CHAPTER - I

INTRODUCTION AND METHODOLOGY
Kerala has been receiving attention, both nationally and internationally for the successful performance in the key areas of human development, particularly, education, health and social welfare measures. This is reflected in the physical quality of life enjoyed by the people in Kerala. But, how far has this been made beneficial to the people in the lower economic strata of the State, for example those people who work in the many traditional industries operated manually where the so called workers toil from morning to night for daily sustenance is a debatable issue.

Economic dualism is widespread in India with the two sectors existing side by side. One is the organised, modern formal sector characterised by capital intensive technology, relatively high wages, large scale operators by cooperate or governmental organisations. The other is the unorganised, traditional, informal sector characterised by small-scale operations using traditional methods providing modest earnings to the individual. Over the years techniques of mechanization have furthered the growth of industries which have led to rapid urban growth. Due to the technological advancements, over the time, the nature of the industries has changed from traditional industry to technical units shifting from rural to urban areas. The line which differentiates between the organised and unorganised is usually gradual and never sharp, except in the eyes of law.¹

In Kerala, such a transition is quite pronounced as the breakdown of division between rural and urban as well as organised and unorganised is much faster and more

comprehensive than anywhere in India. It brought with it the universal phenomenon of gender discrimination on the industries which employed mainly female labour force as semi-skilled casual employers. The traditional industries in Kerala have developed into export industries bringing in enormous foreign value. These industries have thrived on super exploitative labour practices. One of the ways of doing this has been through employing female labour and rural workforce, which is supposedly docile and less likely to organise. This has led to the guarding of the industries from labour laws.

In addition to this there also existed the discrimination in terms of wages and work done. In any study that deals with the health of workers, gender discrimination with respect to wages and work becomes an enigmatic issue that has to be looked upon. "Work" as such occupies a substantial portion of most peoples lives and has often been taken as a symbol of personal value as work provides status, economic reward, a demonstration of religious faith and a means to realise self-potential. Work also embraces opposite evaluations, a work, for an ammunition worker in the Second World War was, "the blank patch between one evening and the next." Social scientists all over the world have given their own interpretations to work, but exactly what counts as work is dependent on the specific social circumstances and activities as interpreted by those involved.

Contemporary traditional India, is still predominantly a society based on the norms of patriarchy, i.e. a society ruled by an ideology of female subordination based on the Confucian Three Bonds of Obedience - to father when young, to husband when

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3 Lesley Doyal (1995), What makes women sick, Gender and political economy of health, p. 52.
married and to son when old - the tenets as same as the ancient Hindu laws. The economic controls of the society, i.e. of land, capital and labour processes of women and children are held firmly in male hands and is interwoven with social-status hierarchy. This confines the female workforce to certain areas or kinds of work and excludes them from certain others.

One of the most striking developments of the post-war period has been the increase in female work outside the home. World wide, women now make up over one third of the labour force. The proportion of women working in the informal sector of the economy varies between regions. For the women of the twentieth century, staying at home is no longer an option, and many move in to needful employment due to financial need, personal preference and domestic circumstances. In modern studies, the term gender, therefore, substituted the term 'women' or 'sex' and highlighted the difference between the sexes as not merely biological, but due to the discrimination between the two in the organisation of the society.

The industrial revolution paved way to the organisation of society based on empiricism, utilitarianism, scientism and overemphasis on economics. Slavery gave way to subjection through wage labour markets and added a new variable, i.e., the power of money which led to the subordination of labour by capital and subjection of women by man. "Gender", hence got its sanction from traders, city dwellers, capital and men.

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5 Umadevi (S), Women, work, development and ecology, p. 13.
With the evolution of the idea of money payment for labour performed, the western society defined labour as a painful exertion. Majority of the population thus has to spend a large portion of their day in painful exertion, for the sake of a few who could devote more time to activities of their liking. Social system thus got split into 'auto-regulated' sphere of civil society and 'hetro-regulated' sphere of industrial state.\(^6\)

The question of gender has shaken the very foundations of society since women who are mostly engaged in doing unpaid work found that their work is not treated as an economic activity nor valued in the National Income of the country\(^7\). Society, hence attached higher value for paid work, thereby gaining status, mobility, access to information and power, which led to greater inequality in the society.

No where in the world have women entered the labour force on equal terms with men. In most countries, they are concentrated in particular sectors of the economy, i.e. in service jobs or in selected areas of manufacturing such as clothes, food processing and in the traditional sectors. In most of the third world countries, women make up a significant proportion of the labour force in agriculture. Within each area of work women remain in jobs with lowest payment and least status.

Two-third of all labour in the world is done by women (i.e. almost 70%) and the labour is found to exploit cheap female labour. In most third world countries due to the lack of equal opportunities legislation, women are entering employment under less advantageous conditions.

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\(^6\) Umadevi (S), *ibid.*, p. 14.
\(^7\) Umadevi (S), *ibid.*, p 14..
The subordination of women has led many to examine the historical content of sexual inequality and the relationship between the sexual decision of labour and women's subordination.

Scholars differ widely on the origins of the sexual division of labour as some claim that its origins are biologically based and rooted in prehistoric cultures. Others argue that the subordination of women by men is the basis on which early civilization was based and that it has maintained a reciprocal state of dependency between series. Meanwhile, Marx attributes the origin of the subordination of women to the emergence of social differentiation and patriarchy caused by shifts in the models of production.8

Eleanor Leacock and Mona Eitenne are of the opinion that male centered bias gives rise to inextricable link between socio-economic and gender hierarchies, and that, gender inequality does not necessarily follow class inequality.9

Sociological and economic research has presented a biased view of women's status and women's work. Research, in the field of women in development has provided evidence that economic development has proved to be detrimental to women and threw new insights into the interrelationship between gender-based division of labour, subordination of women and health.

It is significant that (much of the) the recent expansion of the female labour force has taken place among married women with children. This pattern is found to vary from country to country, but it is an alarming revelation that mothers with dependent children form an increasingly large proportion of the worlds labour force,

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8 Vina Mazumdar and Kumud Sharma (1990), Challenging patriarchy -- A reappraisal from India, Chapter 11, pg. 1.
9 Ibid., p. 2.
fixing their hours around their offspring's needs and their domestic responsibilities and often leaving little time for themselves.

**Women, Work and Health:**

The first benefit for women entering the labour force is the financial reward it brings. Income is their prime motivation for employment and recent researches done suggests that at least four times more families at present would be below the official poverty line if married women stopped going out to work.

Income from work outside the home can enhance a women's autonomy and hence their mental well-being through reducing their economic and social dependence on male partner. Employment outside home can be a source of companionship and provide a network of relationships to decrease the isolation and feelings of worthlessness commonly expressed by women at home.

In the Indian economy, majority of the women works in the low economy level as labourers. To them, income from waged work may offer significant benefits to themselves and their families, as it will allow them to purchase the basic necessity like food. They do more work than men, yet their labour seems to be of less value. They receive about 30-40 percent less pay than men if employed in the same job and no pay at all for most domestic work.

In India, there is excess of female deaths both in childhood and in childbearing years and this is attributed to material and cultural discrimination against girls and women. In certain cases, this has led to female infanticide either during pregnancy or after birth. This embodies the chronic neglect towards women. It's manifested that in
childhood, girls may receive less care than boys in a variety of different ways. They tend to be breastfed less often than boys for a short period and throughout their childhood receive less food and medical care. This lifelong discrimination has reached the point where the rates between men and women have become unbalanced.

As early as 4th century B.C., "Arthasastra" has prescribed equal wages for men and women artisans and it also laid measures to protect women artisans from sexual harassment by male supervisors. Centuries later, when we are about to enter the new millenium (21st Century) with the technological and modern developments, in India, a pervasive wage differential still exists between male and female workers, as well as a tendency to pay less for activities done exclusively by women as opposed to these done only by men. This differential is based on the assumption that women are weaker and cannot do heavy work and when the same task is done by males, somehow it becomes a hard task.

The circumstances of some women's employment will limit the potential health benefits of waged work. As they usually retain responsibility for domestic labour, many workers become physically and economically exhausted.

Therefore, women anywhere in India remain in poorly paid, low status jobs that make high demands but offer little opportunity for control. Women, whether employed in agriculture, farm labour, construction work, or working in unorganised units or in the organised manufacturing sector remain as the "suffered" group due to gender inequity.

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10 Sundari Ravindran (T.K.), Women Health in a Rural Poor Population in Tamil Nadu.
11 Mencher (Joan P.), Women, Agriculture and the Sexual Division of Labour, A Three State Comparison, pg., 110.
which till today is unerasable due to the nature of the society and the importance it gives to 'man'.

In Kerala, majority of the women, (rural workforce), are employed in agriculture from earlier time onwards. The low labour intensity of tree-crops such as coconut and the broad predominance of wage-labour relation in the agrarian sector of the state made it difficult to accommodate the increasing people within the agriculture sector. As a result the growing workforce is pushed into various, non-agricultural occupations. Coir industry's characteristic features like petty-production structure, labour intensive-handicraft technology, customary work sharing pattern, etc made it an exceedingly suitable sector for accommodating the surplus people, (both men and women) that could not find gainful employment elsewhere.

Coir industry in Kerala is one of the traditional industries in Kerala that brought forth economic development and has helped in shifting Kerala from the backbenches of the 'House of Economics' to the front benches. The industry is still a memoir of the days long past, days in which products were largely made by hand and production took place in small household units scattered along the coastal belt. The presence of the coir industry is quite visible in the scenery of the south western coast of the Indian subcontinent. All along the coastal belt, i.e. from Kasargod on the north to Trivandrum on the down south, one will find heaps of coconut-husks, ready to be sucked up by nearby lagoons. Between the tiny stems of palms, one can see clusters of women sitting on the marshy banks of the backwaters, beating incessantly on the water soaked husks or walking on narrow winding paths between private yards, one can hear the rattling of spinning wheels that cannot be seen.
Kerala accounts for more than 95% of the coir and coir products produced in the country. More than five lakhs of rural population are engaged in the various stages of the industry. In addition to this, over ten lakhs of people over the thickly populated areas of the Kerala, either directly or indirectly are dependent on the industry. "Alleppey" is the main centre of concentration accounting for 55% of industry and the production of products is located in the countryside adjoining Alleppey.

The industry can be broadly divided into two sectors, coir yarn spinning sector, which is unorganised, and coir goods weaving sector, which is organised. The two sectors are related by the fact that coir yarn, the product of spinning sector, forms the raw material for the weaving sector and that chief exporters of coir woven products also control the exports of coir yarn.

An exceeding number of the workforce in the industry are women working mainly in the spinning sector which is unorganised. In the organised weaving sector female workforce accounts to barely around 25%. The wages given in the industry is the lowest reported in the state confirming the dependency of the industry on exploitation of cheap labour. This is facilitated by the putting out system that operates on price-rate basis (so that the workers receive lower wages than what the Minimum Wage Act has prescribed). The workers are thus forced to work long hours under unsanitary and unhealthy conditions to earn their livelihood.

A number of malpractices still continue in the industry. For example, there exists wage discrimination among women workers working in the weaving sector
attributed the nature of their work. The wages of women workers were lower than men workers in the same occupation\textsuperscript{12}.

Women constitute nearly 90\% of the workforce in the unorganised sector. They face more problems as they have no protection from labour laws and can be easily exploited. Economic development, many a times opposes the life conditions of these workers.

The society at large and coir workers in the unorganised sector in particular, view the organised sector as a "citadel of security and relative prosperity"\textsuperscript{13} as it offers regular work and predictable rewards.

The women in organised sector, from earlier times onwards were struggling for their rights. Combined with their unfavourable working conditions is the unchangeable factors of poverty and malnutrition which forces the workers to spend three quarter of their life in work areas. Lack of proper protection makes them highly pre-disposed to infection leading to illness and poor health. "Health" of a person therefore depends on the social and economic conditions and the nature of work he/she does. The conditions of life in combination with the environmental conditions and nature of work contribute to susceptibility to particular disease in the sector.

It is against this background of extremely astounding conditions of work with low wages, combined with extra economic forms of manipulation that the basis for the growth of coir industry was laid in Kerala which till recent times accounted for 80\% of the work trade in coir and coir products.

\textsuperscript{13} Mark Holmstrom (1984), \textit{op. cit.}, p. 8.
The coir industry has been studied from different angles which can be classified into two groups:

(a) Studies on marketing and trade in Coir Industry;

(b) Studies on co-operative sector of the Coir Industry.

(a) **Studies on marketing and trade in Coir Industry**

One of the earliest studies on coir industry is that of Venkataraman in 1940. His study named "Coir industry and trade on the Malabar coast" covered a period of fifty years from 1885 to 1934 and is related to the aspects of growth of coir industry in the erstwhile Malabar district, the industrial and commercial structure of the industry and the wage structure existing in the industry at that time.\(^{14}\)

In 1956, Bhaskaran Unnithan's study of "Coir industry with special reference to Travancore-Cochin State" gives an account of the procedure of production of coir, locational factors of coir spinning industry, and problems of coir factories and coir co-operatives.\(^{15}\)

In 1959, the report of Coir Board's Delegation to Ceylon evaluates the possibilities of producing coir fibres in places where there are no retting facilities and the possibilities of supplying these methods to other states in India.\(^{16}\)

In 1960, Coir Board did a study on the Economic and Statistical Survey of Coir Industry, whose focus was to study the socio-economic conditions of people engaged in

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\(^{14}\) Venkataraman, 1940, "Coir industry and trade on the Malabar coast from 1885-1934.

\(^{15}\) Unnithan Bhaskaran, 1956, A study of coir industry with reference to Travancore-Cochin.

\(^{16}\) Coir Board, 1959, Reports of possibility of production of fibre in Ceylon.
the industry and to estimate the total production of coir yarn and coir products. In the same year, CSIR, in its monograph dealt with the process of extraction of coir fibre and its characteristics, process of spinning, weaving, grading and industrial uses of coir.

In 1966, Coir Board reviewed the different varieties of coir yarn commercially produced marketed in India, like Anjengo, Mangadan, Ashtamudi etc. and highlighted outstanding features of each type of yarn, method of production, region of production, market and end uses. In the same year, Unnithan, in his doctoral thesis, highlighted the strong and weak points of the coir co-operatives in the coir industry in India with regard to the area of marketing and foreign trade.

In 1969, Coir Board's comprehensive study on conditions of labour in factories and outside found that some of the benefits normally provided in well established industry were given only too a few units working as large-scale factories.

In 1970, a team from Coir Board examined prospects for development of the industry in other states like Karnataka, Tamil Nadu, Andhra Pradesh, Maharashtra and Goa and found that there is scope for fibre extraction by mechanised process in these states and manufacture of products by these fibres. In the same year, Ramdean stressed on the need for building up a steady internal market of coir for development of coir industry.

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17 Coir Board, 1960, Economic and Statistical Survey of Coir Industry.
18 CSIR, 1960, Process of Extraction of Coir Fibre (Monograph).
19 Coir Board, 1966, Report on different types of coir yarn.
21 Coir Board, 1969, Comprehensive study on labour conditions in Coir Industry.
In 1971, IIFT conducted a study on export potential of India's coir and coir products. The study stressed on (a) the scope and extent of important necessary methods in production, processing, manufacture and export; (b) factors affecting export potential of coir and coir goods and suggested measures in relation to world market; (c) investigated nature and scope of competition from synthetic substitutes in different sectors and suggested measures for product development and diversification.23

In 1972, Panicker examined different measures for the development of internal market of coir and coir products and identified the problems of internal marketing of coir products. He also found that though internal market has developed in past years, it needs to be strengthened as foreign exports are coming down.24

In 1974, the working group of Government of India formed for studying the prospect of mechanised coir units, stressed the need for mechanisation in the industry.25 Rabindranatha Menon, in the same year, presented a report on factors affecting export of coir and coir products and market potential in West European countries. The report also stressed that there exists stiff competition from synthetics and recommended techniques to develop sophisticated products of comparable quality, as there is great demand for such products.

In 1975, M.V. Pylee studied the crisis prevalent in the industry during 1974-75 with regard to problems of fibre shortage, labour problems of production of coir and coir products and the effect of these in export markets. He found that the

23 IIFT, 1971, A study of export potential of coir and coir products from India.
24 Panicker, P.N., 1972, A study on the development of internal market for coir and coir products.
implementation of too many controls in the field was the main reason for the crisis of shortage of fibre in 1974.\textsuperscript{26}

In 1976, a study by Devidas found defect in marketing technique in the coir industry and stressed the need for evolution of appropriate strategy.\textsuperscript{27} Kannan, K.P., in the same year, studied the implications of technological changes in the coir industry and estimated the number of labour displacement due to mechanisation in spinning sector as 86,400.\textsuperscript{28} Iger, in the same year, studied the history of development of coir industry since 1960-61 and suggested the need for gradual modernization in order to retain traditional foreign markets.\textsuperscript{29}

In 1977, Nair studied the organisation of coir industry in Kerala with reference to employment. The emphasis of these studies was on labour problems, working conditions and employment prospects in the industry in the state.\textsuperscript{30} In the same year, Prakasham analysed problems faced by producers in small scale sector and found that low demand, acute unemployment and under-employment are the main problems. He further examined the changes in connection with mechanisation and the reasons for the existence of dual price system fixed for export and open domestic market.\textsuperscript{31}

\textsuperscript{26} Pylee, M.V., 1975, A study of coir industry in India -- Problems and Prospects.
\textsuperscript{27} Devidas, 1976, A study of marketing in coir industry.
\textsuperscript{28} Kannan, K.P., 1976, Coir industry - Implications of technological changes, Economic and Political Weekly, vol. 6.
\textsuperscript{29} Iger, 1976, History and development of coir industry.
\textsuperscript{30} Nair, M.N.V., 1977, Organisation of coir industry in Kerala with reference to employment.
\textsuperscript{31} Prakasham, B., 1977, Coir industry in doldrums, Economic and Political Weekly.
In 1978, the Department of Economics and Statistics published a report on the renewed socio-economic conditions of coir workers in household sector during 1975-76.\textsuperscript{32}

In 1979, the study titled Problems and Prospects of Coir Industry by Parameswaran found the major problems in the field of marketing are: (a) competition from other natural hard fibres and synthetics, (b) duties and restrictions imposed by importing countries, (c) lack of adequate shipping opportunities and space, (d) frequent hikes in freight charges, (e) shortage of coconut fibre due to controls inflicted by government in price and movement of coconut husks. He also suggested the need for development of internal market and modernization of products to meet changing needs.\textsuperscript{33} In the same year, Institute of Manpower Research found that total employment in the coir sector in Kerala in 1975-76 was about 4,96,307 persons.

Many studies were carried out in the year 1980 Of this, the important one was by Molly Mathew who emphasised the socio-economic the socio-economic problems of women workers in unorganised sector with reference to their mode of employment and working conditions.\textsuperscript{34} Leela Gulati's study identified the extent and nature of involvement of children in the industry and found that children are involved in husk beating and fibre cleaning on a significant scale.\textsuperscript{35} Khan's study highlighted the export performance of industry and analysed the recent trends in exports and identified reasons for decline in exports of Indian coir. Iqbal, in the same year, studied the reasons for the

\textsuperscript{33} Parameswaran, P., 1979, Problems and prospects in coir industry.
\textsuperscript{34} Mathew Molly, 1980, A study of the socio-economic problems of women workers in the coir yarn spinning sector, ICSSR.
decline of exports in coir and coir products from India and suggested measures and schemes which should be adopted by both state and central government for the development and promotion of internal and export market for coir and coir products.\textsuperscript{36}

In 1983, D. Jaya Devadas examined inter-relationship of social, political and working class movement with reference to coir workers in Kerala. The study covered aspects like working class politics among coir workers.\textsuperscript{37}

In 1984, Thomas Isaac, in his study on structure and evolution of coir weaving industry in Kerala from 1859 to 1980, highlighted the specification of class struggle that characterised the industry in Kerala.\textsuperscript{38} In the same year, the Department of Economics and Statistics conducted a benchmark survey in three villages to assess socio-economic condition of coir workers. Robin Jeffrey's study in the same year highlighted the salient features of labour movement in coir industry in Alleppey in 1930s.\textsuperscript{39} Parameswaran and Thomas Isaac in the same year renewed the basic features and general problems of the coir industry in Kerala.

In 1985, Chandy studied the problems in the industry in connection with export sector. He found that increase in cost of production of yarn and coir products coupled with hike in freight charges and other surcharges made coir products from India uncompetitive in foreign markets. He suggested a re-integration of the weaving sector through co-operative means.\textsuperscript{40} Dinesh, in the same year, made an attempt to identify

\textsuperscript{36} Iqbal, 1980, A study on the decline of exports of coir and coir products from India, CDS.
\textsuperscript{37} Jaya Devadas, D, 1983, Coir industry in Kerala - A study of political, social and working class movement, Kerala University.
\textsuperscript{39} Jeffrey Robin, 1984, Destroy capitalism, women trade union movement in coir industry in Alleppey in 1930s, Economic and Political Weekly.
\textsuperscript{40} Chandy, 1985, Export potential and coir industry, current status, Coir Board.
problems of manufacturers and coir workers in the organised set up and the cause for changes in the internal and export market of coir products. He found that a large number of workers are employed in various operations of the industry and hence hardly get employment for more than 50-100 days per hear and that their wages are very low. He also recommended provision to protect women labour force and to explore ways which would diversify and provide full employment to the coir workers.

In 1987, the task force on Traditional Industries for 8th Five Year Plan by the Kerala State Planning Board examined the causes for the shortage of raw materials and working capital experienced by the industry and suggested methods to improve productivity. In the same year, Kumar tried to find out the major internal marketing centres and end uses of various items of coir which are needed to increase the market potential.

In 1990, a special task force on Coir Industry examined measures for increasing economy, availability of raw material, i.e. coconut husks at reasonable prices and conditions in fibre production with reference to restriction on mechanical defibring. It also suggested measures to improve the quality of yarn and to promote both internal and export markets and stressed the need for research and development in the industry.

Kumar's study in 1991 attempted to identify the stagnation reasons of coir exports and stressed on urgent modernization in order to give thousands of workers in the industry a bright future. Sabarinath, in his study on Market Share of the Industry,

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42 Kumar, 1987, Domestic Markets of Coir and Coir Products, Coir Board.
attempted to find the market share of each product in the total export zone and identified the countries to which India is losing its exports.\textsuperscript{44} He also stressed that the main cause for the decline of India's export is due to the impact of tariff and non-tariff barriers, poor and unsophisticated nature of the products, lack of innovation and technological stagnation and lack of marketing potential. He recommended effective intervention of government in the technological and commercial spheres. Market Development Mission to West European countries in the same year highlighted the need for modern methods of packing, improvement in quality of yarn and yarn products, upgradation of dyeing methods and new innovations in the area of Research and Development.\textsuperscript{45} In 1992, Mathew's study on problems and prospects of coir industry in India found total absence of product innovation and product development and suggested needs for upgradation of technology to introduce new and superior products.\textsuperscript{46} Thomas Isaac, Vand and Nair in the same year in the study Crisis in Coir Industry with reference to Trade and Marketing, made an attempt to analyse socio-economic and political factors that affect the trends in the industry in Kerala with reference to areas of export, production and internal consumption.\textsuperscript{47}

(b) \textbf{Studies on Co-operative Sector of the Coir Industry}

The pioneering study on coir co-operatives was conducted by Theyunni Menon in 1957. His work was on the working of coir co-operatives under Coir Development

\textsuperscript{46} Mathew, 1992, Problems and Prospects of Coir Industry in India, Coir Board.
\textsuperscript{47} Isaac, Vand & Nair, 1992, Crisis in coir industry with special reference to marketing and trade, CDS Working Paper.
Scheme and had suggested means for putting the co-operatives on sound financial footing.48

In 1965, Thomas, P.P., in his study Coir Co-operatives in Kerala, attempted to study the then present conditions of coir co-operatives and suggested measures for improving this sector. He has also made an attempt to identify the share of coir co-operatives in the export of coir products from India.49

In 1968, Unnithan, in his work, Coir Co-operatives in India, has given a brief outline of the working of the coir co-operatives in the country.50

In 1978, Planning Commission's High Powered Study team on coir industry, found that the coir co-operatives in Kerala had failed in collecting the full quantity of coconut husks required by them at the economic price.51

In 1981, V.O. Varkey, in his work titled Development and Working of Coir Co-operatives in Kerala, has identified the problems faced by the coir co-operatives in Kerala in the areas of procurement of raw materials, availability of finance, marketing of finished goods and day to day management of the society in the districts of Alleppey, Quilon and Trivandrum.52 In the same year, N. Chandra Das, in his work on Impact of Coir Development Scheme of 1974 on coir co-operatives in Kerala - a study with

49 Thomas, P.P., 1965, Coir Co-operatives in Kerala - Present Status, Coir Board.
50 Unnithan, B., 1968, Coir Co-operatives in India, Coir Board, Planning Commission.
reference to Quilon district has concluded that the scheme has failed miserably in achieving most of its objectives envisaged at the time of launching.\textsuperscript{53}

In 1990, Isaac and Raghavan, in their working paper, have attempted to present a broad policy framework for the revitalization of the industry in Kerala with reference to co-operatives sector. They have suggested the introduction of certain intermediate technologies to improve the quantity of yarn and to increase labour productivity for development of internal markets.\textsuperscript{54} In the same year, under the chairmanship of Ashim Chatterjee, a High Power Committee on coir, assessed the effectiveness of co-operativisation and recommended the continuance of the scheme.\textsuperscript{55}

In 1993, a high level committee on the Reorganisation of Coir Co-operatives in Kerala, made an attempt to evaluate the working of both primary and manufacturing coir co-operatives in Kerala and suggested measures for reorganisation of the co-operatives in the state.\textsuperscript{56}

It is evident from the above review of studies that predominantly economic issues as well as marketing strategies along with significant problems, product innovation, technological developments and trade associated with the coir industry have been given emphasis. The social dimensions like living and working conditions and the implication of it for the health and well being of the worker have not been addressed. This study, therefore, tries to capture the factors (social, economic, working etc.) that affect the health and well being of the worker, who in his plight for daily sustenance,

\textsuperscript{55} Government of India, 1990, Report of High Powered Committee on Coir.
\textsuperscript{56} Government of Kerala, 1993, High Level Committee on Reorganisation of Coir Co-operatives.
works in unhygienic and manipulative working conditions regardless of the damage caused to his health and well being (life).

1. CONCEPTUAL FRAMEWORK:-

A nation-wide study done by the National Institute of Urban Affairs shows that over 15% of the male workforce and over 26% of the female workforce in the Indian industries are "casually employed". This could be aptly considered in the case of the traditional industries like coir, cashew, beedi and fisheries in Kerala which operates on unskilled labour bought at cheap rates. The availability of coconut husks and the existence of extensive 'backwaters' which provides natural retting facilities together with the inland transportation led to the concentration of the industry in the coastal belts of the state and hence, Kerala is names as the 'home of Indian Coir Industry.'

With respect to both the organised and unorganised sectors, it is important to define a "coir worker" as we can find in the industry, a large number of casual labourers. A 'coir worker' "is a person who is usually engaged in any activity in the coir industry, either as an employee receiving wages or as a self employed person working in his/her own household enterprise."

Labour in the coir industry can be viewed as possibility of exploitation of cheap labour availability in the coastal parts of Kerala for catering to a growing demand for coir and coir products in foreign markets.

In both the sectors of the industry specifically in unorganised sector, the economic conditions are fast deteriorating as their wages has not kept pace with the steadily rising prices. There is very little scope for alternate employment for workers as most of these areas are industrially backward. This indirectly results in under
employment of the workers and the conditions aggravated by seasonal unemployment and the fact that workers are from lower strata.

This in combination with the unhygienic, oppressive and overcrowded working environment affects the health and well being of the workers in the industry. The persistent underemployment and the failure of trade unions to chalk out a concrete and concerted form of resistance, demoralised the workers (in both sectors). This even affected the organised sector where the workers were enjoying the benefits provided by the various legal acts. But the smaller weaving and spinning units were characterised by all possible petty exactions, higher work loads and irregular payments. These units could successfully evade the obligations under the Factory Act. In the case of spinning units as the work was mainly done by female force, the basic intermittent nature of it camouflaged the hard labour involved in coir production.

Even women workers in the organised sector are exploited as there exits gender division of labour and they are not given maternity benefits. Therefore the most harassed of the lot are women workers. In the case of women workers, their dual role should be taken into consideration, i.e.

1. Women doing productive work which remains under valued.
2. Women as mother and chief income earner providing for her family.

With the introduction of mechanization the economic condition of the workers has deteriorated from bad to worse. Generally the workers have no financial assets and their economy is run on exhorbitant borrowing as the wages they set are not enough for food, let alone medicine. Most of their health problems are due to the nature and mode of their work and the unhygienic work environment in both the sectors in the industry.
This shows that there are interlinkages between poor working conditions, living conditions and general well being in both organised and unorganised sector. Our concern lies with not the direct assessment of health but with factors which lead to ill health in both the sectors and the workers assessment of their problem to attain a better well being.

It is evident that wide disparities exist between the two sectors of coir industry in terms of wage, working environment and benefits associated with work. Therefore, the basic assumption of this study is that as economic conditions are slightly better due to above, the living conditions of the workers in the organised sector will be better as there exists inter linkage between working condition, living condition and general well-being. The question to be answered is "whether better socio-economic conditions (living and working will lead to better living standard and whether better living standard lead to better health and well-being.

2. **OBJECTIVES AND RESEARCH ISSUES:**

The broad objective of the study based on the conceptual framework formulated in the preceding section is to study the structure of the industry in terms of organised and unorganised sector, and to analyse the labour process involved in both the sectors with respect to the nature of work, hours of work, wages received and incentives obtained to understand the implications of the living and working conditions on the health and well-being of workers.

This being the central objective, an attempt is made to study the following specific aspects:
a. To study the overall structure of the coir industry which includes:
   i) the two sectors in the industry
   ii) difference between the two sectors in terms of employment, wages, incentives, workload, duration of employment and unionisation involved.

b. To study the working conditions in both the sectors like nature of work, location of work place, facilities available, etc.

c. To study the gender divisions of labour in terms of wages, incentives, work hours, etc. (specifically in organised sector).

d. To study socio-economic conditions of coir workers in both sectors in the industry.

e. To understand the perceived problems of the workers with respect to their daily work, work pattern, general health problems, and specific work related problems and their awareness towards it, in both the sectors of the industry.

f. To study the health care utilization pattern, available to workers in both the sectors and to understand whether there exists any difference between them.

3. **FIELD OF STUDY:**

For the purpose of conducting the above study, Alleppey district has been chosen as the field area for this study.

Aleppey, the smallest district in Kerala State formed on 17 August 1957 is bounded on the north and north-east by Ernakulam and Kottayam districts, on the South by Quilon district and on the West by Arabian sea. It lies between north latitude $9^\circ 05'$ and $9^\circ 52'$ and east longitude $76^\circ 48'$. The population of the district according to 1991
census is 1,990603 persons spread around 1,414 sq.km., which is almost double of the state density of population. The total number of workers in the district is 598,468 of which 452,061 are made and 146,407 are female workers.

"Alleppey" is an anglicised form of "Allapuzha" which means land between the sea and the river. The inland waterways through backwaters and canals provided cheap mode of transport in the region and thereby Alleppey flourished as a major commercial centre for the past few centuries. The district consists of seven taluks viz. Shertallia, Ambalapuzha, Kuttanad, Thiruvalla, Chengannur, Mavellikkara and Karthigapally.

The district also has an agrarian economy, as the rivers Manimala, Achankovil and Pamba flow through the district. The production of rice in the state is mainly concentrated in the Kuttanad area of the district and hence Alleppey district is also known as "Rice Bowl" of Kerala. Coconut is the next important cultivation. In addition to this, pepper, ginger, turmeric, rubber, etc. are cultivated.

Alleppey district is considered as industrially backward but some traditional industries based on coir, coir products, coconut oil and marine products are dominating since early times. As coconuts are produced abundantly, especially in the lowland region of the district, the raw materials, are available in plenty and hence the production of coir yarn and coir products has been found in particular, spread over the entire district with the yarn production mainly centered in Shertallai taluk and coir products produced in factories set up in and around Alleppey town. The district has also got the highest number of workers in the household industry.

Alleppey town is the district as well as the taluk head quarters with an area of 46.77 sq.km. and population of 169940 according to 1991 census - the town is called
"The Venice of Travancore", as it is almost surrounded by sea and backwaters and has many canals intersecting it. Alleppey is the world's chief supplier of coir yarn and coir mattings.

4. **SELECTION OF SAMPLES:-**

A case study approach was followed to understand different dimensions of Coir Industry and the living and working conditions of coir workers in Alleppey district. As we are dealing with the two sectors of the industry, the locational spread of the two sectors is slightly different as one is located in the urban and semi-urban area and the other located in the rural area. The coir products are mainly produced in and around Alleppey town where as the production of yarn is concentrated in Shertallai taluk of Alleppey district.

In the organised sector of coir industry, there exists three types of factories which produce coir products on the basis of ownership. They are the factories owned by Kerala State government, the factories owned by private entrepreneurs and factories owned and managed by the co-operative society. In Alleppey town, there exists around 23 private factories, three government factories and two factories managed by co-operative society. All these factories employ both male and female workers. Depending on the basis of maximum number of workers (both male and female workers) employed, three factories have been selected based on the ownership pattern, as the unit of study. The factories selected are:

(a) Kerala State Coir Corporation started in 1970;

(b) Aspinwall & Company Pvt. Ltd. started in 1940; and
Kerala Coir Mats and Mattings Co-operative Society Ltd. started in 1961.

All the three factories employ around 150 workers. A detailed description of the factories is given in Chapter III. The main functions carried out in these factories with regard to the manufacture of coir products can be divided into four stages, i.e. (a) the primary stage, (b) main stage, (c) final stage and (d) packing stage.

In all the three factories, the female workers are generally employed in the primary stage, i.e. for spooling and sorting. A few are also employed in the quilling section.

To study the living and working conditions of workers, 150 workers are taken from the three factories selected as the study unit i.e. KSCC, Aspinwall & Co. and KCMMS. In all the three factories, the maximum number of female workers employed was found to be forty. Maximum number of workers are found to be employed in the process of weaving. The study sample from each factory consisted of all forty female workers employed in the factory and sixty male workers randomly selected, from the weaving section.

The distribution of the workers in the factories selected as the unit of study is as follows:

In this manner, 100 workers are selected from the three factories namely Kerala State Coir Corporation, Aspinwall & Company Pvt. Ltd., and Kerala Coir Mats and Mattings Co-operative Society Limited.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Type of Work</th>
<th>Number of Persons Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Govt. Factory</td>
</tr>
<tr>
<td>1.</td>
<td>Sorting</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Spooling</td>
<td>35</td>
</tr>
<tr>
<td>3.</td>
<td>Wemboly</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>Quilling</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>Weaving</td>
<td>45</td>
</tr>
<tr>
<td>6.</td>
<td>Dyeing</td>
<td>8</td>
</tr>
<tr>
<td>7.</td>
<td>Clipping</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>Passing</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Grand total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The total sample size from the organised sector was thus 300.

Shertallai taluk of Alleppey district lies in the lowland region and has highest population of 17.86% and lowest literacy rate of 66.07% in the district. The reason for selecting this particular taluk is due to the fact that it has got the highest number of workers in the household industry (due to high concentration of coir industry).

The village Kokkothamangalam in Shertallai taluk is selected for studying the factors influencing the health and well being of coir workers in unorganised sector. The village is situated at a distance of 3 kms. From Shertallai town to Thanner Mukkom on North and Muhamma to South. The total area of the village is 1129 sq.km. and population is 5073. The village is linked to nearest town Shertallai by backwaters and road services. Majority of the folks are employed in the traditional industries of coir yarning. In this particular village the major portion of the production of yarn is done by cooperative scheme. This particular scheme is promoted by coir-development board of Government of India in order to rehabilitate the coir industry mainly working in the coir
yarn-spinning sector. The societies in the village have got a president, a secretary, a work manager, and a panel of members elected by the workers working under the society.

Generally the society in the village carries out 2 types of yarn production, i.e., yarn produced in co-operative workshed, and those produced on certain households under society. The societies generally work six days a week and around 9-10 months a year. The societies have got fixed minimum wages paid in piece rate weekly. In Kokkothamangalam seven cooperative societies are catering to rural folk by employing more than 300 workers in one sample.

From the analysis of literature and from earlier study, it was possible to identify four types of activities in the village with respect to coir yarn production. According to these activities, there are four categories of workers. They are:

1. Workers who are working directly under the society,
2. Members of the co-operative society who hires workers from outside to do the work in their homes,
3. Households who are not members in the co-operative society, but hires workers from outside to do the work in their houses.
4. Household members who themselves work and are not related to the society.

Regarding the second category of workers, of the seven societies in the village, only one society i.e. Nedumbarakkad (working strength 452) in the village is employing this kind of work. The process of work is as follows: It gives retted husks to the members. The members hire the workers by paying from their pockets to defibre the husks and to turn the fibre into yarn. The members in turn are paid by society
depending on the quality of yarn spun. As this type of work is not benefitting the members financially and as the society finds it difficult to supply fresh stock of defibred husks, six of the societies in Kokkothamangalam have stopped this activity.

Out of the seven societies in the village, one society is taken, on the criteria of maximum number of workers employed. Therefore, the society taken was Manavelli society which is three and a half kilometres away from Shertallai town and has the work strength of 491. (The particular society is situated in Ward 10, called Idavana).

From the Manavelli society, 75 workers were randomly selected from the first category making sure that only one person is selected from a family. Twenty five workers were selected from the second category from the Nedumbarakkad society. From the third category of workers, 25 workers were selected from those households which employ more than ten workers (from outside). The houses selected are located around the area of Manavelli society. To study the socio-economic and working patterns, 25 workers were purposively selected from the fourth category of workers.

In all the above cases, care was ensured that only one person was selected from one particular family. The total sample size from the unorganised sector was thus one hundred and fifty.

Considering both the organised and unorganised sector, the total sample size of the study is 450.
### Sample of Study

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Type of Study Unit</th>
<th>Male Workers</th>
<th>Female Workers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organised Sector</td>
<td>Kerala State Coir Corporation</td>
<td>60</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Aspinwall &amp; Co. Pvt. Ltd.</td>
<td>60</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Kerala Coir Mats and Matting Co-operative Society Ltd.</td>
<td>60</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>Unorganised Sector</td>
<td>Co-operative Society</td>
<td>-</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Members of co-operative society but hires workers to do work</td>
<td>-</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Households who are not members but hires workers to do work in houses</td>
<td>-</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Households who themselves work</td>
<td>-</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Grand Total of Study Population</td>
<td></td>
<td></td>
<td>450</td>
</tr>
</tbody>
</table>

5. **TOOLS OF DATA COLLECTION:-**

A variety of tools are employed to generate the required data. Research tools such as bibliographical studies, informal interviews and discussions, case reports, observations and an interview schedule are used for the study. The reasons for selecting each tool is given below:

5.1. **Interview schedule:-**

This is the main tool used for the study. A carefully tested interview schedule was administered to collect information from each category of sample. The interview
schedule consists of four parts. Part one includes the identification data like age, sex, religion, education, marital status, type of family and place of residence.

Part two consists of the family details like demographic particulars, living conditions which includes housing pattern, availability of sanitation facility, electricity supply, source of income other than from industry, expenditure incurred, debts to clear and saving habits.

Part three includes, working conditions, wages and mode of payment and on important aspects like:

i) problems workers face in the work area,

ii) workers perception of diseases or their health,

iii) benefits made available to workers,

iv) availability and accessibility of health care facilities,

v) action taken by the worker to alleviate his problems.

Part four consists of unionization and its impacts which includes details of unions involved and its activities, purpose of the activity and relationship of the employers towards workers in the union.

5.2. Observation Method:

Observation method is often used to collect certain type of data which cannot be ascertained through interview schedule alone. This technique is used to collect data on the working conditions, i.e. the nature of work and how it is carried out and to notice the relationship of workers with the employers. Some of the union activities of the coir workers were also closely observed.
5.3. **Informal Interview:-**

The informal interviews helped the researcher to elicit information from different categories of persons who play major roles in the society through process of production and exporting of coir yarn and its products thereby affecting the workers life conditions. They are the Public Relations Officers of the Coir Board, Managing Director and Labour Officer in Kerala State Coir Corporation, Development Manager in Aspinwall, Secretary and President of Kerala Coir Mats and Matting Cooperative Society, union leaders of C.I.T.U. in the factories and the Executive Officers of Coir Board in Alleppey, Cochin and Shertallai.

5.4 **Bibliographical Methods:-**

This tool is used to collect certain statistical informations from 1. District Collectorate and Panchayath Offices on the number of workers and the locational spread of the rural labour force. 2. The Coir Workers Welfare Agency to know the government schemes and policies for the welfare of the workers. 3. Central Coir Research Institute, Alleppey to know the history of the industry in Kerala and the new changes that have taken place in the industry regarding product innovations. 4. Study reports, published research papers, working papers on various aspects of the coir industry and its development. In this regard, the articles and reports collected from the Coir House (Coir Board Head Office), Cochin and Centre for Developmental Studies (C.D.S.), Trivandrum were of immense use.

5.5 **Case Reports:-**

This was mainly used to get a qualitative dimension to the study. In-depth cases were collected in areas like expenditure of worker with regard to income, problems
faced in the work area, benefits made available to workers and workers perception of their health.

6. **PROCESS OF DATA COLLECTION:**

This study is carried out in three phases: a pre-pilot phase, a pilot phase and the final field study.

(a) **Pre-Pilot Phase:**

The pre-pilot phase helped the researcher to get acquainted with the organisations like Coir Board, Kerala State Coir Corporation, Aspinwall, Kerala Coir Mats and Matting Co-operative Society, the Coir Cooperatives in Shertallai under the Coir Board, Coir Welfare Agency and the Coir Development Research Institute. During this phase, we could identify and select the villages and factories for the study on the basis of the maximum number of workers employed. The informal interviews and observations recorded in the field diary helped us to formulate the interview schedule. The schedule was prepared in English but the interviews with the respondents were carried out in the vernacular language, i.e. Malayalam. The earlier involvement of the researcher with the unorganised sector of the coir industry for the M.Phil study in 1992-93, had helped greatly in gaining acquaintance with the industry and its workers. The pre-pilot study lasted for three months from the period of April 1995 to July 1995.

The collection of the reports and articles from Coir Board and its agencies and from CDS was also done in this phase.
(b) **Pilot Phase:**

In the pilot phase, the interview schedule was tested on ten workers in all the categories of workers selected for the study in both the sectors. The viable questions were thus identified and necessary modifications were made in the schedule. The pilot phase lasted for two months from the period of September 1995 to November 1995.

(c) **Main Study:**

The main study was the largest part of the study and it lasted for eight months. This period was spent on collecting data from both the male and female respondents from the factories in the organised sector and from the female workers in the unorganised sector. The study was conducted between January 1996 to September 1996 with a break in the month of June due to the unavailability of work in that time due to the heavy rains in Kerala.

7. **LIMITATIONS OF STUDY:**

(1) The linkage between work and health is largely a reflection of association between working conditions such as nature of work, posture of work etc. and diseases. An indepth epidemiological analysis would further reinforce the linkages.

(2) Some disciplinary constraints precluded us from going in-depth into the economic organisation of the industry. We have only considered the minimum essential economic factors in our study.
(3) The management of the private factory and the government factory was non cooperative with the researcher especially in the initial phase in giving the data regarding their administrative details and export details. These were given after much persuasion.

In chapter II, we present an overview of the Coir Industry in India regarding the historical examination, organisation and structure of the industry, levels of management in the industry and the production and consumption of coir and coir products in both the domestic and in the export market. The chapter also includes the conditions of labour and related issues in the industry. A description about the unionisation and its impact in the industry and the present status of the coir industry is also included. The organisational and administrative structure together with a brief history aims and export details of the three different factories namely Kerala State Coir Corporation, Aspinwall & Company Ltd., and Kerala Coir Mats and Mattings Co-operative Society Ltd. is given in Chapter III.

Chapter IV describes the socio-economic and working conditions of coir workers in the unorganised sector. This chapter also includes data on various health problems of the workers and the availability, accessibility and health behaviour of the worker.

Chapter V provides an in-depth discussion on the living and working conditions and its influence on the health and well being of coir workers in the three different factories, viz. KSCC, Aspinwall & Co. and KCMMS in Alleppey. Gender disparities with regard to wages, health and the benefits available as per the Factories Act are also included in this chapter.
The final chapter furnishes a detailed summary and discussion which establishes the link between living conditions, working conditions and health of a worker in the coir industry.