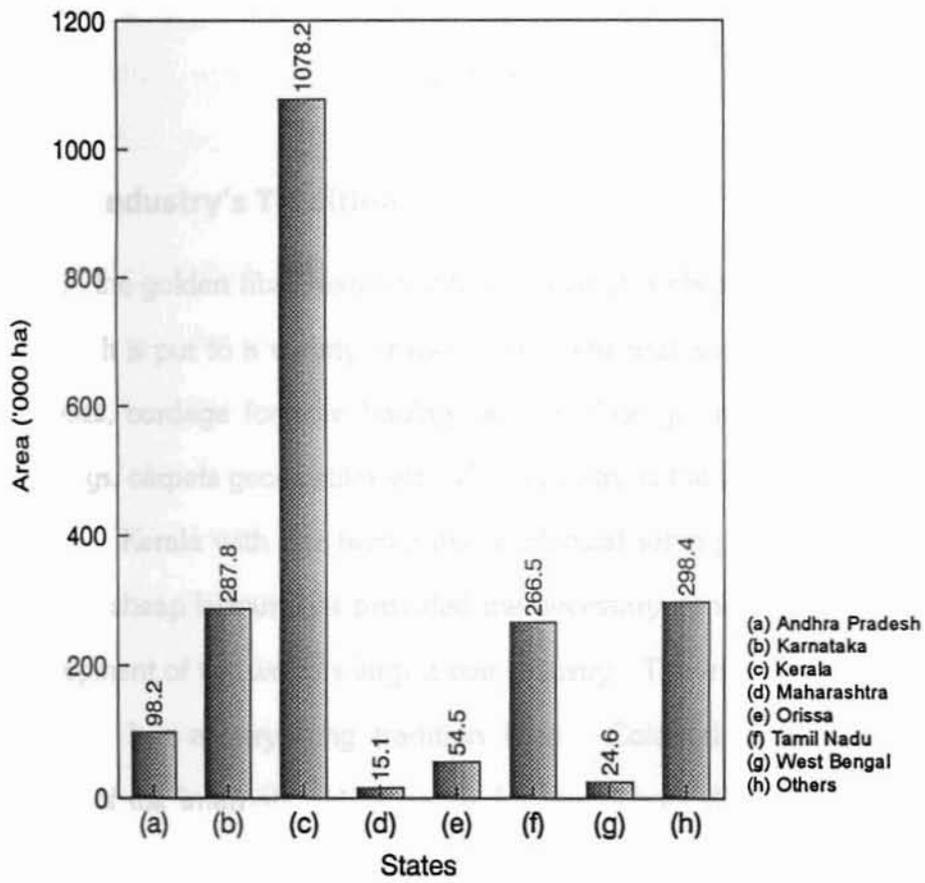


Figure 3.3

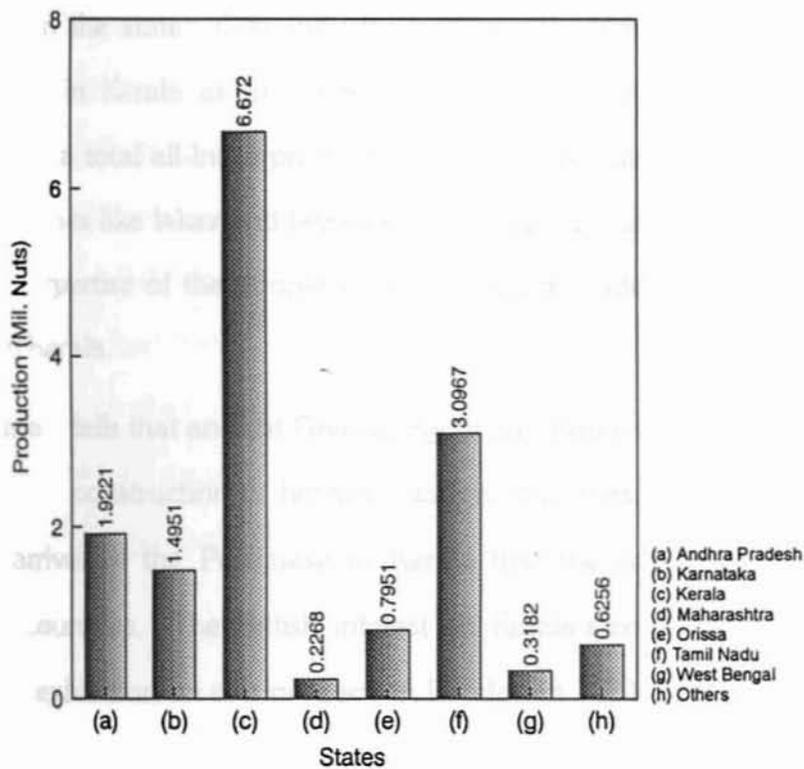


Figure 3.4

### 3.2 Coir Industry's Tradition

Coir, the golden fibre, extracted from coconut is classified as the industrial 'hard fibre'. It is put to a variety of uses, both industrial and agricultural, like for lashing ropes, cordage for safe haulage and anchorage, manufacture of mats, mattings, rugs, carpets geo-textiles etc. Coir industry is the largest industry in the Kerala coast. Kerala with her favourable ecological setting, abundant supply of coconut, and cheap labour, has provided the necessary conditions for the growth and development of the world's largest coir industry. The extraction of fibre from coconut husk has a very long tradition here. Colonial integration and the expressions of the international demands for hard fibres stimulated the external trading in coir products and, thereby fostered the emergence of coir industry in Kerala. The industry has evolved as the second most important source of labour

absorption in the state.<sup>7</sup> Coir industry begins with dehusking, which is largely concentrated in Kerala as this state produces 6672 millions nuts of coconuts [45%] out of a total all-India production of 14924.8 million nuts<sup>8</sup>. In addition to this, the facilities like lakes and lagoons for retting the husk and the availability of traditional expertise of the people in coir work also added to the growth of coir industry in Kerala.

History tells that ancient Greece, Egypt and Rome used coir ropes made in Kerala for the construction of houses, citadels, ship mast and mansions. It was with the arrival of the Portuguese in Kerala that the coir trade spread to the European countries. The British interest on Kerala's coir products made them conduct an exhibition on coir products in London in 1851.<sup>9</sup>

The Coir Industry of the country comprised of fibre making, yarn making, mats and mattings, rubber backed mats, synthetic backed mats rubberised beds and various other products. The first coir factory in the country was started in 1854 by an Irish man named James Darragh, at Kulachal, Alappuzha in Kerala. In 1859 Darragh shifted his works to central Alappuzha, where along with his brother – in – law, Smail, organised a large coir factory for the manufacture of mats and mattings named James Darragh, Smail & Co. Ltd. with its offices in London and New York. The success of Darragh's company attracted many enterprising businessmen to Kerala to set up factories in the State for production and export of coir products. In course of time demand for coir and coir products increased and several coir factories in and around Alappuzha expanded and the number of units increased to 12607. It could also claim a lions share in the total export from India during the period.

During the post war period labour unions started putting forward several demands on behalf of labour and consequently factory owners felt that operation

of large establishments would be uneconomic. This led to a process of retrenchment. In the course of a few years after independence the foreigners left the coir scene and most of the large factories were closed down or some of them were taken over by the worker's unions themselves and re-organised them on co-operative basis. But lack of competence of workers to manage the units on commercial basis had further affected the growth of coir sector in the country. Coir exports were dwindling, the industry was languishing, large number of workers had lost their employment and crisis continued to deepen in the industry which led to prolonged agitations by the coir workers<sup>10</sup>.

### **3.3 Various Stages of Coir Production**

From the organisational point of view, the coir industry could broadly be divided into four sectors. The first sector is connected with retting of husks and production of fibre. The second sector is the hand spinning sector which comprises of about 80000 hand spinning households. Spindle Spinning of coir yarn forms the third sector. The total number of workers in beating of retted husk and spinning of coir yarn is estimated to be around two third of the total workers in the coir industry. The fourth sector is concerned with the manufacture of coir mats and mattings. Majority of workers employed in the fibre extraction and spinning sector are women. Child labour also appears in these sectors.<sup>11</sup> Spinning is a cottage industry spread over a wide area along the backwaters of Kerala. But manufacturing is an organised industry concentrated in certain localities mainly Alappuzha Project area. The location of these sectors of industry seems purely in accordance with the Weberian theory.<sup>12</sup> The basic raw material of coir industry is the coconut husk which has low value. There are various processes involved from collection of raw husk to manufacturing of yarn. The

fibrous raw husk is extracted from nuts through the process called 'dehusking', a manual work. The coir fibre is five to ten inches in length. There are two major types of coir fibres. They are White and Brown fibre.

### 3.3.1 White fibre

White Fibre is extracted from retted husk. Retting may be natural or chemical. In natural retting the husks are soaked in, preferably saline water for a certain period [average 8 to 10 months] until the fibre becomes loose and soft. Soaking of husks may be in three ways. One is immersing the husks in the muddy pits dug near lagoons in shallow water or by the side of backwaters where water flows in and out, with the rise and fall of the tide. An average pit contains about 1000 husks. The second method of soaking is, collecting the husks in coir nets and immersing them in water. The unit adopted for soaking in coir nets is usually 10000 husks at a time. The other way of soaking which is practised in some areas is, putting the husks in enclosures erected in shallow backwaters with coconut leaves and petioles. This method is known as "Valachukettu mude". After the husks are filled in the soaking pits, nets or enclosures, they are covered with coconut leaves and mud and weighed down to prevent floatation when immersed in water.

During the retting process, the husks become soft and a number of substances like carbohydrates, glucosides, tanins and nitrogen compounds are brought in solution. The time required for retting is influenced by various factors such as the stage of maturity of coconuts, the weather and the nature of water. Husks from immature nuts rets in short period. The process is quicker during the summer season because heat is necessary for fermentation. But the retting period is longer if the retting is done in saline water and shorter in fresh water. However,

retting in saline water is considered to be the best for natural retting. The salts in the saline water prevent over-fermentation without discolouring the fibre and the resultant fibre is strong and better coloured as the pith and other impurities are continuously removed by the free flow of water due to tidal action. The retting itself is not complete in fresh water and the fibre retains a certain amount of pith. For ensuring the quality of fibre, soaking is usually done in shallow waters as the heating effects of the sun on the water help to produce a better fibre. In shallow backwaters, it may sometimes happen that the husks soaked in pits get exposed during the low tide, which results in production of inferior quality fibre. This problem can be avoided if soaking is done in coir nets which helps to deep sink of husks in backwaters and thereby subject to better tidal action than they are placed in pits.<sup>13</sup> It was noticed that soaking crushed husks, reduces the retting period by six months. The crushing can be done by simple crushing rollers, similar to sugar cane crushers. White fibre is generally the longest and the finest and they are suitable for spinning yarn and products of superior quality. Mechanical and chemical retting are adopted in areas where facilities for natural retting do not exist and for speedy retting. In mechanical method either dry husks or green husk are soaked in cement Tanks having a provision for water flow in and out from tank for a period of one to three weeks. This ensures a better circulation of water, which will come into contact with all the husks and remove the acids and gums deposited in them. It will be necessary to re-arrange the husks from the lower part of the tank to the upper part and vice versa from time to time. Medium to major coir units, practice this method. In some units, the husks are first crushed through iron rollers, a machine called husk crusher. Then the husks are thrown into a retting tank where they undergo fermentation for a minimum period of 72 hours. The fibre is extracted manually or mechanically.

However, these processes do not yield fibre of spinnable quality as in the case of natural retting, but yield only bristle and mattress fibres.<sup>14</sup>

In Chemical Retting, various methods are developed. The advantages claimed are of higher yield of uniform quality fibre and considerable saving of time. But the financial advantages of chemical retting compared to the natural process has not been fully investigated for commercial exploitation. In one method the green or dry husks are partially crushed and treated under steam pressure of 5.6 to 7.0 Kg/cm<sup>2</sup> with sodium sulphate or sodium carbonate containing a trace of aluminium sulphate for one to two hours. During this process, the pith is loosened from the fibre and removed by washing. The fibre obtained is of good quality but bit darker than that of natural retting.<sup>15</sup>

Another method of chemical retting is by means of technology developed by the Coir Board for reducing the retting period using a bacterial cocktail Viz. 'Coirret'. It is claimed that, it helps besides in the period of retting and assists to improve the quality of unretted brown fibre.<sup>16</sup> Under this method the bundles of brown fibre produced from combing mills from Tamil Nadu or elsewhere are put into water in Cement Tank and allowed to be there for 72 hours with chemical Coirret. After the water is drained out the resultant fibre is claimed to have almost the same quality of natural fibre.<sup>17</sup>

### **Extraction of White Fibre**

Extraction of White Fibre involves the following processes:-

1. Taking out of retted husk

After natural retting, the husks are taken out of water and washed to get rid of mud and dirt.

## 2. Peeling

After natural retting the outer skin is then peeled off before beating.

## 3. Husk Beating

After peeling, the husks are placed on wooden blocks and beaten with a wooden mallet or iron rods till the fibres are separated from rotten pith and are then manually sifted. It is unhygienic hard work, usually done by women. One person can beat 100 husk per day. While beating, the whole body will be covered with pith and smells foul. If the decomposed husks are not exposed to the sun for long, the extraction becomes difficult and the colour of the fibre darkens. The fibre so extracted is cleaned and then spread in shade for drying and occasionally beaten and tolled up with poles to remove the remnants of pith and impurities still attached to the fibre.

## 4. Willowing

For making superior type of fibre, especially for spinning, the fibre so obtained is combed in a specially designed combing or willowing machine. The willowing machine consists of a number of knives with saw-like teeth mounted on a wooden shaft set spirally and it is rotated by hand or motor.

### **Machanised Husk Beating**

The fibre from the retted husk is also extracted mechanically with husk beating machine. The retted husk are passed between rollers and then the crushed husks are torn on rolling cylanders with nails on the cylinder casting. The raw coir fibre, thus obtained, is further cleaned by means of blowing fans. The machine helps to soften and remove the last traces of pith on the fibre and the

processed fibres are clean. With a husk beating machine 10000 retted husk can be beaten up per day with 15 HP. Motor.

### **3.3.2 Brown Fibre**

#### **Extraction of Brown Fibre**

Brown Fibre is extracted from ripe dry husk or partially retted husk by the mechanical defibering. These husks are fed into revolving drums provided with upright spikes of high carbon steel which tear out the outer skin and some of the pith, leaving the long coarse fibres. The accumulated mixed fibres that get piled up by the side of the machine are further processed in the willowing machine and separated into different grades. Brown fibre is extracted from ripe dry husk by the mechanical defibreing. It is having a brown colour and is of poor quality. It may be of two types - 'Bristle' and 'Curled'. The bristle fibre is thick and long and is used for brush making. The 'Curled' fibre is shorter staple and finds use in the upholstery, mattresses etc.

#### **Yield of fibre from husk**

The yeild of fibre is subjected to considerable variation depending upon the season, method of extraction and quality of fibre produced. The yield from retted husk is more than that from unretted husks. The husk of coconut produced [ripped] between the months of January to April is capable of getting top range yield. Taking all these variations into consideration, the average yield of white fibre from 1000 full husks in India is estimated at 81.8 kg<sup>18</sup>. But Govt. of India[1999-2000] revealed that in Kerala the fibre- husk ratio is 86.72 kg. from

1000 husk, but it is 110 kg, 65.13 kg, 122 kg. In Tamil Nadu, Andhra and Karnataka respectively.

### 3.3.3 Spinning of coir yarn

The spinning of coir yarn is a traditional cottage industry in India and is mostly concentrated in the backwater areas where natural retting is available.

Spinning processes are of three types:

(a) Hand Spinning, (b) Ratt Spinning [Wheel Spinning] and (c) Machine Spinning.

#### (a) Hand spinning

In hand spinning, fibre is rolled between the palms with a clockwise twist into strands of short length, when sufficient quantity is made for the work of a day, the strands are taken in pairs and twisted together in the opposite direction to form a 2 – ply yarn. The yarn is then held in position by the toes and individual pieces of yarn are joined together one after another by continuing the counter twist using both palms till the required length for knot or mudi [6 to 18 meters] is reached. The yarn is then reeled in the form of a hank and a knot is made at the end. One worker is estimated to produce about 2 to 2.5 kg. of yarn per day. Hand spun yarn is soft and has uniformity of twist and thickness. This is considered as the top quality yarn. Since it is not remunerative the workers are not ready for doing this work. More over the coir workers skilled in hand spinning are also rare.

**(b) Ratt [wheel] spinning**

In ratt spinning two ratts are used - one ratt with two spindles are fitted to a stationary stand and the other one with one spindle is mounted on wheels and can be moved forward and backward. In the actual working, one boy or girl rotates the wheel on the stationary stand by rotating a handle fixed to its axis. Two adults make the strands by hooking short length of fibre strands on to the spindles of the stationery ratt and walking back, delivers the fibre continuously to form strands of uniform thickness. During this process, the stationary ratt is made to rotate continuously to give the necessary twist to the strand. When the two adults complete a length of about 15 – 18m. of the strand each, the rotation of the stationery wheel is stopped. The two ends of the single strands are then joined together and hooked to the spindle of the movable ratt. One adult worker takes charge of this movable ratt and it is now slowly rotated to give the two strands yarn a twist in a direction to that of the single strands. The other worker in charge of the yarn who moves forward towards the stationary wheel with a yarn guide in hand held between the two strands yarn. The yarn guide is a triangular block of wood, grooved on the sides known as 'Achue'. It helps to regulate the counter twist, prevents knots and kinks and binds the strands very close. The worker keeps a steady movement of the yarn guide towards the stationary ratt, followed by the forward movement of the movable ratt to allow the contraction of the yarn in the process of doubling operation. These movements are simultaneously carried out by rotation of the stationary ratt also, in order to prevent the loosening of the twist on the single strands while imparting the doubling twist by the operation of the movable wheel. This movement is controlled by experienced workers. The spun yarn lengths of 12 to 15 m. is

reeled into hanks. About 100 strands of 15 m. each weighting about 15 kg. can be produced per day<sup>19</sup>.

This is the popular method of yarn spinning. However, it does not possess the evenness and softness of the former type of yarn. The inherent defect of this method is that it requires a long open yard, the length of which limits the maximum length of the strands, which may come around 15 meters. Therefore the process of production is also interrupted during monsoon to those who are not having such a lengthy shed. The grading of coir yarn, is made according to colour, runnage,\* moisture content and the presence of sand, salt etc. A large number of yarn types are available in India and are recognised according to its place of manufacture.

### (c) **Mechanised Spinning (Motorised Ratt)**

Mechanised Spinning is developed by Coir Board in order to avoid unnecessary movement of coir workers, to save moving space of yard, to increase productivity and to save the cost of production.

In this method of spinning 0.5 H.P. motor is used to rotate the spindle carrying fibre strands. A basket is attached to the machine to carry the fibre. The woman worker sitting alongside the machine issues fibre to the spindle and the yarn is produced by operating 'on' and 'off' position of the switch by the leg.

The yarn produced by motorised ratt is rough and thick and is not attractive to users and productivity is lower than traditional method. This is because from 30 Kg. of Fibre the yarn product will be only 20 to 22Kg. whereas from traditional spinning yarn the product will be 26 to 28 kg.

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\*Length of yarn per kg.

### 3.3.4 Drying and Bundling of Yarn

Drying of yarn in the sunshine is inevitable for maintenance of quality of the fibre. After proper drying the yarn is bundled weighing usually 15 Kg. or 30 Kg. per bundle.

### 3.3.5 The important Varieties of Coir Yarn and its Features

The general characteristics of a particular variety of yarn as specifications of the Coir Board is briefly discussed below. It is considered that the yarn shall be reasonably free from extraneous matters, moisture, impurities like salt, sand etc. and shall be of reasonably uniform construction.

Definitions of different varieties of Coir Yarn in tabular form are given below.

Sl. No.	Variety	Type of fibre	Colour [Natural]	Twisting & Spinning	Approx. Scorage	General characteristics
1	Anjengo A	Long and medium stapled well cleaned fibre from well retted husks.	Bright golden, reddish brown to bluish grey.	Wheel-spun hard twisted and hard spun	12-20	Less hairy and smooth texture.
2	Aratory	Long and medium stapled, less combed fibre from retted husks.	Reddish brown to bluish grey.	Wheel-spun, soft twisted and hard spun.	11-18	Hairy, less regular in spinning and slightly pithy.
3	Imitation Alapat/Ashtamudy/Caruva	Medium and short stapled less combed fibre from less retted husks-lumpy with pith.	Brownish to greyish	Wheel-spun, medium twisted and medium spun	8-13	Slightly hairy, regular in spinning.

4	Vycome [W]	Medium and short stapled less combed fibre lumpy with pith from retted husks	Bright cream, reddish brown to dark grey.	Hand or wheel-spun, soft twisted and soft spun.	11-17	Hairy, less regular in spinning and rough texture.
5	Beach	Medium and short stapled uncombed fibre from under retted husks.	Reddish brown	Hand spun, very soft twisted and soft spun	9-14	Less hairy, medium texture, regular in spinning and very pithy
6	Hard Unsoaked	Medium and short stapled fibre from unretted husks.	Reddish to dark brown.	Hand spun, medium twisted and medium spun	9-12	Less hairy, medium texture, regular in spinning and very pithy.
7	Roping	Medium and short stapled uncombed fibre from under retted husks.	Brown to grey	Hand spun, soft twisted and soft spun	4-6	Extra ordinarily thick unclean in appearance, very less hairy and pithy
8	Bey pore	Medium and short stapled less combed fibre from under retted husks.	Bluish brown	Hand spun, soft twisted and soft spun	6-9	Very thick, less hairy containing a little pith.
9	Quilandy	Medium stapled, less combed fibre from well retted husks.	Bright golden to greyish	Hand spun, medium twisted and medium spun.	8-12	Slightly hairy regular in spinning and with a little pith.
10	Fine unsoaked Grade I	Medium and short stapled uncombed fibre from unretted husks.	Green buff to dark reddish brown.	Hand spun, very soft twisted and soft spun	9-12	Less hairy, smooth texture, regular in spinning and very pithy.

11	3 ply	Medium and short stapled less combed fibre from under retted husks	Brown to grey	Wheel-spun in 3 ply, hard twisted and hard spun	4-8	Extra-ordinarily thick, hairy with varying amount of pith, hard and rough texture
12	Single Ply	Long stapled well combed fibre from well retted husks.	Brown to grey	Wheel twisted in single ply, medium twist.	16-20	Thin, very hairy fluffy lin appearance with a little pith.
13	Superfine Unsoaked	Medium stapled combed fibre from unretted green husks.	Golden yellow	Hand spun, medium twisted and medium spun.	9-12	Less hairy regular spinning with smooth texture and negligible amount of pith.
14	Eda-vannan	Medium and short stapled less combed fibre from under retted husks	Brown to grey	Hand spun, soft twisted and soft spun	6-9	Less hairy, unclean in appearance and pithy
15	Mannu-Mangadan	Long and medium stapled well combed fibre from retted husks.	Reddish brown to bluish grey	Wheel spun, hard twisted and hard spun	8-10	Less hairy, unclean in appearance and pithy
16	Parur	Long and medium stapled clean fibre from well retted husks	Golden, reddish brown to bluish grey.	Wheel spun, very hard twisted and very hard spun	6-12	Fairly hairy and rough texture with a little pith.
17	Alleppey, Vycome	Fibre obtained from bits of various varieties of coir yarn	Bright cream, reddish brown to bluish grey.	Hand spun, soft twisted and soft spun	8-12	Very hairy, low breaking strength and soft texture.

18	Ordinary Bongo Yarn	Medium and short stapled fibre from under retted ten der husks	Reddish brown	Hand sun, hard twisted and hard spun, spinning and twisting uniform	12-18	Less hairy smooth texture with a little or no pith
19	Mangadan K	Long and medium stapled combed fibre from retted as well as a partly retted husks	Slight reddish brown to bluish grey	Wheel spun, medium twisted and hard spun	10-15	Hairy, unevenly thick with a little amount of pith
20	Amindivi	Long and medium stapled less combed fibre from well retted husks.	Bright golden	Hand spun, medium twisted and medium spun	6-9	Very less hairy and regular in spinning, contains very little pith
21	Laccadive	Long and medium stapled fibre from retted husks	Golden reddish brown to bluish grey	Hand spun, medium twisted and medium spun	6-8	Less hairy in appearance and regular in spinning.

Source: Constructional details of coir and coir products, Coir Board[1996].

### 3.4 Environmental Hazards related to Coir Industry

In recent years public attention has been focussed increasingly on environmental pollution and its impact on human beings, animals and plant kingdom. The environment can be defined as “the aggregate of all external conditions and influences, affecting the life and development of an organism, human behavior or society”<sup>20</sup>.

The major environmental pollution is related to coir industry is contamination of water and air through husk retting. While immersing coconut husk in the lagoons and backwater side for months and years, the water will be highly contaminated. When surface water is polluted, consequently it leads

contamination of ground water. Ground water pollution as an impairment of water quality by chemicals, heat or bacteria to a degree, that does not necessarily create an actual public health hazard, but does adversely affect such waters for domestic, farm, municipal or industrial use. Pollution can originate from a point or distributed sources within the recharge area of an aquifer.<sup>21</sup> The ground water moves very slowly, sometimes many years may lapse after the start of pollution before affected water shows up in a well. Similarly, many years may be required to rehabilitate contaminated aquifers, after the sources of pollution has been eliminated.

Coir industry has a history of one and half century in Kerala. Uninterrupted retting activity in the lagoons led to contamination of surface water. While visiting these places in Kollam, Chirayinkeezhe, Karunagapally, Alappuzha, Vaikom, Kozhikodu etc. one will feel foul smell, see black water in the place of very transparent water. We can walk through these places only with a closed nose. In these places it is learnt that one can't depend water from well, which is also likely affected due to pollution. After some more years the households may force abandonment of wells and may require costly development of alternate water supplies. This polluted atmosphere in air and water which hinder tourism development in the State, as lagoons and backwaters are the real attraction to the tourists. In some of the areas of coir industry like Thanneermukkom environmentalists started protest against carrying out retting activity in lagoons and backwaters.

### **3.5 Employment in the coir industrial sector**

Coir Industry is the largest cottage industry in the country. It is concentrated in the coconut producing states and provides employment to about 5:2900<sup>22</sup> persons. Of this, Kerala accounts for 76 per cent, Tamil Nadu, 12 per

cent<sup>23</sup> and all other states accounts 12 per cent. Eighty five per cent of the coir workers in Kerala are women [3,25,000]<sup>24</sup>. The socio-economic conditions of coir workers are generally found to be very poor and most of them lives below poverty line. They use the first chance to migrate from this sector to other sectors.

### **3.6 Husk Potential and Fibre Productivity**

#### **3.6.1 Husk potential and Fibre productivity - India**

The total production of coconuts in India, its husk potential and utilisation by all coconut producing states during 1998-99 are given in Table 3.5.

From Table 3.5 it is seen that out of the total nuts production of 14925 Million in India, the husk available for consumption is only 9840 million ie 66 per cent. The husk potential rate is maximum in Karnataka and that is followed by Tamil Nadu and Kerala.

The total fibre potential of the industry was 10,21,370 Tonnes and the average fibre potential rate with husk potential was calculated as 104 Tonnes per Million Husk [ $10,21,370 / 9840 = 104$ ]. This rate also varies from State to State. But it is noted that the lowest Fibre Potential rate is in Kerala, that is 97 Tonnes per one Million husk.

Column 7 of the Table 3.5 shows that of the total fibre potential of the industry ie. 1021370 tones, India could exploit only 3,56,000 tones, which comes only 35 per cent of the total fibre potential. This rate also varies from state to state and the maximum fibre potential is exploited by Tamil Nadu followed by Kerala. Production of Fibre in India is depicted in Table 3.6.

Table 3.5. India's Coconut Production, Husk potential, Fibre potential and Fibre production. In all coconut producing states [1998-99]

States	Coconut Production [Nos. in Million]	Husk potential		Fibre Potential [Tonnes]	Fibre potential Rate [Tonnes per one Million]	Production of Coir fibre [Tonnes]	Rate of Fibre Potential Utilisation [% of 7 on 5]
		[Nos. in Million]	Rate [% of 3 on 2]				
1	2	3	4	5	6	7	8
Andhra Pradesh	1922.1	797	41	87640	110	22000	25
Karnataka	1495.1	1248	83	137200	110	35200	25
Kerala	6672	4500	67	435600	97	168000	38
Orissa	795.1	239	30	26230	110	2000	8
Tamil Nadu	3096.7	2496	81	272400	109	118700	43
Others	943.8	560	59	62300	111	10100	16
Total	14924.8	9840	66	1021370	104	356000	35

Sources: Coir Board [1998-99, 99-2000], Director of Economics & Statistics, Ministry of Agriculture, Govt. of India [Through Coconut Development Board Kochi]

**Table 3.6. Production of coir– white fibre and brown fibre [Quantity in Tones and growth in %] 1980-81 to 1999-2000**

Year	White Fibre Growth	Growth	Brown Fibre	Growth	Total	Growth
1980-81	126500	-	32300	-	158800	-
1981-82	140300	11	30100	-7	170400	8
1982-83	144380	3	30100	-	174480	2
1983-84	144380	-	30100	-	174480	-
1984-85	114770	-21	34500	15	149270	-15
1985-86	122880	7	43700	30	166580	12
1986-87	135000	10	63371	45	198371	19
1987-88	130600	-3	66012	4	196612	-1
1988-89	117000	-10	71100	8	188100	-4
1989-90	125900	8	75800	7	201700	7
1990-91	126950	1	84270	11	211220	5
1991-92	127000	-	92600	10	219600	4
1992-93	127000	-	101900	10	228900	4
1993-94	127000	-	112100	10	239100	4
1994-95	127000	-	123300	10	250300	5
1995-96	127700	1	135600	10	263300	5
1996-97	127000	-1	149000	10	276000	5
1997-98	127000	-	169000	13	296000	7
1998-99	124000	-2	210000	24	334000	28
1999-2000	120000	-3	236000	12	356000	7

Source: Annual Report, Coir Board, From 1980-81 to 1999-2000

Note: -The total of white fibre and brown fibre can be considered as basic product from coconut husk.

It is seen from the table 3.6 that, even though total production of fibre has increased, there is wide differences in the matter of growth in production of white fibre and brown fibre. The difference of growth in both types of fibres is also depicted in Figure 3.5.

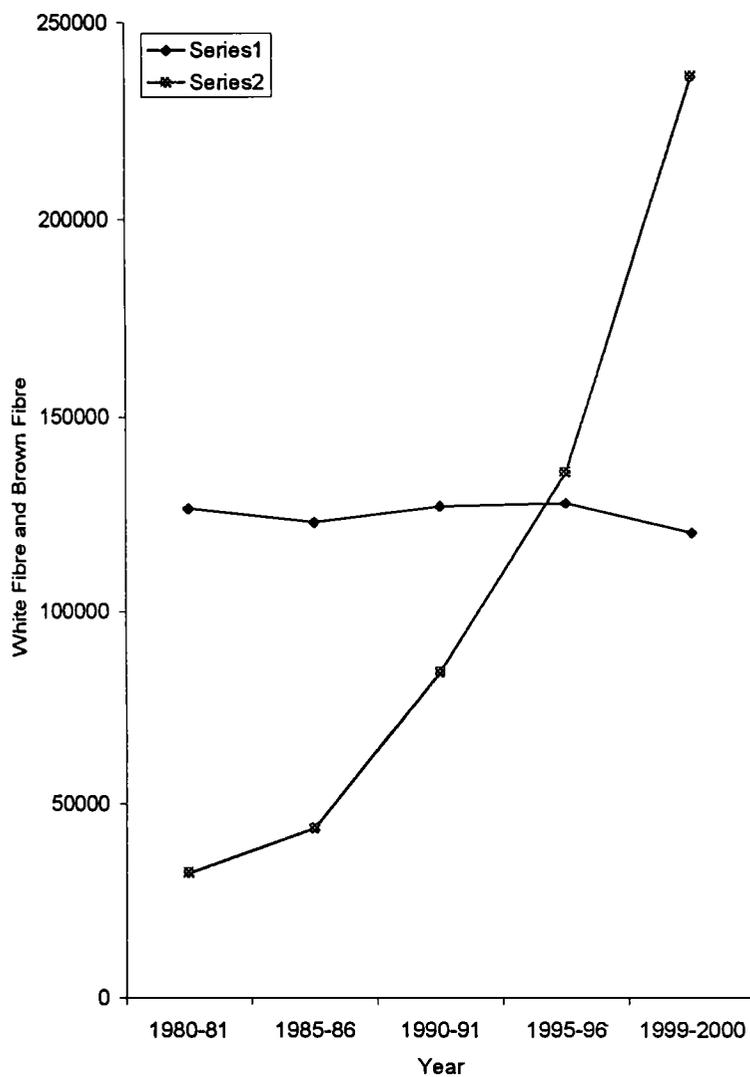


Figure 3.5. Production of white fibre and brown fibre

In order to examine the trends Compound Growth Rate were computed based on

Exponential function of form  $y = a b^x$

The Compound Growth Rate of White Fibre and Brown Fibre is given below:-

	White Fibre	Brown Fibre
1980-81 to 89-90	1.11	2.23
1990-91 to 99-00	0.55	2.80

The analysis of the trends in production of White Fibre shows that the growth rate is very low compared to Growth Rate of Brown Fibre. While the Brown Fibre recorded a compound growth Rate of 2.23 in between 1980-90, White Fibre recorded only a growth of 1.1 %. In the next decade the growth of Brown Fibre further enhanced to 2.80 while White Fibre production deteriorated to 0.55. Hence there is clear cut de-markation between the growth of Brown Fibre and White Fibre. This is due to widespread mechanised fibre production in the States of Tamil Nadu, Andhra Pradesh and Karnataka. At the same time in Kerala white fibre production has decreased due to labour shortage for retting work and opposition from environmentalists in using lakes and lagoons retting. The prospects of coir production depends more on White Fibre and hence studies and research should continue in that direction.

The Trend Analysis[1980-81 to 1999-2000] of growth of total fibre, white fibre and brown fibre is also depicted as Figs. I, II and III.

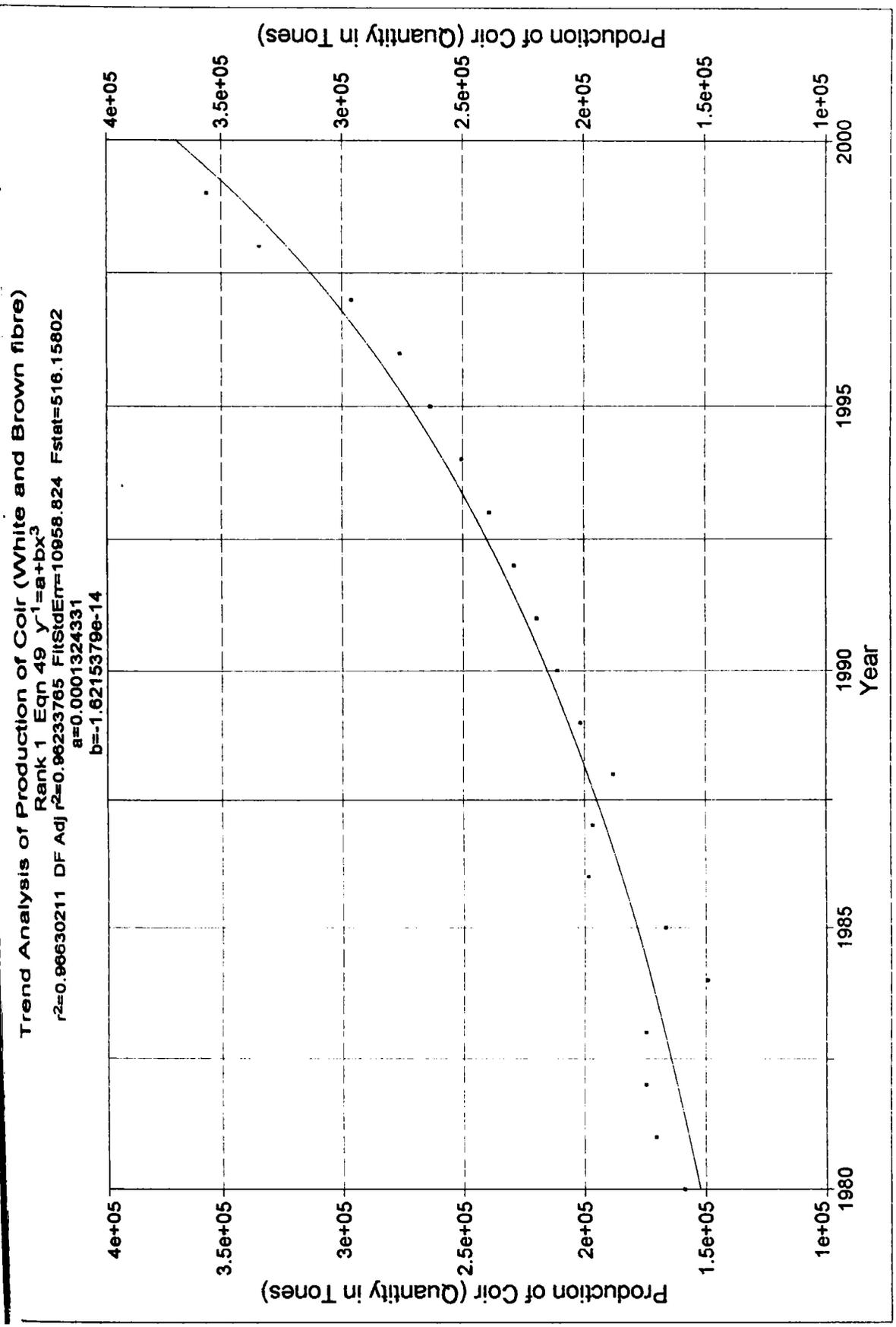


Figure I

Trend Analysis of Production of White fibre.  
 Rank 1 Eqn 8002 Exponential(a,b,c)  
 $r^2=0.20675067$  DF Adj  $r^2=0.05801642$  FitStdErr=7355.4975 Fstat=2.2154203  
 $a=121422.31$   $b=2.4129343e+83$   
 $c=10.852386$

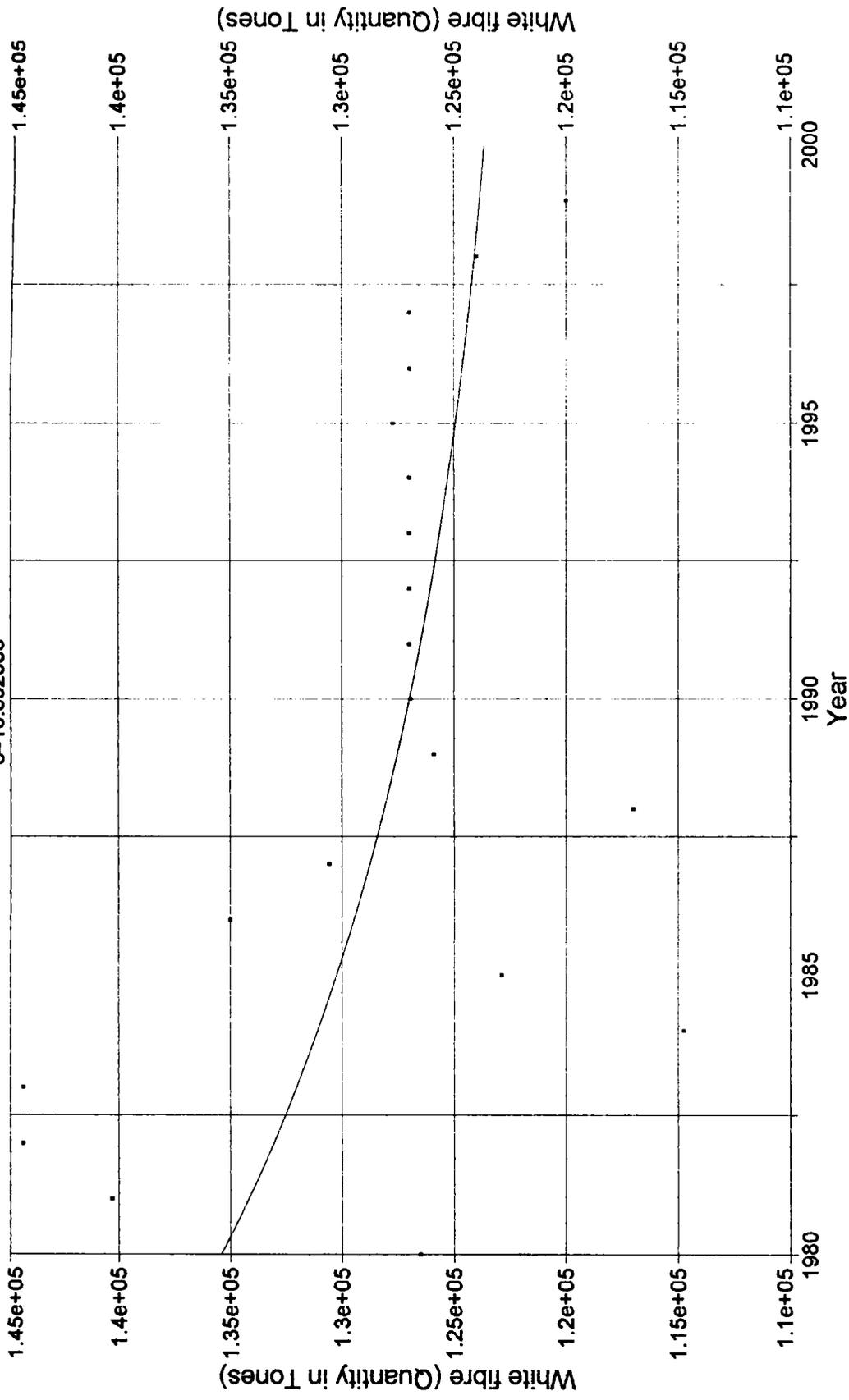


Figure II

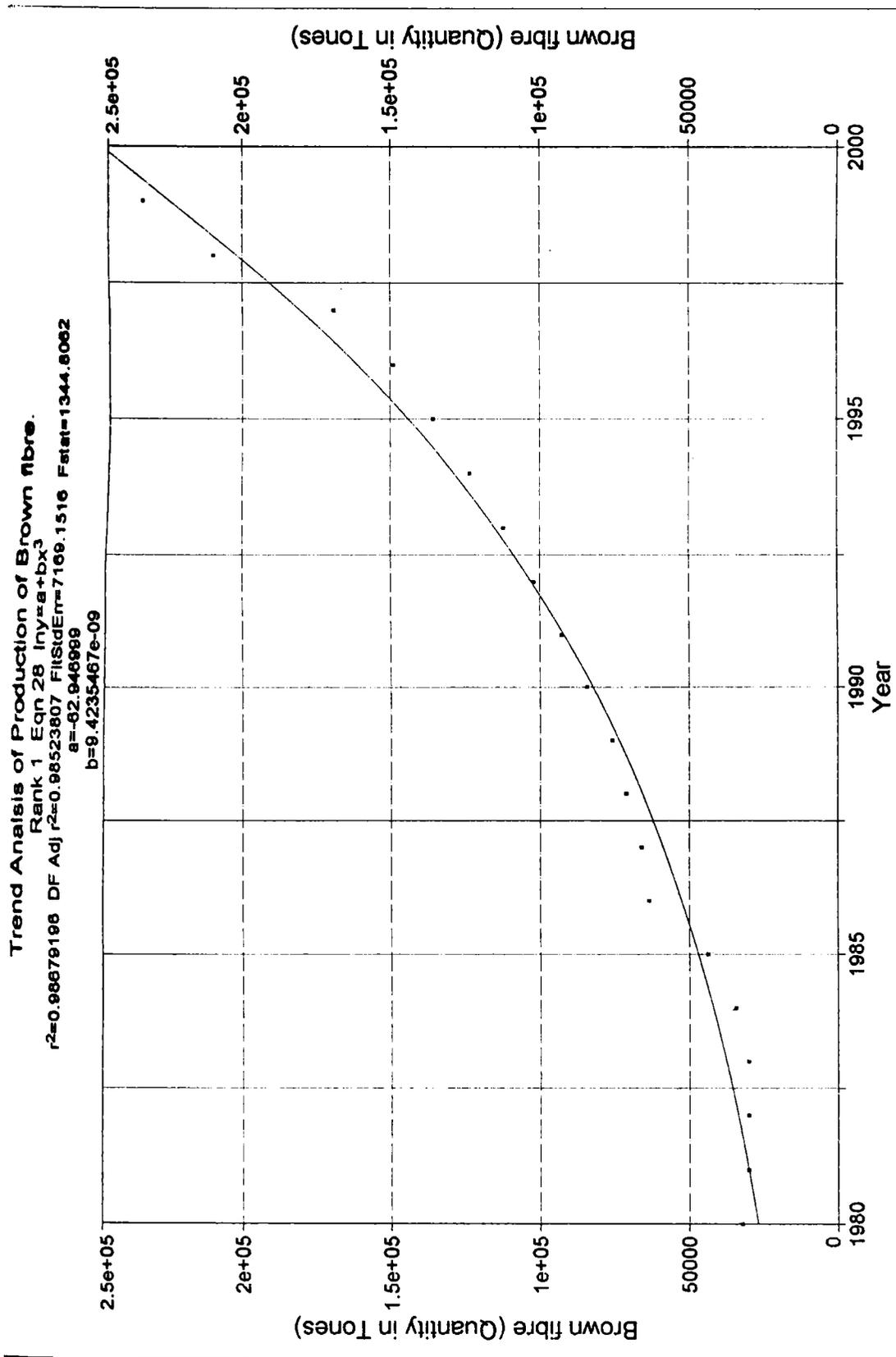


Figure III

### 3.6.2 Husk Potential of Kerala

Table 3.6 also shows that, husk and fibre potential of Kerala is 4,500 Million and 435,600 tonnes respectively. But she could exploit only 1,68,000 tonnes [38 %] of fibre. Even this low rate of utilisation is a bit high Vis-à-vis all-India average.

The above picture shows the macro view of the husk potential and its utilisation by coir industry in India and Kerala.

### 3.6.3 Production and Export of Coir and coir products in India

#### 3.6.3.1 Production

Production of different types of coir and coir products from 1994-95 to 1999-2000 are given in Table 3.7.

Table 3.7 depicts that among coir and coir products four items are dominating and they are Brown fibre, Coir yarn, White fibre and coir products. Over a period of six years substantial growth has been registered [91%] in the production of Brown fibre. This was because of the entry of Tamil Nadu in the field of brown fibre by using mechanised defibering mill. Coir yarn production has grown only 36 per cent, but coir products have grown by 61 per cent and Rubberised coir has grown by 47 per cent. But white fibre showed negative growth rate during the same period. Kerala was considered as the sole producer of White Fibre with its natural retting facility. But due to resistance from environmentalists and increased cost of production, natural retting is decreasing. That is why its production rate has decreased.

**Table 3.7. Estimated Production of coir and Coir products in India[1994-95 to 1999-2000] [Quantity in '000'Tonnes]**

Item	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	Growth % over Six years
White Fibre	127	127.70	127.00	127.00	124.00	120.00	-5.5
Brown Fibre	123.30	135.60	149.00	169.00	210.00	236.00	91
Coir Yarn	164.60	176.20	188.50	201.00	211.00	222.30	36
Coir products	40.30	44.00	48.00	51.50	58.50	64.90	61
Coir Rope	37.50	38.60	39.80	39.900	48.00	48.90	30
Curled Coir	21.20	22.00	24.00	26.00	28.60	29.80	41
Rubberised Coir	31.50	33.00	35.00	37.00	43.00	46.30	47

Source: Coir Board, Cochin

Note: The figures are not mutually exclusive and should not be added together.

### 3.6.3.2 Exports

Despite India is having huge potential, the coir industry does not occupy a place it deserves in her export basket. Its export although have increased over a period of time, the export earnings stood at the level of Rs. 3136.6 million during 2000-2001. But it constitutes only 0.15 per cent in India's global exports. India's place in world export of coir and coir products is at the level of 4 per cent.<sup>25</sup> In the following paragraphs India's coir production, export, internal consumption, direction of export etc. are explained.

Table 3.8 shows that from India 14 items of coir and coir products are exported. The export earnings were Rs. 171.6 crores in 1994-95 and that increased steadily to Rs. 303.05 crores during 1999-2000 registering a growth of 77 per cent over a period of six years. In term of quantity, export stood at 48085 tones during 1994-95 and that went up to 61031 tones during 1999-2000, registering a growth of 27 per cent during the same period. It is to be noted that even though export value has increased by 77 per cent, the quantity has increased only by 27 per cent. The jump in value more than proportionate to the quantity was due to devaluation of the rupee.

The most dominant item of export was Handloom mats. This was followed by coir yarn, coir pith and Handloom Matting. The other items have only little role in export. Out of the total quantity of export over a period of six years Hand loom Mats maintained its role around 40 per cent. Coir yarn had a role of 35 per cent in quantity of export during 1994-95, but it was reduced to 21 per cent during 1999-2000. Another important point to be noted is that Coir Pith had only a role of 0.4 per cent in total quantity of export but it jumped to 10.65per cent during 1999-2000. An emerging market can be noted in this item in the international market. In the case of geo-textiles, it had only a share of one percent in the quantity of export during 1994-95, but its share was more than doubled [2.8] during 1999-2000.

Table 3.8. Export of coir and coir products from India [1994-95 to 1999-2000]. Quantity in Tonnes and Value in Rs. Lakhs]

Product name	1994-95		1995-96		1996-97		1997-98		1998-99		1999-2000	
	Qty.	Value	Qty.	Value								
Curled coir	2007.20	186.05	1155.89	112.89	714.53	85.94	641.62	80.33	445.13	76.38	657.28	114.57
Coir fibre	779.51	76.88	303.22	27.09	336.73	49.59	243.25	27.93	645.76	91.46	809.88	117.15
Coir rugs	2428.90	1419.96	2817.75	1867.91	2305.78	1705.15	1956.74	1441.55	2934.37	2300.56	2889.64	2259.62
Coir pith	202.68	6.35	108.61	5.39	467.88	51.69	754.99	87.76	2215.39	251.26	6501.59	562.77
Coir rope	76.64	16.58	121.18	26.27	77.89	21.68	92.07	24.51	211.20	59.25	286.63	73.41
Coir other sorts	195.80	71.22	353.37	176.36	578.42	256.52	1098.78	442.69	2204.15	1030.26	925.99	326.29
Coir yarn	16810.09	3487.82	14838.56	3434.48	13645.06	3263.18	15888.94	4123.65	16538.78	4827.41	13052.58	3738.40
Geo-textiles	442.14	151.35	474.12	167.80	361.25	149.46	739.44	313.31	1207.55	546.91	1711.25	808.41
Hankloom mats	17693.98	7895.62	19870.17	9899.74	20969.03	11343.72	20763.92	12339.40	21399.16	14610.12	24292.92	15658.72
Handloom Mattings	6305.00	3224.43	7027.27	4246.62	6282.92	3923.37	6794.99	4451.25	6465.77	4641.00	6238.58	4338.55
Powerloom mats	250.84	107.43	332.81	166.77	18.95	8.58	178.3	85.16	115.19	65.20	1042.61	699.12
Powerloom mattings	633.95	364.06	563.47	374.66	295.36	202.68	311.93	198.77	105.51	88.86	531.35	395.05
Rubberised coir	155.17	110.93	174.50	113.40	211.62	152.32	287.9	234.12	573.15	427.01	522.88	387.52
Tufted mats	103.93	45.33	135.11	65.26	103.53	44.38	96.90	42.47	428.91	203.20	1567.70	793.77
Total	48085.83	17164.03	48276.02	20684.65	46368.94	21258.26	49849.77	23892.90	55490.01	29218.88	61030.89	30305.37

Source: Coir Board, Cochin

India fetches over Rs. 300 crores worth foreign currency from export of coir and coir products per annum. But she can expect severe competition from other coir producing countries like Sri Lanka and Philipines.

### **3.6.3.3 Total Production of Coir Products, Exports and Internal consumption in India**

The total production of coir products and the export share of various items are depicted in Table 3.9.

Table 3.9 provides information regarding production, export and internal consumption of various items of coir. It is seen from the table that out of the total production of coir products, India was able to export only 9 percent during 1994-95 and in subsequent years it declined to 8 per cent. Sufficient progress has not been witnessed in the matter of export. It implies that 92 per cent of the coir products are being consumed within the country. As item-wise analysis shows that in the case of coir fibre, India has exported 0.31 per cent of its total production during 1994-95 but it declined year-after-year and reached 0.22 per cent during 1999-2000.

Coir yarn export accounts 10 per cent of total production in 1994-95 and thus it decreased to 6 percent during 1999-2000. Exporting Coir Rope and Rubberised coir accounts only less than one per cent of the total production in most of the years. While curled coir, accounted was 9 per cent of the total production, in 1994-95 and then it declined year-by-year and reached 2 per cent during 1999-2000.

Table 3.9. Production of coir products, export and internal consumption in India [Qty. in tonnes]

Items	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00
Coir Fibre-Prod.	250300	263300	276000	296000	334000	356000
Export	780[.31]	303[.11]	337[.12]	243[.08]	646[.19]	810[.22]
Consumption	249520	262997	275663	295757	333354	355190
C.Yarn- Production	164600	176200	188500	201000	211000	222300
Export	16810 [10.2]	14837 [8.42]	13645 [7.2]	15888 [8]	16539 [8]	13053 [6]
Consumption	147790	161363	174855	185112	194461	209247
C.Rope-Production	37500	38600	39800	39900	48000	48900
Export	77[.2]	121[.03]	78[.19]	92[.23]	211[.43]	287[.58]
Consumption	37423	38479	39722	39808	47789	48613
C.curled- Production	21200	22000	24000	26000	28600	29800
Export	2007[9]	1156[5]	715[3]	642[2]	445[2]	657[2]
Consumption	19193	20844	23285	25358	28155	29143
C.Rubberised- Pro.	31500	33000	35000	37000	43000	46300
Export	155[.5]	175[.53]	212[.6]	288[.77]	573[1.33]	523[1.12]
Consumption	31345	32825	34788	36712	42427	45777
C.Product-Others- Production	40300	44000	48000	51500	58500	64900
Export	28257 [70]	31683 [72]	31383 [65]	32696 [63]	37075 [63]	45702 [70]
Consumption	12043	12317	16617	18804	21425	19198
Total- Production	545400	577100	611300	651400	723100	768200
Export	48085[9]	48276[8]	46369[8]	49850[8]	55490[8]	61031[8]
Consumption	497315	528824	564931	601550	667610	707169

Source: Coir Board, Cochin. Note: Figures in parentheses indicate the percentage of export on total production.

In short Table 3.9 conveys the message that India has enough potential to export various items of coir and coir products. But at the same time she has failed to exploit the opportunity.

### 3.6.3.4 Trend of export of coir goods from India from 1947-48 to 1999-2000

In the above paragraphs we have discussed the highlights of production of coir products and its export value. It will also be interesting to examine the trends in the quantity of export and the value of exports. In order to examine the trends Compound Growth Rate was computed based on Exponential function of form  $Y = a b^x$

Table 3.10 gives Compound growth Rates of Export of coir goods in quantity and value from 1950 to 2000.

**Table 3.10. Compound Growth Rate of Export of Coir and Coir Products[1950 to 2000]**

Year	Export in Quantity	Export in Value
1950-51 to 1955-60	0.6	1.95
1960-61 to 1969-70	3.51	1.69
1970-71 to 1979-80	1.97	10.4
1980-81 to 1989-90	2.07	4.95
1990-91 to 1999-00	8.64	3.75
Pooled	3.51	1.62

Source: Calculated from the data published by Coir Board [given as appendix VI].

From the analysis on the trends in quantity of exports it is seen that the growth is negligible during the first decade of planning. But in the next decade the Growth Rate is found to be significant [3.5]. In the subsequent two decades

the Growth Rate of export of coir product declined.. For instance, the quantity which stood at 27926 tones in 1990-91 consistantly increased and reached 61030 tones by the end of 1999-2000, the rate of increase being 2.18 times. Over the period the Compound Growth Rate is found to be 8.64. Counting continuing the entire half century at a stretch, from the Growth Rate it is seen that the export of coir products increased by 3.51 per cent. These trends suggest that the growth rate in coir products export is notable and significant. A high Growth Rate in exports will naturally be reflected in the value also.

From the Growth Rate of exports given in table 3.10, it is seen that, the Compound Growth Rate for the entire half century is found to be 1.62. Decade-wise, in the first two decades the Compound Growth Rates respectively are 1.95 and 1.69. But an unprecedent shoot up is noticed in the decade 1970-80. In this decade the Compound Growth Rate is found to be an unbelievable figure of 10.4. In the later decades also the Growth Rate in the value of export is reasonable. This may be due to an increase in quantity exported or due to the escalation of international prices. Unless we know the international factors, the rate of inflation etc. we can't arrive at a reasonable conclusion. However it is not a major focus of the present study. But one thing is certain that because of the comparatively low growth in value of exports still there is sufficient potential for promoting exports.

The growth\_of export of coir goods from India [in quantity and value from 1947-48 to 1999-2000] is depicted as Appendix VI.

The Graphical representation of the trend analysis of export is given in figure IV and V.

**Trend Analysis of Coir Export from India.**

Rank 1 Eqn 8002 Exponential(a,b,c)  
 $r^2=0.50840784$  DF Adj  $r^2=0.47937169$  FitStdErr=13165.563 Fstat=25.958835  
 $a=19076.741$   $b=9.3611693e+26$   
 $c=38.103459$

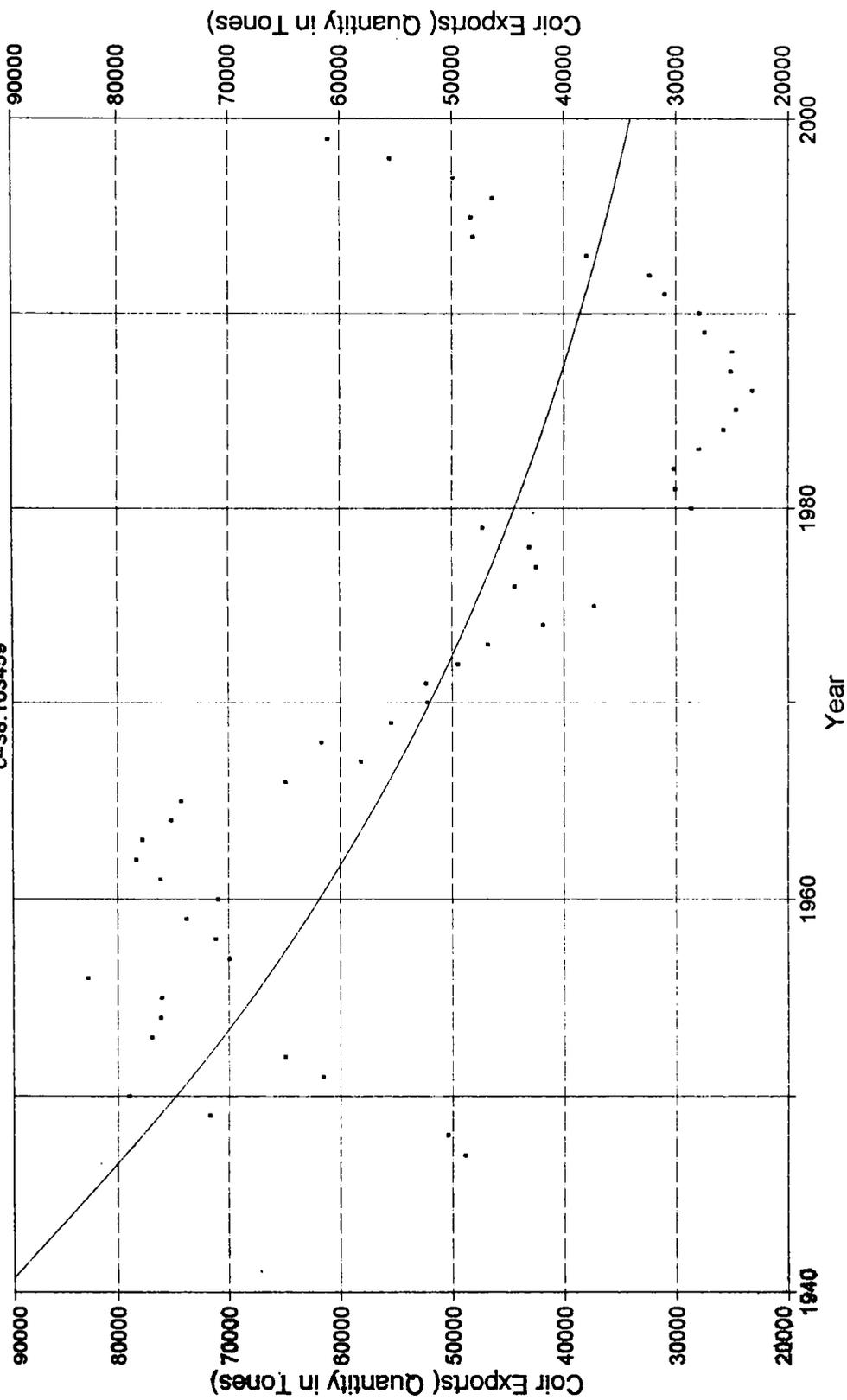


Figure IV

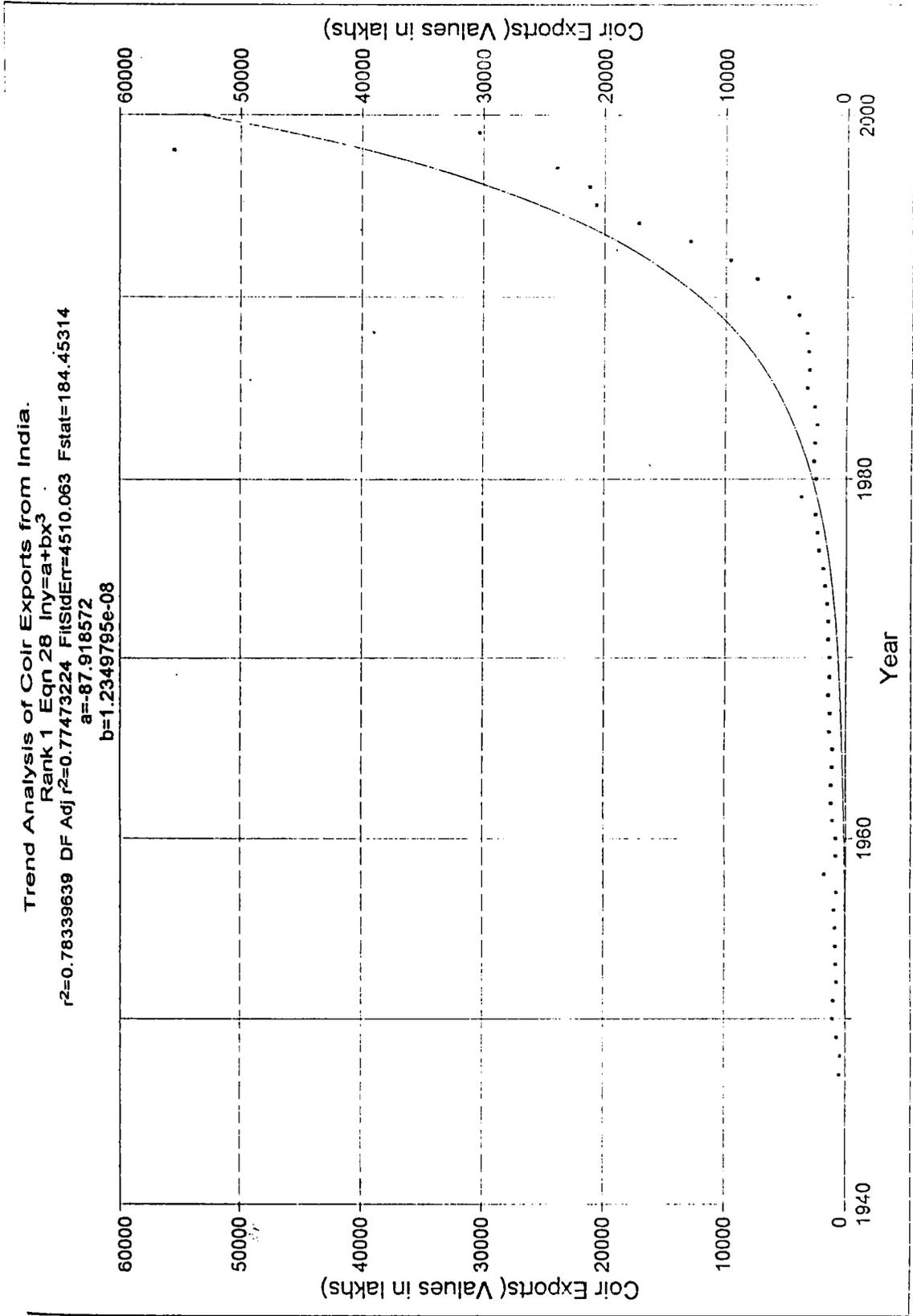


Figure V

### 3.6.3.5 Direction of India's export of coir and coir goods

During 1998-99, India exported coir and coir products to 69 countries. The U.S.A. is the single largest export market for coir from India [19%]. The countries in the European Union including Germany, U.K., France etc. account for 66 per cent of coir exports from India. The rank of different countries on the basis of the share of imports of various items of coir and coir products from India are given in Tables 3.11-a to 3.11-f and pie diagrams 3.11-a.a to 3.11.f.f

**Table 3.11.a**

Yarn		
Rank	Country	Share (%)
1	Italy	27
2	Netherlands	12
3	USA	12
4	Germany	9
5	Portugal	9
6	France	9
7	Belgium	6
8	Turkey	3
9	Spain	3
10	UAE	3

Source: Annual Report, Coir Board, Kochi, 1988-99

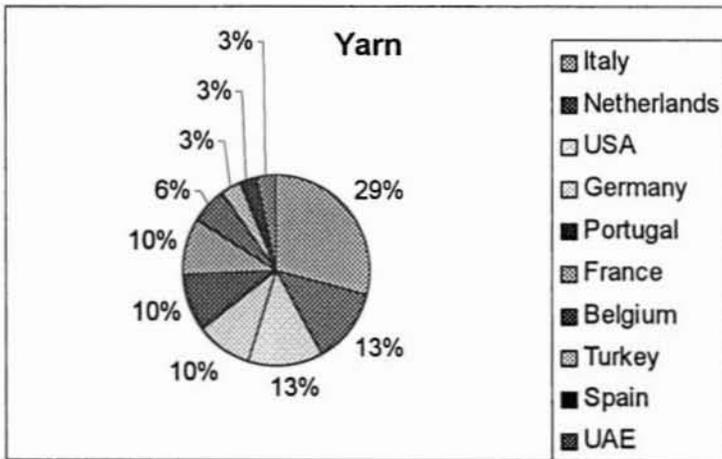


Figure 3.11.a.a.

Table 3.11.b

Coir Mats		
Rank	Country	Share[%]
1	USA	29
2	UK	14
3	Australia	9
4	Germany	7
5	Netherlands	7
6	Belgium	5
7	France	5
8	Italy	5
9	Canada	4
10	Sweden	2

Source: Annual Report, Coir Board, Kochi, 1998-99.

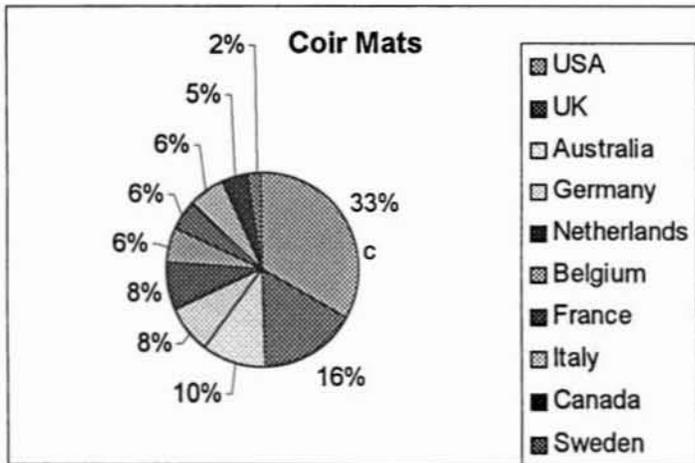


Figure 3.11.b.b

Table 3.11.c

Coir Matting		
Rank	Country	Share[%]
1	UK	19
2	Netherlands	14
3	USA	11
4	Belgium	12
5	Germany	9
6	Spain	5
7	France	6
8	Italy	5
9	South Africa	2
10	Australia	2

Source: Annual Report, Coir Board, Kochi, 1998-99.

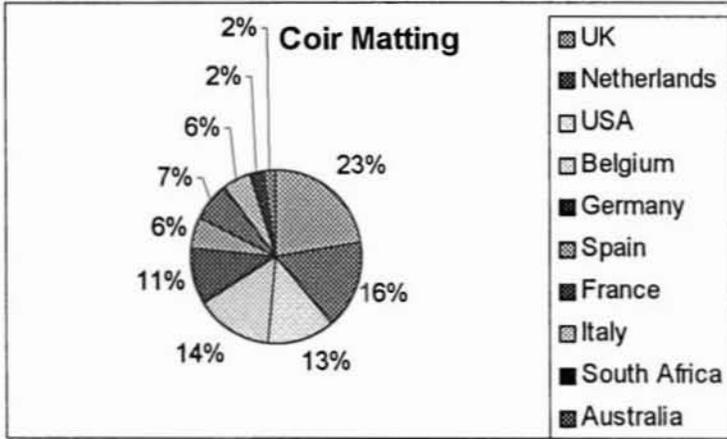


Figure 3.11.c.c

Table 3.11.d

Rubberised Coir			
Rank	Country	Share[%]	
1	Hongkong	24	
2	Nepal	18	
3	Italy	15	
4	South Korea	10	
5	Greece	12	
6	Maldiv Islands	8	
7	UAE	7	
6	Portugal	3	
9	Russia	2	
10	Saudi Arabia	1	

Source: Annual Report, Coir Board, Kochi, 1998-99

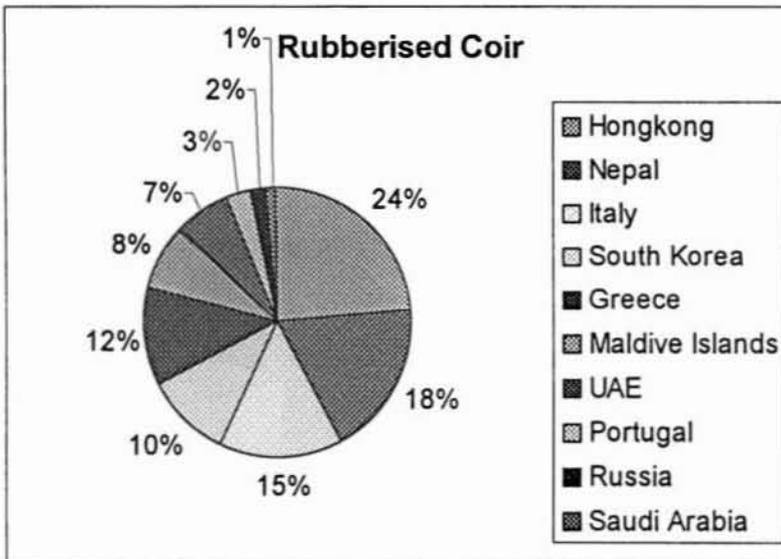


Figure 3.11.d.d

Table 3.11.e

Coir Geo Textiles			
Rank	Country	Share[%]	
1	USA	27	
2	Japan	22	
3	Germany	19	
4	UK	8	
5	Netherlands	6	
6	France	5	
7	Belgium	5	
8	Canada	2	
9	New Caledonia	1	
10	Sweden	1	

Source: Annual Report, Coir Board, Kochi, 1998-99.

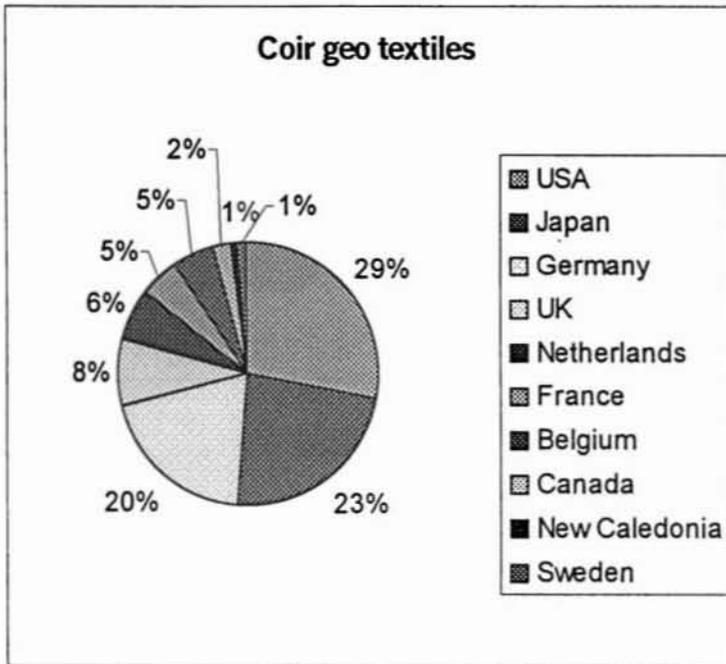


Figure 3.11.e.e

Table 3.11.f

Coir Pith		
Rank	Country	Share[%]
1	France	51
2	Netherlands	32
3	USA	9
4	Italy	3
5	UK	1
6	Australia	2
7	Others	3
8	Norway	1
9	Israel	1
10	Germany	@

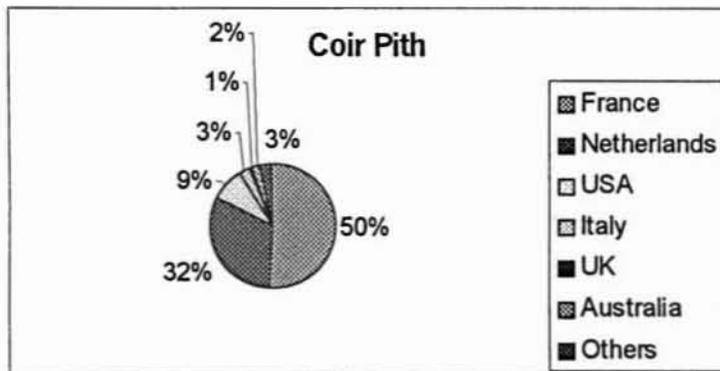


Figure 3.11.f.f

### 3.7 Marketing Channel of Coir Products

#### 3.7.1 Domestic Market

There are a series of intermediaries engaged in the various stages of coir production. Actually the Indian coir industry has developed on the initiative, enterprise and financial backing of innumerable middlemen<sup>25</sup>. No other traditional industry in India has so many intermediaries functioning in the chain of marketing. Therefore it is desirable to examine the various intermediaries engaged - from the collection of input [raw husk] to its final distribution point-. But unfortunately it is extremely difficult to trace out the volume of their business as they are working in a very informal way.

##### 3.7.1.1 Input collection [Raw husk]

###### *Husk Collector*

Husk collector's main occupation is collection of husk, which is the primary raw material for coir industry. Husk collector collects husk from door to door of small scale coconut producers and carries them in baskets or by country boats [Vallom] and sells the same for profit to village husk dealers. Husk collector

is considered an ubiquitous figure in all the coconut growing areas.<sup>26</sup> Coconut merchants who deal coconuts in bulk also take part in the collection of husk. They turn it over to the village husk dealers in large quantities.

### ***Coconut Merchants***

In villages coconut merchants and copra producers purchase coconuts directly from palm cultivators. After dehusking coconut they sell the husk either to Dealers or Retters or Thondu Vyavasaya Societies in large quantities. After two or three days of dehusking the green husk will become dry. This dried husk is known as 'Kallan Thondu' and it is difficult to rett. Since copra producer's activities are influenced by fluctuations in the oil market dehusking is often delayed and hence the husk is wasted.

### ***The Capitalist Husk Dealer***

Husk dealers procure husk from village farms and coconut merchants through a number of agents in the countryside. The collected husk will be sold either to retters or societies or soak the husk for retting in their own retting yard if they think that selling is not profitable. Capitalist husk trader's business involves large investments. But they have high bargaining power and in a way control the price in the market.<sup>27</sup> Private individuals dominate in this business though some co-operatives also have undertaken this work from 1951.<sup>28</sup>

### ***Thondu Vyavasaya Societies***

Thondu Vyavasaya Societies were formed with the objective of supplying required husk to yarn producing societies at reasonable prices. It is a feeder

society to production societies. Therefore the main business of these societies is to collect and stock husks from cultivators or coconut merchants for the purpose of supplying the same to Coir Vyavasaya Societies at the lowest price possible. An enquiry into the working of these societies disclosed that their operations were insignificant as well as ineffective as they could't compete with the private merchants and so they failed to attain of the main objective<sup>29</sup>. Between 1951 and 1960 there were 32 such societies functioning with about 4000 members.<sup>30</sup> But now no such societies are functioning in the state.<sup>31</sup>

### ***Small Retters***

Some small businessmen also husk collection from households using country boats and rett them and after retting sell it to retted husk dealers or yarn producing units including Coir Vyavasaya societies or coir households. These small retters have only a few retting pits.

### ***Capitalist Retters***

There are Capitalist Retters who procure husk from distant areas through husk dealers and do business on a large scale. Coir Board [1960] revealed that capitalist retted husk dealers occupy a commanding position [80 percent of retting business] in the industry.<sup>32</sup> But these Capitalist Retters constitute only 10 per cent of the total number of people engaged in retting business. But by virtue of their monopolistic position they are able to dictate prices and create artificial fluctuations in prices of retted husk. In times of need the Coir Vyavasaya Co-operatives also may approach the small retters or Capitalists Husk Dealer for retted husk.

### ***Coir Vyavasaya Co-operatives***

These societies also purchase green husk on a large scale and ret them either in their own or hired retting yard. These society's role in the business of procurement and distribution of raw husk is insignificant when compared to the role of Capitalist Retters.<sup>33</sup> But one of the objectives behind its formation was to break the monopoly of the Capitalist Dealers in the field, but it has not made much success.

#### **3.7.1.2 Output – Fibre and Yarn**

The fibre and yarn produced in various centres including co-operatives are distributed through a chain of intermediaries. Wholesale dealers of fibre and yarn too supply fibre and yarn to the manufacturer, to the internal market for consumption and to the export trade. Co-operatives also feed all these three lines of business. The major consumers of fibre and yarn are manufactures of Mats and Mattings, Coir Vyavasaya Co-operatives, Marketing Federation and Foreign markets. For feeding all these channels, there are several intermediaries functioning from small range to higher range. Their functions are discussed below.

#### ***Village Middlemen***

Village middleman is a person who buys fibre or yarn from coir households or cottage industry units and passes it on either to village merchants or to agents or representatives of wholesale dealers and manufactures. He also purchases retted husk and distributes it among cottage workers at a specified price and buys back the yarn produced by cottagers. The majority of the sales is

confined to the same locality. These middlemen are only a small link in the long chain of intermediaries.

### ***Village Merchants***

In the center place of village there may be a village merchant for coir yarn. Really he may be a grocer and does side business in coir. In a 'Coir hand spinning household, invariably there will be a member who will be engaged in hand spinning of coir yarn either on a part-time or full-time basis:- Such persons sell their produce in the evening market to the village merchants to meet their household requirements of groceries. These merchants who buy coir produce from the evening market as well as from middlemen and sell it to commission agents. The commission agents in turn send their consignment to big market places. Thus the daily market or weekly market form a link with outside world.

### ***The Whole sale Bazaar Dealer***

The Wholesale Bazaar Dealer owns huge godowns. He is also financially sound. He generally controls the price of coir yarn. But his business involves risk as the yarn market is so transient. The transient nature of the market results in high price fluctuations resulting in huge loss or windfall incomes.

### ***Godown Owners***

The godown owner makes arrangements for stocking different lots of yarn. They generally pay approximately 50 per cent of the value of yarn to the dealer or producer from whom they collect yarn for store. Then they sell the yarn on

behalf of the original owners and the value so realised is paid to the owner after deducting the commission, interest and other charges which comes to about 2 to 4 percent of the sales price. Godown owner's business is less risky compared to that of whole sale Bazaar Dealer.

### ***Brokers or Commission Agents***

Brokers and Commission Agents are employed by Whole-sale Dealers in the major coir yarn business cities like Alappuzha and Kochi. These agents are working in major producing areas to purchase and store fibre and yarn from producers as well as local merchants in accordance with their requirements. They get commission and act as a liaison between or among the producers, dealers, the godown keepers and the ultimate purchasers. Some big factories depute factory representatives as their agents to important coir producing centres for making direct purchases from the local open market and many of them have own local depots also.

### ***Primary Coir Vyavasaya Co-operative Societies***

The Primary Coir Vyavasaya Co-operatives also act as an important link in the chain of marketing of coir fibre and yarn. The business operations of coir primary societies comprise of purchase of raw husk, retted husk and fibre for processing and sale of fibre and yarn to central Marketing Societies. Manufacturing activities are carried out either in the yard of societies or at the residence of members. The manufactured articles will be kept in godowns of societies before selling to COIRFED.

### ***The Kerala State Co-operative Coir Marketing Federation [COIRFED]***

Every primary coir society is required to sell its produce to the COIRFED at the price prescribed by COIRFED. It is the single marketing agency with State-wide jurisdiction over primary coir societies. The COIRFED will either sell yarn to manufacturing societies or use it to manufacture coir products.

### ***The Kerala State Coir Corporation***

It is a State owned company, manufacturing coir products. It purchases coir yarn from small- scale producers and coir co-operatives. Production of coir products is carried out either in their own units or through their accredited small-scale manufacturers who produce products as per Corporation's specifications.

### ***Hindustan Coir Mattings***

The Hindustan Coir Mattings was established as the result of a pioneering effort of the Coir Board. It was with the objective of mechanisation of the manufacturing process and development of coir industry on modern lines this was established. It started production in 1968 with five imported looms with ancillary winding machines. Coir yarn required for the factory is procured from COIRFED as well as from private parties. Dyeing of coir yarn is done through the Dye House of Central Coir Research Institute. Coir Board showrooms located in different cities of India serve as major marketing points of Hindustan Coir Mattings. During the year 1998-99 a total quantity of 2,59,688 sq. meters valued at Rs.2,29,69,464 was produced at the factory.<sup>34</sup>

### **3.7.2 Export Market – Channel**

A number of intermediaries are involved in the export sector also. The Shippers, Bazaar dealers, Brokers, Commission Agents, Factors, Foreign representatives and Export-Freight-Forwarders are important among them. There are also manufacturers who combine manufacturing activity with export trade.<sup>35</sup>

#### **The Shipper**

The shipper is an outgrowth of the commission agent during the thirties. Some shippers have specialised in speculative trade. They, however, occasionally undertake export trade also with a view to keeping in close contact with the foreign markets, which helps their speculative business in the domestic market. However, the share of their export trade to total business turnover is insignificant.

#### **Bazaar dealers**

Bazaar dealers are pure speculators who keep themselves away from export trade. The emergence of a class of bazaar dealers or the speculative dealers, as they are often referred to, was the result of wide fluctuations in the prices of coir goods

#### **Brokers**

Brokers constitute another important link in the Alappuzha and Cochin coir markets. With the expansion of export trade in coir manufactures, there arose the need for an intermediary between the buyers and the sellers. They help in finding out buyers for various types of manufactures. The brokers also possess technical knowledge of export of coir goods and have intimate knowledge about

the foreign and domestic market. They also guarantee the fulfillment of the contract terms by the buyer and the factory.

### **Commission agents**

Commission agents are middlemen who buy and sell for importer or exporter of coir goods in return for a commission. They have expert knowledge of the commodities in the field of trading.

### **Factors**

The factors are chiefly small operations. They are essentially middle-men who act as a link between the actual producers and the shippers. Factors canvass orders from overseas buyers, purchase supplies and manufactures. There are many small factories who supply their products to the manufactures – Shippers and to the factors.

### **Foreign representatives**

In respect of commodities whose volume of trade does not warrant the establishment of a branch or subsidiary, the agent or foreign representatives is found to be the most suitable channel of distribution. They include agents, distributors or dealers.

### **Intermediaries in Foreign Countries**

In the buying countries, there are various intermediaries engaged in handling transactions before it reaches the agents of distribution, dealers and the ultimate consumers. Important among them are:-

1. The customs house brokers
2. The commission agents.
3. Importers.
4. Buyers associations
5. Wholesalers and
6. Retailers.

After analysing the intermediaries in coir goods trade it is pointed out by Heydon “ there are far too middlemen who make profit before the yarn reaches the merchant. As the manufacture of coir industry is a cottage industry of a scattered character, the middlemen appear to be necessary” .<sup>36</sup>

### **Coir Products – Marketing**

Coir products like Mats and Mattings, carpets, rugs, etc., are manufactured by numerous unorganised manufacturing units, organised factory units, Mats and Mattings co-operatives etc. They sell their wares either directly to customers or through large scale exporters, like Kerala State Coir Corporation, Foam Mattings Ltd., etc. CVCs on the other hand, sell their products through COIRFED. It is revealed that in Kerala there are 97405 units engaged in various activities connected with manufacture of coir and coir goods in the unorganised sector whereas in the factory sector there are only 84 units. Nearly 92 percent of these units are household units.<sup>37</sup> During 1995-96, 32 units exported coir yarn, 121 units coir Mats, 79 units Coir Matings, 24 units coir rugs, 10 units Fibre, 8 units Rubberised Coir, 6 units Coir Rope, 9 units Curled Coir, 7 units Geo textiles, and 4units coir pith .<sup>38</sup>

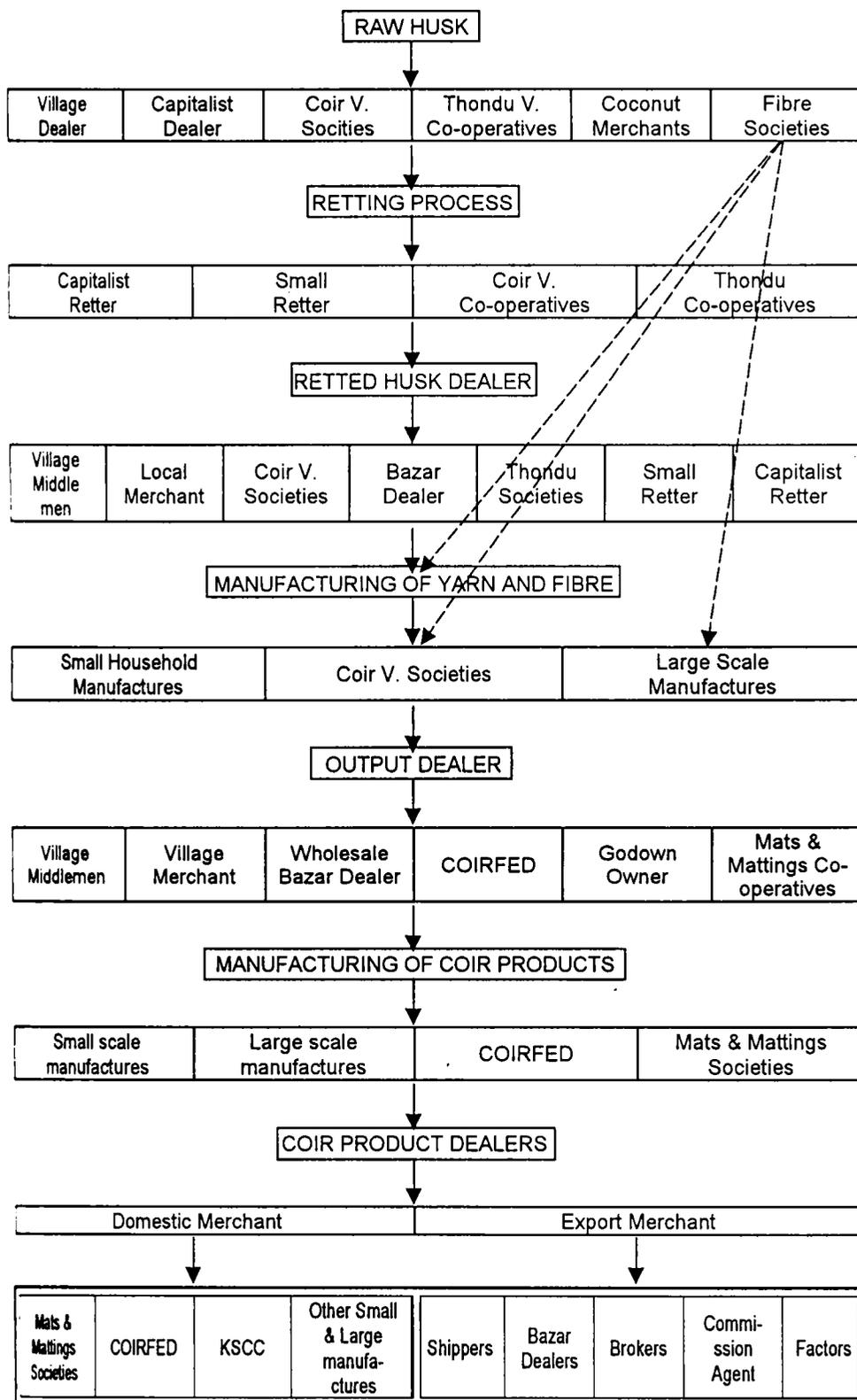


Diagram I – Production and Marketing process of Coir and Coir products

### 3.8 Policies and programmes for the development of coir industry

In market economies Government controls are often introduced to meet short-term crisis situations. But controls have a tendency to repeat themselves even when the crisis has blown over and also it paves the way for more controls. The series of control measures introduced in coir industry in Kerala are typical example for this. The Government issued various control orders, one after another, on one protect or the other. Let us have a glance over the various control measures initiated by the government to surpass various crisis situations. It is stated that 'No industry in India is subject to such detailed control as the coir industry in Kerala.'<sup>39</sup>

As majority of the workers in the industry are employed in the primary activities of coir work, in order to make available adequate quantities of raw husk to provide continuous employment to workers in the co-operative fold, Government of India, as per order NO. P.23[8] Tax [D]/68/dated 22-7-1968 under Essential Commodities Act 1955, have declared coconut husk [raw or retted] as an essential commodity.<sup>40</sup>

From the last quarters of 1973, there were a series of regulatory measures introduced by the Government of Kerala under the Defence of India Rules. The Government of India had also came into the picture with Coconut Husk Control Order, 1973 applicable only to the State of Kerala. The series of the concerned Orders and Notification are listed below.

#### **Orders/Notification with their Dates of Issue**

- 1. Notification prohibiting the use of Husk Beating Machines in the Districts of Trivandrum, Quilone and Alleppey, 20 - 7-1973, Issued by Govt. Kerala

- 2 The Kerala Coconut Husk Control order – 1973, 20-9-73 , Govt Kerala.
- 3 Notification declaring localities for retting and maximum prices for husk , 25-9-1973,
- 4 The Coconut Husk Control Order 1973, Govt. of India
- 5 Notification prohibiting the use of Husk Beating Machines in the District of Kottayam and installation of additional machinery for the production of fibre in the District of Ernakulam, Thrissur, Pathanamthita, Malapuram, 13-6-74, Govt. of Kerala.
- 6 The Kerala Coconut Husks and Coir Fibre (Export Control ) Order 1974 , 4-11-74, Govt Kerala.
- 7 Notification regarding the revised prices of raw husk, 6-11-74, Govt . of Kerala.
- 8 Notification amending the Kerala Coconuts Husks and Coir fibre (Export Control) Order, 1974.15-1-75 Govt of Kerala.
- 9 The Kerala coconut Husks and Fibre Regulation of Movement) Order, 1975, 30-1-75, Govt. of Kerala,
- 10 Notification relaxing the restriction on the prohibition of Husk Beating Machines, 10-3-75, Govt of Kerala,
- 11 The Kerala Coir Production [Price Fixation ] Order 1975 , 11-6-75, Govt Kerala.
- 12 When it was found that the Coir Vyavasaya Societies felt shortage of raw materials at reduced price, Govt. of Kerala, based on the Govt. of India Notification No. 6352/E3/83/Id Dated 1-9-86, introduced a Single Point Levy System. Under this system the husk retters have to pay levy at 30 percent of the husk purchased, retted or stocked by them.<sup>41</sup>

However, after sometime, it was found that, there were many loopholes to escape from the stipulations, and that this order was not a success in getting the desired result. So the Government thought of another alternative.

After realising that a Single Point Levy System is not effective, Govt. of Kerala, as per Notification No.12910/E3/88/ID dated 20-4-88, introduced a Three Point Levy System, according to which Copra producers, Husk Dealers and husk retters were required to sell not less than 30 per cent of the husk handled by them to agencies authorised by Govt. However, if a lot of husk has been subjected to 30 per cent levy at one point, the same will not be subjected to further levy at any other point.

Under this Scheme, Retters, Manufacturers of fibre using machines, Copra produces, Husk Dealers, have to take licence for their respective activities. Application for licence or disposal permission is to be made in appropriate forms to the Licencing Officer concerned. To avoid hardships to copra producers, dealers, retters and manufacturers of fibre using machines, the licencing powers have been decentralised. There will not be any restriction on the quantity of husk that can be sold by a copra producer or dealer. The only condition was that they should give 30 per cent of the quantity handled by them as levy at the price notified by the Government. The Coir Co-operative Societies to which levy husk is allotted, were called as "husk receivers". The husk receivers will be located in the Coir Project from which husk was procured or in the Project where the husk was proposed to be sold, or in a Project route.

When a copra producer or husk dealer applies for a disposal permission, the licencing Officer will first decide the quantum of levy husk and the husk receivers depending on from where the husk is purchased and where it is proposed to be sold. Thereafter disposal permission under levy will be issued for

the quantity of levy husk which the dealer is agreeable. As soon as the levy husk is delivered, the husk receiver society will give levy receipt. On production of this corresponding quantity ie. 7/3<sup>th</sup> of levy will be allowed to be sold as non-levy and disposal permission for that quantity given immediately. When the husk dealer or copra producer sells the non-levy husk to the retter or a subsequent dealer the levy receipt as well as the disposal permission for this quantity will be handed over to the buyer of husk in order to exempt him from further levy.

All husk dealers, copra producers, and retters are to give periodical statements of the husk purchased or consumed by them. The Coir Inspector or Project Officer are required to verify such statements.<sup>42</sup>

But all these formalities were required to be implemented by the Coir Directorate. Most of the husk transportation activities were carried out at night. Due to several practical difficulties including lack of sufficient police force, and absence of support from several corners, some anti-social activities under the shade of control measures were generated. Thus it was found that it failed to produce the desired result. Therefore, as per G.O. MS NO 117/94/Id Dated 10-5-94 the Three Point Levy System has been dispensed with in the State and the Government have announced a subsidy of not more than Rs. 150 per 1000 husk to the societies in the State.<sup>43</sup>

During 1993, Govt. appointed another High Level Committee to study the working of Coir Vyavasaya Co-operative Societies in Kerala under the Chairmanship of Thachadi Prabhakaran. On the basis of this Committee's report, Govt. categorised the Coir Vyavasaya Societies into three categories, viz., A, B and C.<sup>44</sup>

The different control measures initiated by the Central and the State Governments from time to time, placed the coir co-operatives under the

protective umbrella of the Government. But many of the control measures have failed to meet the desired objectives. It came to be known that, these control measures were taken by the Govt. as a result of social and political compulsions.

As already noted India is producing a quarter of the total coconuts in the world and in India Kerala is the largest coconut producing State. But data show that India could utilise only one third of her total fibre potential for coir industry. On the other hand Kerala's utilisation is a bit higher than the all-India estimated rate. During the last 20 years, when coconut production has increased at an annual rate of 5.5 per cent fibre production has increased only at the rate of 5.1 per cent. The export front, did not reflect corresponding increase pari pasu with fibre production. Over a period of six years even though value of export has increased by 77 per cent, quantity has increased only by 27 per cent only. It is also seen that, India could export only eight per cent of her total coir production and in most of the items, the rate of export is even less than one per cent. This is particularly discouraging when, in the global market, demand is increasing for eco-friendly items like coir. India could not perform well in the international market as the other coconut producing countries are supplying similar products at reduced prices. The marketing route also suffers due to multiplicity of intermediaries who often knock off substantial share of profit. This affects the small-scale producers. The various control measures, implemented to protect the industry, also failed to produce the desired result.

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## CHAPTER IV

### CO-OPERATIVISATION OF COIR SECTOR – ROLE OF COIR CO-OPERATIVES IN KERALA

A general picture regarding coir industry, global and national scenario of coconut production, brief historical background and its national importance, marketing channels etc. were explained in the last chapter. In this chapter an attempt is made to throw light on the genesis of co-operatives in coir industry, their growth over the Five Year Plans, role of coir co-operatives in the coir industrial scenario of the state and forward and backward linkage of coir co-operatives.

Co-operativisation in coir sector was an important step to contribute to the healthy growth of the industry. A widely held notion about co-operatives is that co-operatives could provide optimum employment to the unemployed people in the coastal areas and help to improve their living conditions. Here an attempt is made to verify this claim.

The withdrawal of foreign capitalists from the coir sector and the inflow of local industrialists and middlemen into the arena created immense problems in this sector. Middlemen and the local capitalists knocked off all profits from the industry. Workers and small producers who dependent entirely on the coir sector had neither the capital nor any organisation to desist the onslaught of the local capitalists and middlemen and hence subjected to all kinds of exploitation.<sup>1</sup> This state of affairs drew the attention of the Central as well as the state Governments.

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 issues related to the coir industry in the country. These Committees recommended the re-organisation of coir industry on co-operative basis and a Scheme was launched by the erstwhile Government of Travancore in 1950 to co-operativise the coir industry.

#### **4.1 Objectives of the Co-operativisation Scheme**

The Scheme aimed at

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

The Special Officer for coir, in his note on the Scheme submitted to the State Government on 26-9-1950, has explained the object of the Scheme in the following words. "The Scheme is mainly intended to standardise the quality of the coir produce, to discourage the adulteration prevalent, to attract foreign markets for the coir produces, to eliminate middlemen engaged in the various stages of

the industry to swallow up the profits, and to ensure reasonable wages and regular work to the labour class.”

## **4.2 Coir development programme in Kerala**

### **Outlay and Expenditure during Five year Plans [Ist Plan to IX th Plan]**

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. One lakh from the Government.<sup>2</sup> 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. The Scheme of Coir Development was so designed to bring all persons engaged in coir industry into the co-operative fold by forming three categories of societies, Viz.,

- ♦ The Thondu Vyavasaya co-operative societies for collection and supply of green husk.
- ♦ The Coir Vyavasaya Co-operative societies for actual production of yarn.
- ♦ The Coir Marketing Societies to market the yarn produced by member societies in favourable markets.

### **Budgeted Out-lay and expenditure for Coir Development in Kerala**

The out lay and expenditure for Coir development in Kerala is given in Table 4.1.

**Table 4.1. Coir Development Programme in Kerala – Outlay and Expenditure during Five Year Plans Rs. In Lakhs**

Plan period	Outlay [Rs.]	Expenditure [Rs.]
I Five Year Plan [1951-56]	64.00	63.15
II Five year Plan [1956-61]	115.00	81.45
III Five year Plan [1961-66]	195.00	104.03
Three Annual Plans[1966-69]	76.00	81.69
IV Five year Plan[1969-74]	300.00	412.06
V Five year Plan [1974-78]	300.00	551.96
Two Annual plans[1978-80]	225.00	197.02
VI Five year plan [1980-85]	800.00	1326.79
VII Five year Plan [1985-90]	1045.00	1338.25
Two Annual plans[1990-92]	1040	843.00
VIII Five year Plan[1992-97]	4000.00	4418.47
IX Five year Plan[1997-98]	1587.00	3096.54
[1999-99]	1600.00	1924.26
<b>Total</b>	<b>11347.00</b>	<b>14438.67</b>

Source: 1. Govt. of Kerala[1998] Notes on Coir Industry, State Planning Board, Thiruvananthapuram.

2. Govt. of Kerala[1999] Economic Review, State Planning Board, Thiruvananthapuram.

Table 4.1 points out that the total amount spent for coir development in the State was Rs. 14438.67 lakhs by the end of the IX th Plan. The table shows that in almost all Five year Plan periods the actual expenses exceeded the budgeted outlays.

### **First Plan Period [1951-56]**

The programmes of revitalising the coir industry was initiated in the First Five Year Plan. It was mainly aimed at organising a network of co-operative societies of coir workers in order to provide full employment and better wages to workers. During this plan period the programme of co-operativisation was mainly concentrated in the spinning sector. Information received shows that during this period, 187 coir societies were organised in the state and out of which 140 were in the spinning sector [CVCs]. The Coir Industries Act was passed by the Govt. of India in 1953 and on its strength Coir Board was established in Kochi in 1954.<sup>3</sup>

### **Second Plan [1956-61]**

The programme of co-operativisation was continued vigorously during the second Plan. The formation of the present state of Kerala in 1956 added a new dimension to the problem of rehabilitation of the industry. The main thrust during the Second Plan period was on improving the conditions of primary producers through the organisation of co-operative societies, by undertaking research and by assisting in the marketing of coir products both within and outside India. The Coir Enquiry Committee [1958] constituted by the Government of India recommended measures for reorganising the coir co-operatives with a view to ensuring more effective rehabilitation of the actual coir workers engaged in the industry. The Report of the Coir Enquiry Committee [1958]<sup>4</sup> and the Govt. of India Resolution thereon enabled the State Government to carry on with the Coir Development Schemes by extending it to Manufacturing and Marketing activities as well. Thus by the end of the II<sup>nd</sup> year of the Plan period 367 societies of various types- 316 CVCs, 31 thondu Societies, 3 Central

Coir Marketing Societies, 2 Mats and Mattings societies, 15 Coir Co-operative Unions and three Central Marketing societies - were formed.<sup>5</sup> The total expenditure under the scheme was Rs.81.45 lakhs out of the proposed State Outlay of Rs.115 lakhs.

The Third Five Year Plan [1961-66] envisaged strengthening of the existing primary coir co-operatives and Factory Co-operatives by increasing their efficiency and business capacity, besides the formation of new co-operatives. The plan also envisaged setting up of new co-operatives in the State. During this Plan period 172 Coir Co-operatives were organised in various types like 140 CVCs, 11 Mats and Matting Societies, 19 Husk Retting Unions, two Bristle and Mattress Fibre Manufacturing Societies and a Model Coir factory was also established with a total expenditure of Rs. 104.03 lakhs.<sup>6</sup>

#### **Annual Plans [1966-69]**

During the three Annual Plan period of 1966-69, the Coir Development Scheme envisaged an aggregate outlay of Rs.76 lakhs, but the actual expenditure amounted to Rs. 81.69 lakhs<sup>7</sup>. The State Govt. prepared a comprehensive scheme amounting to Rs 15.59 crores during three Annual Plan period, for the establishment of 10 project areas, and for setting up of 600 co-operatives to bring two lakh coir workers under the Co-operative fold on a phased manner. Though the scheme was accepted by the Government of India, it was not implemented as envisaged.

#### **Fourth Five Year Plan [1969-74]**

The Scheme for Coir Development during the fourth Plan aimed at improving the existing levels of production and production techniques of all coir products so as to avoid any decline in the volume of gainful employment possible in the industry. It also aimed to ensure qualitative improvement so that internal and external demand to the end products could be maintained. An outlay of Rs.300 lakhs was provided in the Fourth Plan for this Scheme, but the actual expenditure amounted to Rs.412.06 lakhs. At the end of the plan there were 462 CVCs, 18 Mats and Matting societies, three Husk collection societies and one Marketing Federation. During the plan period The Kerala State Coir Corporation Ltd. [July 1969], with the main object of stabilising the industry through marketing and manufacturing activities<sup>8</sup> and a Model Coir Factory at Beypore were established<sup>9</sup>.

The detailed scheme drawn up by the Kerala State Government during 1968 for the development of the coir industry with an outlay of Rs. 15.59 crores, was partially approved by the Government of India and implemented during the plan period. The scheme restricted to the re-organisation of the Co-operatives covering about 61000 workers in the spinning sector and 17000 workers in the manufacturing sector. This scheme could not tackle even a fringe of the problems in the coir sector.<sup>10</sup>

During the Fifth Five Year Plan period [1974-79] the Planning Commission appointed a Task Force to study the Coir industry and to suggest appropriate measures for restructuring the Coir industry. Though the task force submitted a comprehensive Scheme of RS. 44.08 crores, for the revival of the Coir industry in the State and the State Government also prepared and submitted

a scheme costing Rs. 41.72 crores, lack of adequate central assistance that the scheme under jeopardy.<sup>11</sup>

As a landmark for the development of coir co-operatives in the State and to solve the major problem of marketing coir products an Apex Institution[COIRFED] for control and management of the coir co-operatives in the state was established in the year 1979 [27-10-1979].<sup>12</sup>

During the Sixth Plan period [1980-85]: Rs. 800 lakhs had been earmarked for the development of coir sector in the state. It was mainly intended to strengthen the Share Capital and, the working capital base of coir co-operatives and to provide assistance for the marketing of coir products, for welfare measures and to meet the administrative expenses of coir co-operatives.<sup>13</sup> The Central Scheme of Co-operativisation of Coir Industry was started from 1982 onwards.<sup>14</sup>

The VIIth Five Year Plan observed [1985-90]: a remarkable achievement of Coir Cooperatives in the State was that the Coir Co-operatives have increased to 630 and the total number of members had come to 2.46 lakhs<sup>15</sup>. The actual expenditure during this period had increased by 33 per cent of the budgeted outlay.

#### **VIIIth Five Year Plan [1992-97]**

On the basis of the recommendations of the Special Task Force constituted by the State Planning Board, schemes for the development of coir industry have been formulated during the plan period. Modernisation of the coir sector was emphasised during the VIII<sup>th</sup> Five Year Plan. A total state sector outlay of Rs. 40 crores was set apart in the plan for implementing the programmes

under this sector. The Eighth Plan out-lay under centrally sponsored schemes and NCDC assistance amounted to Rs. 34.46 crores. Programmes in the plan were intended to provide coir workers full employment, better wages, better working conditions etc. But this objectives could not be achieved due to non-availability of raw material. So the state sector out-lay were utilised for giving interest subsidy and working capital loan to coir co-operatives, which implemented schemes of Coir Board and the Coir Corporation. The fund was also used for training personnel, development of coir industry, husk control etc. As a part of modernisation of the coir sector, the Integrated Coir Development Project, proposed to establish 100 defibering mills and 200 motorised coir spinning units during the plan period with the financial support of the Govt. of India and NCDC. The important event during the plan period was lifting of controls that existed in coir industry.<sup>16</sup>

From Table 4.1, shows that expenditure was more than the allocated amount except during the first three Five Year Plans.

#### **4.3 Govt. of India sponsored scheme of Co-operativisation in Coir Industry**

Although development of coir industry on co-operative basis was begun in the Travancore-Cochin part of the Kerala even before the formation of the present state of Kerala, the Government of India adopted Co-operativisation Scheme for the development of coir industry for whole of India only from 1982 onwards. The co-operativisaion Scheme of the coir sector was introduced mainly on the basis of the recommendations of the High Power Committee of the Planning Commission under the Chairmanship of B. Sivaraman. The Scheme was intended to assist the formation of viable coir co-operative societies,

revitalisation of potentially viable and dormant societies and to bring coir workers under the co-operative fold.<sup>17</sup>

The Scheme included various assistance such as

- ♦ Share Capital assistance for formation of new societies and revitalisation of dormant societies
- ♦ Managerial subsidy
- ♦ Assistance for purchase /modernisation/ renovation of equipment / looms etc.
- ♦ Marketing assistance for opening of sales outlets for sale of coir products by Apex coir co-operatives.

#### 4.3.1 Total State-wise [Major] Coir Societies, Membership and Coir Workers

The national scenario of coir co-operatives regarding total number of coir societies, membership and total coir workers in major coconut producing states in India are given in Table 4.2.

**Table 4.2. Number of Coir Societies , membership and coir workers in major coconut producing States in India[1998-99]**

States	No. of coir societies	Membership [Nos.]	Coir workers [Nos.]	Average Membership
Kerala	829[76]	2,88,070[93]{76}	3,80,000[74]{100}	347
Tamil Nadu	75[7]	14,524[5]{24}	59,500[12]{100}	193
Andhra Pradesh	30[3]	4504[1]{14}	31400[6]{100}	150
Karnataka	45[4]	2700[1]	NA	60
Other States	108[10]	NA	41032	NA
Total	108[100]	309798[100]{60}	5,12,900[100]{100}	

Source: 1. Coir Board, Annual Report, [1983-84 to 1999-2000]

2. Economic Review[1984-85 to 1998-99]

Note: 1. Figures in brackets[ ] indicate percentage to column total.

2. Figures in brackets{ } indicate percentage of members in coir societies to total coir workers

It is seen from Table 4.2 that 76 per cent of the total coir societies in India are located in Kerala and this is followed by Tamil Nadu, Andhra Pradesh and Karnataka. Ninety-three per cent of the members of the society and 74 per cent of the coir work force belong to Kerala. That means the membership in co-operative sector is more in Kerala than in other states. It is further noted that out of the total coir workers in Kerala, the coir societies could bring only 76 per cent into co-operative fold.

#### 4.3.2 Central Assistance for Co-operativisation of Coir Industry in India[1982-83 to 1999-2000

The total financial assistance entrusted to different states in India from 1982-83 to 1999-2000 in the form of Share Capital assistance, Managerial assistance, assistance for equipment and Marketing is given in Table 4.3.

**Table 4.3. Central Assistance for Co-operativisation-of Coir Industry in India From 1982-83 to 1999-2000 [Amount Rs. In Lakhs]**

Name of State	1982-83	1987-88	1992-93	1997-98	1999-2000	Total	Share of each State [%]
Andhra Pradesh	NFA	13.11	8.94	2.44	NFA	24.49	1.52
Goa	.24	NFA	NFA	NFA	NFA	0.24	0.04
Karnataka	NFA	4.00	6.99	NFA	40	50.99	3.14
Tamil Nadu	NFA	33.68	16.22	4.14	87.86	141.90	8.75
Orissa	NFA	5.98	5.57	4.82	6.44	22.81	1.4
W. Bangal	NFA	0.32	NFA	NFA	NFA	0.32	0.02
Kerala	54	368.23	116.23	614.04	230.05	1382.55	85
Andaman & Nicobar	NFA	NFA	0.94	NFA	NFA	0.94	0.07
Maharashtra	NFA	NFA	0.95	NFA	NFA	0.95	0.06
TOTAL	54.24	425.32	155.84	625.44	364.75	1625.19	100

Source: Coir Board, Cochin, Annual Report, Coir Board, 1999-2000.

Note: NFA denotes No Fund Allocation

Table 4.3 reveals that, out of the total assistance of Rs. 1391.6 lakhs on an all-India basis 83 percent was given to the coir co-operatives of Kerala. It is also seen from Tables 4.2 and 4.3 that even though 93 per cent of membership in coir co-operatives in India belonged to the societies in Kerala, only 85 per cent of the total financial assistance was channalised to Kerala.

#### **4.4 Types and Functions of Primary Coir Co-operatives in Kerala**

Coir industry in Kerala, is managed by either private, or co-operatives or public sector undertakings. The major activities in the coir industry include:-

- ◆ Collection and supply of raw materials required for the industry,
- ◆ Production of coir yarn ,
- ◆ Marketing of coir yarn and products produced.
- ◆ Manufacture of Mats and Mattings and other products

The Coir Co-operative Development Scheme has paved the way for the establishment of a number of coir co-operatives in Kerala. The coir co-operatives in Kerala can be classified into the following categories, viz.

##### **The Thondu Vyavasaya Co-operative Societies**

The basic objective of this society is to collect green husk from coconut producers, copra producers and supply the same to the primary yarn producer societies in the state at a reasonable price. It is a feeder society to the production societies. Membership in this type of societies is open to all persons engaged in either production and or collection of green husk in the area of operation of the

society. The number of societies and percentage of dormant societies are given in Table 4.4.

**Table 4.4. Thondu Vyavasaya Co-operative Societies in Kerala [Tvcs]**

Year	Total Tvcs [Nos.]	Dormant Tvcs. [Nos.]	Percentage of Dormant Societies to Total
1994-95	4	2	50
1995-96	4	2	50
1996-97	4	2	50
1997-98	4	2	50
1998-99	2	2	100

Source: Economic Review[1995-96 to 1999-2000]

It can be seen from table 4.4 that at present no husk societies are functioning in the State.

### **Coir Vyavasaya Co-operative societies [CVCs]**

The basic function of this type of societies is production of coir yarn, which is the core activity of the industry. For this it may purchase green husk and put it for retting or retted husk or fibre directly from producers, and supply the same to its members for production of yarn. Production activity may be carried out either at the society's premises or at their homes. They have to return the yarn to the society. It may market the same through COIRFED. Membership of this society is open to all persons engaged in production of yarn and or fibre in the area of operation of the society. It is also observed that sympathisers were also give membership to the extent of 7 per cent of total membership of these societies. The management of these societies is vested in the hands of seven member board, of whom five are elected from among the coir workers of the society. The

total number of Cvc's, working Cvc's., their membership and their growth over the years are given in Table 4.5.

**Table 4.5. Number of Coir Vyavasaya Co-op. Societies in Kerala[Cvc's.] and their members**

Year	Total Cvc's. [Nos.]	Total working Cvc's.[Nos.]	Total number of members [In 000's]
1994-95	440	440	257
1995-96	583	449	252
1996-97	545	412	228
1997-98	545	440	247
1998-99	525	434	281

Source: Economic Review[1994-95 to 1998-99]

### **Kerala State Co-operative Coir Marketing Federation [COIRFED]**

In Kerala, marketing of coir goods produced by co-operatives is done by four Central Coir Marketing Societies with their Head Quarters at Alappuzha, Kollam, Kochi and Kozhikodu..

But the performance of these Central Organisations were far from satisfactory owing to several reasons. Consequently, these four Central Marketing Societies were amalgamated and The Kerala State Co-operative Coir Marketing Federation Ltd. was established on 27-10-1979 with its Head Quarters at Alappuzha. The amalgamation was done to co-ordinate the working of the Central Societies and the primary member societies and to function as a single marketing agency with state-wide jurisdiction. It was expected that a united agency can function more effectively and successfully. Moreover competition between the Co-operative Societies and variations in cost, price, quality etc. can also be avoided.

The Kerala State Co-operative Coir Marketing Federation Ltd. is considered as the Apex Organisation of all the primary coir co-operatives in the State. As on June- 1999, it had 603 primary societies as its members including Coir Vyavasaya Co-operative societies, Mats and Mattings Societies, Fibre Societies etc. with a total paid up Capital of Rs.13.82 crores. The area of operation of COIRFED extends to all over the State of Kerala.

### **Objects**

The important objects of the federation are:

- ♦ To arrange for the purchase and sale of coir fibre, yarn and other coir products belonging to the affiliated societies to the best advantage within the Indian Union and outside
- ♦ To rent purchase or own administrative offices, godowns, sales depots, sub offices and branch offices within the jurisdiction of the federation.
- ♦ Purchase and distribution of raw materials, establish plant and machinery and research centres.
- ♦ Running warehouses inside and outside the country.
- ♦ Undertaking retting of husk, production of fibre, coir yarn and coir goods.
- ♦ Raising funds required for the business by way of loans, grants and other contribution from Government, Reserve Bank of India and other financial institutions.
- ♦ Extend loans to member societies and conduct credit sales to Government Agencies and co-operative institutions.
- ♦ Undertake inter-state trade and export coir and coir products.

- ♦ Render services like undertaking grading, packing , standardisation, supply of market news, technical advice, guidance, arranging transport, shipping clearing and forwarding of goods.
- ♦ Act as agent on behalf of Government or any other institution for the procurement, supply, distribution and production of husk, coir and coir products.
- ♦ Supervise, develop, assist and co-ordinate the activities of affiliated societies.
- ♦ Act as an exponent of co-operative opinion in matters relating to coir and coir products.
- ♦ Arrange for the holding of periodical conferences and seminars on coir industry, publishing of periodicals and booklets for the stabilisation and development of coir industry.
- ♦ Function as the agent of the State Government and or Central Government or any other agency authorised by the Central or state Government in implementing the programmes for the development of the coir industry

It undertakes the responsibility of procurement and storage of the entire products of the primary societies and to arrange their sales through its 54 show rooms and 49 agency showrooms in different parts of the country. It has four regional offices at Kozhikodu, Kochi, Kollam and Alappuzha, through which the procurement from primary societies are made. The purchase price for coir produce of each society is fixed on the basis of cost plus 10 per cent margin.

## **Membership and Capital**

The membership of COIRFED shall be open to the following in their areas of operation.

- ♦ Primary Coir Co-operative Societies.[CVCs]
- ♦ Mats and Mattings Coir C-operative Societies.
- ♦ Other Co-operative Societies registered under the Coir Development Scheme.
- ♦ Government.

Thus all primary coir societies, which are registered by the Government of Kerala and working all over the State and, under the administrative control of the Director of Coir Development are the members of COIRFED.

It is the apex body and sole marketing agency of coir and coir produce of member co-operatives. Most of the Schemes for coir co-operatives are implemented through COIRFED. It is registered with Director of Coir Development. Thus Coir Director is the Registrar of COIRFED.

## **Share Capital**

The authorised Share capital of the federation, shall be Rs.20 crores. Made up of 2 lakh shares of Rs. 1000 each.

During 1998-99 the COIRFED had 603 members including the State Government. It is working with a total share capital of Rs. 13.83 crores of which Rs. 0.30 crores and 13.53 are held by primary coir societies and the Govt. respectively.

## Management

The management of the COIRFED is vested in a Board of Directors consisting of 19 members on the following basis:-

- ♦ One director each to represent member societies from each one of the Coir Projects of Chirayinkeezhu, Kollam, Alappuzha, Thrissur, Kozhikodu, Kannoor, Kayamkulam, Vaikomi, North Parur, and Ponnani.
- ♦ One director to represent the Mats and Mating Societies in the State.
- ♦ Three directors to represent all the member societies in the State.
- ♦ Three directors including Director of Coir Development to be nominated by Government under Section 31 of the Act.
- ♦ One representative of Kerala State Co-operative Bank.
- ♦ The Managing Director.<sup>18</sup>

The Managing Director shall be appointed by the Board of Directors with the approval of the Government. The term of office of the Board of Directors shall be three years. The Government shall have power to extend the term of the Board of Directors beyond the term prescribed.

## Administrative Set up

It has Finance, Marketing, Export, Quality control, Internal Audit, Inspection, Planning and Administrative divisions. It is functioning with 392 employees<sup>19</sup>.

### Mats and Mattings Societies

The Mats and Mattings societies produce mats, mattings, rugs , carpets etc. needed for households, institutions business firms etc. They buy coir yarn[input] from Coir Vyavasaya Societies and small scale yarn producing firms. The Coir Vyavasaya societies thus act as the feeder firms to Mats and Matting Societies. The members of these societies are coir workers associated with production of mats and mattings. These societies are concentrated in Alappuzha District. The growth of such societies and their membership are presented in Table 4.6

Table 4.6. Mats and Mattings Co-op. Societies and its growth [M&Mcs]

Year	No. of working societies	Growth of Working M&mtts. [%]	No. of Members	Growth of Members [%]	No. of Dormant societies	Worker members	Growth of worker members [%]
1994-95	30	-	5240	-	-	2630	-
1995-96	28	-7	4940	-6	28	2350	-11
1996-97	29	4	5230	6	50	3710	58
1997-98	22	-24	5450	4	26	3720	0.27
1998-99	28	27	7070	30	26	4900	32

Source: Economic Review [1994-95 to 1998-99]

Table 4.6 shows that worker members are increasing even when there is no increase in the number of societies.

### Small-scale Producer's Societies

These are co-operative societies of small scale producers engaged in production of coir products. The aim of these societies is to find market for the products of its members and to secure reasonable price for their products. Ten such societies are now functioning in Kerala.<sup>20</sup>

## Fibre Societies

The objective of this type of societies is to supply brown fibre to CVCs. They purchase green husk or dry husk and extract brown fibre with the help of husk beating machines. They supply fibre so extracted to Coir Vyavasaya societies. The members of these societies are coir workers. The total number of societies, the number of societies are actually working etc. are given in Table 4.7.

**Table 4.7. Fibre Societies in Kerala**

Year	Total Fibre Societies [Nos.]	Working Societies [Nos.]	Societies not started working
1994-95	N.A.	N.A.	N.A.
1995-96	70	2	68
1996-97	70	2	68
1997-98	73	8	65
1998-99	73	9	64

Source: Economic Review [1994-95 to 1998-99]

It is seen from Table 4.7 that out of 73 Fibre Societies only Nine societies were working in the state at the time of the study.

### 4.4.1 Total Registered Coir Societies functioning in Kerala

Latest position of Total registered societies and societies of various other categories that actually functions in Kerala are given as Appendix I.

Appendix I shows that of the 829 coir societies registered in the State only 482 [58%] are functioning. Out of the total functioning societies, 90 per cent belongs to the category of Coir Vyavasaya Societies.

#### **4.4.2 Position of Coir Co-operatives in Kerala – Its total numbers, Number of membership, Worker members etc.**

There is a large net work of Coir Co-operatives in the State of Kerala. It has already been stated that as on 1998-99 the total number of coir societies in the State was 829 and out of which only 482 [58%] were functioning. Total number of registered societies, their membership, average membership of societies, working members of coir societies etc. from 1974-75 are given in Table 4.8.

Table 4.8 shows that total number of societies increased from 374 during 1974-75 to 829 during 1998-99, registering a growth of over 120 per cent in 25 years. Even though membership has grown over three times, worker members increased only by two times. It is also to be noted that though average membership per society has grown by 50 per cent, working members decreased by three per cent. Another point to be noted is that only 18 per cent of the members were getting work in coir societies at the time of this study, while it was 15 per cent during 1974-75. It can further be inferred that over the 25 years in coir societies worker members and members getting work, showed a decreasing trend. It is also seen that of the 829 registered societies, only 58 percent were working and of which 90 per cent belonged to Coir Vyavasaya Co-operatives.

#### **4.4.3 Government contribution in the Share Capital of Coir Vyavasaya Societies**

Government of Kerala was giving much attention to the growth of coir sector through co-operatives. This is very evident from the Share Capital contribution and the total amount expended by the Government during the various five year plans. The Share Capital of Coir Vyavasaya Societies and the Government's contribution to it from 1994-95 to 1998-99 are given in Table 4.9.

Table 4.8. Number of Coir Co-operatives, Membership and working members in Coir Co-operatives – 1974-75 to 1998-99

Year	No. of societies	No. of working societies	% of working societies to total societies	Members-hip in working societies	Average Members-hip in working societies	Worker members	Av. No. of working members	% of Av. Working members to Av. members	No. of Cvcs	% of Cvcs to Total Societies
1	2	3	4	5	6	7	8	9	10	11
1974-75	374	207	55	82107	397	22673	110	28	196	95
1979-80	N.A	422	--	197867	469	67567	160	34	409	97
1984-85	854	600	70	236345	394	103515	173	44	544	91
1989-90	844	448	53	230662	515	79045	176	34	423	94
1994-95	N.A.	470	N.A.	257240	547	64630	138	25	440	94
1998-99	829	481	58	288070	599	51440	107	18	434	90

Source: 1. Govt. of Kerala[197884,85, to 1999], Economic Review, State Planning Board, Thiruvananthapuram.

2. Govt. of Kerala[1984], Report of the High Level Committee on Industry , Trade and Power, Vol.II, State Planning Board, Tvm.

3. Govt. of Kerala[1988], Statistics for Planning, Dept of Economics and Statistics, Tvm.

Note: 1. No. of Societies include all categories of coir societies

2. Cvcs. means Coir Vyavasaya Co-operative Societies

**Table 4.9. Share Capital Position of Coir Vyavasaya Co-operatives from 1994-95 to 1998-99 [Rs. in Lakhs]**

Year	Paid-up Share Capital [Rs.]	Govt.'s Share [Rs]	Coir Worker's Share [Rs.]	Govt.'s Share [Rs.]
1994-95	1187.49	854.98	332.49	72
1995-96	1292.65	943.64	349.01	73
1996-97	1437.92	1143.72	294.20	80
1997-98	1309.45	1036.30	273.15	79
1998-99	1552.41	1127.78	424.63	73

Source: Compiled from the records of the Directorate of Coir Development, Govt. of Kerala, Thruvananthapuram, 1998-99.

Table 4.9 shows that more than 70 percent of the Share Capital of Cvc's is being contributed by the state Government. It indicates that workers participation in the share capital is very meager. This often affects the initiative of coir workers in the efficient conduct of the Coir Co-operatives.

#### **4.4.4 General view of Coir Vyavasaya Societies in Kerala on the basis of results from operation**

The project-wise details of total number of societies, numbers running at profit or loss, their amount etc. were given in Table 4.10.

**Table 4.10. Division of CVCs in Kerala societies on the Basis of results from operation[1998-99]**

Name of project	Number of Societies			Number of societies		Amount of	
	Total	Running at profit	Running at loss	At trade profit	At trade loss	Profit [Rs. In Lakhs]	Loss [Rs. In Lakhs]
Chirayinkeezhe	53	3	50	38	12	0.40	170.06
Kollam	85	Nil	85	65	20	Nil	286.46
Alappuzha	53	6	47	35	12	2.50	113.72
Vaikom	21	1	20	14	6	0.06	173.62
North Parur	21	Nil	21	6	15	Nil	215.92
Thiruvananthapuram	31	2	29	18	11	1.08	19.58
Kozhikod	62	10	52	36	16	3.68	93.23
Ponnani	18	Nil	18	10	8	Nil	37.47
Kannur	9	1	8	1	7	0.39	11.14
Total	434	35	399	275	124	10.8	1158.3

Source: From the records of Coir Directorate, Thiruvananthapuram.

Table 4.10 projects that, of the total 434 societies only eight per cent of CVCs are running at net profit. Sixty- three per cent are running at Trade Profit. The average loss per society comes nearly to Rs 3 lakhs. Thus even with all the potentialities of growth- abundant supply of raw husk, labour force, Govt. support, high potentialities for export and domestic market, 92 per cent of the societies are running at a loss. Now let us have a look at the raw material potential of Kerala and upto what extent it is availed by these societies.

#### **4.4.5 Raw material potential in Kerala and its utilisation by Coir Industry and Coir Co-operatives**

Kerala is the largest coconut producing state in India. Of the total production of 14924.8 Million [1998-99] nuts in India, Kerala accounted for 6672

million nuts [45%]. Estimates reveal that of these nuts only 75.28 per cent of the husk would be available to coir industry.<sup>21</sup>

[Husk potential rate is taken as 76 percent in Table 4.11].

The total production of nuts, potential supply of husk and share of procurement by Coir Co-operatives are given in Table 4.11

Table 4.11 shows that over a period of nine years production of nuts increased by 47 per cent, but rate of procurement of husk by CVCs decreased from 4.5 percent to 1.53 per cent. Similarly rate of consumption to total consumption of husk in the coir industry also declined from 12 per cent to 4.02 per cent over the same period. This shows that the role of CVCs in procurement of husk in the State is negligible.

[Husk utilisation rate of major coconut producing states in India is given in Table 3.5 of Chapter III]

With a wide network and Govt. support the coir co-operatives failed to utilise a substantial portion of the husk potential of the State. Even though this industry is a labour – intensive one, it failed to exploit that advantage. It is also observed that the low procurement of raw husk was due to lack of timely availability of working capital and poor managerial efficiency of Board of Directors of CVCs. Manufacturing of yarn from retted husk leads to high cost of production and objection from environmentalist. So the societies were reluctant to purchase raw husk and they were forced to purchase brown fibre from neighbouring States. The low price in these States also lead to limit the procurement of husk from within the State.

Table 4.11. Coconut production, husk potential and its consumption in Coir Industry and Cves. (1990-91 to 1998-99)

Year	Production of coconuts in Kerala [In Million]	Husk potential [In Million]	Husk consumption in coir industry [In Million]	% of 4 to 3	Husk consumption in Cves. [Million]	% of 6 to 4	% of 6 to 3
1	2	3	4	5	6	7	8
1990-91	4527.3	3441	1308	38	155.4	12	4.5
1991-92	4206.1	3197	1215	38	153.2	12.6	4.8
1992-93	5125.2	3895	1480	38	108.7	7.3	2.8
1993-94	5197	3950	1501	38	109.4	7.3	2.8
1994-95	5335.1	4055	1541	38	88.6	5.75	2.19
1995-96	5908	4490	1706	38	88.8	5.21	1.98
1996-97	5835	4435	1685	38	78.5	4.66	1.77
1997-98	5911	4450	1691	38	58.6	3.47	1.31
1998-99	6672	4500	1710	38	68.8	4.02	1.53

Sources: 1] Coconut Development Board, Kochi.

2] Govt. of India, Ministry of Agriculture, Director of Economics and Statistics. [Through Coconut Development Board]

3] Govt. of Kerala [1998] "Notes on Coir Industry". State Planning Board, Thiruvananthapuram.

4] Govt. of Kerala [1995-96 -1997-98], Directorate of Coir Development, Thiruvananthapuram.

5] Govt. of Kerala [1999], Economic Review, State Planning Board, Thiruvananthapuram, p. s-115

Note: 1] Husk potential for 1990-91 to 1997-98 is estimated based on the estimate of Coconut Development Board that, approximately 24% of total husk production is wasted or not usable and 76% can only be used in coir industry.

2] Nut production = Husk production.

3] According to statewide estimate, Kerala is consuming in coir industry only 38 % of husk potential

#### **4.4.6 A macro view of employment generated by Coir Co-operatives**

One of the major objectives of co-operativisation programme of the coir sector was to give maximum days of employment to the worker members of coir societies, which are located in places where alternative employment opportunities are scanty. Total man- days generated by CVCs, total number of worker members who secured work, average man-day per worker, wages per man-day etc. during the period from 1994-95 to 1998-99 are presented in Table 4.12.

Table 4.12 shows that during the reference period the societies could provide only less than 70 days of employment in a year and that too at a meagre wage rate of Rs.30 per day. As there was some doubts in the mind of the researcher regarding the employment data published by the Director, Coir Development, data given in the Report of the High Level Committee[1993] is relied on. The Committee calculated the man-days of employment on the basis of production of yarn and fibre and that estimate is more realistic[Calculation is given in working note below]. The data with respect to this is presented in Table 4.12. Table 4.12 shows that the societies could generate a total of 31,90,044 man-days of labour during 1994-95 and that was sufficient to provide 51 days of employment to the worker members. There was slight improvement in the position during 1998-99 when the societies could provide 69 days of labour to their worker members. The wage rate per man-day during 1994-95 was only Rs. 20 while this has gone up to Rs. 30 during 1998-99.

Table 4.12. Man-days generated Coir Yvavasaya Societies and Wages per man-day[1994-95 to 1998-99]

Year	Production[Qty.]		Total Man-days	Total no. of worker members to whom work has given	Average Man-day per worker member	Total wages [Rs. In Lakhs]	Total Bonus [Rs. In Lakhs]	Wages per Man-day [Rs.]	Bonus per Man-day [Rs.]	Total earning Per man-day
	Yarn [Tonnes]	Fibre [Tonnes]								
1994-95	8512.1	2116.06	3190044	62000	51	622.62	113.72	20	3.5	23.5
1995-96	9418.0	2125.59	3493598	60000	58	764.47	129.79	22	3.7	25.7
1996-97	11203	1962	4061333	72000	56	1044	242.59	26	6	32
1997-98	12000	1167	4194500	73000	57	1204.5	176.84	29	4.2	33.2
1998-99	9361.7	441.8	3194200	46540	69	967.04	161.88	30	5.0	35

Source: 1. Govt of Kerala[1997],[1999], Economic Review, State Planning Board, Tvm. Pp. S.144,S.115

2. Records of Directorate of Coir Development and State Planning Board from 1994-95 to 1998-99

Note: Total man-days calculated on the basis of out put of yarn and Fibre for the concerned year by applying the tool applied in the Report of the High Level Committee appointed by State Govt. [1993] to study, and forward recommendations to revitalise Coir Yvavasaya Societies in Kerala.

Working Note:- Man-days calculated in Table 4.12 is given below:-

According to the Report of the High Level Committee[1993] 18 Kg. Yarn = 6 Man-days and 18 Kg. fibre = 3 Man-days.

[Production of Yarn and Fibre in tonnes is converted into Kg.]

1994-95- Yarn	$8512100/18 \times 6 = 28,37,367$	Total
Fibre	$2116060/18 \times 3 = 3,52,677$	
		31,90,044
1995-96 Yarn	$94,18,000/18 \times 6 = 31,39,333$	
Fibre	$21,25,590/18 \times 3 = 3,54,265$	
		34,93,598
1996-97 Yarn	$1,12,03,000/18 \times 6 = 37,34,333$	
Fibre	$19,62,000/18 \times 3 = 3,27,000$	
		40,61,333
1997-98 Yarn	$1,20,00,000/18 \times 6 = 40,00,000$	
Fibre	$11,67,000/18 \times 3 = 1,94,500$	
		41,94,500
1998-99 Yarn	$93,61,700/18 \times 6 = 31,20,567$	
Fibre	$4,41,800/18 \times 3 = 73,633$	
		31,94,200

#### 4.4.7 Minimum Wages Fixed and Actual Wages Paid

The study reveals that most of the workers are employed in the three sectors namely, retting, beating and spinning. The Minimum Wages fixed by State Government and actual wages paid by the Coir Vyavasaya Co-operative Societies in the three Project areas of the State are depicted in Table 4.13 for having a clear idea about the real situation.

**Table 4.13. Minimum Wages Fixed and actual wages paid for a man-day in Three Project areas[1998-99]**

Project Area	Minimum Wages [Rs.]			Actual Wages[Rs.]		
	Retting [1000 husk]	Beating [100 husk]	Spinning	Retting [1000 husk]	Beating [100 husk]	Spinning
<b>Chirayinkeezhu</b>						
Basic Pay	7.66	11.98	11.58			
Fixed D.A.	2.28	2.28	2.28			
Variable D.A.	69.32	69.32	69.32			
<b>TOTAL [Rs.]</b>	<b>79.26</b>	<b>83.58</b>	<b>83.18</b>	<b>63.72</b>	<b>30.81</b>	<b>63.04</b>
<b>Alappuzha</b>						
Basic Pay	7.66	11.98	11.58			
Fixed D.A.	2.28	2.28	2.28			
Variable D.A.	67.4	67.4	67.4			
<b>TOTAL [Rs.]</b>	<b>77.34</b>	<b>81.66</b>	<b>81.26</b>	<b>66.0</b>	<b>46.62</b>	<b>68.76</b>
<b>Kozhikodu</b>						
Basic Pay	7.66	11.98	11.98			
Fixed D.A.	2.28	2.28	2.28			
Variable D.A.	75.	75	73.97			
<b>TOTAL [Rs.]</b>	<b>84.94</b>	<b>89.26</b>	<b>88.23</b>	<b>59.56</b>	<b>43.32</b>	<b>33.57</b>

Source: 1. Govt. of Kerala[1994], Enforcement of Minimum Wages Act, 1948 in Kerala, Dept. of Labour, Statistical Wing, Thiruvananthapuram, 1994.

2. Department of Economics and Statistics, Thiruvananthapuram.

Note: 1. Wage rate is applicable for spinning is based on approximate wages paid for common variety of yarn in the respective area

2. Variable D.A. is computed on the basis of Consumer Price Index, applicable to Thiruvananthapuram, Alappuzha and Kozhikode as published by the Dept. of Economics and Statistics, Govt. of Kerala.

Table 4.13 shows that there existed substantial difference between the actual wages paid and Minimum Wages fixed by the Government in the coir sector for various processes of coir work. The difference existed between and among project areas. It is seen that the wages for beating work were much below than the wages for retting and spinning. The study also revealed that more than 70 per cent of the workers in the beating sector were old women, whereas the retting sector was dominated by men. This also reveals that women workers were doing most of the drudgery work with low wages in the coir sector.

#### **4.5 Marketing of Fibre and Yarn – Need for strong institutional Linkage**

Coir Vyavasaya societies produce two types of products from retted husk, namely; Fibre and Yarn. Majority of societies produce yarn as per the established system and Coir Vyavasaya Societies are expected to market their entire produce through the Apex level of coir societies, namely; COIRFED. It is found that there exists poor institutional forward and backward linkages between coir societies and COIRFED in the State. Production and marketing of fibre and yarn of CVCS from 1994-95 to 1998-99 through COIRFED is given in Table 4.14

Table 4.14 makes it clear that production of fibre by Fibre Producing Cvc's were declining from 1994 onwards. It was due to low procurement of their product (Fibre) by COIRFED as well as high cost of production as fibre producing societies are not eligible for husk subsidy from Government. Therefore, these societies may go for bargaining in the open market. It is very clear that, the fibre producing societies are facing a lot of working problems such as shortage of raw material, shortage of labourers for traditional way of yarn making, lack of working capital and problems relating to marketing of fibre.

**Table 4.14. Production and Sales of Fibre and Yarn of Coir Vyavasaya Co-operatives from 1994-95 to 1998-99 [Qty. in tonnes, Rs. in Lakhs.]**

Year	FIBRE						YARN					
	Production Qty.	Value [Rs.]	Sales to Coirfed Qty.	Value [Rs.]	% of sales to Coirfed		Production Qty.	Value [Rs.]	Sales to Coirfed Qty.	Value [Rs.]	% of sales to Coirfed	
					Qty.	Value					Qty.	Value
1994-95	2166.06	177.21	108.57	8.8	5.0	5.0	8512.1	1287.82	8056.3	1240.35	95	96
1995-96	2125.59	191.30	100.82	8.86	4.7	4.6	9418	1299	7146.08	1270.2	76	98
1996-97	1962.3	157.3	83.07	7.22	4.2	4.5	11203	2016	6977.17	1120.68	62	56
1997-98	1167.00	161.6	77.66	7.58	6.65	4.5	12000	2400	6483.54	1332.75	58	56
1998-99	441.8	38.08	43.7	4.21	9.9	11	9361	1978.36	8201.96	1696.99	88	86

Source: 1. Annual Reports of COIRFED [1994-95 to 1998-99]

2. Govt. of Kerala [1999], Economic Review, State Planning Board, Thiruvananthapuram.

Therefore, they are forced to either market their produce through private channels by accepting a lower price than offered by COIRFED or to store the same for COIRFED for better times. One thing to be noted in this context is that yarn production has been registering positive growth rate except during 1998-99. This is mainly due to the support extended by the State Govt, in the form of husk subsidy through COIRFED for procurement of yarn from CVCs. Hence it is imperative that fibre making units must also go one step ahead for converting the fibre into yarn to get their products marketed through COIRFED. COIRFED as the apex body of CVCs and their sole marketing agency in the state it is the duty and responsibility of COIRFED to purchase the yarn produced by CVCs. But it is clear from the table that COIRFED is not accepting 100 per cent of CVCs products. COIRFED's inability to accept 100 per cent of the produce of CVCs create working capital problems for CVCs and that prevents CVCs in carrying out their production uninterruptedly. COIRFED is also not releasing the sale price without much delay. This problem leads to a chain reaction. Non-releasing of sale proceeds promptly to CVCs creates problems with respect to payment of wages to workers engaged by CVCs which in turn makes the workers reluctant to work for the societies. Further, the societies will not be able to purchase raw husks and put them for retting at the most advantageous season. Thus the societies face the vicious problem of shortage of labour and raw material. This affects its uninterrupted functioning. If COIRFED can market the produce of the CVCs in time and settle the accounts with CVCs without delay much of the problems faced by CVCs can be solved. It is gratifying to note that COIRFED has stepped into the export field very recently<sup>22</sup>. Hundreds of private firms were actively engaged in export of coir and coir goods since decades<sup>23</sup>. During 1999-2000 there were 92 firms exporting Coir Handloom Mats and Mattings, 8 firms, Powerloom Mats and Mattings, 21 firms, Coir fibre and coir yarn, 6 firms, geo

textiles, 12 firms, coir Rugs and Carpets, 12 firms, Coir pith, 12 firms, Coir other sorts.<sup>24</sup> It can be seen from Table 3. 6 that during 1998-99, India earned Rs 29218.88 Lakhs from export of coir and coir products. But the Annual Report of COIRFED indicates that it could export of Rs. 31.81 Lakhs worth of coir and coir products. This comes only 0.11per cent of the total exports of coir and coir products from India. The inefficiency of COIRFED in tapping the export market thus cripples the working of CVCs.

#### **4.6 Institutional set up for the Development of Coir Industry in the country**

The following institutions, Viz; Coir Board, Coir Directorate, The Kerala State Coir Corporation Ltd., and COIRFED were set up on the basis of the recommendations of various Committees and Commissions appointed by the Government with a view to promote coir industry.

##### **4.6.1 Coir Board**

The Coir Board was set up in 1954 by the Government of India under the provisions of the Coir Industry Act 1953 with its Head Quarters at Kochi, Kerala.

The main objectives of the Board are the following.

- ♦ To promote by such measures as it thinks fit for the development of the coir industry under the control of the Central Govt.
- ♦ To promote exports of coir yarn and Coir Products and carrying on propaganda for that purpose.

To regulate production of husk, coir yarn and coir products by registering coir spindles and looms for manufacturing coir products, licensing exporters of coir yarn and coir products and taking such other suitable steps as may be prescribed.

To undertake, assisting or encouraging scientific, technological and economic research and maintaining one or more research institutes and to collect statistics from manufacturers and dealers of coir products and from such other persons, on any matters relating to the coir industry and publication of statistics so collected.

Fixing grade standards and arranging when necessary, for inspection of coir fibre, coir yarn and coir products and try to improve marketing of coconut husk, coir fibre, coir yarn and coir products in India and elsewhere and preventing unfair competition.

Setting up or assisting in the setting up of factories for the producers of coir products with the aid of power.

Promoting co-operative organisation among producers of husks, coir fibre and coir yarn and manufactures of coir products and to ensure remunerative returns to producers of husks, coir fibre and coir yarn and manufactures of coir products.

Licensing of retting places and warehouses and otherwise regulating the stocking and sale of coir fibre, coir yarn and coir products both for internal and for exports.

Advising on all matters relating to the development of the coir industry and such other matters as may be prescribed<sup>25</sup>.

### **Constitution of the Board**

The Coir Board consists of thirty members. They represent coconut growers, producers of husk, Coir and coir yarn, manufacturers of coir products, dealers in coir, yarn, and coir products, exporters and internal traders, members of Parliament, the Governments of principal coconut growing states and such other persons who in the opinion of the central Government ought to be represented on the Board.

### **Activities of the Board**

In 1958 the Board issued the Coir Industry [Registration and Licensing] Rules, 1958 with a view to regulate the functioning of coir industry. As per the rules only registered exporters were permitted to export coir goods.

In 1963, in association with the Indian Standards Institution the Board introduced Export Quality Control and Pre-shipment Inspection for ensuring standard and quality of various items of coir products.

In order to avoid cut-throat competition and to impart stability to prices, Coir Board introduced a Floor Price Scheme in 1966. It has been brought under the purview of the Export Control Order by the Government of India from April 1977. According to this Scheme every exporter is required to get their quoted price satisfied by the floor prices fixed.

Coir Board strives to provide succor to the poor coir workers through the Model Coir Village Scheme. For covering four Lakh coir workers, the Board launched the Insurance Scheme for one year with effect from 1-12-98. It initiated Mahila Coir Yojana, the first women oriented self employment programme in the industry.

Above all, Coir Board is entrusted with the task of implementing Coir Co-operativisation Scheme from 1982 onwards, for developing coir co-operatives in all coir producing states in India.

### **Institutions created by the Board**

Coir Board has four regional Coir Training and Development centres in major coconut growing states and a central Research Institute in Alappuzha for continuous research and development activities. In this campus National Coir Training and Design Centre was also established in 1965. In Alappuzha again the Board established Hindustan Coir, a manufacturing unit, in 1968 to meet the challenges of competing countries in the world market. The Board is functioning with the three regional offices and 32 showrooms in important cities in India. Besides, for diversified activities it has several institutes in various states in India.

Coir Board is the sole agency of Central Government for upliftment of coir industry in India. The Government of India is spending crores of rupees for the establishment and maintenance of Coir Board and its allied institutions all over India. But it can be assessed that even after 46 years of its functioning the coir workers are still in poverty, getting very low wages even less than the Minimum Wages, the Coir societies are running at loss, Private Coir manufactures are squeezing the workers. The Board has failed to popularise the unsurpassable quality of coir product in foreign countries. Coir Board's manufacturing unit, Hindustan Coir shows Excess Expenditure over Income by Rs.296,658 in 1998-99 and Rs. 58,172 in 1997-98. The Showrooms of the Board are also showing Excess Expenditure over income. The expenditure exceeded income by Rs. 53,17,631 in 1998-99 and Rs. 49,44,922 in 1997-98. The overall financial picture of the Coir Board shows a negative figure ie. Excess Expenditure of Rs.

59,91,764 in 1998-99. Thus the objectives of the formation of the Coir Board has not been fulfilled.<sup>26</sup>

#### **4.6.2 The Kerala State Coir Corporation Ltd.**

The Kerala State Coir Corporation Ltd was established in the year 1969 with its Head Quarters at Alappuzha, Kerala. The Authorised Capital of Rs. 150 lakhs is divided into 1,50,000 shares of Rs. 100 each. But as on 31-3-1996, the Authorised Capital of the Company is Rs. 5 crores divided into 5,00,000 Equity shares of 100 each. Of these 4,34,550 shares are issued and fully subscribed by the Government of Kerala.

The objectives of the formation of the Corporation are listed under 37 heads. The main among are summarised below.

The basic thrust of the Corporation to develop, promote and stabilise the coir industry in Kerala and to work as an Export House for coir and coir products. The incidental or ancillary to the attainment of the above main objects include the following:-

- ♦ To provide financial, technical, marketing, developmental or any other assistance to facilitate or accelerate the development of the coir industry in Kerala and take other steps for improving the marketability of coir and coir products of the State within and outside India.
- ♦ To undertake export and export promotional activities for coir and coir products directly or in collaboration with exporting business Corporations. To enter into contracts with and take up indents from Government of India and the State Governments in all their departments to supply goods, materials and articles relating to the Coir industry.

To implement the Schemes which the Government of Kerala or Govt. of India may formulate for the development of the Coir Industry and to Undertake any of the obligations laid down by the Coir Industries Act of 1953 .

To aid, advise, assist, finance and protect the interests of coir industry in Kerala.

To introduce Schemes of Standardisation and Quality Control according to the specifications fixed by the ISI, Coir Board and the Government of Kerala, undertake market surveys and market research, to publish price lists, catalogues, folders, pamphlets with in the country and outside for the guidance and promotion of the coir industry.

To import equipments, know-how, other fibres and any other material required for the coir industry and to aid coir industrial units, whether Co-operative or Private enterprises by supplying credit, giving financial assistance, guarantee loans etc.

To undertake the processing and manufacture of coir and coir products and to effect co-ordination between large and small industrial units between companies and Coir Board to help promotion of sales, export of coir and coir products of the companies.

To receive financial and other assistance like grants, loans advances from Central Government or State Governments and to make, draw, accept endorse, discount, execute, issue and negotiate cheques, bills of exchange, promissory notes, debentures and negotiable instruments.

To take such steps which are necessary to improve the marketing efficiency of coir and coir products, to promote overseas and internal

exhibitions, take over the business in coir and coir products undertaken by any individual, institutions, establishment or Government on such terms and conditions as may be necessary.

- ♦ It also entrusted to do all such matters and things in general as may appear to be incidental to the interest of and attainment of the objectives of the corporation.<sup>27</sup>.

### **Number of Directors**

The number of Directors shall not be less than two or more than eleven. The Directors are not required to hold any qualification Shares and are appointed by the Governor of Kerala.

### **Mode of Functioning of the Coir Corporation**

As mentioned above Kerala Coir Corporation is a complete State Government owned company like any other Government company. It has no formal linkage with COIRFED, Coir Directorate or any Coir Co-operative undertaking. The relation with Coir Board is, that it has to register with Board, as done by any coir manufacturing unit in India. The Corporation has its own manufacturing unit in its compound at Alappuzha. It also used to purchase coir products manufactured by small scale coir manufacturing units in and around Alappuzha. The Corporation has 3000 small scale manufacturing units. These units manufacture coir products according to the order and specifications of the Corporation. It deals with coir manufactured products only. It purchases coir from small units for its own manufacturing purpose. Corporation is having show rooms all over India.

Considering its formation and linkage, it is not obligatory for the corporation to lift the Coir Co-operatives. But in some situation with the compulsion of State Government, it is used to purchase coir products from COIRFED when it was flooded with stock.

While analysing its working, it has been learnt that, it is regularly making loss and its functioning is not at all satisfactory even with regular office work. Even during the month of March 2001, they had completed the Annual Report of 1995-96 only. From the Annual Report it can be learnt that, its Accumulated loss comes to Rs. 3,65,50,938 during 1994-95 and it reached to Rs. 435,11,066 during 1995-96. The accumulated loss was around 50 percent of the total Assets of the Corporation. During the year 1994-95 it made a net loss of Rs.32,26,812 and the loss doubled during 1995-96 ie Rs.66,60,127<sup>28</sup>. From the internal sources it was understood that during 1999-2000 also it generated loss and they even admitted that it is a sinking firm and has not done much vis-à-vis its noble objectives.

#### **4.6.3 The Kerala State Co-operative Coir Marketing Federation Ltd. [COIRFED]**

*[Explained at the beginning]*

#### **4.6.4 Coir Directorate**

The Coir Co-operatives in Kerala are governed by the Kerala Co-operative Societies Act and Rules 1969. Since these Societies undertake industrial activities, they are also subject to the management of the Director, Coir Directorate, Kerala. The Coir Directorate has Project Offices and Circle Offices who undertake the organisation, management and control of Coir Co-operatives

in the State. The Director and Project Officers of Coir Directorate are acting as Registrars for registering coir co-operatives in the State. The Director is empowered to register societies having State- wide areas of operation and so he is the Registrar of COIRFED. He is also acting as an ex-officio member in the Board of Directors of COIRFED. Moreover, the audit is being carried out by The Department of Co-operation, Kerala. The Organisational Structure of the Coir Directorate and its linkage with coir co-operatives are given in the Diagram II.

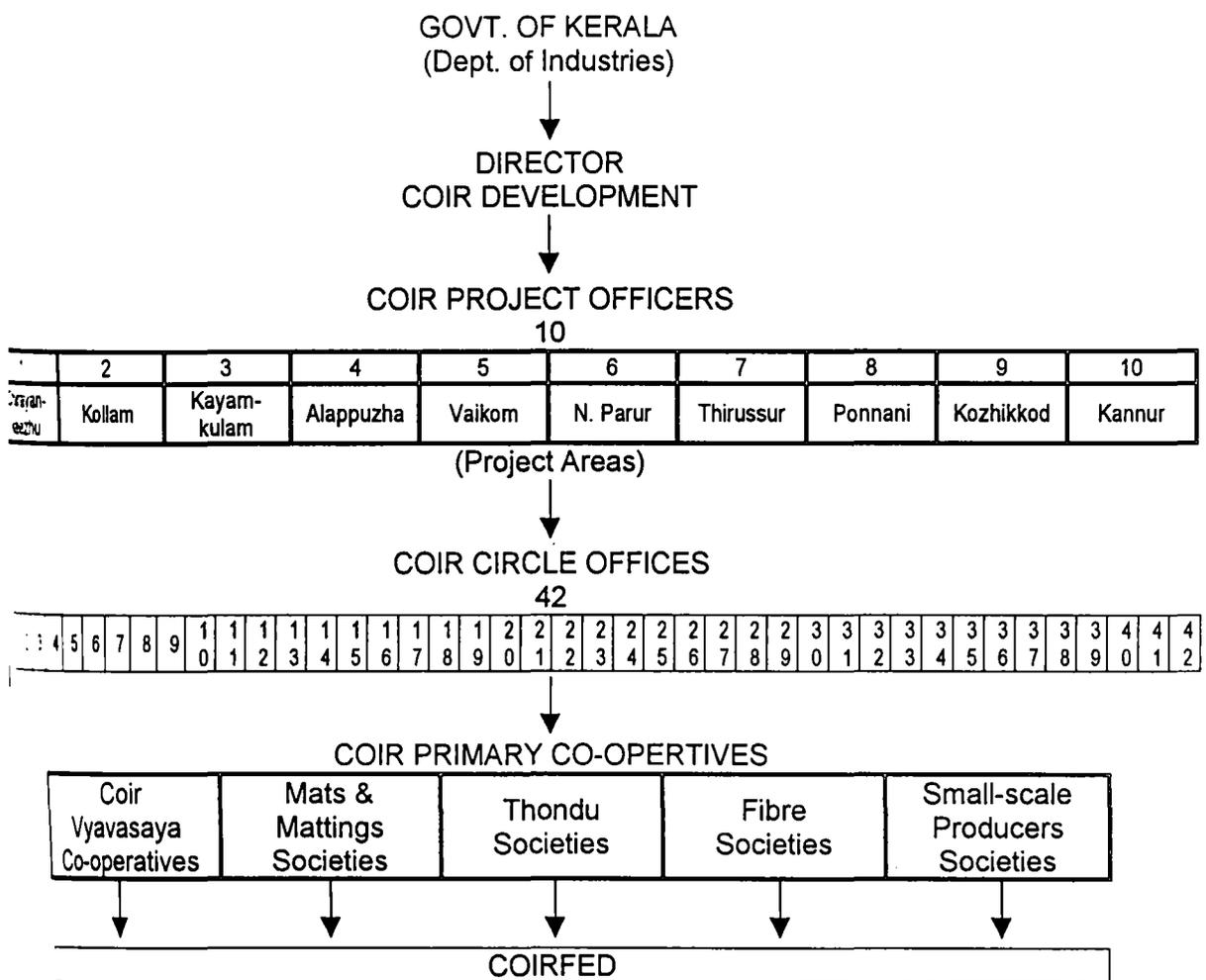


Diagram II. Organisational Structure of Coir Directorate

It is to be noted further that the Registrar of Co-operatives audits the accounts of all co-operatives functioning in Kerala. Besides, the Registrar also acts as Registrar of those industrial co-operatives having no separate Directorate. The Registrar sends Audit Reports to the Coir Director. If the auditor detects any drawback in the functioning or accounts of the Coir co-operatives, the Registrar can direct the Coir Director to rectify the irregularities.

Five Decades passed after launching The Scheme of Coir Development through the Development of Co-operatives by erstwhile Travancore-Cochin State Government. It was intended to solve the problems of actual coir workers, and small producers in coir industry by ensuring regular work, living wages, standard quality, better market and to bring all the coir workers under the co-operative fold. Over Rs.144 crores was spent from I<sup>st</sup> to IX<sup>th</sup> Five Year Plan. Centrally sponsored Co-operativisation Scheme was started in 1982 to assist revitalisation of potentially viable and dormant societies and to bring all coir workers under co-operative fold and also important thrust was given to mechanise yarn making through Integrated Coir Development Programme. Through this Scheme it also spent around 14 crores of rupees. But even after all these Schemes, coir workers in societies are still in a poor condition. Their conditions is as bad as before the launching of the Scheme. The CVCs in Kerala, on an average, could not provide more than 69 man-days of work per worker during 1998-99. The workers were not getting regular work and even Minimum Wages fixed by the Government. Forty two percent of societies were not functioning, and out of the functioning societies majority of them were running at a loss. Further even now all the coir workers have not come under the co-operative fold [26 %] and out of the total members, only 18 per cent have only been benefited out of the coir co-operatives by getting employment. The

societies could collect only slightly higher than one per cent of the husk potential of Kerala. The implementation of motorised ratt for yarn making under ICDP was also not effective qualitatively and cost-wise. [Details given in Chapt V].

Regarding the role of various promotional agencies, they were not playing effective role for the promotion of the industry. The Coir Corporation is not performing in conformity to its objectives and not extending a helping hand to the Coir Co-operatives. The Coir Board and COIRFED are only acting as agencies of the Govt.

In the marketing Channel, numerous intermediaries are functioning formally and informally. Even though the Govt.'s objective was to eliminate the role of middlemen and to free the small producers from their clutches, still the middlemen are dominating in the coir market and they control the prices of coir products.

## References

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## CHAPTER V

### PERFORMANCE OF COIR VYAVASAYA CO-OPERATIVE SOCIETIES

Having discussed the Co-operativisation process of the coir and their role in various areas of State economy like providing employment to its worker members, Govt.'s contribution to their Share Capital and part played by various agencies associated with it etc., it is necessary to examine the performance of Coir Vyavasaya Co-operatives[CVCs] in order to ascertain whether they are working to achieve the desired objectives of their formation. Hence an attempt is made in this chapter to evaluate the performance of CVCs. The performance is evaluated with respect to financial performance and adherence to their objectives of Co-operativisation.

Financial performance of the societies were analysed in two ways as follows:-

- A) Analysis of financial position and
- B) Analysis of operational efficiency.

The evaluation of performance in relation to the desired objectives was made through the analysis of a survey conducted among 45 CVCs. belonging to A, B and C categories, selected from among the working societies. A survey among the 275 coir worker households [100 each from A and B category and 75 from C category] was also conducted for this purpose.

A brief profile of the operational environment of coir co-operatives and the production process seems to be in order to highlight the salient features of this sector.

### **5.1 Profile of the area of A, B and C classes of Coir Vyavasaya Societies selected for the study**

Although coir industry is centered in the coastal areas of Kerala, it is in a decentralized nature and scattered all over the coastal belt of the state. The common features of this area are lack of provision for any fruitful employment opportunity for the livelihood and the unhygienic surroundings in which retting and beating operations were done. A visit to the places of coir manufacturing, will make one feel the foul smell of retting places in lagoons and coastal areas of backwaters. The spinning activity is carried out in most of the societies in the open air irrespective of rain or scorching sun beams. Some societies make temporary sheds with coconut leaves and it would not last more than a season. In the spinning yards it can be seen that women workers are walking forward and backward in maximum speed with fiber bundles between their hands and body wearing mostly rags in the working spot, holding triangular wooden block[Achu].

The societies are having Unit System of production; the beating and spinning activities are carried out in the back yards of the dwelling places of coir workers who have moving space. The most repulsive work in this processing is immersing the green husk for retting into the mud of lagoons and coastal parts of backwaters. Next is beating work, which is carried out mostly by women. On the pressure of beating, the pith will be scattered and that will cover the body of these beaters. The pith will be having a foul smell. There is no time limit for work in those engaged in this activity. The description given in the Minimum

Wages Committee Report may convey the miserable plight of coir workers more sharply than any statistical exercise. The Committee observed that "for a long time, the workers have not been able to obtain a good meal on any day except on festival days.... Even that was made possible only by starvation on subsequent days.... After returning late in the night they prepare Kanji (loose watered cooked rice) and drink the watery portion, giving the rice to the men and children in the family".

At present about 100 societies in Kerala are having permanent work shed under ICDP Scheme. But in these work sheds traditional ratt spinning is not carried out. Here the spinning work is done by motorised ratt. Production of yarn under motorised ratt is carried out by workers sitting by the side of the machine. But quality of yarn in this method of processing is very poor and cost of production comparatively high. The quality of yarn produced with traditional ratt is better but here the workers work in the open yard irrespective of rain or the scorching sun.

Most of the households engaged in coir work belong to Hindu Ezhava or Thiyya community excepting those at Kozhikodu, where majority belong to Sheeya Muslim Community. For administration purpose of Cvc's in Kerala, the Coir Directorate divided the coir producing area under 10 projects namely:- 1.Chirayinkeezhu 2. Kollam 3.Kayamkulam 4.Alappuzha 5.Vaikom 6.North Parur 7. Thrissur 8. Ponnani 9. Kozhikodu and 10. Kannur. It is to be noted that the division is not based upon any geographical limit of any District. The Chirayinkeezhu project area extends beyond Thiruvananthapuram District. It has five circle offices including Neyyattinkara circle, which is either in coastal belt or in the backwater side. Kollam project area covers Kollam as well as Pathanamthitta districts. It comprises of eight circle offices viz. Kollam, Perinadu,

Kundara, Adoor, Paravoor, Chavara, Ponmana and Karunagappally. The Kayamkulam project area is located in Alappuzha and Pathanamthitta Districts. It has five circles viz., Kayamkulam, Muthukulam, Haripad and Karthikappally South. Most of these places are close to backwaters, lagoons and coastal areas. The Alappuzha Project area is fully confined to Alappuzha district with 5 circle offices in Alappuzha North and South, Poochakkal, Cherthala and Thuravoor. All these places are by the side of backwaters and lagoons. Vaikom project area is confined to Kottayam District. It has two circles viz. Vaikom North and Vaikom South. These circles were also near the side of backwaters or lagoons. The North Parur Project area is located in Ernakulam District. It is divided into four circles viz. North Parur, Njarakkal, Ernakulam and Mattancherry. Since it is the most industrialised place in Kerala, it is very difficult to get labourers for coir work in this area. Thrissur, Chavakkad, Nattika and Kodungalloor are the circles coming under the Thrissur Project area. Most of these places are located on the side of backwaters or big rivers. The Ponnani Project is located in Malappuram and Palakkad districts. It has two circles viz., Ponnani and Tirur. The husks available from these areas are of superior quality. The Kozhikode Project area is spread over five circles viz., Kozhikode North, Kozhikode South, Chevayoor, Badagara and Quilandy. Majority of the households in this area belong to Muslim community. Hand spinning is mostly carried out here. The Kannur Project area is spread over Kannur and Kasargodu Districts. It has two circles viz. Kannur and Kasargodu. The present study covers eight project areas [Except Kannur and Ponnani].

## **Categorisation of Coir Vyavasaya Co-operatives**

The CVCs in Kerala are categorised into A, B and C on the basis of the recommendations of the High power Committee, appointed by the Government of Kerala [1993], under the Chairmanship of Thachadi Prabhakaran. According to the Committee, those CVCs working satisfactorily are placed in A category and the CVCs having the possibility of working satisfactorily are grouped into B category. All societies, having extreme possibility to work fairly are placed in C category.

### **5.1.1 Socio-Economic conditions of Coir Workers**

In Kerala nearly two lakhs households<sup>1</sup> are depending upon coir as their livelihood. Ninety per cent of the workers in the coir industry are engaged in the retting of husks, extraction of fibre and spinning of yarn etc. and majority of them are women. There are 23000 retting units, existing in about 357 villages spread over the coastal area of the State.<sup>2</sup> The notable feature of these villages is the absence of an alternate employment opportunity when there is no possibility of coir related work and so living in poverty.

Majorities of the coir workers are members of Coir Vyavasaya Societies. These societies are encouraged by Government by providing various types of financial assistance for giving full- time employment and fair wages to them. Even then the coir workers are living in poor socio-economic circumstances.

Survey was conducted among 275 coir worker households spread over Eight Coir Projects selected at random consisting of 100 households from each category of A and B societies and 75 from C. A coir worker household is a household in which at least one worker is engaged in coir work. The study

covered the demographic profile of coir workers, their economic set-up, participation in the management of societies, opinion about present management of coir society, future prospects of society and opinion about mechanisation in coir sector etc.

### Family Size

The socio-economic prospects of any society have a relationship with size of family. The size of family of the coir worker households is given in Table 5.1

**Table 5.1. Family Size of sample Households of A,B, and C classes of CVCs**

Category of societies	Number of Households	Family Members			Average Size of coir worker House holds		
		Total [Nos]	M [Nos.]	FM [Nos.]	M	F	Total
A	100	479[100]	191[40]	288[60]	2	3	5
B	100	502[100]	220[44]	282[[56]	2	3	5
C	75	465[100]	187[40]	278[60]	2	4	6
Total	275	1446[100]	598[41]	848[59]	2	3	5

Source: Survey Data.

Note: Figures in parentheses indicate percentage to row total.

It can be observed from Table 5.1 that the average size of the family of coir workers is five, consisting of two male and three female members, which is higher than the all Kerala average of 4.6<sup>3</sup>. However, it is seen that in C category societies, the number of total members and female members are higher than the other two categories.

### Age and Sex Composition of Total Members in coir worker Households

Age is a measure of a person's capability and so it is a significant index of nation's vitality. The quality of population of a sector depends to a great extent upon the age of their workers. The juvenile, comprising of infants and adolescents, are largely, biologically as well as economically, non-productive. The age and sex composition of members in coir worker Households are given in Table 5.2.

**Table 5.2. Number of members in the Coir Worker Households and Age Class**

Age class	Family Members			Total [Nos]	M [Nos]	F.M. [Nos.]
	A[Nos.]	B[Nos.]	C[Nos.]			
Less than 15	86[18]	85[17]	86[18]	257[18]	170[28]	87[11]
16-45	186[39]	215[42]	170[37]	571[39]	247[42]	324[38]
46-60	100[21]	103[21]	97[21]	300[21]	103[17]	197[23]
Above 60	107[22]	99[20]	112[24]	318[22]	78[13]	240[28]
Total Members	479[100]	502[100]	465[100]	1446[100]	598[100]	848[100]

Source- Survey Data

Note- Figures in brackets indicates percentage to column total

Table 5.2 depicts that 39 per cent of the members are in the productive age group of 16-45. The sex ratio in the study region was 1438, which was far higher than the sex ratio of the state, which is 1058.<sup>4</sup>

### Age and Sex composition of Coir Workers in the Coir Households

Age and Sex composition of Coir workers in the Coir Households are displayed in Table 5.3.

**Table 5.3. Number of Coir Workers in the coir worker Households**

Age Class	Number of coir workers in households			Total [Nos.]	M [Nos.]	F.M. [Nos.]
	A[Nos.]	B[Nos.]	C[Nos.]			
Less than 15	6[2]	4[1]	6[3]	16[2]	2[1]	14[3]
16-45	70[28]	76[29]	73[30]	219[29]	47[26]	172[30]
46-60	73[30]	92[34]	80[33]	238[32]	64[35]	174[30]
Above 60	97[40]	95[36]	82[34]	281[37]	68[38]	213[37]
Total	246[100]	267[100]	241[100]	754[100]	181[100]	573[100]

Source: Survey Data

Note: Figures in brackets indicate percentage to column total

Table 5.3 shows that 37 per cent of the workers are above 60 years of age. Those in the age group of 46-60 constitute 32 per cent and only 29 per cent of the coir workers were from the productive age group of 16-45. It is also noted that children below the age group of 15 were also engaged in coir work. Of the total coir work force, it was found that 76 per cent of them were women. Among the workers in A,B and C classes of CVCs more productive age groups of workers were found in C class CVCs. It can be inferred from the above that most of the workers are old ages and new generation are not interested in the coir sector.

### Education Level - Coir Worker Household

The Education level of coir worker households is depicted in Table 5.4.

**Table 5.4. Education Level of members in coir worker Households**

Category of Societies	Number of Members above 5 years old	Literate [Nos.]	Level of Education		
			Primary [Nos.]	Secondary [Nos.]	College [Nos.]
A	460	408[11] (100)	191 (47)	155 (38)	62 (15)
B	479	417[13] (100)	201 (48)	171 (41)	45 (11)
C	441	381[14] (100)	205 (54)	146 (38)	30 (8)
Total	1380	1206[13] (100)	597 (50)	472 (39)	137 (11)

Source: Survey Data

Note: 1) Figures in parentheses ( ) indicate percentage to row total of literate

2) Figures in [ ] brackets indicate the percentage of illiterate in each category

Table 5.4 reveals that 13 per cent of the members of the coir worker households were illiterate. Among the literate, 50 per cent of had only primary education. However, the general literacy level of coir worker household members were below the State average [90.92%]<sup>5</sup>. Among the three categories, the majority [54%] belong to C category societies and they had only primary education.

### **Level of Education of Coir Workers**

The literacy rate of individual workers is examined so as to have a more realistic picture. This is depicted in Table 5.5.

**Table 5.6. Ownership of Dwelling House**

Category of Societies	Total No. of Coir Households	Ownership			Electrified (Nos.)
		Own (Nos.)	Rented (Nos.)	Living with Others (Nos.)	
A	100	99	--	1	68
B	100	92	5	3	65
C	75	69	3	3	44
Total	275 [100]	260 [94]	8 [3]	7 [3]	177 [64]

Source: Survey Data

Note: Figures in Brackets indicate percentage to row total

**Table 5.7. Type of Dwelling House**

Category of Societies	Total Households	Type of Dwelling House			
		Concrete [Nos.]	Tiled [Nos.]	Asbestos [Nos.]	Thatched [Nos.]
A	100[100]	49[49]	41[41]	2[2]	8[8]
B	100[100]	64[64]	26[26]	1[1]	9[9]
C	75[100]	41[54]	23[31]	6[8]	5[7]
Total	275[100]	154[56]	90[33]	9[3]	22[8]

Source: Survey Data

Note: Figures in parentheses denote percentage to row total

Table 5.6 shows that 94 per cent of the households were having owned dwellings, of which 36 per cent, were not electrified.

Table 5.7 shows that 33 per cent were living in thatched houses. It is to be noted that this rate is higher [41%] in A category societies than the other two. In Kerala, 25.2% households are living in thatched houses and 12.5%, in concrete

houses. Thus the position of coir workers is worse compared to the general situation of Kerala.<sup>6</sup>

### Drinking Water facility

Drinking water facility is an important factor affecting the standard of living of people of any category. This facility with respect to coir workers is given in Table 5.8.

**Table 5.8. Drinking Water facility**

Category of Societies	Total Households	River [Nos.]	Well [Nos.]	Pipe [Nos.]	Pond [Nos.]
A	100[100]	2[2]	40[40]	57[57]	1[1]
B	100[100]	3[3]	54[54]	38[38]	5[5]
C	75[100]	--	35[47]	36[48]	4[5]
Total	275[100]	5[2]	129[47]	131[48]	10[3]

Source: Survey Data

Note: Figures in brackets denotes percentage to row total

Table 5.8 shows that 48 per cent of the households depend on pipe water and 47 per cent, in traditional wells. Only a negligible per cent were depending on pond. Category-wise analysis shows that 57 per cent of A category were depending on common tap for drinking water. This shows that, the condition of coir worker households is much worse compared with normal households of Kerala. In the case of normal households 76 % have own wells.<sup>7</sup> In certain areas where the households are surrounded by backwater and lagoons, pipe water is the only source and long queue of women and children can be seen in front of common taps.

### Value of assets of Coir Worker Households

The assets comprising of land, building and other items of coir households are depicted in Table 5.9.

Table 5.9. Value of Assets of Coir worker Households [Value Figures in Rs.]

Category of Households	Households	Range of value of Assets			
		<25000 [Nos.]	25000-75000 [Nos.]	75000-1,25,000 [Nos.]	>1,25,000 [Nos.]
A	100	19[19]	31[31]	21[21]	29[29]
B	100	6[6]	38[38]	23[2]	33[33]
C	75	13[17]	34[45]	19[26]	9[12]
Total	275	38	103	63	71
	[100]	[14]	[37]	[23]	[26]

Source: Survey Data

Note: Assets include Land, Building and other equipments, if any.

It can be observed from Table 5.9 that 14 per cent of the households were having the assets valued less than Rs. 25000. Sixty per cent were having assets between Rs.25000- 125000

It is worth noting that in C category only 12 per cent of the households are having assets valued above Rs. 1,25,000 which is less than the other two categories. The low asset value of the households are due to their poor land

## Area of Land Holding

Table 5.10. Land Holdings of Different category of Societies

Category of societies	Land Holdings [Cents]				Total
	0-5 [Nos.]	6-10[Nos.]	11-15[Nos.]	16 and above {Nos.]	
A	42[42]	33[33]	10[10]	15[15]	100[100]
B	30[30]	37[37]	13[13]	20[20]	100[100]
C	35[47]	25[33]	9[12]	6[8]	75[100]
Total	107[39]	95[34]	32[12]	41[15]	275[100]

Source: Survey Data

Note: Figures in brackets indicate percentage to row total.

Table 5.10 shows that 212 [74%] coir households were having only less than 10 cents of land and some are even landless. Only 41[15%] households were having 16 to 30 cents of land. Category-wise analysis shows that, the minimum land holders are more in category C whereas households having higher land holdings were more in B category. It was also observed that, the coir worker households had no income from agriculture, because they were not having cultivable land and most of them were having land just for a house only.

### Occupational Structure- [Main and subsidiary separately]

The principal and subsidiary occupational structure of the sample respondents were checked and given in Tables 5.11 and 5.12.

Table 5.11. Occupational structure of Coir Workers[Main]

Types of Work	Categories of Societies and Number of members			Total
	A[Nos.]	B[Nos.]	C[Nos.]	
1-a	135[55]	125[47]	123[51]	383[51]
1-b	--	--	1	1
1-c	16[7]	27[10]	28[12]	71[9]
[X] Total[1.a+1b+1c]	151(62)	152(57)	152(63)	455(60)
2	9[4]	9[3]	11[5]	29(4)
3	21[8]	9[3]	6[2]	36[5]
4	65[26]	97[37]	72[30]	234[31]
[Y] Total[2+3+4]	95(38)	115(43)	89(37)	299(40)
X+Y	246[100]	267[100]	241[100]	754[100]

Source: Survey Data

- Note: 1) Figures in Parentheses indicate percentage to column total  
 2) Figures in ( ) indicate percentage of X and Y to column total  
 3) Work is divided into coir work from 1.a to 1.c and Non - coir work is from 2 to 5  
 1.a = Coir work in coir society 1.b = Coir work by themselves [own]  
 1.c = Coir work in other private firms  
 2. = Agriculture labour 3 = Service 4 = Other occupations which includes- Fishing, Net making, Head load, Basket making , Mat making etc.

Table 5.12. Subsidiary Occupational Structure of Coir Workers in the study Region

Types of work	Category of societies and number of workers			Total
	A[Nos.]	B[Nos.]	C[Nos.]	
1.a	18[28]	12[24]	10[32]	40[28]
1.b	--	6[12]	--	6[4]
1.c	24[37]	16[33]	10[32]	50[34]
[X] Total[Nos.]	42[65]	34[69]	20[64]	96[66]
2	5[8]	3[6]	2[6]	10[7]
3	3[5]	4[8]	3[10]	10[7]
4	15[22]	8[17]	6[20]	29[20]
[Y] Total[Nos.]	23[35]	15[31]	11[36]	49[34]
X+Y[Nos.]	65[100]	49[100]	31[100]	145[100]

Source: Survey Data

Note: Figures in parentheses indicate percentage to column total.

As a whole 60 per cent of the workers mainly depended on work related to coir for their livelihood. It ranges from 57 per cent to 63 per cent among different categories. They also depend on fishing, shell collection[Kakka], net making, basket making, or work as agricultural labour or do head load work for their sustenance. It was also noted in Table 5.12 that, 19 per cent of the total coir workers were undertaking subsidiary occupations, of these 66 per cent of them in the coir sector itself. Thirty four per cent of them were engaged in private coir sector. There was not much difference in occupational structure among the workers in A, B and C classes of CVCs.

#### Man-days of work [Main and Sub. separately]

Man-days of work available by different sectors to coir worker households [Main and Sub. separately] are depicted in Tables 5.13 and 5.14.

Table 5.13. Number of Man days engaged by coir workers in an year [Main occupation]

Types of work	Category of societies and the man days of work			Total {Nos.}
	A[Nos.]	B[Nos.]	C[Nos.]	
1.a	17213[47]	15030[37]	14247[44]	46490[43]
1.b	--	--	200[1]	200[.18]
1.c	2832[18]	6045[15]	5076[16]	13953[13]
Total 1a+1b+1c]	20045(55)	21075(52)	19523(61)	60643(56)
2	964[3]	944[3]	980[3]	2888[3]
3	5045[14]	2048[5]	908[3]	8001[7]
4	10228[28]	16261[40]	10632[33]	37121[34]
Total(2+3+4)	16237(45)	19253(48)	12520(39)	48010(44)
X+Y	36282[100]	40328[100]	32043[100]	108653[100]

Source: Survey Data

- 1 - Figures in [ ] brackets indicate percentage to column total  
 2 - Figures in ( ) brackets indicate percentage to X and Y total.

**Table 5.14. Coir Workers Man-days of work in an year [Sub]**

Types of Occupation	Category of Societies and Number of Man-days			Total
	A[Nos]	N[Nos.]	C[Nos.]	
1.a	180[11]	144[12]	150[22]	474[14]
1.b	-	60[5]	-	60[2]
1.c	480[29]	352[31]	180[27]	1012[29]
[X] Total	660[40]	556[48]	330[49]	1546[45]
2	150[9]	120[10]	80[12]	350[10]
3	75[5]	160[14]	90[13]	325[9]
4	750[46]	320[28]	180[26]	1250[36]
[Y] Total	975[60]	600[52]	350[51]	1925[55]
[X+Y] Grand total	1635[100]	1156[100]	680[100]	3471[100]

Source: Survey Data

Note: Figures in brackets indicate percentage to column total

Table 5.13 shows that the coir sector provided 56 per cent of the total man-days to the coir workers and the coir co-operatives could offer only 43 per cent of that. It is clear from this that the workers have to depend on occupations in non-coir sector for their livelihood. The private coir sector also played a very significant role in providing employment. The study also clarifies that there was not much difference among the man-days of work available in A, B and C category of CVCs.

The analysis of the subsidiary occupational man-days available [Table 5.14] also reveals that the coir sector could provide only 45 per cent of man-days of work to the workers. Further it is understood that 55 per cent of the man-days in subsidiary occupations were provided by occupations like agri. labour, service, fishing, net making etc.

### Total Occupational Mandays[Main plus Sub.]

The total man days contributed by main occupation and subsidiary occupations are depicted in Table 5.15.

Table 5.15. Occupational Man days of Sample coir workers [Main + Sub]

Types of work	Category of Societies and Man days			Total Man-days [Nos.]	Average days of Work of a coir Worker in an Year
	A[Nos]	B[Nos.]	C[Nos.]		
1.a	17393[46]	15174[37]	14397[44]	46964[42]	62
1.b	--	60	200[1]	260	.3
1.c	3312[9]	6397[15]	5256[16]	14965[13]	20
[X] Total	20705[55]	21631[52]	19853[61]	62189[55]	82
2	1114[3]	1064[3]	1060[3]	3238[3]	4
3	5120[13]	2208[5]	998[3]	8326[7]	11
4	10978[29]	16581[40]	10812[33]	38371[35]	51
[Y] Total	17212[45]	19853[48]	12870[39]	49935[45]	66
Grand Total[x+y]	37917[100]	41484[100]	32723[100]	112124[100]	148

Source: Survey Data

Note: Figures in brackets denotes percentage to column total

Table 5.15 discloses that of the total man-days of work provided to the workers, 55 per cent were contributed by coir sector. The share of co-operatives was found to be 42 per cent only. Among A, B and C classes of CVCs, the

highest man-days of labour were offered by A class CVCs. However, it was estimated that the average man-days engaged by a worker in all occupations was 148 in an year, of which the coir sector provided employment of 82 days (55%) only in a year.

### Occupational Income [Main and Sub. Seperately]

The income generated from all sources was given in Tables 5.16 and 5.17.

Table 5.16. Occupational Income of sample respondents [Main Occupation] [Income – Rs. In Lakhs]

Types of Occupation	Category of Societies and workers Income			Total [Rs.]
	A[Rs.]	B[Rs.]	C[Rs.]	
1.a	8.69[37]	7.3[29]	6.54[34]	22.53[33]
1.b	--	--	0.12[1]	0.12
1.c	0.76[3]	1.67[6]	1.46[8]	3.9[6]
[x] Total	9.46[40]	8.96[35]	8.12[43]	26.54[39]
2	0.76[4]	0.84[3]	0.94[5]	2.54[4]
3	3.87[16]	3.16[12]	0.50[2]	7.53[11]
4	9.5[40]	12.92[50]	9.14[48]	31.57[46]
[y] Total	14.13[60]	16.93[65]	10.58[57]	41.64[61]
[x+y] Grand total	23.59[100]	25.89[100]	18.7[100]	68.18[100]

Source: Survey Data

Note: Figures in parentheses indicate percentage to column total

Table 5.17. Occupational Income of sample respondents [Sub ]

Types of Occupation	Categories of Societies and worker's Income			Total [Rs.in Lakhs]	Average Income per man day [Rs.]
	A [Rs. In Lakhs]	B [Rs.in Lakhs]	C [Rs.in Lakhs]		
1.a	0.09[6]	0.07[8]	0.07[13]	0.23[8]	48
1.b	-	0.02[2]	-	0.02[1]	39
1.c	0.15[11]	0.11[13]	0.06[11]	0.32[12]	32
[x]Total	0.24[17]	0.20[23]	0.13[24]	0.57[21]	37
2	0.12[9]	0.10[12]	0.08[14]	0.29[11]	84
3	0.09[6]	0.18[20]	0.10[20]	0.37[13]	114
4	0.94[68]	0.38[45]	0.23[42]	1.55[55]	124
[y]Total	1.15[83]	0.66[77]	0.40[76]	2.21[79]	115
[x+y]Grand Total	1.39[100]	0.86[100]	0.53[100]	2.78[100]	80

Source: Survey Data

Note: 1) Figures in brackets indicate percentage to column total

2) Average income per man-day is calculated by dividing the total income from each type of occupation by the number of man days given in each type of occupation given in Table 5.14

Table 5.16 shows that though the coir sector provided 55 per cent of the total man-days of work [Table 5.15] to the workers, it had contributed only 39 per cent of the total income of the workers. It indicates that the non-coir sector had provided more income to the workers ie, 45 per cent of the man-days of work and 61 per cent of the total income. It is to be noted that the workers in C class of CVCs. engaged more number of man-days of coir work in private sector.

As regards the combination of the subsidiary income [Table 5.17], it can be seen that 45 per cent of the man-days of coir work [Table 5.14] were able to contribute only 21 per-cent of the total subsidiary income to the workers

### Occupational Total Income [ Main Plus Sub.]

Income from all sectors of coir households is given in Table 5.18.

Table 5.18. Occupational Total Income of coir workers in the study region[Main+Sub]

Types of occupation	Category of societies and workers' Income			Total [Rs. In Lakhs]	Average income Of a coir worker per day
	A [Rs. In Lakhs]	B [Rs. In Lakhs]	C [Rs. In Lakhs]		
1.a	8.78[35]	7.37[27]	6.61[34]	22.75[32]	48
1.b	--	.02	.12	.14	54
1.c	.92[4]	1.78[7]	1.52[9]	4.22[6]	28
(X)Total	9.7[39]	9.16[34]	8.25[43]	27.11[38]	44
2	0.88[3]	0.94[4]	1.02[5]	2.84[4]	88
3	3.96[16]	3.34[12]	0.60[3]	7.9[11]	95
4	10.44[42]	13.31[50]	9.37[48]	33.11[46]	86
(y)Total	15.28[61]	17.59[66]	10.99[57]	43.85[62]	88
(x-y)Grand Total	24.97[100]	26.75[100]	19.24[100]	70.96[100]	63

Source: Survey Data

Note: Figures in brackets indicate percentage to column total.

It is evident from Table 5.18 that the coir sector had contributed only about 38 per cent of the total income of the workers even though this sector contributes 55 per cent of total man-days of work[Table 5.15]. This clarifies the fact that the coir sector couldn't contribute income proportionate to the share of man-days of work. The CVCs claim 32 per cent of the income while the private sector claims only 6 per cent. The per day income from the coir sector was

worked out to be Rs. 44 per man-day of work which was much below the income from non-coir sector. However, it was observed that the wage rate offered by co-operatives for different stages of coir operations, was higher than the wage rate offered by private sector. Table 5.19 give the comparative wage rate structure in VCs and the private sector.

Table 5.19. Coir production process-Wages in co-operative and private sector—A comparison

Project area	Production Process							
	Retting/1000hk		Beating / 1000 hk		Spinning / 15 Kg.		Bundling / 15 Kg.	
	Cp-op [Rs]	Private [Rs.]	Co-op. [Rs.]	Private [Rs.]	Co-op. [Rs.]	Private [Rs.]	Co-op. [Rs.]	Private [Rs.]
Chirayinkeezhu	54.5	40	684	400	188	135	14.65	6
Sellam	61	45	540	412	141	97	5.8	4.3
Kayamkulam	55	40	500	160[M.B]	139	82	2.2	1.3
Kappuzha	57	35	370	160[M.B]	120	70	2.5	1.75
Kaikom	48	30	400	140[M.B]	135	80	3	1.5
North parur	42	35	250[M.B]	150[M.B]	165	85	2.25	1.5
Thirissur	53	35	190[M.B]	190[M.B.]	113	80	5	3
Kozhikodu	90	80	400	250 175[M.B]	138.75	65	5.25	3
Average	58	43	413 190[M.B]	354 159[M.B]	142	87	5	3

Source: Survey Data

Note: M.B. means Mechanised Beating

Hk=Husk

### Average Family Expenditure of Coir worker Household in the study region

The annual family expenditure of coir worker household is given in Table

5.20.

Table 5.20. Average Family Expenditure of the coir worker Households in the study region

Categor Of Societies	Total [Rs.]	Average Annual Family Expenditure [In Rs.]											
		1	2	3	4	5	6	7	8	9	10	11	12
A	28615 [100]	16537 [58]	2851 [10]	1140 [4]	1711 [6]	1125 [4]	50 [-]	285 [1]	270 [1]	855 [3]	1145 [4]	80 [-]	2566 [9]
B	27755 [100]	16322 [59]	2767 [10]	1107 [4]	1660 [6]	832 [3]	48 [-]	265 [1]	292 [1]	584 [2]	1383 [5]	--	2495 [9]
C	27529 [100]	16546 [60]	1655 [6]	827 [3]	1930 [7]	810 [3]	29 [-]	552 [2]	255 [1]	545 [2]	1910 [7]	--	2470 [9]
Total Average]	27966 [100]	16449 [59]	2500 [9]	1109 [4]	1958 [7]	839 [3]	44 [-]	280 [1]	270 [1]	541 [2]	1388 [5]	80 [-]	2517 [9]

Source: Survey Data

Note:- 1] Figures in brackets indicate percentage to row total

2] Items of Expenditure

- 1- Food 2- Medicine 3- Education 4- Cloth 5- Fuel and lighting 6- Rent
- 7- Consumer Durables 8- Recreation 9- Travelling 10- Liquor 11- Tobacco
- 12- Social activities

Table 5.20 depicts that the coir worker households incur 59 per cent of their total expenditure on food. This is lower than the state average [60.75 %]. Expenditure on medicine accounts for nine per cent of the total expenditure. Most of the spinners work by standing directly under blazing sun. Field level experience revealed that coir workers were subjected to diseases like allergy, chest pain, vomiting and gynecological complaints. The clothing expenditure was found to be Seven per cent which was also higher than the state average of 5.2 per cent<sup>8</sup>. The speedy deterioration of cloth by drudgery work in open air, force them to spend more on clothing. Expenditure on liquor was found to be Five per cent. The heavy work and proximity to toddy shops force them to consume liquor. For fuel and lighting, they spend three per cent which was much less than the state average<sup>9</sup>. As coir households are located in clusters, expenditure on social activities become higher [9 %]. There was not much difference in the spending habits among the coir workers of A, B and C classes of CVC.

### **Basic Facilities of Coir worker Households**

Table 5.21 gives a clear picture about the basic facilities available to the coir workers within 2 K.Ms. of their residence. It is clear from the table that most of the basic facilities were not available to the coir workers within 2 K.Ms. of their residence. According to Government of Kerala], basic facilities were available to each household within 2 K.Ms. radius.<sup>10</sup> This claim was found to be false in the cases of coir households. The availability of basic facilities were found to vary from institution to institution. But in the case of 79 per cent of the households liquor shops are available within in 2 K.M. from their houses.

**Table 5.21. Basic Facilities of Coir worker Households with in 2 K.m of their residence in the study Regions**

Sl. No.	Basic Facilities	< 2 KM. [No. of Households]			Total
		A Category	B Category	C Category	
1	Ration Shop	73	86	70	229[76]
2	Provision Shop	91	97	96	284[95]
3	Public Health Centre	39	65	52	156[52]
4	Primary School	83	83	65	231[77]
5	Secondary School	71	58	45	174[58]
6	High School	50	32	33	115[38]
7	Post Office	59	61	52	172[57]
8	Co-operative Bank	29	47	32	108[36]
9	Nationalised Banks	78	64	57	199[66]
10	Coir Society	80	81	86	247[82]
11	Consumer Co-op. Society	54	43	57	154[51]
12	Coir Marketing Shop	38	44	53	135[45]

Source: Survey Data

Note: Figures in brackets indicate percentage to the total number of coir households covered in the study[300]

Only 29 per cent of the coir workers were in the productive age group and the majority of them were women above the age of 45. Child labour is existing in this sector. Man-days contributed by coir sector was less than 100 days per year and their income contributed was less than proportionate to the share of man-days. The income from private coir sector was also less than the income in coir co-operative sector. Medical expenses contributes the dominant share among the total the total average family expenditure. This is due to the inherent unhygienic nature of coir related work. The average family expenditure is found to be higher

than their income. Again most of the basic facilities of living are not within two kilometers from the dwelling place of all households. Majority of the households had only less than five cents of land at their disposal. The literacy rate, type of dwelling house, drinking water facility etc. of coir worker household are in low status than the all-Kerala average.

The facts mentioned above clarify the low profile with respect to the living status of coir workers as well as coir worker households of CVCs.

## **5.2 Financial performance analysis of CVCs**

Modern economy is money oriented and money forms the basic foundation of all economic activities. It is the master-key which provides access to all sources that could be well employed in manufacturing and merchandising activities. The private organisations are blessed with sound management systems and are able to monitor the business efficiency of the firm on a continuous basis and devise appropriate measures as and when required. The co-operative sector, on the other hand are faced with the problems of non-professionalised management system. Thus an effective management and planning of finance has turned to be an unavoidable managerial requisite for the co-operatives. The co-operatives unlike private organisations, have the dual responsibility of earning profit for its existence as well as servicing the members. Coir Vyavasaya co-operative societies are also not an exception to this general notion. Even though their performance are evaluated on the basis of their objectives of Coir Co-operativisation Scheme, their financial performance is also assessed as an adjective. This is analysed in two ways such as :- a) Financial position and Operational efficiency. Both these parameters were checked with the help of ratio analysis.

## 5.2.1 Financial position

In order to highlight the general working of CVCs and their Units and to assess their efficiency in discharging their functions their financial position is analysed. The financial position of a society is judged here in view of its short-term as well as long-term solvency position.

### 5.2.1.1 Short-term solvency position or liquidity position

It is extremely essential for a firm to meet its obligation as they become due. A firm should ensure that it has the optimum liquidity. Lack of liquidity will impair the goodwill of the concern whereas excess liquidity means unnecessary investment in liquid asset and consequent erosion of profit. Short-term solvency is analysed with the help of the following ratios.

1. Current ratio
2. Quick asset ratio
3. Absolute liquidity ratio
4. Stock to gross working capital ratio
5. Current Ratio[Current Assets/Current Liabilities]

The current ratio is a very popular financial ratio, which measures the ability of the firm to meet its current liabilities. Current assets get converted into cash in the operational cycle of the firm and provide the funds needed to pay the current liabilities. As such a relatively high value of the current ratio is considered as an indication that the firm is liquid and has the ability to pay its current obligations. As a conventional rule if current assets are twice that of current

liabilities or more it is considered to be satisfactory. The current ratio of three category of societies is depicted in Tables 5.22-a, 5.22-b and 5.22-c.

**Table 5.22-a. category soceties [1994-95 to 1998-99] [Rs. In Lakhs]**

Year	Current Assets[Rs.]	Current Liabilities[Rs.]	Current ratio o
1994-95	213.4	125	1.71:1
1995-96	234.4	110	2.13:1
1996-97	258.2	102.4	2.52:1
1997-98	241.9	98.6	2.45:1
1998-99	250.82	107.88	2.32:1

Source: survey data.

**Table 5.22b. B category socieities [1994-95 to 1998-99] [Rs. In Lakhs]**

Year	Current Assets[Rs.]	Current Liabilities[Rs.]	Current ratio
1994-95	45	40	1.13:1
1995-96	66.5	37	1.8:1
1996-97	92.4	45.4	2.04:1
1997-98	85.1	39.4	2.16:1
1998-99	77.01	46.2	1.67:1

Source: survey data.

**Table 5.22-c. C category socieities [1994-95 to 1998-99] [Rs. In Lakhs]**

Year	Current Assets[Rs.]	Current Liabilities[Rs.]	Current ratio
1994-95	24.7	30.5	.81:1
1995-96	24.5	29.7	.8:1
1996-97	49.4	40.4	1.22:1
1997-98	33.4	37.3	.9:1
1998-99	43.55	39.16	1.11:1

Source: survey data.

The Combined Current Ratio of three categories of societies is given in Table 5.3a and Figure is given as 5.1.

Table 5.22-d. Current Ratio

Year	A Category	B Category	C Category
1994-95	1.71	1.13	0.81
1995-96	2.13	1.8	0.8
1996-97	2.52	2.04	1.22
1997-98	2.45	2.16	0.9
1998-99	2.32	1.67	1.11

Source: survey data.

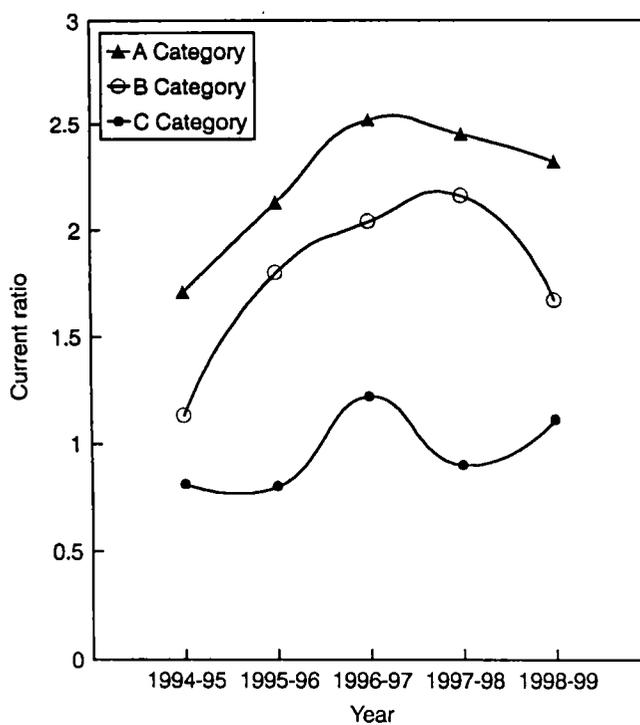


Figure 5.1

The Current ratio of A category societies for the period from 1994-95 to 1998-99 reveals a satisfactory position. During 1994-95, it was lower than the

standard. In the case of B category societies, even though the current ratio is lower than the standard in three years, it can be considered as reasonable. But in the case of C category societies, the ratio is far below than the standard throughout the study period. Therefore, on the basis of current ratio, it can be inferred that A and B category societies are capable of paying their current financial obligations. But C category societies will find it difficult to settle their current obligations even though, they show the signs of recovery during 1998-99. It calls for measures to improve the liquidity position of these societies.

**Quick ratio[Quick Assets{current assets – closing stock}/Current Liabilities]**

Quick ratio is also termed as Acid Test Ratio. It is a supplementary measure of liquidity and places more emphasis on immediate conversion of assets into cash compared to current ratio. does. A quick ratio of 1:1 is considered favourable. Tables 5.23-a , 5.23-b and 5.23-c exhibit the quick ratios of the three categories of societies.

**Table 5.23-a. A category societies [1994-95 to 1998-99] [Rs. In Lakhs]**

Year	Quick Assets[Rs.]	Current Liabilities[Rs.]	Current ratio
1994-95	152.77	125	1.22:1
1995-96	173.52	110.	1.58:
1996-97	213.08	102.4	2.08:1
1997-98	197.38	98.6	2:1 .
1998-99	202.38	107.88	1.88:1

Source: survey data.

Table 5.23-b. B category societies [1994-95 to 1998-99] [Rs. In Lakhs]

Year	Quick Assets[Rs.]	Current Liabilities[Rs.]	Current ratio
1994-95	26.62	40	.67:1
1995-96	54.89	37	1.48:1
1996-97	81.09	45.4	1.79:1
1997-98	73.95	39.4	1.88:1
1998-99	57.56	46.2	1.25:1

Source: survey data.

Table 5.23-c. C category societies [1994-95 to 1998-99] [Rs. In Lakhs]

Year	Quick Assets[Rs.]	Current Liabilities[Rs.]	Current ratio
1994-95	7.52	30.5	0.25:1
1995-96	12.63	29.7	0.43:1
1996-97	41.12	40.4	1.02:1
1997-98	26.73	37.3	0.72:1
1998-99	30.28	39.16	0.77:1

Source: survey data.

The combined Quick Ratio position of three categories of societies is presented in Table 5.23.d and Figure is given as 5.2.

Table 5.23-d. Quick Ratio

Year	A Category	B Category	C Category
1994-95	1.22	0.67	0.25
1995-96	1.58:	1.48	0.43
1996-97	2.08	1.79	1.02
1997-98	2	1.88	0.72
1998-99	1.88	1.25	.77

Source: survey data.

Table 5.23-a clearly reveals that quick ratio is at the standard level during 1994-95. But later it shows an increasing tendency and reached the higher level during 1996-97. Too higher ratio is also not a good sign of sound financial position. Tables 5.23-b and 5.23-c give different pictures. Though quick ratio is slightly lower than standard, their liquidity position is comparatively good. However, during 1994-95 to 1996-97 the quick ratio of these two categories of societies were far below than standard. But the position later showed improvement. Thus the financial position of B and C category societies are comparatively satisfactory than the A category societies as far as the quick ratio is concerned. All types of societies have to resort to sales promotion and marketing strategies to attain the standard ratio.

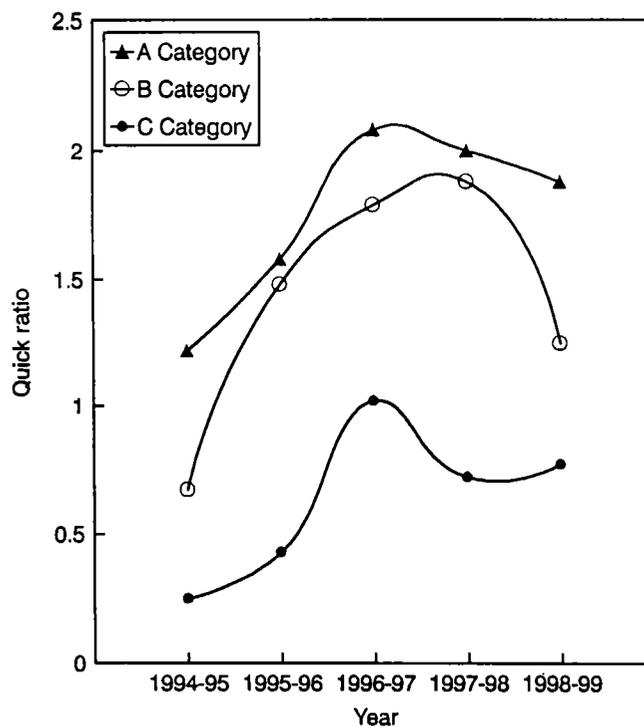


Figure 5.2

### **Absolute liquid ratio[Cash in hand + cash at bank/Current liabilities]**

To get some idea about the absolute liquidity of Cvc's, receivables and inventories are excluded from current assets and only absolute liquid assets are taken into consideration for the computation of this ratio. Absolute liquid assets include cash-in-hand, cash at bank and readily realisable securities. The absolute liquid ratio of the three categories of societies are given in Tables 5.24a, b and c.

**Table 5.24-a. A category societies[1994-95to 1998-99] [Rs. In Lakhs]**

Year	Cash in hand + Cash at bank[Rs.]	Current Liabilities[Rs.]	ratio
1994-95	45.9	125	0.37:1
1995-96	78.9	110	0.72:1
1996-97	65.8	102.4	0.64:1
1997-98	78.24	98.6	0.79:1
1998-99	83.31	107.88	0.77:1

Source: survey data.

**Table 5.24-b. B category societies [1994-95to1998-99] [Amount Rs. In Lakhs]**

Year	Cash in hand + Cash at bank[Rs.]	Current Liabilities[Rs.]	ratio
1994-95	11.9	40	0.3:1
1995-96	17.7	37	0.48:1
1996-97	16.1	45.4	0.35:1
1997-98	13.5	39.4	0.34:1
1998-99	15.47	46.2	0.33:1

Source: survey data.

**5.24-c. C category societies [1994-95 to 1998-99] [Rs. In Lakhs]**

Year	Cash in hand + Cash at bank [Rs.]	Current Liabilities	ratio
1994-95	8.5	30.5	0.28:1
1995-96	12.3	29.7	0.41:1
1996-97	8.6	40.4	0.21:1
1997-98	7.9	37.3	0.21:1
1998-99	8.58	39.16	0.22:1

Source: survey data.

The combined position of Absolute Liquid Ratio is given in table 5.24-d. The figure is given as 5.3.

**5.24-d. Absolute Liquid Ratio**

Year	A category	B category	C category
1994-95	0.37	0.3	0.28
1995-96	0.72	0.48	0.41
1996-97	0.64	0.35	0.21
1997-98	0.79	0.34	0.21
1998-99	0.77	0.33	0.22

In the case of absolute liquid ratio, the standard is considered as 0.5 : 1. Even though the ratio gives a fairly meaningful measure of liquidity, it is not of much use as the idea of keeping large cash balance has been widely disapproved. Considering the three tables [5.24-a, 5.24-b and 5.24-c], the absolute liquidity position of A category is too high than the standard. It reveals that they are maintaining idle excess cash [without investment] whereas in B and C category, the ratios are lower than standard, which is also not advisable. During the years under reference, a more or less stable position is found. Therefore

These three categories of societies are not maintaining required liquidity. Much effort is required to avoid liquidity problems in subsequent years.

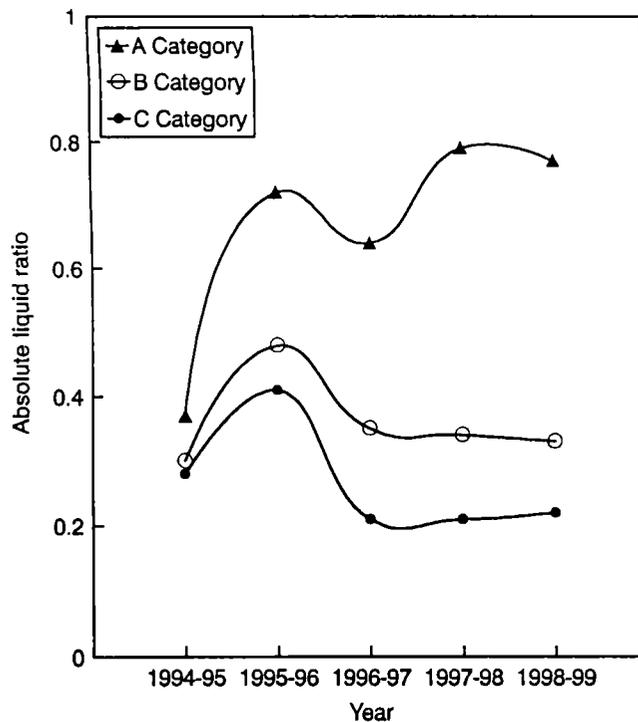


Figure 5.3

#### Stock to Working Capital Ratio [Closing stock / Gross working capital]

This ratio analyses the structure of current assets and indicates the proportion of stock to gross working capital as on a given date. The ideal level of stock to gross working capital ratio should be 0.5:1 ie. the percentage share of stock-in-trade to total current assets should be around 50 per cent. Stock to working capital ratio of the three category of societies are shown in Tables 5.25.a, 5.25-b and 5.24-c.

**Table 5.25-a. A category societies Stock to Gross working capital ratio [Rs. In lakhs]**

Year	Closing stock[Rs.]	Total current assets[Rs.]	Ratio
1994-95	60.63	213.4	0.23:1
1995-96	60.88	234.4	0.26:1
1996-97	45.12	258.2	0.17:1
1997-98	44.52	241.9	0.18:1
1998-99	48.44	250.82	0.19:1

Source: Survey data

**Table 5.25-b. B category societies Stock to Gross working capital ratio [Rs. In lakhs]**

Year	Closing stock[Rs.]	Total current assets[Rs.]	Ratio
1994-95	18.38	45	0.41:1
1995-96	11.61	66.5	0.17:1
1996-97	11.31	92.4	0.12:1
1997-98	11.15	85.1	0.13:1
1998-99	19.45	77.01	0.25:1

Source: Survey data

Table 5.25-c. C category societies Stock to Gross working capital ratio [Rs. In lakhs]

Year	Closing stock[Rs.]	Total current assets[Rs.]	Ratio
1994-95	17.18	24.7	0.7:1
1995-96	11.87	24.5	0.48:1
1996-97	8.28	49.4	0.17:1
1997-98	6.67	33.4	0.2:1
1998-99	13.27	43.55	0.3:1

Source: Survey data

It can be observed that the working capital ratio is poor in all the three categories of societies throughout the study period excepting 1994-95 and 1995-96, when B and C category societies respectively showed signs of improvement. A declining trend is noticed in this ratio. Thus the urgency of stock clearance through sales promotion is necessary to attain at least the required minimum working capital ratio.

The combined position of Stock to Working Capital Ratio of the three categories of societies is depicted in Table 5.25d and Figure is given as 5.4.

Table 5.25d. Stock to Working Capital Ratio

Year	A category societies	B category societies	C category societies
1994-95	0.23	0.41	0.7
1995-96	0.26	0.17	0.48
1996-97	0.17	0.12	0.17
1997-98	0.18	0.13	0.2
1998-99	0.19	0.25	0.3

Thus while considering the liquidity ratios of all the three categories of societies, a satisfactory picture of liquidity position of CVCs is not found. This calls for readjustment in the asset structure of CVCs.

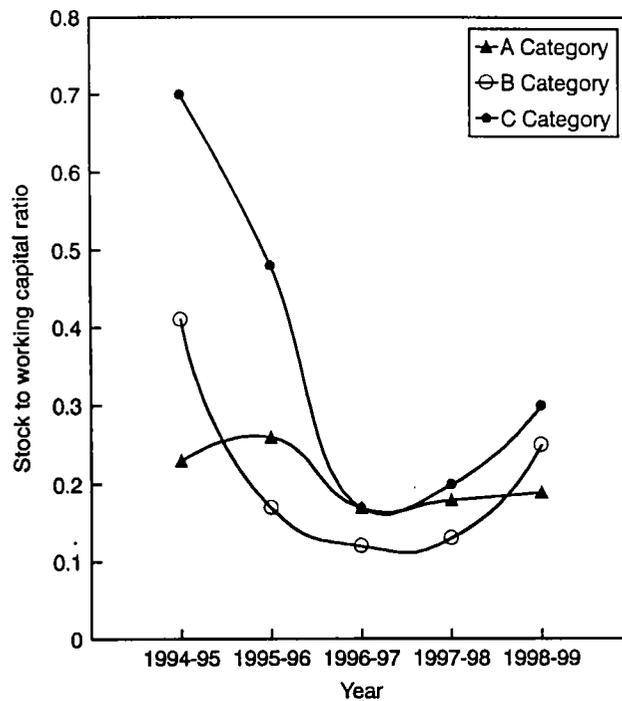


Figure 5.4

### 2.1.2 Long-term solvency position

Long-term solvency of Cvc's is analysed by applying Debt-equity ratio and Proprietary ratio.

#### Debt – equity ratio[Outsiders fund /Share holders fund]

Debt-equity ratio brings out the relationship between long-term debt and equity in the total capitalisation of the concern. It indicates the cushion of ownership funds available to debt-holders.

Even though there is no ideal debt-equity ratio, the ratio between the share capital and debt is generally accepted as 1:1. However, for a concern, which runs on profit, a high debt-equity ratio may be favourable as it facilitates financing on equity. On the other hand in case of a loss making concern, a higher

Debt-equity ratio is not desirable as it means compulsory interest payment. Debt-equity ratio of Cvcs for the study period [1994-95 to 1998-99] on category-wise is brought out in Tables 5.26-a to 5.26-d.

**Table 5.26-a. A category societies Debt-equity ratio [Amount Rs. In Lakhs]**

Year	Outsiders fund	Share-holders fund	Ratio
1994-95	382.4	75	5.1:1
1995-96	410.2	90	4.56:1
1996-97	454.8	85.4	5.33:1
1997-98	470	130.1	3.61:1
1998-99	416.85	178.59	2.33:1

Source: Survey data

**Table 5.26-b. B category societies Debt-equity ratio [Amount Rs. In Lakhs]**

Year	Outsiders fund	Share-holders fund	Ratio
1994-95	92.4	28.6	3.23:1
1995-96	117.1	31.4	3.72:1
1996-97	129.4	37.5	3.45:1
1997-98	129.2	40.5	3.19:1
1998-99	115.99	56.81	2.04:1

Source: Survey data

**Table 5.26-c. C category societies Debt-equity ratio [Amount Rs. In Lakhs]**

Year	Outsiders fund	Share-holders fund	Ratio
1994-95	65.9	26.6	2.59:1
1995-96	67.8	22.6	3:1
1996-97	84.4	24.6	3.43:1
1997-98	79.1	28.6	2.77:1
1998-99	76.12	46.76	1.63:1

Source: Survey data

Combined position of Debt-Equity Ratio of three categories of societies as shown in table 5.26-d and Figure is given as 5.5.

5.26-d. Debt-Equity Ratio

Year	A Category	B Category	C Category
1994-95	5.1	3.23	2.59
1995-96	4.56	3.72	3
1996-97	5.33	3.45	3.43
1997-98	3.61	3.19	2.77
1998-99	2.33	2.04	1.63

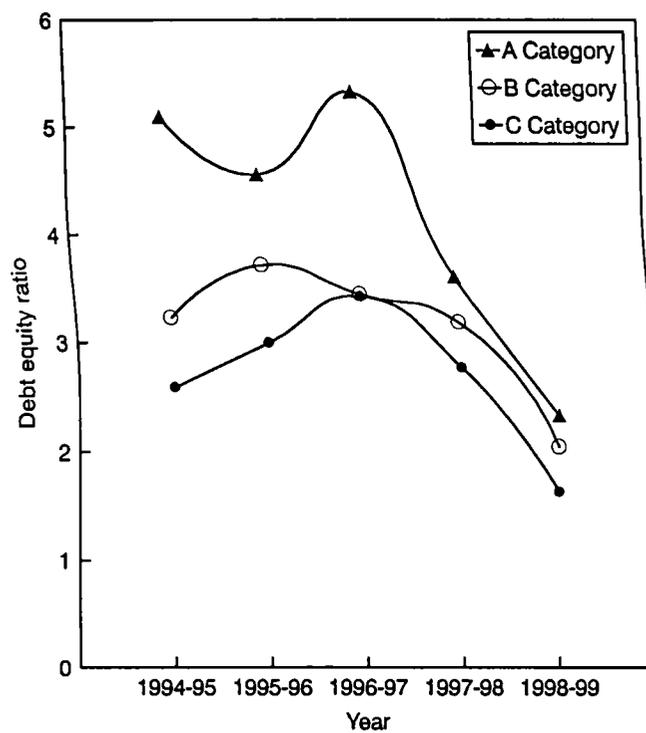


Figure 5.5

It is seen from Table 5.26-a that in A category societies, the Debt-equity ratio is alarmingly high. It was 5.1:1 during 1994-95, which is five times higher than the standard. However it came down to 2.33:1 during 1998-99, even then it is far higher than desirable level. Tables 5.26-b and 5.26-c also convey almost the same picture, but not worst as of A category societies. The B and C categories could reduce their debt towards the last year of the period of the study. Even then their long-term solvency position is not at all satisfactory. Since these societies are continuously making losses, the problem gets aggravated here. This necessitates drastic reduction in the debt burden of these societies.

#### B) Proprietary ratio [Share-holders fund/ Total assets]

Proprietary ratio shows the relation between the shareholders fund and the total assets. This ratio measures the percentage of funds supplied by the shareholders. The low ratio is unfavourable as it shows that the major portion of the assets are contributed by creditors. The tables 5.27-a, 5.27-b and 5.27-c depict the position of the three category of societies.

Table 5.27-a. A category societies. Proprietary ratio [Rs. In Lakhs]

Year	Share-holders fund[Rs.]	Total assets[Rs.]	Ratio
1994-95	75	457.4	0.16:1
1995-96	90	490.2	0.18:1
1996-97	85.4	540.2	0.16:1
1997-98	130.1	560.1	0.23:1
1998-99	178.59	545.44	0.3:1

Source: Survey data

**Table 5.27-b. B category societies. Proprietary ratio [Rs. In Lakhs]**

Year	Share-holders fund[Rs.]	Total assets[Rs.]	Ratio
1994-95	28.8	121	0.24:1
1995-96	31.4	148.5	0.21:1
1996-97	37.5	166.9	0.22:1
1997-98	40.5	169.7	0.24:1
1998-99	56.81	172.8	0.33:1

Source: Survey data

**Table 5.27-c. C category societies. Proprietary ratio [Rs. In Lakhs]**

Year	Share-holders fund[Rs.]	Total assets[Rs.]	Ratio
1994-95	20.6	86.5	0.24:1
1995-96	22.6	90.4	0.25:1
1996-97	24.6	109	0.23:1
1997-98	28.6	107.7	0.27:1
1998-99	46.75	122.88	0.38:1

Source: Survey data

The combined position of Proprietary Ratio of three categories of societies is given in table 5.27-d and Figure is given as 5.6.

**Table 5.27-d. Proprietary Ratio**

Year	A Category	B Category	C Category
1994-95	0.16	0.24	0.24
1995-96	0.18	0.21	0.25
1996-97	0.16	0.22	0.23
1997-98	0.23	0.24	0.27
1998-99	0.3	0.33	0.38

Source: Survey data

Table 5.27-a shows that in A category societies, the ratio was very low during 1994-95, but it gradually improved and reached .3:1. Similar trend can be seen in other categories also. This may be due to the governmental support through share capital contribution on the repeated plea and political pressure. Efforts should be made to strengthen the share capital position of these co-operatives [Figure 5.6].

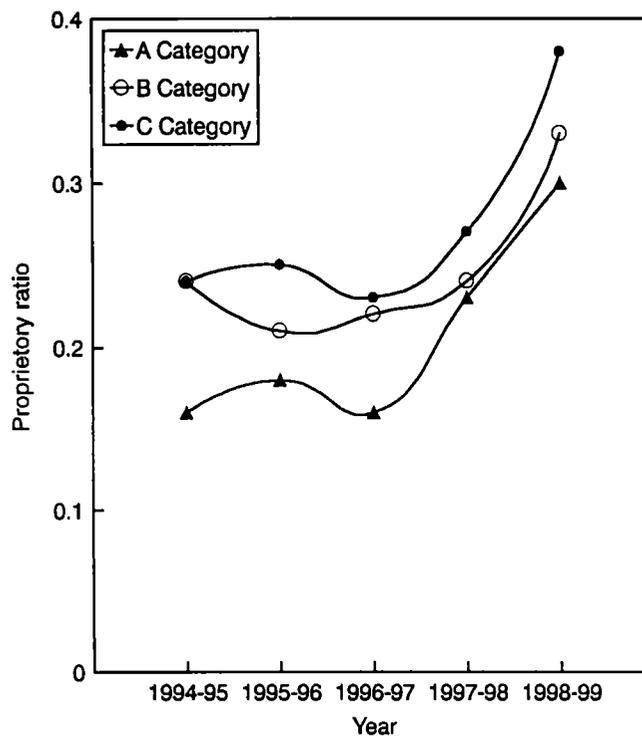


Figure 5.6

The above analysis reveals that, 'A' category societies are using outsiders funds more than that of B and C category. This is because Government assistance were channalised only to A category by way of loans and subsidies. Therefore they are in a severe debt trap as they have to pay more interest on

borrowings. This situation is more grim as most of them are running at loss. In short overall long term solvency position of Cvc's of three categories are far from satisfactory.

### 5.2.2 Operational efficiency

Operational efficiency of Cvc's can be assessed with the help of the following ratios:-

- 1- Cost of goods sold ratio.
- 2- Gross profit ratio.
- 3- Operating expense ratio.
- 4- Net profit ratio/ Net loss ratio.

For facilitating the calculation of the above ratios and for making a general assessment about the working of Cvc's surveyed the following tables are given. These tables depict consolidated and category-wise information for the period under study, relating to production, sales, purchase, closing stock, trade expense, revenue expenses etc.

#### **Production of yarn**

The total production of yarn, average production by each society, their growth and their category-wise view etc. for the period from 1994-95 to 1998-99 are given in Table 5.28.

Table 5.28. Production of Yarn in CVCs. 1994-95 to 1998-99 [ Qty. in quintal]

Year	A Category			B Category			C Category			Total [ A+B+C]		
	Qty.	Av. production	Growth [%]	Qty.	Av. production	Growth [%]	Qty.	Av. production	Growth [%]	Qty.	Av. Production	Growth [%]
1994-95	7833	461	-	3259	204	-	2973	248	-	14065	313	-
1995-96	7305	431	-6	2760	172	-15	2718	227	-9	12783	284	-9
1996-97	6385	376	-14	1642	103	-40	2063	172	-24	10090	224	-21
1997-98	5138	302	-20	1158	72	-30	1436	120	-30	7732	172	-23
1998-99	6634	390	29	4374	273	277	2808	234	96	13816	307	79

Source: Compiled from the records of A,B and C classes of societies

It can be observed from table 5.28 that yarn production decreased from 14066 quintals during 1994-95 to 13817 quintals during 1998-99 that is by 2 per cent. Production was steadily declining up to 1997-98 registering a negative growth of -23.9 %. But 1998-99 witnessed a jump in production by 78.7 %. Yet 3 category societies showed an increase in the quantity of production while the other two, registered decrease in production.

### Sales

The total quantity of sales, sales price, average sales by each society, rate of sales price, growth and its category-wise view etc. over a period from 1994-95 to 1998-99 are depicted in Tables 5.29 and 5.30 respectively.

**Table 5.29. Total sales of CVCs from 1994-95 to 1998-99**

Year	Qty. sold [In Quintals]	Av.Sales per Society [Quantity]	Value [Rs. In Lakhs]	Sales Value per Quintal [Rs.]	Av.Sales per Society [Rs.In Lakhs]	Growth [%]
1994-95	13391	298	192.18	1435	4.27	-
1995-96	12277	273	179.15	1459	3.98	-7
1996-97	10450	232	169.45	1622	3.77	-5
1997-98	7217	160	144.55	2017	3.23	-15
1998-99	10468	233	206.22	1970	4.58	43

Source: Compiled from the records of CVCs from 1994-95 to 1998-99.

Table 5.29 depicts that the average sales by a society was Rs.4.27 Lakhs during 1994-95 and it came down steadily to Rs.3.23 Lakhs during 1997-98 and increased to Rs 4.58 Lakhs during 1998-99 representing that is a net increase of 7 per cent over the period of 5 years. But the quantity sold has decreased from

13391 quintals during 1994-95 to 10468 quintals, showing 22 per cent decrease during 1998-99. The average price per quintal of yarn shows an increase of 37 per cent. Thus increase in value was due to increase in sale price and not because of increase in quantity.

Category -wise analysis, shows that in all category of societies sales was showing a decreasing trend from 1994-95 to 1998-99 (see Table 5.30 ). But sale price increased during the same period except in B category societies.

By comparing the sales and production figures, it is seen that while production decreased by two per cent sales in decreased by 22 per cent. This shows that increased production is not matched by sales.

### **Purchase of raw material**

The value of purchase of raw material [Total and Category-wise] is depicted in Table 5.31.

Table 5.31 shows a steady declining trend of purchase from 1994-95 to 1997-98. But during 1998-99, it showed a jump in raw material purchase (see Table 5.31). It was due to inflow of Working Capital Loan from Government. Category-wise analysis, shows a mixed trend in each category of the societies.

### **Value of Closing Stock**

Total value of closing stock, average value of closing stock and its growth are given category-wise in Table 5.32.

Table 5.32 shows that value of closing stock was decreasing annually with mixed trend and during 1998-99 it witnessed a positive growth.

Table 5.30. Category wise sales details of CVCs – 1994-95 to 1998-99 [Rs. In Lakhs]

Year	A' Category				B Category				C category			
	Sale [Quintal]	Value [Rs]	Av.. Sales Value per society	Growth [%]	Sales In quintal	Value [Rs.]	Av. Sales Value Per society	Growth [%]	Sales In Quintal	Value [Rs.]	Av. Sales Value Per society	Growth [%]
1994-95	7522	115.75	6.81	-	3228.5	42.27	2.64	-	2640.67	34.17	2.85	-
1995-96	7062	100.51	5.91	-13	2757.52	39.04	2.44	-8	2457.65	39.6	3.30	16
1996-97	6807	117.33	6.90	17	1639.73	25.65	1.6	-30	2002.85	26.47	2.21	-20
1997-98	4797	99.34	5.84	-15	1133.83	19.97	1.25	-22	1286.5	25.24	2.10	-5
1998-99	6440	127.71	7.51	29	1850.51	34.46	2.15	62	2177.41	44.06	3.67	59

Source: computed from the records of A,B and C Classes of CVCs from 1994-95 to 1998-99.

**Table- 5.31. Purchase of husk and fibre as raw material for A, B and C class of CVCs 1994-95 to 1998-99. [Value Rupees in Lakhs]**

Year	Total			A Category			B category			C category		
	Value [Rs.]	Average [Rs.]	Growth [%]	Value [Rs.]	Average [Rs.]	Growth [%]	Value [Rs.]	Average [Rs.]	Growth [%]	Value [Rs.]	Average [Rs.]	Growth [Rs.]
1994-95	67.91	1.51	-	38.31	2.25	-	15.35	.96	-	14.25	1019	-
1995-96	59.04	1.31	-13	30.49	1.79	-20	13.46	.84	-12	15.09	1026	6
1996-97	50.32	1.12	-15	32.96	1.94	8	6.32	.4	-53	11.04	.92	-27
1997-98	32.70	.73	-35	16.28	.96	-49	6.97	.44	10	9.45	.79	-14
1998-99	91.48	2.03	178	42.00	2.47	158	22.08	1.38	216	27.39	2.28	190

Source:- Compiled from the records of A, B, and C class of CVCs from 1994-95 to 1998-99.

Note: 1. Average purchase value is obtained by dividing the total value with the number of societies in each category under survey.

2. Quantity-wise purchase of husk and fibre figures were not available.

**Table : 5.32. Value of closing Stock items in A, B and C classes of CVCs. [1994-95 to 1998-99] [Value Rs. in lakhs]**

Year	A Category			B Category			C Category			Total [A+B+C]		
	Value [Rs.]	Av. Stock Value	Growth [%]	Value [Rs.]	Av. Stock Value	Growth [%]	Value [Rs.]	Av. Stock Value	Growth [%]	Value [Rs.]	Av. Stock Value	Growth [%]
1994-95	60.63	3.57	-	18.38	1.15	-	17.18	1.18	-	96.29	2.14	-
1995-96	60.88	3.58	.28	11.61	.73	-37	11.87	.99	-16	84.36	1.87	-13
1996-97	45.12	2.65	-26	11.31	.71	-3	8.28	.69	-30	64.71	1.44	-33
1997-98	44.52	2.62	-1.1	11.15	.70	-1.5	6.67	.56	-19	62.34	1.39	-3.5
1998-99	44.52	2.62	0	19.52	1.22	74	12.79	1.07	91	76.83	1.71	23

Source: Figures compiled from the records of A, B and C classes of CVCs from 1994-95 to 1998-99.

Note: Average stock is calculated by dividing the total value of stock with the number of CVCs in each category

## Trade Expenses

Trade Expense includes all manufacturing expenses excluding purchases. The Trade expenses in total, average per society, its growth etc. category-wise are portrayed in Tables 5.33 and 5.34.

Table 5.33. Trade Expenses [Excluding the purchase price of raw materials] of CVCs selected for the study- 1994-95 to 1998-99 [Rs. In Lakhs]

Year	Total			
	Expenses [Rs.]	Av. Trade Expenses per society	Growth[%]	Trade Expenses to Sales [%]
1994-95	132.26	2.94	-	69
1995-96	146.27	3.25	11	82
1996-97	130.57	2.90	-11	77
1997-98	112.74	2.51	-14	78
1998-99	150.11	3.34	33	73

Source:- Compiled from the records of A,B and C classes of Cvc's from 1994-95 to 1998-99

Note: 1. Trade expenses means the sum total of all manufacturing expenses excluding purchase of raw materials.

2. Average trade expense personally is derived by dividing the total expenses by the number of CVCS. in each class.

Table 5.33 shows the mounting tendency of Trade Expenses with a mixed trend. It shows that, average trade expenses has increased by 14 per cent over the period of Five years. But its percentage on sales accounted 73 per cent during 1998-99 and 69 per cent during 1994-95. Category-wise analysis shows that [Table. 5.34], in A category, trade expense accounted 80 per cent of the sales. But in B and C Categories the rate accounted to 68 and 57per cent respectively.

Table . 5.34 Trade Expenses of A, B and C classes of CVCs from 1994-95 to 1998-99 [Rs. In Lakhs]

Year	A Category				B Category				C Category			
	TradeEx penses [Rs.]	Av. Per Society [Rs.]	Gro-with [%]	Trade Exp. to Sales [%]	Trade Exp. [Rs.]	Av. Per Society [Rs.]	Gro-wth [%]	Trade Exp. to Sales [%]	Trade Exp. [Rs.]	Av. Per Society [Rs.]	Growth [%]	Trade Exp. to Sales [%]
1994-95	82.41	4.85	-	71	27.62	1.73	-	65	22.23	1.85	-	65
1995-96	89.89	5.29	9	89	31.69	1.98	15	81	24.69	2.06	11	62
1996-97	93.08	5.48	4	79	17.01	1.06	46	66	20.48	1.71	-17	77
199798	84.04	4.94	-10	85	12.99	.81	-24	65	15.71	1.31	-23	62
1998-99	101.65	5.98	21	80	23.36	1.46	80	68	25.10	2.09	60	57

Source: Compiled from the records of A, B and C classes of CVCs from 1994-95 to 1998-99.

Note: 1. Trade expenses means the sum total of all manufacturing expenses excluding purchase of raw materials

2. Average Trade expenses is derived by dividing the total expenses by the number of CVCs in each class.

### Revenue Expenses

The total Revenue Expenses for all surveyed societies, average expenses per society, its growth rate, its rate on sales and category-wise details are portrayed in Tables 5.35 and 5.36 respectively.

The total revenue expenses for all the societies show an increasing tendency except during 1995-96. From 1994-95 to 1998-99 it increased by 49 per cent (see Table 5.35).

**Table 5.35. Revenue expenses of CVCS selected for the study 1994-95 to 1998-99 [Rs. In Lakhs]**

Year	Total Revenue Expenses [Rs]	Revenue expenses per society [Rs]	Growth [%]	Revenue expenses to sales [%]
1994-95	40.46	0.96	-	21
1995-96	39.72	0.88	-2	22
1996-97	47.32	1.05	19	28
1997-98	48.36	1.01	2	33
1998-99	60.27	1.34	23	29

Source: Compiled from the records of CVCs from 1994-95 to 1998-99.

It can be seen from table 5.35 that revenue expenses accounted 29 per cent of the sales during 1998-99, but it was 21 per cent only during 1994-95. It went up to even 33 per cent during 1997-98. Category-wise analysis shows that, revenue expenses on sales accounted 30 and 40 per cent in the case of A and B categories respectively (Table 5.36). But in C category it was only 16 per cent of sales.

**Table 5.36 Revenue expenses of A, B and C classes of CVCS from 1994-95 to 1998-99 [Rs. In Lakhs]**

Year	A Class Societies					B Class Societies					C Class Societies					
	Total Rev. Exp. [Rs.]	Rev. Exp. Per Society [Rs.]	Gro-wth [%]	Rev. Exp. To Sales [%]	Total Rev. Exp. [Rs.]	Rev. Exp. per Society [Rs.]	Gro- with [%]	Rev. Exp. To Sales [%]	Total Rev. Exp. [Rs.]	Rev. Exp. per Society [Rs.]	Gro- with [%]	Rev. Exp. To Sales [%]	Total Rev. Exp. [Rs.]	Rev. Exp. per Society [Rs.]	Gro- with [%]	Rev. Exp. To Sales [%]
1994-95	21.49	1.26	-	19	8.89	.56	-	20	10.08	.84	-	30	10.08	.84	-	30
1995-96	23.18	1.36	8	23	9.11	.57	3	22	7.42	.62	3	19	7.42	.62	-26	19
1996-97	29.88	1.76	29	25	9.58	.60	5	33	7.87	.66	5	25	7.87	.66	6	25
1997-98	30.73	1.81	3	31	8.51	.53	-11	37	9.12	.76	-11	30	9.12	.76	16	30
1998-99	38.13	2.24	24	30	14.53	.91	71	40	7.6	.63	71	16	7.6	.63	-16	16

Source: Compiled from the records of A, B and C classes of CVCS from 1994-95 to 1998-99.

## Ratio analysis

The existence of a concern, in the long run, depends upon its ability to generate profit/surplus. Co-operatives, even though are non-profit organisations, their continued existence and ability of providing service to members depend upon their ability to generate surplus. Profits also provide a yardstick of the ability of the co-operative institutions for generating funds internally from its operations for meeting expansion requirements and unexpected contingencies. The ratios worked out here shows the efficiency of CVCs belonging to the three categories in generating surplus from their operations for the period of study.

### Cost of goods sold ratio. [Cost of goods sold/Net sales x 100]

This ratio indicates the portion of net sales revenue which is consumed by the cost of goods sold.

A higher ratio is unfavourable since it will leave only a small amount of operating income to meet fixed charges, indirect and fixed expenses, interest payment etc. The cost of goods sold ratio by category-wise is depicted in Table 5.37.a, b and c.

Table 5.37-a. A category societies-Cost of goods sold ratio for the years 1994-95 to 1998-99 [Rs. in Lakhs]

Year	Cost of goods sold[Rs.]	Net sales[Rs.]	Ratio
1994-95	113.5	115.75	98.06
1995-96	100.1	100.51	99.59
1996-97	112.69	117.33	96.05
1997-98	98.51	99.34	99.16
1998-99	124.71	127.71	97.65

Source: Survey data.

The cost of goods sold ratio of A category societies stood at a higher level. All though much variation cannot be noticed in this regard during the period under reference, the urgency of cost reduction cannot be rejected. From table 5.37a it can be seen that even the minimum ratio of cost of goods sold to net sales stood at 97.65 which itself is extremely high.

**Table 5.37-b. B category societies- Cost of goods sold ratio for the years 1994-95 to 1998-99 [Rs. In Lakhs]**

Year	Cost of goods sold[Rs.]	Net sales[Rs.]	Ratio
1994-95	38.54	42.27	91.17
1995-96	39.73	39.04	101.77
1996-97	25.84	25.65	100.74
1997-98	23.53	19.97	117.83
1998-99	33.96	34.46	98.55

Source: Survey data.

Table 5.37-b presents a very dismal picture. The ratio of cost of goods sold to net sales was steadily increasing from 91.17 during 1994-95 and touched 117.83 in 1997-'98. Even though it has come down to 98.55 in the subsequent year, it emphasises the poor performance of societies falling under this category.

**Table 5.37-c. C category societies Cost of goods sold ratio for the years 1994-95 to 1998-99 [Rs. In Lakhs]**

Year	Cost of goods sold[Rs.]	Net sales[Rs.]	Ratio
1994-95	30.49	34.17	89.23
1995-96	39.75	39.6	100.38
1996-97	28.27	26.47	106.8
1997-98	24.22	25.24	95.96
1998-99	44.24	44.06	100.41

Source: Survey data.

Table 5.37-c depicts that the ratio of cost of goods sold to net sales ranged between 89.23 and 100.41 per cent in the case of C category societies. This shows the urgency in resorting to cost reduction measures.

The combined position of the ratio of Cost of Goods Sold to net sales of the three categories of societies is depicted in table 5.37-d.

Table 5.37-d Cost of goods sold ratio

Year	A Category	B Category	C Category
1994-95	98.06	91.17	89.23
1995-96	99.59	101.77	100.38
1996-97	96.05	100.74	106.8
1997-98	99.16	117.83	95.96
1998-99	97.65	98.55	100.41

Source: Survey data

The four tables viz. 5.37. a to 5.37.d exhibit the pathetic situations of societies viz; they are producing yarn at costs above the sales price. Even though A category societies make some margin, the margin is too low that it can be wiped out at any moment of time. All these warrant the urgency of introducing cost reduction methods in all categories of societies [Figure 5.7].

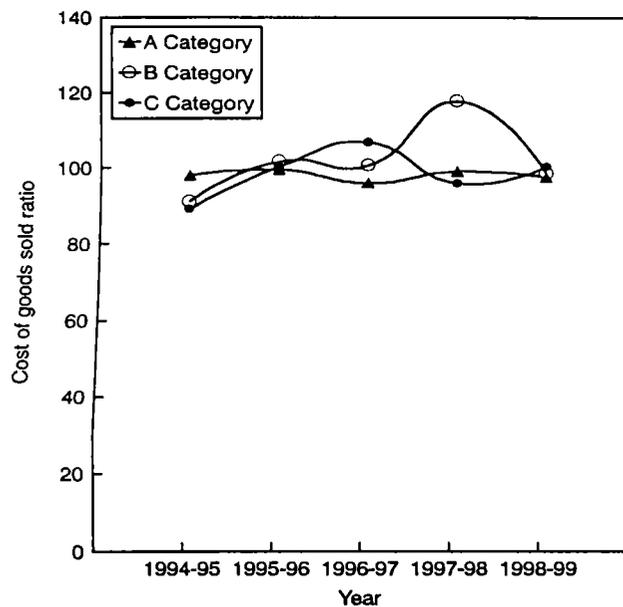


Figure 5.7

### Gross profit ratio [Gross profit/sales X 100]

Efficiency in trading activities is judged mostly on the basis of the gross profit ratio. The ratio is considered to be a reliable guide as regards adequacy of selling price. Higher the gross profit margin, lesser the cost of goods sold and therefore, greater the efficiency and profitability of the concern. The ratios of the three categories of societies during the study period are depicted in tables 5.38-a, 5.38-b and 5.38-c.

Table 5.38-a. A category societies. Gross profit ratio for the period from 1994-95 to 1998-99.

Year	Gross profit [Rs.in lakhs]	Net sales [Rs. In lakhs]	Ratio
1994-95	2.25	115.75	1.94
1995-96	0.41	100.51	0.41
1996-97	4.64	117.33	3.95
1997-98	0.83	99.34	0.84
1998-99	3.06	127.71	2.4

Source: Survey data.

Table 5.38a reveals that A category societies are having gross profit ratio in the range of 1.94 to 3.95 during the study period. It showed a fluctuating trend.

**Table 5.38-b. B category societies. Gross profit ratio for the period from 1994-95 to 1998-99.**

Year	Gross profit [Rs. In Lakhs]	Net sales [Rs. In lakhs]	Ratio
1994-95	3.73	42.27	8.82
1995-96	-0.69	39.04	-1.77
1996-97	-0.19	25.65	-0.74
1997-98	-3.56	19.97	-17.83
1998-99	0.5	34.46	1.45

Source: Survey data.

It can be observed from table 5.38.b that only during 1994-95 these societies engaged some gross profit, which was 8.82 per cent of sales. But thereafter the ratio became negative. This means that most of the CVCs in B category are making gross loss. C category societies is depicted in table 5.38.c

**Table 5.38-c. C category societies. Gross profit ratio for the period from 1994-95 to 1998-99.**

Year	Gross profit [Rs. In lakhs]	Net sales [Rs. In Lakhs]	Ratio
1994-95	3.72	34.17	10.89
1995-96	-0.15	39.6	-0.38
1996-97	-1.8	26.47	-6.8
1997-98	1.02	25.24	-4.04
1998-99	-0.18	44.06	-0.41

Source: Survey data.

From Table 5.38.c it is seen that except during 1994-95, there was no gross profit for C category of societies. However, there is a decline on the rate of loss from 6.8 per cent during 1996-97 to 0.41 per cent during 1998-99.

The combined position of Gross Profit Ratios of the three categories of societies are depicted in table 5.38-d and Figure is given as 5.8.

Table 5.38-d. Gross Profit Ratio

Year	A	B	C
1994-95	2.25	8.82	10.89
1995-96	0.41	-1.77	-0.38
1996-97	4.64	-0.74	-6.8
1997-98	0.83	-17.83	-4.04
1998-99	3.06	1.45	-0.41

The gross profit ratio analysis for the study period conveys that, while most of the A category CVCs are generating marginal gross profit, most of the B and C category CVCs were incurring only loss only. The loss is as high as 17.83 per cent of net sales. Since profit is an essential ingredient for survival, the societies, especially under B and C categories need restructuring.

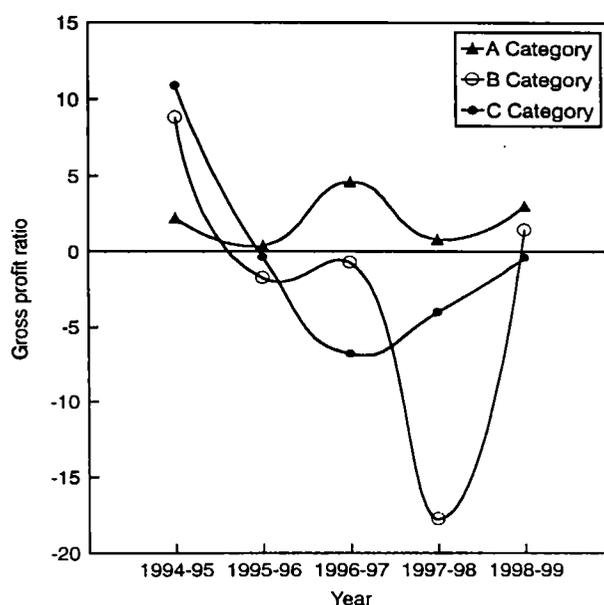


Figure 5.8

**Operating expense ratio [Cost of goods sold + operating expense/Net sales + other operating income X 100]**

This ratio indicates the proportion of cost of sales on the total operating revenue. It establishes the relation between the operating expenses incurred to total operating income consisting of net sales revenue and other operating income. Tables 5.39-a, 5.39-b and 5.39-c display operating expense ratios of the three categories of CVCs.

**Table 5.39-a. A category societies. Operating ratios for the period from 1994-95 to 1998-99**

Year	Operating expense [Rs. In Lakhs]	Operating income [Rs. In Lakhs]	Ratio
1994-95	134.99	127.5	105.87
1995-96	123.28	111.47	110.59
1996-97	142.57	126.91	112.34
1997-98	129.24	107.05	120.73
1998-99	162.84	137.66	118.29

Source: Survey data.

From table 5.39-a, it is seen that operating ratio is more than 100 per cent. This means that operating expenses of A category societies are more than their operating revenue. The ratio is showing an increasing trend and is reached 120.73 during 1998-99.

**Table 5.39-b. B category societies. Operating ratio for the period from 1994-95 to 1998-99**

Year	Operating expenses[Rs. In Lakhs]	Operating income [Rs. In Lakhs]	Ratio
1994-95	47.43	47.16	100.57
1995-96	48.84	43.18	113.11
1996-97	35.42	28.11	126
1997-98	32.04	21.71	147.58
1998-99	48.49	41.02	118.21

Source: Survey data.

**Table 5.39-c. C category societies. Operating ratios for the period from 1994-95 to 1998-99**

Year	Operating expenses[Rs. In Lakhs]	Operating income[Rs. In Lakhs]	Ratio
1994-95	40.57	38.62	105.05
1995-96	47.17	43.68	107.99
1996-97	36.14	29.56	122.26
1997-98	33.34	27.39	121.72
1998-99	51.84	48.27	107.4

Source: Survey data.

The combined position of Operating Ratios of the three categories of societies are depicted in table 5.39-d and Figure is given as 5.9.

Table 5.39-d. Operating Ratios

Year	A Category	B Category	C Category
1994-95	105.87	100.57	105.05
1995-96	110.59	113.11	107.99
1996-97	112.34	126	122.26
1997-98	120.73	147.58	121.72
1998-99	118.29	118.21	107.4

Source: Survey data

From tables 5.39-b and 5.39-c, it can be seen that in B and C category societies are also having operating ratios more than 100. Moreover, every year it shows an increasing tendency. This is mainly due to the increase in the establishment expenses and labour cost. However, in the case of A category societies, in spite of they making some gross profit, operating ratios remain about 100. This is because, A category societies have to discharge heavy amount of interest on loans. A common phenomenon noticed is that, all the three categories of societies witnessing an increasing trend in their operating ratios. This is because of the mounting debt burden of CVCs.

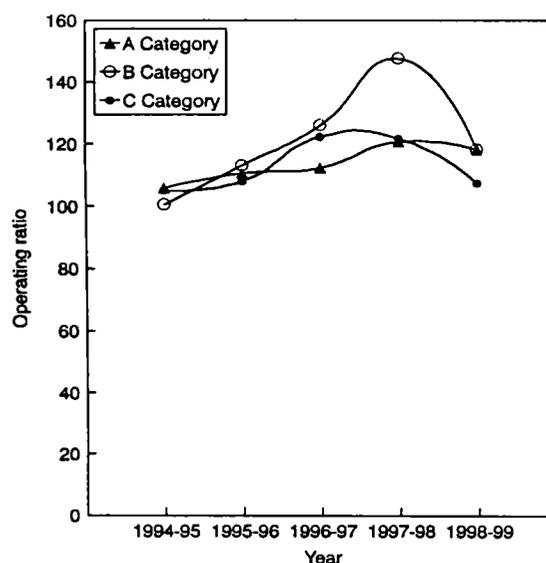


Figure 5.9

### Net profit /Net loss ratio [Net profit/loss/Net sales X 100]

Net profit ratio is an overall measure of a firm's ability to turn each rupee of sales into net profit. It establishes the relationship between net profit and sales and indicates the overall managerial efficiency in manufacturing, administering, selling as well as financing the operations. Higher the ratio, better is the efficiency of the concern. However, the CVCs of the three categories collectively were not making any net profit during any of the years under the study. Therefore, the ratio between net loss to sales is worked in order to measure the velocity of ineffectiveness of CVCs. Following three tables [5.40-a, 5.40-b and 5.40-c] depict the position of A, B and C category societies separately.

**Table 5.40-a. A category societies. Net loss ratio of CVCs for the period 1994-95 to 1998-99**

Year	Net loss[Rs.in Lakhs]	Net sales[Rs.in Lakhs]	Ratio
1994-95	3.18	115.75	2.75
1995-96	11.21	100.51	10.72
1996-97	9.10	117.33	7.76
1997-98	10.65	99.34	10.72
1998-99	17.01	127.71	13.32

Source: Survey data

**Table 5.40-b. B category societies. Net loss ratio of CVCs for the period 1994-95 to 1998-99]**

Year	Net loss[Rs. In Lakhs]	Net sales[Rs. In Lakhs]	Ratio
1994-95	4.1	42.27	9.7
1995-96	8.56	39.04	21.93
1996-97	9.96	25.65	38.83
1997-98	5.87	19.97	29.39
1998-99	9.36	34.46	27.16

Source: Survey data

**Table 5.40-c. C category societies- Net loss ratio of Cvc's for the period 1994-95 to 1998-99**

Year	Net loss[Rs in lakhs.]	Net sales[Rs.in lakhs]	Ratio
1994-95	0.71	34.17	2.08
1995-96	5.6	39.6	16.39
1996-97	6.4	26.47	24.18
1997-98	6.94	25.24	27.5
1998-99	3.99	44.06	9.06

Source: Survey data

The combined position of Net Profit/Net Loss ratio of three categories of societies is depicted in table 5.40-d and Figure is given as 5.10.

**Table 5.40-d. Net Loss Ratios**

Year	A Category	B Category	C Category
1994-95	13.32	9.7	2.08
1995-96	10.72	21.93	16.39
1996-97	7.76	38.83	24.18
1997-98	10.72	29.39	27.5
1998-99	13.32	27.16	9.06

Source: Survey data

It is seen from tables 5.40-a to 5.40-c that in A category societies the net loss rate was 2.75 per cent during 1994-95 and thereafter it gradually increased and reached 13.32 during 1998-99. The situation in B category societies is more adverse, as it reached 27.16 per cent during 1998-99. However in C category societies even though the trend is same, it depicts a hopeful signal that it began to decline and reached 9.06 during 1998-99

After analysing all these ratios mentioned above, it can be concluded that, operational efficiency of CVCs are extremely poor. All the three category CVC are deserving to this assessment.

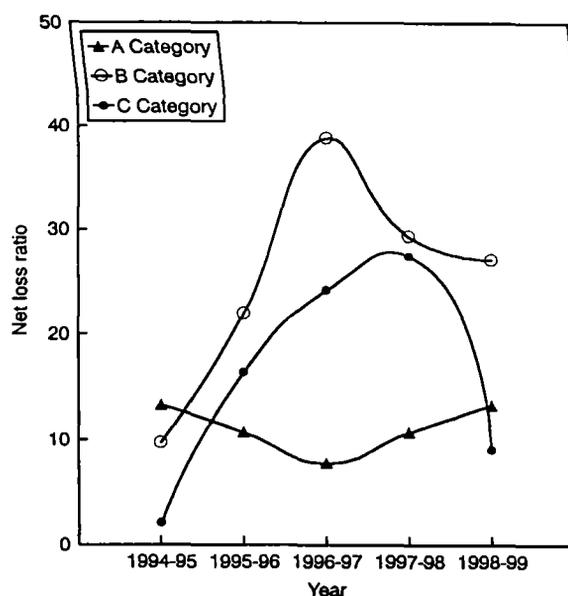


Figure 5.10

### 5.2.1 Distribution of CVCs on the basis of operational result

Tables 5.41, 5.42 and 5.43 present the distribution of the CVCs on the basis of their operational position in general and category-wise in particular from 1994-95 to 1998-99.

Table 5.41. No of CVCs making in profit or loss. [1994-95 to 1998-99]

Year	Total Number of Societies [45] in		Number of societies in profit or loss					
	Profit	Loss	A [17 Nos.]		B [16 Nos.]		C [12 Nos.]	
			In profit	In loss	In profit	In loss	In profit	In loss
1994-95	16[36]	29[64]	7	10[19]	3	13[81]	6	6[50]
1995-96	7[16]	38[84]	4	13[76]	1	15[94]	2	10[83]
1996-97	8[18]	37[82]	5	12[71]	1	15[94]	2	10[83]
1997-98	8[18]	37[82]	6	11[65]	1	15[94]	1	11[92]
1998-99	7[16]	38[84]	3	14[82]	1	15[94]	3	9[75]

Source: 1] Compiled from the records of 45 coir Vyavasaya societies in Kerala.

2] Figures in parentheses indicate percentage to total number of coir societies in each

Number of societies on the basis of their operational result is displayed in Table 5.41. The table shows that out of a total of 45 societies 38(84%) were incurring net loss. Category-wise position shows that is seen that during 1998-99, more societies in B category (94 %) incurred loss. This was followed by A and C category among whom the number of loss making societies were 82 and 75 per cent respectively. With respect to amount of loss, A category societies rank first and they are followed by B and C category societies.

### Summarised view of the amount of operational result

The consolidated and category-wise picture of the CVCs with respect to their operational result is depicted in tables 5.42, 5.43 and 5.44.

#### Gross profit

The consolidated picture with respect to Gross result of 45 CVCs and their category-wise result from 1994-95 to 1998-99 are depicted in Table 5.42.

Table 5.42. Gross Net Result [Gross profit or Gross loss 1994-95 to 1998-99]

Year	Total amount of [Net] Gross profit or Gross loss[Rs. in lakhs]	Average amount of [Net] Gross profit or Gross loss[Rs. in lakhs]	Gross profit/Gross loss Margin
1994-95	19.70	0.45	10
1995-96	-0.42	-0.01	-0.23
1996-97	2.64	0.06	1.56
1997-98	-3.76	-0.09	-2.6
1998-99	3.40	0.08	1.6

Source: Survey Data

The total of gross profit the 45 societies stood at Rs.19.7 lakhs during 1994-95. But it came down to Rs. 3.4 lakhs during 1998-99. (see Table 5.42).

Thus the gross profit became negative [Rs. 0.42 lakhs] during 1995-96. There was revival during 1996-97 when they made a gross profit Rs.2.64 lakhs. Situation became worse during 1997-98 when the loss stood at Rs. 3.76 lakhs. Fortunately, they could turn the table during 1998-1999 by making gross profit of Rs. 3.40 lakhs. The average amount of gross profit [net] during 1994-95 was Rs. 0.45 lakhs. Then there was fluctuation – fluctuating between loss and profit and finally ending with an average profit of Rs. 0.08 lakhs during 1998-99. The average gross profit margin on sales was 10 per cent during 1994-95. Then fluctuated as in the case of gross profit between loss and gain and finally ending with a gross profit margin of 1.6 during 1998-99.

### Net result of Net loss

Consolidated and category-wise details of net result of CVCs are depicted in tables 5.43 and 5.44.

Table 5.43. Total Net result details of Three category CVCs -[1994-95 to 1998-99]

Year	Total Net result	Average net result	Growth [%]	% of Av. Net result on Av. sales
	N. profit or N. loss [Rs.in lakhs]	N.profit or N.loss [Rs. in lakhs]		
1994-95	-7.98	-0.18	-	4
1995-96	-25.38	-0.56	218	14
1996-97	-25.47	-0.57	0.35	15
1997-98	-23.46	-0.52	-8	16
1998-99	-30.35	-0.67	29	14

Source: Compiled from the records of 45 CVCs in Kerala.

Table 5.43 depicts that net average loss per society during 1994-95 was Rs. 0.18 Lakhs and it increased to Rs. 0.67 Lakhs during 1998-99, ie by an increase of 29 per cent. The loss comes around 14 per cent on sales.

Table 5.44. Net result details of Three categories of Societies Separately-Growth and percentage on sales [1994-95 to 1998-99]

Year	A Category				B Category				C Category			
	Total N.P./ N.L. [Rs.]	Av. N.P/ N.L. [Rs.]	Growth [%]	% on Av. Sales	Total N.P/ N.L. [Rs.]	Av. N.P/ N.L. [Rs.]	Growth [%]	% on Av. Sales	Total N.P/ N.L. [Rs.]	Av. N.P/ N.L. [Rs.]	Growth [%]	% on Av. Sales
1994-95	-3.18	-.19	-	3	-4.1	-.26	-	9.85	-.71	.06	--	2
1995-96	-11.21	-.66	254	11	-8.56	-.54	109	22.13	-5.6	.47	690	14
1996-97	-9.10	-.54	-19	8	-9.96	-.62	16	39	-6.4	.53	14	24
1997-98	-10.65	-.63	17	11	-5.87	-.37	-41	30	-6.94	-.58	8	28
1998-99	-17.01	-1.00	60	13.00	-9.36	-.58	59	27	-3.99	.33	43	9

Source: Compiled from the Records of 45 Coir Vyavasaya Co-operatives.

Category-wise analysis (see Table 5.44) with respect to loss shows a very unfavourable situation. During 1995-96 the loss stood at 7 times vi-a-vis of the previous year and thereafter it declined. But the decrease was due to shortage of raw material and increased price. The rate of net loss on sales during 1998-99 was maximum in B category [25 % of sales].

### **5.3 Performance of member workers vis-a-vis the objectives of Co-operativisation**

Development of coir industry through co-operativisation was initiated with a view to provide better employment opportunities to the worker members of coir societies and to provide living wages etc. Therefore it is vital to analyse whether these CVCs were able to show justice to these objectives.

#### **5.3.1 Average Membership, Work Desired Members and Employed Members**

The membership pattern of CVCs, viz, total membership, actual coir work desired members and employed members etc. are given in Table 5-45.

Table 5.45 depicts that average membership in the 45 Coir Vyavasaya societies were 629, of which 76 per cent were women. Of the total members only 37 per cent were interested [desired] to do coir work. That means 63 per cent members of coir societies were not employment seekers in the coir sector. Their membership only help to give an inflated picture of membership in the register of coir societies. Membership Register is purposefully inflated to benefit the share capital assistance from Government, which is given on the basis of the number of members in a society.

Table 5.45. Work desired and employed members in A, B and C classes of CVCs in Kerala [1998-99]

Category	No. of Societies	Average No. of Members			Work desired members	Average employed members	% of work desired members to total	% of employed members to total	% of employed members to work desired members.
		Total	M	F.M					
A	17	735 [100]	183 [25]	552 [75]	264	152	36	21	58
B	16	681 [100]	163 [24]	518 [76]	243	85	36	12	35
C	12	469 [100]	106 [23]	363 [77]	191	85	41	18	45
Average		629 [100]	151 [24]	478 [76]	233	107	37	17	46

Source: Compiled from the records of 45 A, B, and C classes of Coir Vyavasaya Societies in Kerala.

Note: Figures in parentheses indicate percentage to row total.

Of the total work desired members, only 46 per cent were benefited by getting employment in coir society. These employed members were only 17 per cent of the total members. In A category societies membership and rate of employment of work desired members[58 %] were more than the other two categories.

### 5.3.2 Man-days generated by CVCs and the average wage per man-day

One of the prominent objectives of Co-operativisation in coir sector was to offer maximum employment days to their member workers. The total man-days provided by each category of societies, wage per man-day etc. are displayed in Tables 5.46 and 5.47.

**Table 5.46. Days of employment provided and wage paid by the selected CVCs – 1994-95 to 1998-99 [Rs.In Lakhs]**

Year	No. of Man-days created [No]	Wages paid [Rs]	Average Man-day per worker [No]	Average Wages per Manday [Rs.]
1994-95	4.49	108.1	75	24
1995-96	4.12	115.44	71	28
1996-97	2.86	110.1	51	39
1997-98	2.14	95.05	42	44
1998-99	2.94	125.69	58	43

Source: Data compiled from the records of A,B and C classes of CVCs in Kerala from 1994-95 to 1998-99.

It is seen from Tables 5.46 and 5.47 that total man-days of work given by these societies was 4.49 Lakhs during 1994-95. Then it came down to 2.94 Lakhs (by 35%) during 1998-99 and the average man-day per worker also came down from 75 to 58(by 33%) during the same period.

Table 5.47. Society wise days of employment and wages paid-1994-95 to 1998-99

Year	A Category				B Category				C Category			
	Man-days worked [No. in Lakhs]	Wage paid [Rs. In Lakhs]	Man-days per worker [No.]	Wages per man-day [Rs.]	Man - days worked [No. in Lakhs]	Wages paid [Rs. In Lakhs]	Man-days per worker [No.]	Wages per man-day [Rs.]	Man-days Worked [No. in Lakhs]	Wages paid [Rs. In Lakhs]	Man-days per worker [No.]	Wages per man-day [Rs.]
1994-95	2.52	64.65	81	26	1.06	23.81	66	22	.92	19.61	71	21
1995-96	2.41	73.77	80	31	.88	22.23	56	25	.83	19.44	66	24
1996-97	1.91	72.95	66	38	.39	17.32	25	45	.56	19.8	47	35
1997-98	1.52	66.52	54	44	.27	11.47	22	43	.35	17.06	48	32
1998-99	1.85	79.29	68	43	.5	20.46	36	41	.58	25.93	44	59

Source : Compiled from the records of A, B and C classes of CVCs from 1994-95 to 1998-99.

But wage per man-day during the same period increased from Rs.24 to 43. Category-wise analysis shows that more man-days work was given by A category societies than others. But as far as wages are concerned there was not much disparity. It is to be noted that out of 365 days in an year, the societies could generate only an average of 58 man-days of work at the wage of Rs.43 per day.

### 5.3.3 Total bonus, bonus per worker and rate of bonus

Total bonus paid, number of workers benefited, bonus rate, bonus per worker are presented in table 5.48. and these information in category-wise are displayed in Table 5.49.

**Table 5.48. Number of workers and Bonus paid from 1994-95 to 1998-99**

Year	Bonus paid [Rs. In Lakhs]	Number of Workers Benefited [No]	Bonus per Worker [Rs.]	Bonus as % To Wages
1994-95	17.13	5326	322	16
1995-96	19.35	5288	366	17
1996-97	17.98	5102	353	17
1997-98	16.84	4871	346	17
1998-99	18.90	5082	372	17

source : Compiled from the records of CVCS. from 1994-95 to 1998-99

It is seen from Table 5.49 that total bonus paid by the 45 societies came to Rs.17.13 lakhs during 1994-95 and it increased to Rs 18.89 lakhs during 1998-99 registering an increase of 10 per cent. Average rate of bonus also increased during this period and it increased from 16 per cent to 17 per cent.

Table 5.49. Payment of Bonus – Society-wise - 1994-95 to 1998-99

Year	A' Category				B Category				C Category			
	Bonus paid [Rs. In Lakhs]	Bonus Rate [%]	No. of workers Benefited	Bonus per worker [Rs.]	Bonus paid [Rs. In Lakhs]	Bonus Rate [%]	No. of Workers benefited	Bonus per worker [Rs.]	Bonus paid [Rs. In Lakhs]	Bonus Rate [%]	No. of workers Benefited	Bonus per worker [Rs.]
1994-95	10.06	17.8	2737	368	3.65	15	1530	238	3.42	17.2	1059	323
1995-96	12.41	17.4	2788	445	3.61	15.7	1444	250	3.33	17.2	1036	315
1996-97	12.34	18	2805	440	2.34	15.19	1333	175	3.31	18	964	343
1997-98	12.75	18	2975	428	1.58	16	972	162	2.52	17.4	924	273
1998-99	12.87	18	3009	428	2.31	15.5	1193	194	3.71	17.2	880	401

Source:- Compiled from the records of A, B and C classes of CVCs from 1994-95 to 1998-99

But the number of workers who benefited decreased from 5326 to 5082 during the period 1994-95 and 1998-99. The average amount of bonus paid per worker increased from Rs.322 during 1994-95 to Rs.372 during 1998-99. Category-wise analysis shows that the number of workers received bonus, the amount and rate of bonus were substantially higher in A category societies than in B and in C category societies(See Table 5.49). Thus the workers in coir societies were getting bonus at a rate higher than minimum bonus rate (8.33%). Thus in providing employment to its member coir workers and in giving normal working days with living wages the CVCs failed. No wide variation is noted in the case of all the three categories of societies in this regard.

#### 5.3.4 Number of employees and their average salary

The Secretary manages the day-to-day activities of CVCs. There may be one Business Manager and a peon for assisting secretary in business matters. In rare cases a clerk and a peon may also be there. But in most of the surveyed societies (23 out of 45) had a secretary and a peon only as permanent employees. In 16 societies only one employee, the secretary, was found. Only in one society there were 5 permanent employees. The average number of employees and their monthly pay are depicted in Table 5.50.

Table 5.50. Average number of employees and their pay in A, B and C classes of CVCS

Classes of CVCS	Average Number of Employees [Nos]	Average Monthly Pay [Rs.]
A	2.23	2291
B	1.62	1940
C	1.5	2002
Average	1.8	2078

Source: Data compiled from A, B and C classes of CVC

Table 5.50 shows that the average number of permanent employees in a society was only less than 2 [1.82]. In A category societies the average strength was 2.23 and it was less than 2 in B and C categories. The average monthly salary of the employees was Rs.2078 and it was Rs.2291 in A category, Rs.1940 in B, and Rs.2002, in C category. But during the field survey it was revealed that secretaries of three societies were drawing a salary of less than Rs.1000 per month. The survey further revealed that secretaries of three A category societies were drawing salary above Rs.4000 per month. Most of the secretaries of the CVCs were ladies.

#### 5.4 General appraisal of the basic financial structure

From the performance analysis of CVCs, it is inferred that CVCs failed to realise their objectives both on financial and social dimensions. What are the reasons for this failure? This leads us to evaluate their capital structure, infrastructure facilities and manufacturing processes etc.

##### a- Share capital structure

The total share capital of the three categories of coir societies including Government's and members contributions are given in Table 5.51.

Table 5.51. Share Capital of A, B and C Classes of CVCs [Rs. In Lakhs]

Classes of Cvc's	Total	Average per Society	Government Contribution	Govt. Contribution Per society	Govt. Contribution as % to Total
A	108.57	6.39	80.94	4.76	75
B	47.32	2.96	37.04	2.32	78
C	33.56	2.80	25.39	2.12	76
Total	189.45	12.14	143.37	9.19	76

Source: Compiled from the records of A, B and C classes of Cvc's.

Note: Average per society is obtained by dividing the total with the number of Cvc's in each category

Table 5.52 shows that the total share capital of the 45 societies amounts to Rs.189.45 Lakhs. Of this Government contributed Rs.143.37Lakhs (76%). This means that members' contribution is only 24 per cent. The average share capital of a society was Rs. 12.14 Lakhs, of which the Government's contribution was Rs.9.19 Lakhs. Government's contribution was 75 per cent in 'A' category, 78 per cent in 'B' category and 76 per cent in 'C' category. Category-wise analysis shows that is not much variation in the share capital structure of these societies. It is seen that members' contribution towards share capital of the societies is only a quarter of the total share capital. That is not a healthy situation. The low contribution of members to the Share Capital of the societies keep them off in taking interest to run the society on profitable lines. Now the attitude of the members is that even if the society is wound up their loss will be minimum. In other words high share contribution by Government is only reducing the enthusiasm of the members to see their societies work profitably.

#### **b- Ownership of infrastructure facilities**

Ownership of basic facilities is considered as an important factor for the efficient and viable working of CVCs. For yarn manufacturing these facilities includes land, building, retting yard, spinning yard, godown and transport vehicle. All these facilities are essential for the smooth running of coir societies and if they don't own these facilities they have to hire them.(see Table 5.52).

Table 5.52 shows that of the total 45 societies 39 (87%) have own land, 38(80%) own building, 28(62%) own retting yard and 30(67%) own a spinning yard. Only 20 per cent were had own transport vehicle[mostly country boat 'allom']. On an average only 49 per cent had own godown facility.

Table 5.52. Infrastructure Facilities available for A,B, and C classes of CVCs

Sl. No.	Infra- Ructure Facilities	Infrastructure facilities Owned or Hired											
		A Class			B Class			C Class			Total		
		Own [Nos]	Hired [Nos]	Total	Own [Nos]	Hired [Nos]	Total	Own [Nos]	Hired [Nos]	Total	Own [Nos]	Hired [Nos]	Total
1	Land	16 [94]	1	17 [95]	15 [94]	1	16 [95]	8 [67]	4	12 [71]	39 [87]	6	45 [93]
2	Building	16 [94]	1	17 [95]	12 [12]	4	16 [94]	8 [67]	4	12 [71]	36 [80]	9	45 [93]
3	Retting Yard	14 [82]	3	17 [85]	8 [50]	8	16 [82]	6 [50]	4	10 [54]	28 [62]	17	45 [93]
4	Spinning Yard	14 [82]	1	15 [83]	9 [56]	4	13 [79]	7 [58]	5	12 [70]	30 [67]	15	45 [93]
5	Godown	12 [71]	3	15 [84]	7 [44]	4	11 [75]	3 [25]	2	5 [27]	22 [49]	23	45 [93]
6	Transport Vehicle	7 [41]	10	17 [58]	1 [6]	15	16 [57]	1 [8]	11	12 [23]	9 [20]	36	45 [93]

Source: Compiled from the records of A,B and C classes of CVCs.

Note: Figures in parenthesis indicate percentage to each category total.

But 71 per cent of 'A' Category societies had own godown facilities. Only 25 per cent of 'C' category societies were having own godown facilities. Category-wise analysis shows that in general 77 per cent of 'A', 54 per cent of 'B' and 46 per cent of 'C' category societies were having own infrastructure facilities. On an average 61 per cent of the total societies were having own infrastructure facilities. The analysis shows that more A category societies were having own infrastructure facilities vis-a-vis B and C categories.

**c- Place of carrying on yarn manufacturing activity**

Most of the societies were carrying their activities at their own premises. In some societies Unit System of production was practiced. Under this working members are divided into units comprising 3 to 4 members and of whom one will be designated as unit leader. Unit leader will be given 1000 retted husks and he is required to return 80-85 kg. yarn of a particular quality normally within 15 days. While returning, the yarn will be weighed and if there is shortage either in quality or in quantity or both the unit members will be penalised by cutting their wages. The total wages of conversion of 1000 husk into yarn will be given to the group leader and this will be divided among the unit members. In some Projects areas of like Alappuzha, Vaikom, Kayamkulam, North Paraur, Kozhikodu this practice was followed. The convenience of this system is that the unit members can do their work at their own convenience. The family members can also participate in the work. If there is any work opportunity outside they can go for that too.

Table 5.53. Mode of Yarn manufacturing activity of A, B and C CVCs

Category	Mode of yarn manufacturing activity			Total [Nos.]
	Society's Premises [Nos.]	Unit Basis [Nos.]	Both [Nos,]	
A	12 [71]	2 [12]	3 [17]	17 [100]
B	11 [69]	3 [19]	2 [12]	16 [100]
C	10 [83]	2 [17]	--	12 [100]
Total	33 [73]	7 [16]	5 [11]	45 [100]

Source : Data collected from A, B and C classes of CVCs.

Note: Figures in Parentheses indicate percentage to row total

The number of societies following both the systems and the Unit System alone are given in Table 5.53. It can be seen that out of the 45 societies, 33(73%) were contributing following the activity at their own premises. Only 7(16%) societies were following the unit system alone and 5(11%) societies followed both the system. No particular advantage was claimed by societies following Unit System or both in their working results. It was observed that under the unit system the unit leaders returned to the society only the minimum quantity of the output even when they were getting more output. The surplus will be pocketed by the group leaders. In case there is any short-fall the members will suffer.

#### d. Area of opeation

It was observed that, coir societies were located very near to each other. This leads to to unhealthy competition among co-operatives which is taken advantage of private coir manufacturers. In order to avoid disputes and dual

membership between and among societies the area of operation of the societies is divided on the basis of wards or panchayats.

**Table 5.54. Area of Operation of A, B and C classes of CVCS.**

Category of CVCS.	Number of CVCS	Number of Wards	Average Wards covered
A	17	35	2
B	16	26	1.6
C	12	22	1.84
Total	45	83	1.84

Source : Primary data collected from A,B and C classes of CVCS.

Table 5.54, shows that on an average, a society covers 1.84 wards as far as its area of operation is concerned. In the case of 'A' category societies the average area of operation covers two wards which is more than the other two category of societies. One worker is required to take membership only in one coir society, which is located in his of residence.

**e. Details of assistance received in the form of loans and grants from Government**

The State Government as well as the Central Government extends various types assistance in the form of grants and loans to Coir Vyavasaya Co-operatives in Kerala. The average assistance per society in the three categories is depicted in Table 5.55.

**Table 5.55. Details of Average Assistance [Loans & Grants] received by A, B and C Classes of CVCs. Till 31-3-999 [Rs. in Lakhs]**

Types of Assistance	Loans and Grants	A Category [Rs.]	B Category [Rs.]	C Category [Rs.]	Total [Rs.]
Revival Assistance	Grants	0.71	0.99	0.52	2.22
	Loans	0.79	0.78	0.53	2.10
Rat and Land	Grants	0.99	0.09	0.01	1.09
	Loans	0.61	0.66	0.10	1.37
ICDP	Grants	5.82	0.63	0.77	7.22
	Loans	6.81	0.14	-	6.95
Work Shed	Grants	0.12	0.03	0.001	0.15
	Loans	0.15	0.06	0.004	0.21
Panchayat-Grama or District	Grants	0.08	0.04	0.11	0.23
	Loans	--	--	.04	.04
Government Assistance on Working Capital	Grants	0.78	0.59	0.41	1.78
	Loans	1.56	1.08	1.22	3.86
Any other	Grants	0.32	0.2	0.02	0.54
	Loans	1.18	.02	.004	1.2
Total	Grants	8.81[67%]	2.57[19%]	1.85[14%]	13.23[100]
	Loans	11.11[71%]	2.73[17%]	1.89[12%]	15.73[100]

Source: Compiled from the records of A, B and C Classes of CVCs.

It is seen from table 5-55 that the average amount of Grants secured by a society was Rs. 13.23 Lakhs. Out of this grants 67% were channalised to 'A' category societies, 19% were to 'B' category and only 14% were given to 'C' category societies. Regarding loans, the total average amount per society was Rs. 15.73 lakhs. Out of this 71% were given to 'A' category and 17% were to 'B' category and only 12% were given to 'C' category. It is thus evident that

Governments were extending various kinds of assistance to coir societies and its lions share were channalised to 'A'category societies. Among various items of assistance, the largest was Integrated Coir Development Programme[ICDP] assistance for modernisation and which is granted only to A category of societies.

## 5.5 Analysis of Cost of Production

Different CVCs in various project circles produce different varieties of yarn depending upon demands of respective area and traditional expertise available in producing various varieties such as Mangadan, Arratroy, Angeogo, Vaikom, Kadapuram, Baypore etc. For each variety of yarn, cost of production and sale price vary. But the raw material used is the same. Therefore, cost of production and sale price of 100 Kg. yarn of a society can't be compared with that of another society. Hence for cost comparison, difference between [margin] cost of production of 100 Kg. yarn with its sale price is more appropriate. On the basis of that margin the manufacturing efficiency of various systems of production can be measured in various categories of societies.

In order to assess the viability of various systems of production in the three categories of societies, the production systems were divided into Five. They are:-

- Completely traditional way of yarn production, where raw husk is used and no mechanisation, applied.
- Traditional Ratt Spinning and Mechanised Husk Beating [ Machanised Fibre production]
- Brown Fibre purchased and traditional Ratt Spinning
- Raw husk used and Mechanised Spinning [Motorised Spinning]
- Spinning is mechanised and Brown Fibre is used as raw material

The three categories of societies were adopting one or two systems of the above according to their requirement. For each system the sale price per 100 Kg. yarn and its difference with cost of production is depicted in Table-5.56 below.

**Table 5.56. Cost of production of 100 K.g. yarn and Margin in various systems of production [Average]**

Items of Cost	TRADITIONAL RATT SPINNING			MOTORISED SPINNING	
	Using raw husk as raw material [Rs.]	Using raw husk and husk beating machinised [Rs.]	Using brown fibre as raw material [Rs.]	Using raw husk as raw material [Rs.]	Using brown fibre as raw material [Rs.]
A Category					
Raw material	792	812	1039	708	1303
Labour Cost-Retting	149	171	133	150	51
Beating	821	288	--	492	--
Spinning	1074	943	891	862	1000
Drying and Bundling	90	92	101	107	62
Bonus	390	239	229	299	189
Other Expenses	78	110	29	58	73
Av. Total cost of production	3394	2655	2422	2676	2678
Sales Price	2798	2620	2204	2240	2392
Margin	-458	-35	-218	-436	-286
B Category					
Raw material	803	810	1174	No society	1347
Labour Cost-Retting	157	169	87	--	93
Beating	693	285	829	--	--
Spinning	827	908	829	--	700
Drying & Bundling	63	46	34	--	60

Bonus	260	167	186	--	150
Other expenses	25	112	27	--	50
Total Cost of production	2828	2497	2337	--	2400
Sales price	2501	2425	2141	--	1805
Margin	-327	-72	-196	--	-595
C Category				No society is having ICDP or Motorised Ratt	
Raw material	803	814	1158		
Labour cost - Retting	125	169	50		
Beating	780	258	-		
Spinning	1046	917	770		
Drying and Bundling	96	81	37		
Bonus	374	193	158		
Other Expenses	19	110	36		
Total cost of production	3243	2542	2216		
Sales Price	2800	2500	1981		
Margin	-443	-42	-235		

Source: Survey Data

From table 5.56 above it can be seen that for every system the margin is negative. Comparison is possible only with the loss incurred. Thus it can be observed that loss margin is maximum where completely traditional method of production of yarn is practiced. The loss is maximum in A class societies vis-a-vis the other two.

In the second method of production where husk beating is mechanised, and rest of the activities are traditional, the loss margin is minimum. This shows that partial mechanisation will help to reduce loss. In C category societies, the

loss margin is minimum. Complete mechanisation [Spinning and Fibre producing] will reduce loss margin when compared with complete traditional way of production.

Mechanised Spinning is carried on mostly in 'A' category societies as motorised rath is provided to them under ICDP. Use of motorised rath is one of the reasons why the amount of net loss is higher in 'A' category societies. This is because the low sale price of yarn produced using motorised rath and the high raw material cost. Sale price is at least Rs. 100 less per quintal and cost is higher because of high wastage of raw material. If brown fibre is used as raw material, in mechanised rath, cost will further go up as quality of brown fibre is very poor. For instance if 26 – 28 Kg. yarn can be produced from 30 Kg. fibre by traditional rath, only 20-22 Kg. yarn can be produced from 30 Kg. brown fibre by using mechanised rath. Hence it can be inferred that mechanisation in beating process can be advisable as the amount of loss is minimum. The loss can be further minimised if the societies are using own Husk Beating Machine as they used to transport husk to nearby husk beating mills owned by private parties who will charge higher rate. If societies were having own Husk Beating machine transporting cost can also be minimised.

Analysis Financial performance of CVCs shows that their short-term as well as long-term solvency position is far from satisfactory. Operational efficiency is 84 per cent of the CVCs are poor and hence they are running at loss and the loss comes to 14 per cent of their sales. Different aspects of working of these societies such as production, purchase, sales showed a decreasing trends during the five years of the study. The reverse is true with respect to revenue and trade expenses.

The Co-operativisation Scheme for coir was intended to bring all the coir workers under the co-operative fold. But the survey revealed that majority of the members enrolled in the register of coir societies were neither the real coir workers nor interested to do coir work. The society authorities enrolled the names only for availing share capital assistance from government, which was given on the basis of number of members in the register. The societies could provide work only to 46 per cent of the workers who are desirous of doing coir work and that too for 58 to 75 man-days in an year. The wage paid per worker was as low as Rs.43. The general wage rate varies between Rs.100 and Rs.150 per day. This shows that the societies failed in realising their objectives.

Most of the societies were having own infrastructure facilities. Majority of the Share Capital of the societies was contributed by Government and the government continues to extend various forms of assistance. Yet these societies are running at losses. Majority of the societies could not utilise a substantial portion of their production capacity owing to lack of working capital, raw material shortage and non availability of labour. Marketing of yarn takes place only after a long gestation period and societies are forced to wait long periods for the realisation of sales proceeds.

Cost of production is high and there is no effort on the part of societies or Govt., to streamline production and thereby reduce cost. The Govt. is pumping money to societies for mechanising the spinning sector. But the study reveals that mechanisation of the spinning sector is not capable of either reducing cost of production or increasing efficiency.

On the basis of the above analysis it is inferred that the performance of the CVCs is far from satisfactory. They failed to realise the objectives for which the societies were brought under the co-operative fold.

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## **CHAPTER VI**

### **PROBLEMS AND PROSPECTS**

#### **6.1 Problems Facing by the Coir Vyavasaya Co-operative Societies**

The socio-economic status of the coir workers, the performance and the operational efficiency of the coir vyavasaya co-operatives were analysed in the previous chapter. In the following paragraphs the problems faced by the CVCs are discussed.

The CVCs have certain favourable factors for successful working. They are own infrastructure facilities, carrying out of manufacturing activities at the convenience of members, assistance from governments in the form of grants and subsidies. But these societies are faced with number of constraints. They are discussed under three major heads Viz; i] Under-utilisation of production capacity. ii] Marketing problems and iii] problems connected with machanisation.

##### **6.1.1 Under-utilisation of production capacity**

In the earlier discussion it was noted that the CVCs. were not utilising their entire production capacity. The range of capacity utilisation and the reasons thereof are given in Tables 6.1 and 6.2.

**Table 6.1. Production Capacity Utilisation of A, B and C class of CVCS in the Study area**

Range of Capacity Utilisation [%]	Number of Societies in each Category			Total
	A	B	C	
<-20	2[12]	7[44]	4[34]	13[29]
21-40	7[40]	8[50]	6[50]	21[47]
41-60	4[24]	1[6]	1[8]	6[13]
61-80	2[12]	--	1[8]	3[7]
81-100	2[12]	--	--	2[4]
Total	17[100]	16[100]	12[100]	45[100]

Source: Primary data

Note:- Figures in brackets indicate percentage to column total

**Table 6.2. Reasons of Under-utilisation of Capacity**

Reasons [Code]	No of Societies and their responses for under-utilisation			Total
	A Category [Nos..17]	B Category [Nos..16]	C Category [Nos..12]	
A	10[59]	8[50]	7[58]	22[56]
B	10[59]	15[94]	11[92]	36[80]
C	11[65]	6[38]	6[50]	23[51]
D	1[6]	1[6]	2[7]	4[9]
E	3[18]	0	0	3[7]
F	0	1[6]	1[8]	2[4]
G	8[47]	7[44]	5[42]	20[44]
H	2[12]	1[6]	0	3[7]

Source: Primary Data

- Note:- 1) A= Shortage of rawmaterials. B= Shortage of Working Capital  
C= Non- availability of workers at the right time D= Lack of retting facility  
E= Policy of the Director Board F= Environmental objections  
G= Labour problems H= Any other
- 2) Figures in parentheses indicate percentage to total number of CVCs in each class.
- 3) Since the respondents [A,B and C classes of CVCs.] highlighted more than one reason for under-utilisation of capacity, the sum total of percentages will never equal to 100.

Table 6.1 shows that out of the 45 societies belonging to all the categories only 2(4%) have utilised their full production capacity and 34(76%) utilised only upto 40 per cent of their production capacity. This clearly indicates that there is considerable under utilisation of production capacity in the case of most of the CVCs.

In order to have some deeper insight to the reasons for such under-utilization, six major constraints were identified and the responses from the CVCs on each item were solicited and recorded.

Table 6.2 presents the rankings of the four major reasons identified viz; shortage of working capital[80 %], shortage of raw material[56%], non-availability of workers at the peak production period[51%] and labour problems[44%].

### **6.1.2 Working capital shortage [B- 80%]**

In spite of all governmental support in such as Revival Assistance, Working Capital loan, I.C.D.P. loan and other subsidies, the CVCs are facing the problems of working capital shortage. On a much closer examination it was understood that the lengthy production process and blocking up of working capital are the reasons for this state of affairs. Once working capital is invested, it has to be rolled on. But in CVCs, the problem is that after procurement of green husks, it takes 7 to 9 months to get them retted. As running concerns, they carry out yarn manufacturing activity using old stock. But they have to pay wages and meet all other establishment and contingency expenses. These constitute a major share of their cost of production. To meet such expenses they send their products to COIRFED for selling. But the COIRFED takes its own time to pay the sale

proceeds to CVCs. Sometimes it may take months. This results in working capital shortage and that forces some CVCs to shut down their production.

Table 6.2 shows that working capital problem is not that severe in A category societies. This is because they get working capital loan and other assistance from government. But around 90 per cent of B and C category societies are experiencing working capital shortage.

### 6.1.3 Shortage of raw material[A- 56%]

Another major reason for the under-utilisation of production capacity of CVCS was shortage of raw material. Raw husk is the raw material for CVCs. It is a paradox to see that CVCs in Kerala are facing raw material shortage even when Kerala is the major producer of coconut in India. It is already pointed out that only a minor share of the raw material potential of the state is utilised by the coir industry as well as the coir co-operatives operating in Kerala. This points to the fact that raw material shortage is not due to lack of material availability, but due to some other reasons:- They are discussed below.

#### i. **Lack of collection machinery**

The CVCs are depend on the traditional trade route for purchasing raw husk. This route comprises of brokers, copra producers and capitalist husk dealers. There is no effective machinery to collect husk from small-scale coconut producer households. Therefore, husk from households are either discarded or used as fuel. This happens mostly in high range areas because of transporting problem.

ii- **Higher price**

As Levy system is lifted by the Government, the CVCs have to purchase husk from the open market. Naturally they have to compete with other private jam manufacturing firms for purchase of husks. Moreover husks passes through multiples of intermediaries and that which adds the price of husk. Purchase of brown fibre from Tamil Nadu is also affected with because of the same problem.

iii- **Incapability of the mangement of societies to purchase husk at the right time**

Husks riped between January and March are of high quality and that yield maximum fibre. Similarly, fibre content vary in relation to geographical area. Husks collected from Perumbavoor and Mala are considered as top quality. The CVCs have to purchase raw husk in the right season from the right place and in required quality. But they fail to do so because of working capital problem. This results in high raw material cost and interruptions in production

c- **Non- availability of workers at the right time [C-51%]**

Though Kerala is endowed with abundance of man power, coir societies are facing labour shortage. Field survey revealed that lack of certainty of regular work in coir societies labourers go in search of work in low paid private coir sector where they get continuos work. So even at the time of need in coir societies workers will not be available even though they are sure to get higher wages. It may be recalled that the survey among coir households also revealed this situation. It is learnt during the survey that the secretaries of CVCs have to go to the coir worker households in search of workers during busy periods of

production. But they fail to get them as they are in a binding contract with private entrepreneurs.

Labour problems also disrupt the working of CVCs. Labour is unionised and the left parties have a stronghold in the coir sector. A number of strikes take place in this sector on various issues.

In certain areas like Thanneermukkom [Alappuzha] environmentalists started raising voice against pollution of lakes and backwaters caused by retting of husk. This is going to be a major problem in this sector in the coming years and that will affect the production capacity of the societies. Eco-friendly methods of retting are to be experimented to overcome this problem.

Category-wise analysis shows that shortages in the areas of working capital, raw-material and labour are the major causes for the existence of unutilised capacity in B and C categories of societies. But for 'A' category, shortage of workers at right time is their major problem.

## **6.2 Marketing problem**

Marketing problems are broadly categorised into two:- a) Marketing problems directly linked with coir vyavasaya co-operative societies in kerala and b) Marketing problems linked with coir industry in general.

Marketing problems directly linked with coir vyavasaya societies are analysed on the basis of the survey results and general marketing problems on the basis of relevant literature.

### 6.2.1 Marketing problems directly linked with Coir Vyavasaya Co-operatives in Kerala

As per rule, every coir society except that makes only fibre is required to sell their products (yarn) to the apex marketing agency, Viz; the-COIRFED. They are not allowed to market through private parties. But it was observed during the survey that some of the societies are violating this rule. They market yarn to Mats and Mattings units owned by private parties or co-operative societies. They also sell their products to local people for agricultural purposes. Some CVCs manufacture thick yarn, known as 'vadam' to meet local demands.

The details of societies selling their products through private channels and the reasons thereof are depicted in Tables 6.3 and 6.4 respectively.

**Table 6.3.** Number of societies which market their product through private channels and through co-operatives

Classes of CVCs	No of CVCs marketed their product through-		Total
	Private Channel	COIRFED	
A	9 [53]	8 [47]	17 [100]
B	10 [63]	6 [37]	16[100]
C	5 [42]	7[58]	12[100]
Total	24[53]	21[47]	45[100]

Note- Figures in parentheses indicate percentage to row total

Table 6.3 shows that on an average 53% of the societies used to market a part of their finished products to private parties. Category-wise analyses show that, 63 percent of 'B' and 42 percent of 'C' Category societies sell their products privately. As private sale was not formal, they were not maintaining systematic record of such transactions and hence it is difficult to ascertain the exact volume of such sales.

Table 6.4. Reasons for marketing through Private Channel

Reasons (Code)	Number of CVCs and their responses			Total
	A	B	C	
a	10[59]	7[44]	5[42]	22[49]
b	10[59]	15[94]	11[92]	36[80]
c	11[65]	6[38]	6[50]	23[51]
D	10[59]	8[50]	6[50]	24[53]
e	3[18]	0	0	3[7]
f	0	1[6]	1[8]	2[4]
g	10[59]	1[6]	2[17]	4[9]

Source: Primary data collected from CVCs

Note:- 1) Figures in parentheses denote percentage corresponding to column

2) -a = Higher price b= Ready cash c= Marketing at society's premises d= Less formality e= Less quality checking f= Entire products can be marketed g= Other reasons  
 3) Since the respondents [A,B and C] have highlighted more than one reason for marketing their products through private channel, the sum total of the percentages will never be equal to 100.

Table 6.4 highlights seven reasons for selling their products to private entities. Four of them mentioned below are important. They are:-

i. b(80 %) Ready cash

ii. d(53% ) Less formality

iii. c(51%) marketing at society's premises

iv. a(49%) Higher price.

The list shows that the most important reason for private sale practiced by CVCs was availability of ready cash. It may be recalled that COIRFED makes

available the sale price to societies after considerable delay and sometimes repeated visits of secretaries becomes necessary to realise the sales price. Next important reason for private sale was less formality. Dealings with COIRFED involve more formality including quality checking. The third important reason for private sale is that such sales take place at the society's premises. There is no transportation cost and strain involved in such sales. This is an advantage to the society in the sense that a vehicle is to be hired for transporting the yarn to the COIRFED in case of sale for COIRFED and if no adjustment of space is available in the godown, unloading take place only after one or two days which invites more cost and displeasure of vehicle owners. The fourth important reason for sale to private parties is the price differential. The price given by private parties will be a bit higher. There were some other reasons also for private sale as is given in Table 6.4. But it is to be noted that, the societies will be eligible for husk subsidy or fibre subsidy only if they sell their products to, COIRFED. But some CVCs were ready even to sacrifice this attractive subsidy for avoiding delay in cash receipts and formalities while selling to the COIRFED.

#### **6.2.1.1 Problems confronted in selling through COIRFED**

Field survey revealed the fact that majority of the societies are having complaints about the approach of the COIRFED. According to the situation the COIRFED is not only not extending any helpful attitude towards coir primaries but also acting as a 'big brother'.

**Table 6.5. Problems confronted by A , B and C classes of CVCs with COIRFED**

Problems [Code]	No. Of CVCs and their responses			Total	
	A class [Total 17]	B class [Total 16]	C class [Total 12]	No.	%
a	6[35]	5[31]	3[25]	14	31
b	11[65]	13[81]	11[92]	35	78
c	10[59]	10[63]	11[91]	31	69
d	12[71]	12[75]	9[75]	33	73
e	2[12]	5[31]	4[33]	11	24
f	9[53]	7[44]	4[33]	20	44
g	5[29]	6[38]	6[50]	17	38
h	1[6]	6[38]	2[17]	9	20

Source: Primary data collected from A, B and C classes of CVCs.

- Note:-
1. A) Fixed Selling b) Unscientific measurement of quality  
C) Non-acceptance of the produce due to lack of storing facilities in COIRFED.  
D) Importance of delay in releasing of selling price  
E) Distance  
F) Favouritism towards some society  
G) Unfriendly attitude fo employees of COIRFED.  
H) Non- acceptance of Fibre.
  2. Figures in brackets indicate percentage to the total number of CVCs in each class
  3. Since the respondents [A, B and C class CVCs] expressed more than one reasons for selling their produces through COIRFED, the sum total of the percentages will never equal to 100.

Table 6.5 depicts the list of problems connected with dealings with the COIRFED. On the basis of the importance of the problems expressed by coir societies in each category, the problems are ranked. Out of eight reasons given by the societies five were found to be significant. b- (78% of societies) d- (73% of societies) c- (69% of societies) f -(44% of societies) g- (38%of societies)

Thirty five societies (78%) complained about the unscientific way of measuring quality of yarn by the COIRFED. For quality check the COIRFED take a random sample of one bundle of 15 kg from a load of 50 Quintals of yarn, they

and measures its runnage (Meter per kg.). If the COIRFED finds it is less than standard the entire load of 5000 kg. will be under-priced. The moisture measuring equipment is not used in checking quality. The employees of COIRFED randomly assess the quality with a preconceived notion without any scientific basis. In order to avoid further confrontation and delay most of the secretaries are forced to accept the measurement.

Thirty three societies (73%) complained about the delay in releasing selling price by COIRFED. This delay, according to them lead delayed payment of wages to workers and causes working capital problem. Another important complaint against the COIRFED was non-acceptance of produce by COIRFED. Consequently godowns of majority of societies, and offices of the secretaries were flooded with yarn. COIRFED has intimated the societies that they need to bring the coir yarn only after getting positive signal from the COIRFED. Due to lack of storage facilities at their disposal the societies were forced to stop production and consequently workers were forced to go to private manufactures in search of work at lower wages. Another problem pointed out is by the societies is that if too much delay happens in sale, the yarn will get dried further and the resultant weight loss will add to its cost as the workers were already paid on the basis of weight also when the societies took possession of the yarn. Again yarn from brown fibre gets broken when they are excessively dried. So when secretaries rush their yarn to COIRFED have to run from one godown to another in the suburb area to keep their stock in tact and sometimes they are forced to keep the yarn in the transport vehicle itself for days. In such a situation increasing production becomes an added liability.

Another important problem (44%) pointed out by the societies against the COIRFED authorities is favouritism. They allege that COIRFED authorities are

showing favoritism towards some societies in matters relating to measurement of quality and release of sales price. It was pointed out that the politically influential Board Members of societies are able to manipulate quality measurement and get their products, graded as superior. They also succeed in getting the sales price released without any delay.

The unfriendly attitude of the COIRFED officials towards the secretaries of the societies were pointed out by 17 societies (38%). The COIRFED officials consider the secretaries (majority of them are women) as second grade citizens.

Distance from COIRFED is also a problem raised by some societies. In Alappuzha project, there are a number of Mats and Matings societies working near the CVCs and their raw material is yarn. But they were not permitted to sell directly to such Mats and Matings societies. These CVCs have to transport their yarn to the COIRFED first which is 40 k.m. away from their place and then the COIRFED supply the same yarn to Mats and Matings societies located near the CVCs. This shows that the COIRFED has no practical approach. Non-acceptance of fibre is also a problem raised by some of the societies. For eg. in the Thrissur project area some societies are manufacturing only fibre due to lack of workers for manufacturing yarn. But this yarn is not accepted by the COIRFED and so they are not eligible for any subsidy from Governments.

## **12.2 Marketing problems linked with Coir Industry in General**

Marketing problems of coir industry in general are assessed under two categories as:- I] Problems in the domestic Market and II] Problems in the Export Market.

### 6.2.2.1 Problems in the domestic Market of coir

In the recent past several substitutes have been introduced in the market for coir mats and mattings. The samples of 'wondermat', 'ultimate' and 'PP curled Mats' are much in demand in the market in spite of their high prices. Further the introduction of Rubber Stud and Hollow Mats have reduced the sales of Coir Mats to a large extent. With the effect of WTO agreement, cheaper varieties of Polyester floor coverings are being imported from Belgium and other countries and are being sold in India at a price much cheaper than coir floor coverings. The properties of coir say eco-friendliness, is lost. The non-woven carpets are bright, colourful, can be laid wall to wall, can easily be brushed and cleaned but are not environmental friendly. Indian Railways and other ministries were used to buy coir mattings every year, but now they have totally stopped buying coir mattings and have switched over to non-woven carpets. Even the Railways are now using PVC floor coverings for their coaches, toilets and bathrooms. The corridors in ministries at Udyog Bhavan, Krishi Bhawan, etc. are furnished with PVC floorings while coir mattings were used as corridor matting in the past. It is rather a pity to see that the Ministry dealing with promotion of coir in the country is not using coir for its own offices and gangways.<sup>1</sup>

Coir is an item of consumption of mediocre families, institutions and departments. The State Governments of Rajasthan and U.P. have exempted coir goods from sales tax while in states of Delhi and Maharashtra the tax is as high as 3%. This makes coir goods uneconomical and unaffordable.

The marketing efforts in the domestic market is not very effective. The Government owned marketing undertakings wear a shabby look and fail to attract consumers. They fail to keep their showrooms attractive. So also the most demanded coir products are not available in sufficient quantities in such showrooms. The mode and style of packing are crude and conventional, and does not

fit in the present marketing scenario. Publicity, which is the need of the hour is not carried out in a way to hammer the minds of consumers. The services of media consultants are to be availed for this purpose. Again, movement of coir goods from Alappuzha is greatly hampered due to non-availability of railway wagons. Similarly there is no pacca shed at the goods yard, and that forces the unloaded goods to be kept in the open exposed to sun and rain. So the goods get badly damaged and also subjected to theft.

### **6.2.2 Problems in the Export Market**

Even though wide prospects for coir and coir products are existing, several problems are impeding its growth in the export market. Lack of market information is a major problem. The exporters of coir products are generally of small and medium size. Their knowledge about the target market is rather scanty. Only a few exporters undertake travel to have a first hand information about the market, identifying competing products and their prices, monitor the trends in the market place and watch out for emerging opportunities. Lack of market intelligence is a principal problem being faced by the export sector.<sup>2</sup> There is no global forum to effectively represent the cause of the coir industry. The Committee on Hard Fibres set up by FAO has several other hard fibres like Jute, Kenaf, Sisal, Abaca etc, on it, which are competitors of coir in the market place. The high tariff rates for coir existing in various importing countries other than USA is one of the main hurdles for promoting exports of coir and coir products. The international market for coir and coir products to a large extent depends on the flexibility of the tariff imposed by the importing countries. Apart from the tariff, there are several non-tariff barriers that are impeding the growth of export market for coir products. They include, allegations of child labour, application of hazardous chemicals, environmental pollution while processing,

restrictive banking facilities, import quota restrictions antidumping measures, undue insistence on the labour welfare measures etc.

### 6.3 Problems related to Mechanisation

Mechanisation is a controversial as well as a sensitive subject in the coir industry as it is having some strong social and political linkage. Earlier any type of mechanisation was objected by labourers with their political backing due to fear of loss of employment. But now situation has changed. For certain process, labourers are not willing to work and hence shortage is felt. In this context, issues related to mechanisation of various processes of coir work is analysed in two dimensions, Viz; i] From the point view of coir societies and ii] From the point of coir workers.

#### 6.3.1 The views of coir societies regarding mechanisation of various stages of coir work

The views expressed by coir societies with respect to the most desirable stages of mechanisation are displayed in Table 6.6.

Table 6.6. Response towards the desirable stages of Mechanisation

Stages of coir work	No. of Societies and their responses			
	A category [Nos. 17]	B Category [Nos. 16]	C Category [Nos. 12]	Total [Nos. 45]
Husk Beating	15[88]	14[88]	9[75]	38[84]
Retting	12[71]	5[31]	6[50]	23[51]
Spinning	2[12]	1[6]	1[8]	4[9]
No Mechanisation	--	2[13]	3[25]	5[11]

Source: Primary data collected from A, B and C classes of CVCs.

Note: 1) Figures in brackets indicate percentage to the total number of CVCs in each class.

2) Since the respondents [ A, B and C classes of CVCs.] brought out more than once stage of mechanisation of coir work, the sum total of the percentage will never equal to 100.

Table 6.6 indicates that coir societies are not prefer mechanisation in the spinning process and the reasons there of are depicted in table 6.7.

Table 6.7. Reasons for poor response towards Non- Mechanisation of Spinning Process

Reasons [Code]	Categories of Societies			Total
	A[Nos]	B[Nos.]	C[Nos.]	
a	15[88]	12[75]	10[82]	37[82]
b	2[12]	3[19]	2[17]	7[16]
c	16[94]	14[88]	11[92]	41[91]
d	1[6]	3[19]	3[25]	7[16]
e	16[94]	15[94]	8[67]	39[87]

Source: Primary Data collected from A, B and C Classes of CVCs

- Note 1) A = Labourers are available for traditional spinning  
 B = Financial scarcity. c = Low quality yarn from mechanised spinning  
 D = Board of Directors are not interested e = Low price and increased cost of production of Yarn
- 2) Figures in brackets indicate percentage to the total number of CVCs in each class.
- 3) Since the respondents [A,B and C classes of CVCs] expressed more than one reason for the poor response to mechanisation of spinning sector, the sum total of the percentage will never be equal to 100.

Table 6.6 highlights the views of the three categories of societies Viz; A,B and C towards mechanisation. On the basis of the necessity of mechanisation of 4 stages of yarn production, the sample societies expressed their own opinion from their working experience. Their views towards stages of mechanisation are ranked on the basis of number of societies preferring the stages of mechanisation. It is clear from the table that most important stage to be mechanised in their order of importance are husk beating [84%], willowing [51%] and spinning process [3%]. Thus it can be inferred that a large majority of the societies are favouring mechanisation of the beating process. This is because of the simple reason, that husk beating process is hard and unhygenic and labourers are not available for this work. Only old generation workers are prepared to do this work. The opinion from coir household survey also support the same picture.

Even societies, having mechanised spinning facilities, were against mechanisation in spinning. The major reasons cited against mechanisation of spinning are ranked in the order of preference and are presented in Table 6.7. The major factors that go against mechanisation in spinning are:-

- 1-C Low quality of yarn from mechanised spinning [91% of societies]
- 2-E Low price and increased cost of production[87%]
- 3-A Labour available for traditional spinning[82%].

The other minor reasons relate financial problems in installing motorised rath and indifference of Board of Directors. It was understood that motorised spinning leads to high cost of production due to increased wastage, high repair and electricity charges. In addition it results in low sale price to quality difference. There is no shortage of labourers for traditional spinning.

### 6.3.2 Approach of coir workers towards mechanisation of various coir process

The effect of mechanisation whether favorable or not affects the coir workers directly. Therefore, their opinion about mechanisation is more relevant than anybody else. Table 6.8 portrays the opinion of worker households about this issue.

**Table 6.8. Response towards mechanisation of the different stages of coir work**

Category of societies	Number of Respondents [Nos.]	Favour to mechanise all process [Nos.]	Favour for Partial mechanisation [Nos.]	Stages of partial mechanisation demands		
				Husk Beating [Nos.]	Willowin g [Nos.]	Spinning [Nos.]
A	100	33	62[100]	60[98]	40[65]	10[16]
B	100	45	53[100]	53[100]	30[57]	5[8]
C	75	20	49[100]	48[98]	26[54]	3[6]
Total	275	98	164[100]	161[98]	105[59]	19[11]

Source: Survey Data

Note: Figures in brackets indicate percentage to column No.4

Table 6-8 depicts opinions of the coir worker respondents about mechanization of coir process. As a whole 98[36%] of the respondents were for full mechanization and 164[60 %], for partial mechanization and 13 persons [4%], against any kind of mechanization.

Among those who favoured partial mechanization 161[98%] respondents were for mechanization of Husk Beating process and 96[59%] respondents for mechanization of willowing process. Only 18[11%] persons advocated for mechanizing spinning process. The general conclusion is that, most of the respondents were against full mechanization but were favouring mechanization of husk beating process. Thus, majority people feel husk beating and willowing requires mechanization and not the spinning process.

Now it is vital to examine the views of coir workers towards the existing mode of work, their approach towards future of coir work etc.

The approach of coir households towards the various processes of work and the reasons thereof are depicted in tables 6.9 and 6.10.

**Table 6.9. Response towards favouring to work in all stages of Yarn Manufacture**

Category of Societies	No. of Respondents	Respondents Who favoured to work all Stages [Nos.]	Reasons for favour [Nos.]			
			1	2	3	4
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A	100	50[100]	45[90]	48[96]	20[40]	2[4]
B	100	35[100]	28[80]	33[94]	20[57]	3[9]
C	75	26[100]	18[71]	25[96]	15[57]	2[8]
Total	275	111[100]	91[82]	106[95]	55[50]	7[6]

Source: Survey Data

Note: 1. Figures in brackets indicate percentage to column No.3

2. Reasons: 1 denotes Nearness to dwelling place  
2 denotes Non-availability of alternative employment  
3 denotes Beating is mechanized  
4 denotes Getting of reasonable wages

3. Out of the total four options, the respondents marked more one option and hence the sum total of percentages will not be equal to 100

Table 6.10 shows that 111 [40 %] favoured to work in all stages of coir work except husk beating. Among them 106[96 %] preferred coir work due to non-availability of alternative work and 91[82 %] preferred due to nearness. The other reasons were not given due response by the majority members. From this it is inferred that lack of alternative work and proximity to dwelling place are the most important reasons for opting coir work by the members.

The reasons for dislike in doing coir work is given in Table 6.10.

Table 6.10. Number of Households disliked to work in selected process of yarn manufacture and the reasons

Category of societies	Total Number of Households	Disliked To work [Nos.]	Reasons for dislike [Nos.]				
			1	2	3	4	5
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
A	100	55[100]	52[95]	30[55]	40[73]	45[82]	10[18]
B	100	65[100]	58[89]	50[77]	40[62]	60[92]	15[23]
C	75	45[100]	44[97]	30[67]	26[58]	41[92]	59[20]
Total	275	165[100]	154[93]	110[67]	106[64]	146[89]	34[21]

Source: Survey Data

- Note: 1. Figures in brackets indicate percentage to column No.3.  
 2. Reasons: 1- Repulsive work and chances of disease  
 2- Low wages 3 - Work occasionally  
 4- Very hard work 5 - Lack of practice.  
 3. Out of the total Five options, the respondents marked more than one option and Hence the sum total of percentages will not be equal to 100

Out of 165 respondents who disliked coir work, 154[93%] divided it due to the repulsive nature of coir work and 146[89 %], due to high physical exertion. The other dominant reasons were low wages and occasional nature of work. Thus it is seen that 64 to 93 per cent respondents disliked coir work due to the four reasons given above.

From 6.9 and 6.10 tables, it can be understood that, the only attraction towards work relating to coir is its nearness to dwelling place.

While analysing the of societies and labour towards mechanization it was seen that both object mechanization in spinning process. However, all are in favour of mechanization of husk beating process.

In this context the opinion of coir workers in sending their children to coir work is worth noting.

#### 6.4 Opinion of workers in sending their children to coir work

The views of workers in sending their children to coir work under the existing process of yarn production, is depicted in Tables 6.11 and 6.12

**Table 6.11. Response towards sending children for Coir work and reasons**

Category of societies	Total Number of Respondents	Not Favoured [Nos.]	Reasons[Nos.]				
			1	2	3	4	5
A	100	57[100]	54[95]	53[93]	50[88]	25[44]	20[35]
B	100	70[100]	66[94]	68[97]	60[86]	42[60]	25[36]
C	75	55[100]	44[80]	54[98]	52[95]	39[71]	15[27]
Total	275	182[100]	164[90]	175[96]	162[89]	106[58]	60[33]

Source: Survey Data

- Note:
1. Figures in parentheses indicates percentage to row total
  2. Out of the total Five options, the respondents marked more than one option and hence the sum total of percentages will not be equal to 100
  3. Reasons-- 1- Low wages 2- Ugly nature and sick 3- Beating is tedious  
4 - No continuous work 5- Low social status

Table 6.11, exhibits that, out of the 275 worker respondents 182[66 %]do not prefer to send their children to coir work. This shows the aversion of new generation of people to coir work.

#### 6.4.1 The reasons for favoring to send children to coir work

Even though 66 per cent of the workers do not like to send their children to work the rest has no objection with respect to this. The reasons cited by the rest in their in sending their children to coir work is depicted in Table 6.12.

Table 6.12. Reasons for favoring to send children to Coir Work

Category of Societies	Favoring children for Coir work [Nos.]	Reasons[Nos.]			
		1	2	3	4
A	25[100]	20[80]	24[96]	--	15[60]
B	26[100]	25[96]	25[96]	1[4]	18[69]
C	18[100]	14[78]	16[91]	13[4]	13[70]
Total	69[100]	59[85]	65[94]	2[3]	46[66]

Source: Survey Data

Note: 1) Figures in parentheses denote percentage to row total

2) Reasons- 1- denotes Nearness to Dwelling place

2- " No other alternative work

3 " Reasonable wages

4 " To support family

3) Out of the total four reasons, the respondents marked more than one reason and hence the sum total of percentages will not be equal to 100.

Table 6.12 shows that 'lack of alternative work' and 'nearness to dwelling place' are the compelling reasons stated by coir workers in sending their children to coir work.

The reasons for low preference to coir work were the same as given in table 6.10. Apart from that coir work has only low social status. There is no

significant variation among the responses of the three categories of societies. Hence it can be safely inferred that the new generation is not interested in coir work and unless mechanisation is resorted to, the societies cannot survive in the years to come.

## 6.5 Member Participation Level in Coir Vyavasaya Co-operatives

In the hierarchy of planned economic development, people's participation in the growth process is an essential condition. No doubt, co-operatives are no exception to this rule. There also member's participation in the various affairs of the coir societies is very crucial for their success. This particularly true where 5/7<sup>th</sup> of Board members are ordinary coir workers. So it is desirable to examine the extent of participation of worker members in the important areas of the working of the CVCs.

### 6.5.1 Reasons for taking membership in Coir Societies

Table 6.13 presents information regarding how coir workers took membership in the coir societies.

Table 6.13. Mode of Taking membership in Coir Societies

Category of Societies	Total Households	Mode of taking membership [Nos.]			
		A	B	C	D
A	100[100]	83[83]	6[6]	2[2]	9[9]
B	100[100]	88[88]	4[4]	3[3]	5[5]
C	75[100]	60[80]	4[5]	4[5]	7[10]
Total	275[100]	231[84]	14[5]	9[3]	21[8]

Source: Survey Data

Note: 1) Figures in Parentheses denote percentage to row total

2) A denotes Voluntary, B denotes Persuasion of friends

C denotes Persuasion of union leaders, D denotes Persuasion by Board Members

Table 6.13 shows that 84 per cent of the respondents took membership voluntarily and eight per cent because of persuasion from Board of Directors. There was no significant variation noticed in this aspect in the three categories of societies.

## 6.5.2 Period of Membership

Table 6.14. Membership in Coir Societies

Category Of societies	Total House holds	Period of membership in coir society[Years]					
		<5 [Nos.]	5-10 [Nos]	10-15 [Nos.]	15-20 [Nos.]	20-25 [Nos]	>25 [Nos]
A	100[100]	14[14]	26[26]	17[17]	17[17]	18[18]	8[8]
B	100[100]	12[12]	15[15]	18[18]	27[27]	15[15]	13[13]
C	75[100]	15[20]	11[15]	20[26]	15[20]	8[11]	6[8]
Total	275[100]	41[15]	52[19]	55[20]	59[21]	41[15]	27[10]

Source: Survey Data

Note: Figures in brackets indicate percentage to row total.

Table 6.14 depicts that 66 per cent of the members took membership long ago i.e. 10-25 years ago and of which 25 per cent became members 20 years ago. Only 15 per cent became members within the last 5 years. This shows that new people are not attracted to become members in coir societies. But in C category societies, 20 per cent took membership in the last Five years. The valid explanation for this is the general unemployment situation which is more grim in the areas of C category societies.

### 6.5.3 Participation in Democratic Process

Participation of members in the democratic process of the society is a vital requirement. General body is the supreme authority and an important forum in which members can express their views freely and frankly with respect to improving the society's business. While electing the managing committee/Board of Directors, they should be cautious to elect persons who are honest and capable of managing the business of the society in an efficient manner. Are they really doing this? To know this one must have some idea regarding the extent of the participation of worker members in the democratic process of CVCs.

#### Participation in elected body

Table 6.15. Official position held by coir workers in coir societies

Category of Societies	Number of Respondents [Nos.]	Number of Persons are Held official positions	Official Positions		
			President [Nos.]	Board Members [Nos.]	Member of other Committees [Nos.]
A	100	16[100]	2[13]	12[75]	2[13]
B	100	16[100]	2[13]	12[75]	2[12]
C	75	16[100]	2[14]	12[72]	2[14]
Total	275	48[100]	6[13]	36[74]	6[13]

Source: Survey Data

Note: Figures in brackets denotes percentage to row total.

It is seen from the Table 6.15 shows that only 18 per cent of the respondents took active interest and became office bearers of societies. Of this, 13 per cent became presidents and 74 per cent, members of Board of Directors. In order to ensure representation to coir workers in the Board, the Govt. made it

compulsory that five out of the seven Board Members should be coir workers. The study reveals that those who become members of the Board continues to be the Directors as new persons are reluctant to get elected to the Board or they are side tracked by the existing directors.

### Attendance in General Body Meeting and expression of opinion

Worker's participation in management is good in principle and practice. All member workers of CVCs get chance to participate in management by attending general body meetings. The level of effective participation of worker members in management is shown in Table 6.16.

**Table 6.16. Respondents and their periodicity of attendance in General Body**

Category Of Societies	Total House holds [Nos.]	Periodicity of attendance [Nos.]					No. of respondents expressed their opinions	Feeling of considering the opinion [Nos.]
		Always	Occasionally	Sometimes	Rarely	Never		
A	100	55	15	17	8	5	35	18
B	100	52	19	14	5	10	42	22
C	75	36	11	21	4	3	23	8
Total	275[100]	143[52]	45[16]	52[19]	17[6]	18[7]	100	48

Source: Survey Data

Note: Figures in brackets indicate percentage to row total

Table 6.16 reveals that only 52 per cent of the members used to attend General Body meetings regularly. Sixteen per cent attend the meeting occasionally, nineteen per cent sometimes and six per cent rarely. Seven per cent never attend the general body meetings. Those who attended, 69 per cent never

expressed any opinion. Forty-eight per cent of those who expressed opinions feel that their opinions were not at all considered in the meeting. This shows that only 17 per cent of the members opinion were considered. This reflects the pathetic situation with respect of participation of coir workers in the policy making body of coir co-operatives.

#### 6.5.4 Participation level of worker members in the societies' affairs

##### Consultation during the pre-planning period

Participation of member workers is of considerable importance during the pre-planning period, as the future working of the society is based upon the decisions taken during this period. The extent of member workers participation is depicted in Table 6.31.a.

Table 6.17.a. Consultation during the pre-planning period

Category of Societies	Total respondents[No.]	Respondents participation[No]
A	100	17[17]
B	100	12[12]
C	75	11[14]
TOTAL	275[100]	40[14]

Source: Survey Data

Note: Figures in brackets indicate percentage to row total

Table 6.17.a highlights the fact that only 14 per cent of the member workers participated during the pre-planning discussions. Among the three category societies, the participation rate was a bit higher in A category.

### Supervision during implementation

To ensure implementation of programmes as planned, participation of members are highly essential, particularly in societies where supervision of experienced worker members is essential. The level of participation in this aspect is shown in Table 6.17-b.

**Table 6.17-b. Supervision during implementation**

Category of Societies	Total Respondents	Respondents participated
A	100	28[28]
B	100	25[25]
C	75	19[26]
TOTAL	275	72[26]

Source: Survey Data

Note: Figures in Brackets indicate percentage to row total

Table 6.17.b shows that the level of supervision very low, viz; around 25 per cent. Not much difference in the level of supervision is noted among the three categories of societies.

### Receipts of benefits

The level of participation of members in receiving benefits from CVCs is given in Table 6.17.c

**Table 6.17.c. Receipts of benefits**

Category of societies	Total respondents[No]	Respondents participated[No]
A	100	80[80]
B	100	84[84]
C	75	70[93]
TOTAL	275	229[84]

Source: Survey data

Note: Figures in brackets indicate percentage to row total

Table 6.17.c reveals that members are eager to exploit the benefits from the societies rather than contributing their might for the benefit of the societies. This is evident from the higher participation of members [80 to 93%] in receiving benefits from societies.

### Sharing of cost

Sharing of cost by worker members is good for the long run working of Cvcs. Table 6.17.d depicts the extent to which members are ready to share the cost.

**Table 6.17.d. Sharing of cost**

Category of societies	Total respondents[No]	Respondents participated[No]
A	100	2[2]
B	100	8[8]
C	75	3[4]
TOTAL	275[100]	13[5]

Source: Survey data

Note: Figures in brackets indicate percentage to row total

Table 6.17- d. shows that the members are not prepared to share the cost. It is natural as the workers are getting only very low wages.

### Involvement in evaluation

Involvement of workers in the evaluation process of the working of CVCs is important for ensuring efficiency in operation. Table 6.31.e indicates how far this purpose is served by the worker members.

Table 6.17.e. Involvement in evaluation

Category of societies	Total respondents[No]	Respondents participated[No]
A	100	10[10]
B	100	8[8]
C	75	2[3]
TOTAL	275[100]	20[7]

Source : Survey data

Note: Figures in brackets indicate percentage to row total

Table 6.17e. shows that the number of respondent worker members who participated in the evaluation process is only 7 per cent. In A category societies this rate is higher than in the other two.

### **Discussing the programmes of society with the secretary or the Business Manager**

Discussions and exchange of views relating to the programmes of the society with the Secretary or the Business Manager will be beneficial to coir societies. Table 6.17-f shows the rate of participation in this aspect.

Table 6.17-f. Discussing the programme with secretary

Category of societies	Total respondents[No]	Respondents participated[No]
A	100	19[19]
B	100	31[31]
C	75	14[18]
TOTAL	275[100]	64[23]

Source: Survey data

Note: Figures in brackets indicate percentage to row total

Table 6.17.f, shows that only a quarter of the members discussed the programmes with the secretary or the Business Manager. Among the three categories, of societies members of B category participated more in such discussions.

### **Visiting the office of the organisation**

Visiting the office of the society by its members is desirable for healthy relationship and involvement. Table 6.17-g. depicts the rate of visits of worker members in the offices of the societies.

**Table 6.17. g. Visiting the office of the organisation**

Categories of societies	Total respondents[No]	Respondents participated[No]
A	100	88[88]
B	100	90[90]
C	75	68[90]
<b>TOTAL</b>	<b>275[100]</b>	<b>246[89]</b>

Source: Survey data

Note: Figures in brackets indicate percentage to row total

It is interesting to note [Table 6.17- g] that, the members visit the offices of the societies quite frequently. Eighty-nine per cent of the members visit the office frequently. There is no significant difference in this in the case of the three categories of societies. It is learnt that members frequently visit to the office for making enquiries regarding release of their wages and prospects of work in the society in the ensuing days.

### **Making suggestions with respect to programmes**

The rate of participation of members with respect making suggestions regarding the programmes is depicted in Table 6.17-h.

**Table 6.17-h. Making suggestions for programme**

Category of societies	Total respondents[Nos]	Respondents participated[No]
A	100	21[21]
B	100	22[22]
C	75	20[26]
<b>TOTAL</b>	<b>275[100]</b>	<b>63[23]</b>

Source: Survey data

Note: Figures in brackets indicate percentage to row total

Table 6.17-h shows that nearly one fourth of the members give suggestions with respect to the programmes. As the majority of the worker members are educationally and financially poor, they are reluctant to put forward suggestions to the secretaries who are expected to be educated.

### **Assisting the organisation in times of need**

Assistance extended to the CVCs in the form of temporary finance and physical labour in times of need by worker members are given in Table 6.17.i.

**Table 6.17i. Assisting the organisation in times of need**

Category of societies	Total respondents[Nos.]	Respondents participation[No]
A	100	5[5]
B	100	4[4]
C	75	2[2]
<b>TOTAL</b>	<b>275[100]</b>	<b>11[4]</b>

Source: Survey data

Note Figures in brackets indicate percentage to row total.

Table 6.17.i shows that only a very small percentage of the member workers[4] is ready to extend their financial or manual help in case the societies need such help.

### **Briefing and propagating programmes to others**

For getting popularity about the working of CVCs and their products among the public briefing and propagating programmes are desirable. Participation of worker members in such activities is depicted in Table 6.17-j.

**Table 6.17-j. Briefing- propagating – programmes to others**

Category of societies	Total respondents[Nos.]	Respondents participation[Nos.]
A	100	2[2]
B	100	4[4]
C	75	2[2]
TOTAL	275[100]	6[2]

Source: Survey data

Note: Figures in Brackets indicate percentage to row total.

Table 6.17-j clearly shows that of worker members are least interested in propagating the CVC's programmes. From C category societies no worker member is involved in such activity. This reveals that the members are either unaware of their own society's programmes or have a passive attitude towards them.

### **6.5.5 Awareness about Training Programmes offered by Coir Societies and worker member's participation**

Coir Board offered training programmes to coir workers to impart knowledge about technological improvement. Table 6.18 gives information

regarding awareness about training programme and participation of coir workers in such programmes.

**Table 6.18. Training programmes offered by Coir societies and participation of coir workers**

Categories of Societies	Total Number of respondents	Respondents having knowledge of Training programme	Number of respondents attended
A	100	43	31
B	100	22	16
C	75	21	15
Total	275[100]	86[31]	62[23]

Source: Survey Data

Note: Figures in parentheses indicate percentage to row total.

Table 6.18 reveals that, only 31 per cent of the respondents have awareness about such programmes, of which only 75 per cent participated in such programmes. Lack of training in operating the motorised ratt may be one of the reasons for poor quality and quantity of yarn produced from motorised ratt.

### 6.5.6 Membership in Trade Union

Table 6.19 depicts the extend of membership of workers in Trade Unions.

**Table 6.19. Membership in Trade Union**

Category of Societies	Respondents [Nos.]	Membership	
		Yes [Nos.]	No [Nos.]
A	100[100]	72[72]	28[28]
B	100[100]	52[52]	48[48]
C	75[100]	40[53]	35[47]
Total	275[100]	164[59]	111[41]

Source: Survey Data

Note: Figures in brackets denotes percentages to row total.

Table 6.19 reveals that on an average 59 per cent of the respondents are members of any trade unions. Even then any change in this sector regarding wage rate, mechanization etc. are affected only with the approval of Trade Unions. In A category societies Trade Union membership is as high as 72 per cent.

### 6.5.7 Membership in other Coir Societies

Certain members used to take membership in more than one coir societies. The dual membership is not a healthy practice. It may vitiate the interest of existing members.

**Table 6.20. Respondent's membership in other Coir Co-operatives –Reasons**

Category of societies	Respondents	Reasons		
		1[Nos]	2[Nos]	3[Nos.]
A	5	3	2	-
B	4	2	1	1
C	14	5	3	6
Total	23[100]	10[43]	6[26]	7[31]

Source: Survey Data

Note: - Reasons—1. Denotes , To avail raw husk 2 denotes To sell produce, 3 denotes, To Vote in election

Table 6.20 depicts that out of the 275 respondents 23[8%] have dual membership in coir societies. Of the 23 dual membership holders, 43 per cent took membership for availing raw husk and 26 per cent, for selling their produce and 31 per cent for getting voting right in elections. The first two reasons cited by

members show that they take dual memberships for ensuring continuity of employment. The third reason was rather political and not in the best interest of societies.

### 6.5.8 Opinion of worker members regarding Managerial efficiency of Coir Societies

Managerial efficiency of societies are analysed under seven heads. They are:-

#### Purchase of raw materials

Table 6.21-a. Opinion of members regarding the efficiency of societies in purchasing raw husk [ Raw material]

Category of Societies	Total Respondents [Nos.]	Efficiency regarding purchase of Raw materials				
		Very Good [Nos.]	Good [Nos.]	Satisfactory [Nos.]	Bad [Nos.]	Very Bad [Nos.]
A	100[100]	--	43[43]	50[50]	6[6]	1[1]
B	100[100]	1[1]	52[52]	40[40]	6[6]	1[1]
C	75[100]	--	32[43]	38[50]	5[7]	--
Total	275[100]	1[--]	127[46]	128[47]	17[6]	2[1]

Source: Survey Data

Note: Figures in brackets denote percentage to row total

Table 6.21-a shows the opinion of member workers regarding the efficiency of management in processing raw husk. Only one member in 'B' category societies had 'very good' opinion in this regard. Forty-six per cent are 'good' and 47 per cent have 'satisfactory' opinion regarding purchase of husk. Purchasing at the appropriate time and retting are important aspects in profitable or efficient working of coir societies. But apathy of management

towards this regard is one of the reasons for the weak performance of majority of the societies. Scarcity of working capital, lack of professional skill in decision making etc. are also factors affecting the ability of management in purchasing.

### Marketing efficiency of Coir Societies

Table 6.21-b. Opinion about Marketing efficiency of Coir Societies

Category of Societies	Respondents	Opinion about Marketing efficiency			
		Very Good [Nos.]	Good [Nos.]	Bad [Nos.]	Very Bad [Nos.]
A	100[100]	2[2]	78[78]	19[19]	1[1]
B	100[100]	2[2]	87[87]	10[10]	1[1]
C	75[100]	--	58[77]	14[19]	3[4]
Total	275[100]	4[1]	223[81]	43[16]	5[2]

Source: Survey Data

Note: Figures in brackets indicate percentages to corresponding row total.

Table 6.21-b depicts that only one per cent of the respondents had 'very good' opinion while 16 per cent had negative opinion with respect to about the marketing efficiency of the coir societies. It is mandatory that for every society to sell their output to COIRFED. But some societies as already been noted sell their output in the open market for the sake of liquidity. This may be one of the reasons why a substantial number of respondents expressed 'Bad' opinion about management with respect to marketing efficiency. Moreover, the accumulated stock in the societies itself gives an impression of poor marketing efficiency.

### Dealing of management towards members

The members expect friendly approach from their Board Members as they are elected to the Board from among themselves. Table 6.21-c shows that dealing of Board Members towards members are not friendly.

**Table 6.21-c. Opinion about the dealings of Board of Directors with the members of the Society**

Category of Societies	Respondents [Nos.]	Dealings of society with Members			
		Very Good [Nos]	Good [Nos.]	Bad [Nos]	Very Bad [Nos.]
A	100[100]	--	91[91]	9[9]	--
B	100[100]	3	88[88]	8[8]	1[1]
C	75[100]	2[2]	65[86]	8[10]	2[2]
Total	275[100]	5[2]	244[88]	25[9]	3[1]

Source: Survey Data

Note: Figures in brackets denote percentage to corresponding row total

Table 6.21-c reveals that 88 per cent of the members have 'good' and another 5 per cent 'very good' pinion about the Board members in their dealings with them. But nine per cent expressed 'Bad' opinion. This results from disputes over the fixation of wage rate.

### Behavior of employees of societies towards worker members

The respondents were highly divided regarding the general approach of employees of societies towards worker members.

**Table 6.21-d. Behavior of employees of Coir Societies towards members**

Category of Societies	Respondents [Nos.]	Behavior				
		Very Good [Nos.]	Good [Nos.]	Satisfactory [Nos.]	Bad [Nos.]	Very Bad [Nos.]
A	100[100]	1[1]	36[36]	62[62]	1[1]	--
B	100[100]	7[7]	43[43]	42[42]	8[8]	--
C	75[100]	3[4]	26[34]	44[59]	--	2[3]
Total	275[100]	11[4]	105[38]	148[54]	9[3]	2[1]

Source: Survey Data

Note: Figures in brackets indicate percentage to corresponding row total.

Table 6.21-d depicts that only 4 per cent of the members have 'very good' impression regarding the behaviour of employees towards them. Thirty-eight per cent expressed 'good' opinion and 54 per cent 'satisfactory' opinion. Only one per cent were having 'very bad' opinion in this regard.

It was observed during the survey that coir workers are a highly dissatisfied lot. There are many reasons for this. Unhygienic environment, low wage rate, uncertainty regarding payment of wages and stability of work are major among them. The employees are also under severe stress due to low salary and the uncertainty about future. In most of the societies, the secretaries are ladies and they have to answer all unpleasant questions raised by workers. All these make smooth relationship among employees and worker members difficult.

### Capability of Board Members in administering the society

Table 6.21-e. Opinion about the Management Capability of Board of Directors

Category of Societies	Respondents	Opinion about capability		
		Capable [Nos.]	Not Capable [Nos.]	Don't Know [Nos.]
A	100[100]	40[40]	38[38]	22[22]
B	100[100]	45[45]	53[53]	2[2]
C	75[100]	39[52]	32[42]	4[6]
Total	275[100]	124[45]	123[45]	28[10]

Source: Survey Data

Note: Figures in brackets indicate percentage to row total

Table 6.21-e presents the opinion of respondents with respect to Board members and their administrative capabilities. The survey reveals that only 45 per cent of the members have positive opinion about Board members and their administrative capability. Forty-five per cent members have negative opinion and 10 per cent, no opinion about their capability. Since majority of the Board members are coir workers and have only very poor education, fail to interpret Government orders correctly. They fail to give directions to secretaries and in most cases. They can't do anything without the help of the secretaries. This is true in their dealings with COIRFED, Coir Inspectorate, Project Offices. Consequently, the secretary administers the society according to his will and pleasure and the management efficiency in most cases depends on the ability of the secretary.

## Incorporation of Co-operative principles in Coir Societies

**Table 6.21-f. Observance of co-operative principles in Coir Societies**

Category of Societies	Total [Nos.]	Observance of Co-operative principles		
		Yes [Nos.]	No [No.]	Don't Know [Nos.]
A	100	67	11	22
B	100	60	20	20
C	75	50	11	14
Total	275[100]	177[65]	42[15]	56[20]

Source: Survey Data

Note- Figures in brackets shows the percentage to row total

Table 6.21-f displays that 65 per cent of the respondents opined that, coir societies are running in accordance with co-operative principles. But 15 per cent of the respondents are not agree with this claim. Twenty per cent of the members did not express any opinion on this aspect. This shows that they are not aware of co-operative principles. Lack of awareness about co-operative principles is more in the case of A category societies. Membership in coir societies without the knowledge of co-operative principles is against the spirit of co-operation.

### Comparative advantage of Co-operatives over private Sector

The respondents gave more weightage to coir co-operatives in comparison with the operation of private units. The factors responsible for this are displayed in Table 6.21-g.

**Table 6.21-g. Factors patronizing the co-operative sector by the respondents**

Category of societies	Total Respondents [Nos.]	Factors patronizing co-operatives and number of respondents				
		a	b	c	d	e
A	100	74	76	34	80	65
B	100	89	84	29	97	67
C	75	55	70	17	72	60
Total	275[100]	218[79]	230[84]	80[29]	249[91]	192[70]

Source: Survey Data

Note: 1) Figures in brackets denotes percentage to corresponding row total

2) Factors of Patronage- a = Conditions of work b = Income c = Continuity of employment d = Welfare measures e = Approach of Management

Table 6.21 g reveals that, 91 per cent of the respondents favoured co-operatives welfare measures, 84per cent on high income due to higher rate of wages, and 79 per cent on working conditions. Seventy-one per cent[100-29] have favoured the private coir sector on continuity of employment offered by them.

Survey responses indicate that continuity of employment is a major factor not only to hold existing members in the coir co-operative sector but also to attract more coir workers into the co-operative fold.

## 6.6 Prospects of Coir Industry

The analysis of the diverse problems faced by the coir industry and the coir co-operatives shows that some of the problems that cause crisis in the CVCs are self –created ones. Wrong policies of Government also adds to their miseries.

These problems can be solved out through concerted and sincere attempts on the part of authorities. But, even in the midst of a cloudy atmosphere, there still exist a silver line that gives hope to the industry.

The factors that give hopes to the coir industry are assessed in two heads, viz;

- A) Prospects in the overseas market and
- B) Prospects in the domestic market.

The prospects of coir in both the markets depend upon popularising the inherent properties of coir products.

### **Properties of coir products**

Coir falls under the category of industrial hard fibre. other hard fibres competing with coir in its various end-use outlets are Sisal, Abaca, Henequen and Hemp. The unique characteristics of coir hold a position of its own among the industrial hard fibres. It has qualities which few other hard fibres possess which gave it international acceptance as an excellent raw material for manufacture of floor furnishing articles. Coir is rot proof and water resistant. It is resistant to dampness and deadens sound. It can impart coolness in torrid heat and retains warmth in severe winter. Its durability under moisture and humid conditions is proverbial. Coir products are also resistant to microbiological attack. Properties of coir products, in relation to synthetics are hundred per cent natural, biodegradable, non-allergic, flame retardant and environment friendly. Publicity for coir projecting these unique features would arouse the interest of overseas consumers in using it as floor furnishing materials. Other products such as geo-

textiles, rubberised coir, coir ply, coir pith etc. will also be in immense demand. Specific advantages of various new coir products mentioned are given below.

### **Coir Geo-Textiles**

Water run off creates soil erosion and that is a major problem in plantation areas, mountain slopes and river embankments. Nets made of coir can not only stop soil erosion but can also add organic matter to the soil which increase the growth of vegetables by retaining soil moisture. The properties of coir geo-textiles are the following:-

1. High tensile strength of coir fibre protects steep surfaces from heavy flows and debris movement.
2. Five to 10 years of longevity that it provides allows for full plant and soil establishment, and land stabilisation.
3. Totally biodegradable, coir fibre functions as a soil amendment.
4. As water absorbent fibre it acts as a mulch on the surface and as a wick in the soil mantle.
5. Coir re-vegetation measures encourage the restoration of terrestrial and aquatic riparian habitat.<sup>3</sup> Coir geo-textiles are cheaper than other geo-textiles available and presently used in india viz. nylon, jute etc.

### **Room surface cooling**

Homes, offices and factories can be effectively cooled by using coir mattings. It can bring down indoor air surface temperature up to 10 degrees paripassu with non-air-conditioned buildings. It can also help to reduce the power

consumption of air-conditioners/desert coolers substantially and it is economical to install and easy to operate with the help of one pump set and a timer.

### **Coir Pith**

Coir pith is a waste material accumulated during the course of extraction of fibre. It can be converted into manure in 30 days by the applying of 'pith plus', a Fungal Spawn. Development of coir pith into a horticulture growing medium extraction of organic matter like lignosulphonacts, resorcinol, catechol, and tannin from coir pith also applied for industrial use. It is further used as building material, low cost packing material and to maintain the optimum and electrical conductivity are also from part of the research efforts.<sup>4</sup>

### **Coirply [Poly Coir]**

Development of coir composites based on rubber/plastic for finding new use areas for coir and coir products are continueing. Research undertaken on product development has revealed that coir needled felt impregnated with phenolformaldehyde resin yielded in production of 'Poly Coir'. The fibre content in poly coir is in the range of 70-85%. Poly coir can be moulded into various shapes, sizes to suit a variety of applications in building construction, paneling and partition, fabrication of office/house furniture, and boats. There are a few properties of polycoir which make it superior to wood/plywood products. The low water absorption and swelling also make polycoir superior to standard plywood/fibre board products. This is a potential substitute for wood based Light-weight Bricks. Light-weight bricks are low density building bricks generally used for multi-storeyed buildings with structural frame work for reducing the load-

bearing members and also for thermal and acoustic applications. The technology is developed at Regional Research Laboratory, Thiruvananthapuram, utilising coir and coconut pith. The manufacture of light-weight bricks closely follows the process of wire cut bricks with a slight change in the schedule of drying and firing.<sup>5</sup>

### 6.6.1 Prospects in Overseas market

Coir fibre, yarn and other coir products are used in various products in several countries. Coir fibre and yarn are used to manufacture filters for olive oil presses in countries like Italy, Greece etc. Coir fibre also finds use for a variety of air filtering applications especially in evaporative coolers and air breathers for small engines. In selected markets of Europe like West Germany, coir fibre is used as an insulation medium in buildings. In view of the high moisture retention capacity coir netting filled with coir fibre is imported by countries in West Asian region for use in gardens and nurseries. Coir yarn spun from coir fibre is used for a variety of agricultural purposes apart from its main end-use in the manufacture of doormats, mattings etc. In the recent past there has been large scale import of coir yarn into the U.K. and the U.S.A for Hop cultivation. Coir yarn is used here as a support string to the Hop plant to grow. Special variety of yarn exported for this end use application is known as Hop Yarn. Creepers find it easy to climb on if their growth is supported by a coir pole.

Since coir products have certain inherent properties, the export market for coir and coir products is bright. Only thing is that there must be a sincere attempt to tap it. Table 6.22 – shows over the last five years there has been a substantial growth in export of coir and coir products from India.

Table 6.22. Export of coir and coir products from India in Quantity and Value

Year	Quantity[Tonnes]	Value[Rs. Crores]	Growth rate [%]
1995-96	48276	206.84	20
1996-97	46368	212.58	3
1997-98	49850	238.93	12
1998-99	55490	292.19	22
1999-00	61030	303.05	4

Source: Coir Board

Recently, in the Indian export arena, a major change has taken place with respect to the Minimum Export Price[MEP] policy. Under the new policy, embellishment has been taken out of the purview of MEP. The growing awareness in favour of environment friendly, bio-degradable and non-polluting products provides a reasonable opportunity and potential for coir products with export market. Out of the total imported quantity of geo-textiles in the world market 90 per cent consists of synthetic products. The use of coir mesh is still not known to many end users. Therefore, if proper awareness is created about the properties of coir geo-textiles, sufficient potential can be created. It is also reported that, there is abundant market opportunities for coir and coir products in the Latin American countries and CIS countries. U.S.A is one of the major markets for coir and coir products. The zero duty policy for of natural products in U.S.A is a major advantage for coir and coir products. The European Union Countries also have given preferential treatment in the case of import tariff of coir and coir products and this has paved the way for development of market for coir and coir products in the European Union countries.<sup>6</sup> The consulting and research for Environment Management [CREM] in Amsterdam has assigned a project to the Government of Netherlands for investigating the desirability and feasibility of introducing coir fibre geo-textiles and thermal insulation materials in the building sectors in the Netherlands. The report concluded that coir fibre products offer the Dutch building sector a unique chance to bring about a

synergic effect. Introduction of coir fibre geo-textile and thermal insulation materials in building sector in the Netherlands will open up new opportunities to the coir industry of India not only in Netherlands but also in other parts of Europe. There exists vast potential for using coir as a geo-textiles in U.S.A., Sweden and Korea in areas such as erosion control, application in river embankments, highway construction, lakes, canals, roadside slopes, plant tree protection, re-vegetation of batters, weed control etc. In Australia and Switzerland coir has been used with positive results on Ski slopes for high altitude erosion control.

In order to assess the future prospects of coir and coir products in export market, the share of major coir products in Indian export market is to be analysed. On the basis of the export figures during March- April 2001, the respective shares in value of export of major coir products are given in table 6.23.

**Table 6.23. Export of Major Coir Products and their share**

Product Name	Value[Rs. In Lakhs]	Share[%]
Handloom Mat	15917.69	51
Handloom mattings	4287.87	14
Coir yarn	4187.5	13
Tufted Mat	2104.17	7
Coir Rugs and Carpets	1958.63	6
Coir Pith	752.79	2
Geo-textile	625.38	2
Power-loom Mat	442.72	1.5
Power-loom Matting	284.05	1
Rubberized Coir	267.24	1
Coir other sorts	164.49	.5
Coir fibre	148.17	.5
Coir Rope	154.22	.5
Curled coir	80.33	.25
Total	31366.25	

Source: International seminar on coir

### **Handloom Mats**

They are the most demanded item in export and account for nearly half of the total export earnings. Handloom mats are exported to 68 countries, five among them viz;– USA, UK, Germany, Belgium and the Netherlands put together account for 90 per cent of total exports. It is obvious that, lot of scope exists not only in these 5 countries in the existing range but also of the new range in the remaining 63 countries also. With improvements in production, marketing and with appropriate planning, exports can be increased by 3 times in the next six years to reach the level of around Rs. 450 crores from the current exports of about Rs. 160 crores.<sup>7</sup>

### **Handloom Matting**

This has been the second largest export earning product. Though exported to 38 countries, five of them –USA, the Netherlands, U.K., Belgium and Germany together account for 71 per cent of the exports. USA has the highest share[33 %]. Considering the Eco- friendly nature of the product, it is possible to target an export value of say Rs. 120 crores in the next six years. For this innovations in product designs and exploration of new markets are required.

### **Coir Yarn**

It has been the third highest export earner. Even though yarn is exported to 28 countries, – Italy, the Netherlands, U.S.A., France and Germany together account for 71 per cent of total exports. With modernization of production and upgradation of technology it should not be difficult to increase exports by three times both in the existing as well as new markets.

### **Tufted Mats**

The export earnings from tufted mats has increased from Rs. 65 lakhs in 1995 to over Rs.21 crores in 2000-2001. Even though tufted mats are exported to 37 countries 96 per cent of them are exported to 5 countries. Considering its scope for export a target of Rs. 300 crores can be achievable in the next 6 years.

### **Coir Rugs and Carpets**

These items are in direct competition with synthetics. The Eco friendly customers can be persuaded to prefer the use of coir rugs and carpets.

### **Coir Pith**

Coir Pith is a new non-traditional item exported to 32 countries. However five countries viz; the Netherlands, France, Australia, Ecuador and USA together account for 82 per cent of the total exports. It is expected that the versatility of the product and its wider usage will help to attain an annual growth of 100 per cent in exports.

### **Geo-textiles[Coir Bhoovastra]**

It is another new non traditional eco-friendly item highly demanded in foreign countries. It is to exported to 21 countries. Considering its characteristics and demand potential, 100 per cent annual export growth can be targeted [Rs. 400 crores] in the next 6 years. Appropriate planning and marketing strategy are required in this respect. <sup>8</sup>

Similar marketing prospects exists in the case of other coir products like power-loom mats, power-loom mattings, rubberized coir and coir fibre. The important use of rubberised coir is in the automobile industry. The leading users are Mercedes and BMW in Germany, Volvo in Sweden, Volks Wagen and Datsun

in Japan. The prospects of coir in the automobile industry appears to be very promising.

### **Bright prospects for hand-made coir products**

The hand-made coir products continue to be marketed at a premium price in spite of the fact that a few fully mechanised units have come up in the export sector. Therefore, this niche requires to be developed by offering better initiative for encouraging hand-made coir products.

It is seen from the study that almost 70 to 80 per cent of exports of various items are confined to 5 countries. But there are around 20 countries which import large quantities of such products. Marketing effort need to be strengthened to exploit the opportunities existing in other countries.<sup>9</sup>

#### **6.6.2 Prospects in the domestic market**

Coir industry is essentially an Export Oriented Industry. This does not mean that the domestic sector is to be ignored. Both these markets should be developed strengthened by removing obstacles faced by the market. Coir being an eco-friendly products, its use is to be popularised through evoking public awareness. The general public are not fully aware of the various uses of coir and products made of coir and their eco-friendly nature.

Coir has an expanding domestic market. The growing affinity towards environment friendly natural products all over the world presents new market opportunities to coir and coir products. There is a vast unexploited market potential in India. The unique properties of coir like high resistance to rotting, ability to act as an insulating material and ability to withstand high velocity water etc. are not known even within India.

Traditionally coir and coir products were marketed within the country largely through private traders. The expanding role of co-operative sector in developing a stable internal market for coir yarn, since co-operative movement took birth in coir sector is commendable. Out of the total production of coir yarn in India, 85 per cent is consumed domestically. This is only 40 per cent in the case of products like coir door mats, mattings etc. Coir rope, has a number of commercial uses and is a highly demanded item. In the case of rubbersied coir products, almost the entire production is consumed in the home market. West Bengal, U.P., M.P., Maharashtra and Punjab are the leading markets of coir yarn in India. They account for about 70 per cent of the coir yarn despatched from the producing region. U.P., M.P., Maharashtra and Delhi are the major consumers of coir rope. The end use pattern of coir yarn consists of four major segments:-

Construction activities, Agricultural operation, Charpoy making [demanded in U.P., M.P., Punjab, Haryana, Rajasthan and Delhi] and General packing and bundling.<sup>10</sup>

Coir rope finds major use in tethering cattles, lifting of water, felling of trees, drawing temple chariots and in trucks and bullock carts. It is facing increasing competition from rope made of synthetic material.

The internal market for coir products [coir mats and mattings] has two segments- household and institutional. The organised selling channels of coir products referred to above cater mainly to the institutional channels and not sufficient to tap the unexploited household sector in India.

Coir matting has been recommended for schools by the Government of J&K for snow-clad regions of Leh, Ladakh and Kargil. In Kashmir also, coir is being used as a floor covering in Government undertakings, factories and offices.

There is a lot of potential for coir mattings in this region and the same can be explored with the help of Coir Board. Other potential areas can be hilly areas of U.P., Himachal Pradesh, Rajasthan and Madhya Pradesh. Coir is recommended in these areas because of damp floors due to seasonal effects.<sup>11</sup> Jute patties in large quantities are in demand in Schools in Northern India. In Uttar Pradesh alone, there are about 60,000 primary schools, where jute patties of 60 cms. X 4 Mts. Size are used for primary school students to sit. The wooden desks are too costly for village schools and they cannot afford them. The Jute Patties are not durable. The use of coir has been rejected because of its rough surface and pinching problem. If these problems are solved the industry will have a vast market.

The market potential of eco-friendly coir products in North eastern States is accelerating because of the undulating terrain and incessant rains and the consequent flood conditions prevalent in the region. The use of coir as a means to prevent soil erosion and land slide by protecting embankments and hill slopes is the reason for this added market potential. The Coir Bhoovastra[Coir geotextiles] is a blessing to people in these areas. Thus, it is expected that, north-eastern region comprising of eight States, Mizoram, Tripura, Meghalaya, Assam, Manipur, Nagaland, Arunachal pradesh and Sikkim would constitute a region of adequate growth potential for marketing coir and coir products. The unique characteristic of coir being warm in winter would be an added attraction to the people of north-eastern states.

Various studies undertaken with respect to domestic market revealed that there exists considerable scope for substantially increasing the sale of coir and coir products with-in the country. The household sector in India, as has already been

pointed out, still remains an unexploited market segment as far as coir products are concerned.

Regarding problems facing by Coir Vyavasaya Co-operatives in Kerala it is assessed that, problems have linkages with the socio-economic status of coir workers and with the working inefficiency of COIRFED. Problems ultimately point towards the inefficient marketing strategy of COIRFED and this leads to chain reactions.

It is observed that the primary societies are in a vicious circle. Because of shortage working capital they could't purchase raw husk and put for retting at the appropriate time. If the workers feel that sufficient raw husk for the normal working season has not been stored in the society, they will not wait for work in such societies and go to private sector seeking work and finally enter into binding contract with them by accepting advance wages. When society starts production after heavy struggle they experience shortage of labour. Even with all these difficulties if they organise production, the COIRFED will not give sale price in time. Societies will have to wait at least 2-3 months to realise the sales price and that put them in difficulties to pay wages to workers for the work done. If stock is flooded in COIRFED due to inefficient marketing it reacts adversely on societies. COIRFED will not accept yarn from primary societies. This will put result in flooding the society's godown and they will be forced to stop production. This will put workers in an uncertain situation about future work and wages for the work already done. The survey revealed that even though 'A' category societies are having adequate working capital, they were also forced to stop production because of this situation.

The great objectives of governments regarding the Coir Co-operativisation scheme are nullified because of the inefficient working of the apex body.

Launching of various schemes with the intention of nurturing coir co-operatives are not a solution to the real disease. The sincere attempt for studying the problems has not done by the apex body. Introduction of mechanisation in the spinning sector is the best example. This mechanisation has neither benefited the societies nor the workers.

The participation rate of worker members in the various activities of the coir co-operatives is extremely low. This itself cuts the root of co-operative principles.

However, coir and coir products have good prospects in the internal as well as the external markets because of these unique qualities of durability, biodegradability and eco-friendliness. But India could tap only 4 per cent of the world market potential for coir and coir products. Coir co-operative sector in Kerala could't tap even one per cent of the export market. It can be tapped only through concerted efforts on the part of all concerned in the coir industry.

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## CHAPTER VII

### SUMMARY OF FINDINGS AND RECOMMENDATIONS

This section recapitulates the salient findings that emerge from the study briefly with reference to its objectives.

India has a virtual monopoly in the production of spun yarn that forms the basic material for the manufacture of floor furnishings and coir ropes. India's contribution to world production and export of coir products is significant. Being a major cottage industry providing employment to about a million people, coir industry plays a very important role in the national economy of India. Even then majority of the workers in this sector are woefully underemployed. Low wages and absence of continuous employment plague this industry and that is the major cause for sufferings among the coir workers.

Kerala is the traditional home of coir industry which is basically labour intensive. Natural retting facilities present in the lakes and lagoons that line West Coast of the state and the traditional expertise of the people were the reasons of its concentration in the state. The industry witnessed considerable transformation in the last two decades and that resulted in the loss of Kerala's virtual monopoly in the production of coir and coir goods. However as a labour intensive industry coir still occupies special importance to the economy of Kerala. Coconut husk the raw material of coir industry, is a ubiquitous commodity in Kerala. But bulk of which is not utilised for commercial purpose.

Coir industry was under the control of foreigners. But after independence they left the scene and most of the large factories were either closed down or

were taken over by the worker's unions. Workers attempted to run the units taken over by them on co-operative basis. But they lacked professional competence to operate them on commercial lines and also to organise exports which was the mainstay of the industry for ages. Agitations by politically motivated workers put the industry in disarray. Middlemen and private industrialists exploit and this situation and pocketed the lions share of profits derived from the industry. Co-operativisation Scheme at the National and State level was mooted to solve the problems connected with the coir industry. Thus the work, to bring all coir workers into co-operative fold to ensure them regular work and reasonable wages. The Scheme also envisaged by elimination of middlemen, stoppage of all corrupt practices, stabilisation of the industry on a sound and stable footing, establishment of improved standards and quality so as to attract and ensure a better market for coir products.

The present study was undertaken to evaluate the performance of CVCs in the state. It was also intended to examine the extent of fulfillment of the objectives of Co-operativisation Scheme and the socio-economic betterment of worker members. Further, the study was directed to find out the level of participation of members in the affairs of CVCs and to identify the major problems confronting the CVCs and the future prospects of the industry.

With the above the objectives in view 45 CVCs, falling involve three categories[A,B and C] spread over eight project areas were selected and studied. A sample of 275 worker member households from the selected CVCs were identified and a pre-tested structured schedule was administered separately among societies and households for collecting the required information.

The summary of the major findings of the study and inferences and conclusions drawn therefrom are presented in the following paragraphs. Further

certain recommendations for improving the functioning of the CVCs are also presented.

## **7.1 Findings**

### **7.1.1 Performance of Coir Vyavasaya Co-operatives**

The performance of CVCs in relation to their objectives was evaluated in two dimensions. The evaluation shows that:-

1. Eighty four per cent of the CVCs surveyed were incurring losses. Category-wise analysis revealed that 94 per cent of B class societies were running at losses.
2. The long-term solvency position of the CVCs shows very pathetic situation. A category societies had high debt equity ratio due to excessive dependence on external source of finance. The proprietary ratio of all categories of societies were found to be very low because of poor participation of members in the share capital.
3. Ratio analysis also shows an unhealthy state of affairs with respect to short-term solvency position. A category societies had a comparatively good current ratio, its quick ratio stood above the standard level because of the non-utilisation of borrowed funds.
4. The operating efficiency of all categories of CVCs were found to be extremely poor. They all display negative net profit ratio. The net loss ratio even touched 27 per cent of the sales. Cost of goods sold ratio was found very high and that ranged from 98 to 106 per cent in the three categories of societies.

Performance of societies with respect to fulfillment of their co-operativisation objectives revealed discouraging results.

1. Contrary to its objectives the Scheme of Co-operativisation could only bring 76 per cent of the coir workers to its fold.
2. On an average the societies could provide a meagre 60 man-days of work per year with an average wage of Rs.43 per day, which is far below the minimum wage fixed by the government. Although in the initial years A category societies were able to provide up to 81 man-days with governmental assistance, it reduced to 68 man-days towards the end of the study period.
3. Only 37 per cent of the members in the register are actually interested in coir work. Others retained to obtain share capital assistance from the Government.
4. The CVCs could provide employment only to 17 per cent of its total members.
5. Majority of the coir workers[76%] are women and they are subjected to all kinds of exploitation.
6. Increased level of share capital contribution by the Government[76%], often leads to irresponsibility among the worker members and that often affected their efficiency.

### 7.1.2 Socio-economic Status

The analysis of the socio-economic background of the coir workers revealed the following.

1. Majority of the coir workers did not belong to the productive age group of 16-45. Sixty nine per cent of the workers were above 46 years of age and 37 per cent of them were more than 60 years of age. Unhygienic and repulsive nature of work drives away younger generation from this traditional source of employment.
2. Child labour is rampant in this sector. Nearly two per cent workers were below 15 years.
3. The literacy rate of coir workers[86 %] was found to be lower than the general literacy rate in the state[90.92%].
4. Although majority of the workers surveyed have own dwelling houses, their conditions were deplorable. Availability of drinking water and electricity were below the state average level. Similarly basic common facilities such as public health center, schools, ration shops banks and co-operative societies etc. are not available with in a radius of two kilometers. This situation is in contrast to the claim of Government that in Kerala all the basic facilities for a household are available with in two k.ms. radius.
5. Proximity of toddy shops contributed to high drinking habits among the coir workers which again lead them to extreme poverty.
6. Thus study revealed that coir workers get only 148 man-days in an year- 82 from coir sector and 66 from non coir sector. While the coir sector contributed 56 per cent of the total man-days and 39 per cent of the total

income, the share of non coir sector was 44 per cent and 61 per cent respectively.

7. A notable feature was that when CVCs contributed 43 per cent of man-days and provided 39 per cent of the income, the private coir sector provided 13 per cent man-days, and 6 per cent of the income.
8. Higher rate of spending on medicines than food by coir worker households reveals the inherent health hazards involved in coir work.

### **7.1.3 Members Participation**

Even though participation of members in the democratic process of the society is a vital requirement, the study revealed that coir worker members participation rate is very poor in the functioning of coir societies.

1. Majority of the members visited the societies either to receive some benefits or to enquire about the next day's work. Training programmes offered by Coir Board were not given due weightage and publicity.
2. Members were not properly consulted during the pre-planning period. Very few workers participated[25%] in the implementation stage also. Members were not prepared to share cost and their involvement in the evaluation process of the society was also very poor[7%]. A slight improvement was noticed in A category societies in this regard.
3. It was also found that only 25 per cent of the members discussed future programme with the secretary or the business manager and extended suggestions with respect to programmes. Workers were not very eager to assist the organisation in times of need.

4. Trade unions were found to be dominating in the decision making process of the societies in spite of the fact that majority of the workers were not members of trade unions. Very often this defeats the spirit of co-operation.
5. There is no uniformity in the salary structure of secretaries and other administrative staff of CVCs and they were invariably dis-satisfied. Men were reluctant to officiate as secretaries mainly because of this. This also adversely affected the efficiency of societies.

#### **7.1.4 Working Problems**

Analysis with respect to problems faced by CVCs brought to the light the following highlights:

1. Majority of the societies were not utilising the production capacity due to shortage of working capital, raw material and non-availability of labour at the right time.
2. Undue delay in releasing the sale price of yarn by COIRFED creates problems for societies with respect to working capital. This in turn affects their ability to purchase raw husk in time which often results interruptions in production.
3. Lack of proper godown facilities also leads to interruptions in production.
4. Commercial banks and other financial institutions are reluctant to extent credit facilities to societies against the security of coir products.
5. Although CVCs were required to sell their yarn to COIRFED, 53 per cent of the societies were forced to sell yarn through private channels. The

unscientific way of measuring quality, delay in releasing the sale prices, non-acceptance of entire produce, discrimination amongst societies are the major factors which force societies to resort to private channels.

6. Lack of professionalism and undue politicisation in COIRFED resulted in the failure of this apex body in solving CVCs problems. The study reveals that COIRFED could not tap more than 0.1 per cent of the export market of coir products.
7. The scheme of Co-operativisation did not succeed in eliminating the number of intermediaries exploiting the coir sector.
8. Although Kerala stands 1<sup>st</sup> in coconut production in the country, only 38 per cent of the fibre potential is being utilised by the coir industry and coir co-operatives could collect only 1.52 per cent of the husk potential of the state. In this context it is paradoxical to note that, shortage of raw material as one of the major working problems of the societies.
9. It is also paradox that co-operatives face shortage of labour in a highly labour surplus state like Kerala. But it fact and that was due to uncertainty about employment and dislikes towards some process of coir work like husk beating and retting.
10. Majority of the societies were in favour of mechanising husk beating and willowing process. But they were of the opinion that quality of yarn can be maintained only through traditional spinning process.
11. Field level experience revealed hat younger generation are not at all prepared to work in coir industry because of the repulsive nature of work and low wages. This reveals the gloomy feature of the coir industry. However, compared to private sector, workers prefer co-operative sector

due to higher wages and bonus benefits. They were compelled to seek private sector employment only because of continuity of work.

12. Category-wise analysis of societies revealed that the problems are common to all categories of societies. But in certain respects like employment opportunities, productivity and sales A category societies are slightly better. It was also worth noting that A category societies are top in making losses.
13. Field level experience further showed that norms applied for categorisation of CVCs were illogical and unjust. Societies with decades of good track record and sound fixed assets were put in B and C groups neglecting all types of governmental assistance. While newly started CVCs were brought under A category.
14. Coir and coir products have good prospects in the domestic as well as international market because of their unique quality of durability, biodegradability and eco-friendliness. But India could tap only 4 per cent of the world market potential for coir products. Coir co-operative sector in Kerala could't tap even one per cent of the export market that India has.
15. The organised selling channels of coir products were confined to the Institutional level ignoring the household sector of the country which is unexploited. The unique properties of coir are not known even within India.

## 7.2 Recommendations

Having identified the problems confronting the coir sector in Kerala and the CVCs in particular, the following recommendations are made for the considerations of policy makers and planners for the development of this sector.

1. Husk beating is to be mechanised taking into consideration of shortage of labour and the repulsive nature of the work. Societies may pool their resources to purchase the machine.
2. Necessary amendments shall be made in the by-laws of societies to enable this process.
3. Once the husk beating and willowing process are mechanised the traditional retting of green husk can be banned and the CVCs can collect the required fibre from those CVCs having mechanised beating facility. Banning of retting will solve environmental pollution arising out of retting of green husk.
4. Co-operative credit institutions and commercial banks should extend timely working capital assistance for procurement of raw husk during the months of January- April as during this season husks yield maximum fibre. Efforts should also be made to extend credit facilities on the security of coir products.
5. The salary structure of secretaries and administrative staff in different categories of societies should be made uniform with incentives based on volume of business.
6. Awareness among worker members be created so as to attract able members to the Board of Directors.
7. Government assistance need to be channelised to CVCs directly and not through COIRFED.

8. De-centralisation in the working of COIRFED is to be affected especially in the areas of marketing and procurement. Professionally qualified and experienced personal shall be appointed as top executive of COIRFED so as to improve its competitive efficiency and to tap potential export market.
9. Scientific method of measuring quality of yarn by COIRFED and clear norms for releasing sales price be formulated and implemented.
10. Flexibility in the operation of CVCs for producing variety of yarn suiting the requirements of local markets be introduced.
11. Governmental subsidy and other assistance to CVCs are be linked with volume of production and days of employment days generated and not on the basis of sales to COIRFED.
12. As category-wise provision of assistance to CVCs is illogical and unscientific it should be discarded.
13. Since mechanised spinning leads to increased cost of production, it should be restricted to areas where there is shortage of spinning labourers. Similarly traditional hand spun yarn production be encouraged or promoted in areas where labourers are available.
14. Genuine coir workers shall only be admitted as members of CVCs and any future assistance to societies be restricted on the basis of number of active coir workers.
15. The dual system of audit of CVCs is to be dispensed with and Coir societies are to be audited by Coir Directorate rather than by Dept. of Co-operation.
16. The functions of COIRFED are to be restructured. Centralisation of procurement and marketing activities result in high extra cost. Therefore these activities are to be decentralised. Moreover, professionally qualified and experienced personnel shall be appointed and make the COIRFED competitive and tap the export market. Scientific equipment are to be

used for measuring quality of coir yarn and uniformity in criteria shall be applied. For releasing sale price clear norms shall be implemented and circulated to its primaries.

17. Appropriate collection mechanism should be introduced in order to exploit the raw material potential of the State.
18. The coir exporting countries should come together and form strategic alliances to meet global challenges and creating awareness of the biodegradability, eco-friendliness etc. of coir products. Therefore a better understanding and co-operation among coir producing and exporting countries is the need of the day.

Globalisation and liberalisation taking place all around has thrown in new challenges in every economic activities. Coir sector is not an exception to this general rule. The COIRFED, Coir Board and CVCs have to understand this reality and to work in unison to exploit the situation.

Diversification is essential to gain competitive advantage. Research and Development should be conducted on a war footing to find alternate coir products and their uses.

If CVCs are enabled to increase their quantity of production and thereby the volume of business, their amount of loss can be reduced. If this is so, the societies can provide more days of employment to their worker members, which will help them to earn more wages and thereby improve their economic and social conditions.

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