



PROBLEMS FACED BY COIR UNITS: A STUDY IN THANJAVUR DISTRICT OF TAMIL NADU

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Abstract

India being a land of villages with more than two-thirds of her population living in rural areas, rural industrialization could play a key role in the country as it produces forward and backward linkages in the rural economy. In this context, the Rural Small Scale Enterprises (RSSEs) based on local raw materials, skills and technology have been identified as one of the key sectors in the country.

However, in the present globalised scenario, like any other industry, coir industry is also prone to problems and constraints. Both at the state and at the national levels the problems like inadequate finance to meet the increasing cost of production, non-availability of raw material such as coconut husk in the years with scanty rainfalls, obsolete production technology, difficulties in the adoption of modern technology, labour scarcity during the harvesting periods of agricultural crops, absence of an effective marketing system, lack of marketing infrastructure, concentration of markets and demand in select regions, production only on sunny days, irrational selection and mismanagement of human resources in all its functional areas, environmental problems and unhealthy competition between mechanised units and non-mechanised units and lastly the not-so encouraging government support, apply brakes in the further growth of this sector in the country. The industry in Thanjavur District, Tamil Nadu, also witnesses the major problems seen at the macro-level but at varying degrees. Hence, this study is an attempt to study the major problems faced by coir units in Thanjavur District in production, marketing and human resource management.

Key Words: Coir, Production, Fibre, Marketing and Human Resource

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Introduction

Indian coir industry has come a long way from manufacturing simple ropes to various heightened lifestyle products. The establishment of the first coir factory in 1859 in Alleppey, Kerala, by an Ireland born American initiated the process of coir making in India, taking it from an unorganized cottage industry to a professional and modernised industrial activity. Once the first coir factory was set up, the unique quality of the Indian coir did the rest. Today, India is the leading coir manufacturer in the world. Coir is in great demand due to its natural, bio-degradable and environmental friendly qualities. It has acquired an important position in international markets, the reason for which could not be solely its value as a commodity but also its value in trade. The golden textured Indian coir fibre, which has earned the unofficial brand name “Golden Fibre”, captured the European and world markets in no time. At present, coir industry has a phenomenal share of 89 per cent of the global market for value-added coir products. World production of coir fibre is estimated at 3,85,000 tonnes whereas the combined world production of other similar hard fibres such as sisal, henequen and abaca is two to three times that of coir fibre.

Coir industry emerges as the largest employment generating industry employing a staggering more than half a million people in the country. Equally significant is the fact that most of these people are from the economically disadvantaged classes and as much as 80 per cent of the workers are women in the industry. Moreover, thousands of entrepreneurs are directly or indirectly involved in activities ranging from the manufacture of coir fibre to producing and marketing of value-added products of coir. These new breed of entrepreneurs finds the scope offered by the industry with comparatively low investment an exciting opportunity. The growth of coir industry in Tamil Nadu could be traced back to 1940. By the end of 2009-10, 1260 coir units were found in the state, and the state is the second largest producer of coir fibre in the country. Occupying the pride of place, being the single largest supplier of coir fibre to Kerala, it corners a share of 70 per cent in the total



brown fibre production in the country. This brown fibre sector continues to show a spectacular progress at a rapid pace in Tamil Nadu. The main products being manufactured in the state are coir ropes and curled coir and a few units also concentrate on geo-textiles. The districts of Kanyakumari and Salem have a traditional base for coir industry. Now, it has spread to other districts like Coimbatore, Theni, Dindigul and Thanjavur. Thanjavur district, taken for this study, shows signs of noticeable growth of this industry especially due to its location and industrial advantage. It has accounted for 52 registered coir units.

Considering the socio-economic prospects of the industry in the state in general and in Thanjavur District in particular, higher output, improved mechanization, higher return and pertinent policy measures for better results are the need of the hour especially to promote the industry in non-traditional areas like the study area. In this regard, a study of production, marketing and human resource management problems in coir units, would help in assisting the government in the policy formulation. Hence, this study has been undertaken.

Review Of Literature

Manoharan Nair and Ramesh Chandran (2004) in their article on “Cluster Approach—A new paradigm for the sustainable development of SSIs in Kerala” suggested that clusters could be successfully developed in different sectors such as rubber, handloom, cashew, ethnic food processing, garments and coir. The cluster approach could bring the entrepreneurs engaged in manufacturing similar products belonging to the same locality together and provide them with common facilities, which would remedy the entire problems faced by the existing industries.

Chillar Mohamed (2004) in his article on “Sickness in Coir Industries in Tamil Nadu: A scenario” presented an overall picture of the industrial sickness of coir industries in Tamil Nadu. He pointed out that out of the 5209 coir units taken for study, 3756 became sick on account of various reasons such as financial incapacity, lack of demand, revenue realization problem, managerial weakness and



mismanagement in financial, technical and operational areas. Further, the author identified the sickness problem-wise and stated that financial problems caused 50 per cent of the sickness in coir units. Production problems caused 29 per cent, marketing problems 15 per cent and pith disposal, lack of Coir Board involvement and miscellaneous problems were responsible for 6 per cent of sickness.

Richard Paul (2004) in his study on “A Study on Production and Marketing of Coconut in Theni District” examined the nature of returns to scale and analysed the resource-use efficiency in the production and marketing of coconut with the help of the marginal value product using the Cobb-Douglas production function. He observed that the sum of the production elasticity for the yield of small, large and overall growers indicated a decreasing return to scale.

Gouri Amma (2005) in her article on “Modernization of Coir Industry” stated that in the last financial year the industry earned more than Rs.450 crore as foreign exchange and created more employment in the rural areas. The industry had its root in the rural area and since mostly women workers were involved at different stages of production, this industry had an added relevance in the national income. He concluded that coir workers, small and large manufacturers, industrialists and exporters should work together and render their wholehearted support to the government for strengthening the industry.

Pandi (2005) in his article on “Problems and Challenges of Industrial Co-operatives with special reference to Coir Co-operative Units in Tamil Nadu” pointed out that the causes for losses of the co-operative coir units were the problems of production, labour, marketing, finance and supervision. He identified that the main problem of power and fuel supply were the main reasons for the high cost of production.

Kumarasamy Pillai (2005) in his article “Towards self-reliance in Coir Fibre Production” stated that it might not be possible to utilise the entire coconut husks produced in the country for coir production due to a variety of reasons such as lack of a well-defined mechanism for collection of husks, increased cost of transportation, lack of awareness among the coconut producers, dealers and domestic households about the economic value of husk.



Chandaran (2005) in his article on “The Indian Coir Industry” pointed out that the high labour cost in Kerala forced the manufacturers to take the coconut husk to the neighbouring state for defibring and bring it back as fibre to Kerala, which was another reason for the increase in the price of fibre. Further, he observed that when demand had gone up on account of short supply of fibre to the production centers, there had been an unprecedented increase in the price of fibre.

Srimannarayana (2006), after conducting a study on small business units of the Adityapur Industrial Area located at Jamshedpur of Jharkand State, in his article titled “Human Resource Management in Small Business” observed that the small units did not have formal Human Resource Management policies in place, but they did have Human Resource Management practices with regard to recruitment and selection, training and performance appraisal, informality and flexibility in finding the constraints and opportunities of small business units.

Objectives of the Study

This study was carried out with the following objectives:

- ❖ To study the major production problems faced by coir units in Thanjavur District.
- ❖ To study the major marketing problems faced by coir units in Thanjavur District.
- ❖ To study the major human resource management problems faced by coir units in Thanjavur District.

Research Methodology

In this section, reasons for the selection of the study area, the manner of collection of data, the sampling design and data analysis are described.

- **Selection of the Study Area** The study area of the present research work is Thanjavur District, Tamil Nadu. Though it is predominantly an agricultural district, now it stands at the ninth place in the state in terms of industrial production. The vast stretches of land utilised for coconut cultivation, the presence of adequate agricultural labourers and artisans, the emergence of an ambitious new generation of entrepreneurs and the gradual shift of people from agriculture to business and industry have changed the direction and complexion of the district into an industry-



friendly region. It is one of the pioneer districts of coir production, experiencing a steady increase in coir units over the years due to ready market for the produced coir fibre in the nearby state of Kerala. It indicates that there is a vast potential for the growth of this industry in the region. Further, in the district, no study on or probe into coir industry has been made so far by any individual researcher or by an institution or a university. This sowed the seeds to conduct research on coir industry in Thanjavur district.

- **Collection of Primary Data**

The present study is based on primary data. It is an empirical research based on the survey method. For collecting the required primary data from the owners of Coir units, a well-structured and pre-tested interview schedule was used.

- **Sampling Design**

In Thanjavur district, both Registered Coir units and Unregistered Coir units are functioning. A list of Registered Coir units in Thanjavur District was obtained from the District Industries Centre, Thanjavur and it was found that a total of 52 Registered Coir units were functioning as on 31st March 2010 in the study area. For the purpose of this study, only registered Coir units were taken which precisely constituted the population.

These 52 Coir units taken for present study were stratified into two groups, namely, Small units and Medium size units. The norms prescribed on capital investment by the District Industries Centre (DIC), Thanjavur, have been considered in categorizing these units. The units with investment upto Rs.25 lakhs were grouped as small units, and the units with investment between Rs.25 Lakhs and Rs.5 crore as medium units. According to post-stratification, 29 coir units (55.77 per cent) were small size units and the remaining 23 (44.23 per cent) were medium size units.

- **Data Analysis**

For analysing the problems faced by coir units in production, marketing and human resource management, primary data were collected from the owners of coir units by using interview schedule. Primary data collected from them were analysed by applying Garrett's Ranking Technique.



Production Problems In Coir Units: An Analysis

The production problems which are generally faced by the owners of the units are raising the required finance, procuring the raw material, finding skilled labour, problem of power supply and problem of obsolescence and modernization. Taking into account the general as well as the location-oriented problems prevailing in the industry, a list of problems that are faced by the units was prepared and supplied to the owners of units to seek their opinion. The problems which were so identified and ranked by them were shortage of labour, inadequate supply of green husks, heavy machine maintenance expenses, inadequate finance, erratic power supply, traditional methods of production and problem of drying fibre the during rainy season.

In this section, the problems so identified and ranked by the owners of the coir units were converted into scores by using the Garrett's Ranking Technique. The mean scores were worked out for each problem and arranged in a descending order. Accordingly, the ranks were given and the important problems were identified. The ranks for such problems were worked out separately for the small as well as the medium size coir units and presented in Tables 1 and 2.

Table 1: Production Problems Faced by Small Size Coir Units: Garrett's Ranking Analysis

Problems	Mean Score	Rank
Inadequate finance	60.86	I
Shortage of workers	59.07	II
Inadequate supply of green husks (Raw Material)	58.52	III
Heavy Machine maintenance expenses	44.91	IV
Traditional method of fibre production	42.83	V
Erratic power supply	41.31	VI
Problems of drying fibre during rainy seasons	40.76	VII

Source: Primary data



Table 1 shows the production problems faced by the small coir units of the study area. It is understood from Table 1 that the problem of inadequate finance with a mean score of 60.86 was ranked first. It is because a huge amount of funds has to be locked in purchasing and stocking of raw materials, advance payment to workers besides their regular wages and on machine maintenance. Hence, the owners of the units faced severe scarcity of funds to meet those expenses and considered the inadequate finance as the major and foremost production problem.

The shortage of workers was very much felt by owners of the coir units during the peak agricultural seasons in the area. Most of the workers of the coir units are basically agricultural workers and they are mostly casual. Therefore, the coir units found short supply of workers for nearly four months in a year when agriculture season was at its peak in the study area. This affects the production of the coir units during those months.

The problem with a mean score of 59.07 is ranked second.

Though coconut husk is the basic raw material for coir industry, the green husk is mostly preferred by the coir units as the fibre from such husk fetched a higher price besides yielding more output. But, green husk was always in heavy demand and the inadequate supply of green husk was another problem that affected production adversely and it ranked third with a mean score of 58.52.

The other production problems identified by the small units are heavy machine maintenance expenses, traditional method of fibre production, erratic power supply and problem of drying fibre during rainy seasons. They were ranked fourth, fifth, sixth and seventh with mean scores of 44.91, 42.83, 41.31 and 40.76 respectively. Finally, it is concluded that the most significant production problem faced by the small size coir units was "Inadequate finance".

¹² Garrett E. Hentry, "Statistics in Psychology and Education", Vakils, Fetter and Simons Private Limited, 1969, pp. 328-331.



**Table 2: Production Problems Faced by Medium Size Coir Units:
Garrett's Ranking Analysis**

Problems	Mean Score	Rank
Heavy Transport Cost	61.42	I
Lack of Governmental Support	59.38	II
Inadequate Market Information	58.13	II
Heavy Commission	54.88	IV
Lack of Finance	45.08	V
Lack of Storage facilities	34.62	VI
No direct contact with industrial users	33.50	VII

Source: Primary data

Table 2 shows the production problems faced by the medium size coir units of the study area. It is seen from the table that the shortage of the labour was very much felt by the medium size units as in small size units. The shortage of labour was ranked first with a mean score of 61.57. The medium units are generally capable of procuring huge quantity of green husk. But, it was not sufficient to achieve their production target. Hence, this problem was considered to be another major production problem and ranked second with a mean score of 59.35.

The other production problems faced by the medium size units were heavy machine maintenance expenses, inadequate finance, traditional methods of production, erratic power supply and the problem of drying fibre during rainy seasons. They were ranked Third, fourth, fifth, sixth and seventh with mean scores of 57.39, 43.52, 43.26, 41.03 and 40.83 respectively. Finally, it is concluded that the most significant production problem faced by the medium size coir units was "Shortage of workers".



Marketing Problems in Coir Units: An Analysis

An attempt has been made to identify the problems faced by the manufacturers in the marketing of fibre in the study area. The identified problems are ranked by using the Garrett's Ranking Technique and the details are shown in Table 3.

**TABLE 3: MARKETING PROBLEMS FACED BY THE COIR UNITS:
GARRETT'S RANKING ANALYSIS**

Problems	Mean Score	Rank
Shortage of workers	61.57	I
Inadequate supply of Green husks	59.35	II
Heavy Machine maintenance Expenses	57.39	III
Inadequate finance	43.52	IV
Traditional method of production	43.26	V
Erratic power supply	41.09	VI
Problem of drying during rainy season	40.83	VII

Source: Primary data

It could be seen from Table 3 that the heavy transport cost, lack of governmental support, inadequate market information and heavy commission are the major problems faced by coir manufacturers in the study area. As the fibre has to be marketed in Alleppey, they have to incur heavy transport expenses. Therefore, it is found to be the first and foremost problem with a mean score of 61.42. The lack of governmental support is the next important marketing problem faced by the coir units with a mean score of 59.38. There is no government agency to look after the functions of marketing in the study area.



Lack of market information was ranked third with a mean score of 58.13 as most of the owners of coir units are moderately educated and information about production, recent trends in export and other marketing related information have to be obtained only from the Alleppey market which is far away from the production centres. The high commission paid is also another major problem as more intermediaries were involved in marketing of coir fibre by the coir units. This stood fourth with a mean score of 54.88.

The remaining problems like lack of finance, lack of storage facilities and no direct contact with industrial users were ranked fifth, sixth and seventh with mean scores of 45.08, 34.62 and 33.50 respectively. Finally, it is concluded that the most significant marketing problem faced by the coir units in the study area was “heavy transport cost”.

Human Resource Management Problems in Coir Units

In this section, an attempt was made to identify the human resource problems faced by the owners of the coir units of the study area. The identified problems are ranked by making use of Garrett's Ranking Technique and the details are presented in Table 4.

**Table 4: Human Resource Problems in Coir Units:
Garrett'S Ranking ANALYSIS**

Problems	Mean Score	Rank
Scarcity of workers during peak season	60.23	I
Lack of industrial work culture	58.19	II
Absenteeism	54.94	III



Absence of workers union	51.29	IV
Hesitation to undergo training	43.17	V
Mobility of workers from unit to unit	33.73	VI
Frequent advance sought	31.83	VII

Source: Primary data

It could be seen from Table 4 that the scarcity of workers during the peak agri-season, the lack of industrial work culture among the workers, absenteeism and absence of workers union are the major human resource problems faced by the coir units of the study area.

To meet the increased demand for coir fibre, coir units of the study area generally work two shifts a day. This can be ensured only by the steady and continuous supply of workers. As the major chunk of the workers of the industry is agricultural and casual, they always look for their employment in agriculture related work during its peak seasons. As a result, a heavy migration of workers is a regular feature found in the industry. It is especially more among women workers as they mostly preferred operations like sowing, weeding and harvesting of paddy. Hence, the problem of scarcity of workers during the peak agriculture season seemed to be a major problem of the industry. Hence, this problem was ranked first with a mean score of 60.23.

The deep rooted rural mind-set coupled with the vast illiteracy upset the efforts to inculcate the industrial culture among the workers by the industry people. This problem was ranked second with a mean score of 58.19. A majority of workers are women, and ceremonies and festivals are part of their life. This led to their abstaining from work now and then. Hence, the problem of absenteeism was ranked third with a mean score of 54.94.



As the workers of the industry are not organised through unions, the benefits that could be derived from the presence of unions could not be availed of by the owners of the units. Hence, the problem of the absence of workers' unions was considered another major problem and it was ranked fourth with a mean score of 51.29.

The remaining problems found in the table – workers' hesitation to undergo training, mobility of workers from unit to unit and frequent advances sought by workers—are considered some of the other major problems present in the industry and they were ranked fifth, sixth and seventh respectively. Finally, it is concluded that the most significant human resource problem faced by the coir units in the study area was “Scarcity of workers during peak agri-season”.

Present in the industry and they were ranked fifth, sixth and seventh respectively. Finally, it is concluded that the most significant human resource problem faced by the coir units in the study area was “Scarcity of workers during peak agri-season”.

Findings of the Study

In this study, production problems, marketing problems and human resource problems faced by coir units are analysed. For identifying the major problems in production, marketing and human resources in coir units, Garrett's Ranking Technique was used. The findings of the study are:

- Production problems faced by small coir units were analyzed and three major ones were identified, namely inadequate finance, shortage of workers and inadequate supply of green husks. Production problems faced by medium size coir units were analyzed and three major ones were identified, namely shortage of workers, inadequate supply of green husks and heavy machine maintenance Expenses.
- Marketing problems faced by coir units were analysed and four major problems were identified, namely, heavy transport cost, lack of governmental support, inadequate market information and heavy commission.



- Human Resource problems faced by coir units were analyzed; the four major problems identified were scarcity of workers during peak agricultural-season, lack of industrial work culture, absenteeism and absence of workers union.

From the above findings, it is concluded that the most significant production problems faced by small size units and medium size units are inadequate finance and shortage of workers respectively. It is also concluded that the most significant marketing problem faced by the coir units was heavy transport cost, and scarcity of workers during peak agricultural-season was identified to be the most significant human resource problem faced by the coir units.

Suggestions of the Study

On the basis of the findings of the study the following viable suggestions are offered for improved performance of the coir units:

➤ In this study, it is found that “Shortage of Workers” is the most significant problem faced by both small and medium size coir units of the study area. Hence, it is suggested that the state government as well as the Coir Board encourage the entrepreneurs to start manufacturing value-added coir products like mats, rugs, maurzouks, carpets etc., which will help them to earn more and enable them to pay attractive wages to their workers. If attractive wages are paid, more workers will be drawn towards the coir units even during the peak agricultural seasons. Thereby, the major problem of shortage of workers may be solved.

➤ In this study, it is found that “Inadequate Finance” is a major problem faced by small coir units. Hence, it is suggested that the government encourage the Commercial banks, Co-operative banks and other financial institutions to offer loan facilities at subsidised rates of interest, especially to small coir units to meet their working capital requirements during peak seasons. It is also suggested that the Commercial banks, Co-operative banks and financial institutions conduct “Coir



Loan Melas” by considering their financial difficulties in operating coir units. By doing so, the above said problem may be solved.

➤ In this study, it is found that “Heavy Transport Cost” is a major marketing problem faced by coir units. This might be due to non-availability of market and marketing facility in and around Thanjavur district and they had to go to Alleppey in Kerala for marketing their coir fibre. Hence, it is suggested that the State Government and Coir Board consider this and establish market for coir fibre in Thanjavur district and neighbouring districts. It is also suggested that the Government could extend support to the existing entrepreneurs and encourage new entrepreneurs to start units for manufacturing value added coir products by using the locally available coir fibre of coir units. By doing so, the problem of Heavy Transport Cost may be solved.

10. Conclusion

The coir industry was chosen for study because of its social and economic importance to the area. The industry employs a vast number of disempowered social sections, mostly of the lower castes and outcastes, an overwhelming majority of them are women. Coir and coir products make good progress in the domestic as well as international market because of their unique qualities of durability, bio-degradability and eco-friendliness. At present, the industry gets a phenomenal share in the global market for the value added coir products.

In the prevailing scenario of the industry, the present research is a humble attempt to throw light on certain specific areas of the working of the coir units located in Thanjavur District of Tamil Nadu. The findings of the present study are not exclusive in nature, but are common to a majority of the units in India. The study highlights the problems confronting the industry of the study area that are not amenable to any quick-fix solutions. But improving value addition and access to technology and information would solve most of their operational problems. The industry has every scope to make an indelible mark in the industrial map of Tamil Nadu and could finally contribute to the economic development of the country.



Based on the findings of the study, several viable suggestions have been offered. If these suggestions are properly considered and implemented by the concerned authorities, the performance of coir units in production, marketing and human resource Management can be improved.

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