SUMMARY AND CONCLUSIONS
The traditional industries like coir, cashew and handloom have been in the throes of crisis due to scarcity and escalation of prices of raw materials and increased competition in the product market either from cheaper production outside Kerala or substitute products. Employment and output in these industries have been fast declining. Performances of the traditional sector has been poor when compared to the mechanised sector due to the above reasons. Inspite of all this, these labour intensive, export-oriented industries have been a major form of employment to both men and women in the state of Kerala.

As discussed in this study, “coir-industry” is one of the export-oriented traditional industry in Kerala where both the organised weaving sector and unorganised yarn spinning sector co-exist. Both these sectors are related by the fact that coir yarn, the chief product of the unorganised sector is the main raw material of the organised coir weaving sector. In the unorganised spinning sector, 90% of the workforce is women, whereas in the organised sector, women accounts to barely around 25% of the workforce. Labour in the industry can be seen as a way of exploiting the cheap labour available in the coastal parts of the state in order to cater to demanding foreign markets. There is no scope for alternate employment as these areas are industrially backward which together with its seasonal nature, results in the underemployment of the workers.

The organised sector of the coir industry is covered by the Factories Act and the ESI Act whereas in the unorganised sector there are no benefits to safeguard the workers interests. There also exists in the organised sector, a pervasive wage differential between
male and female labourers. All these coupled with the oppressive conditions of labour in the industry further adds to the misery of the workers. The question for which we seek answer is “whether better socio-economic condition lead to better living standards thus in turn lead to better health and wellbeing.” Hence the definition of “health” of the worker lie beyond the boundaries of medical paradigm. Thus the factors which influence the “health and wellbeing” of workers assumes importance and this forms the conceptual framework to the study of workers health and wellbeing.

Based on this conceptual framework we derived the central objective of the study ie 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 nature of work, hours of work, wages received and incentives obtained in order to understand the implications of the living and working conditions on the health and wellbeing of workers. To study this objective we have identified certain factors of which some are closely related to the structure and labour process involved in the industry and others that are used normally to indicate the health and wellbeing of a worker.

The main factors we have identified to study the structure and labour process involved in the industry are (i) the difference between the two sectors of industry in terms of employment, wages, workload, duration of employment and unionization involved, (ii) Nature and pattern of work in both sectors (iii) Location of work place and facilities available in work place, (iv) the gender division of labour in terms of wages, incentives, work hours, etc (this is applicable only in organised sector).

Some of the main factors identified to analyse health and well being include (1) the socio-economic factors like age, education, income, expenditure, saving habits,
landownership, housing pattern and availability of facilities like electricity, sanitation, etc. (2) prevalence of health and day-to-day problems as perceived by coir workers. (3) reported general health problems and specific work related problems (4) availability and accessibility of health care services. (5) efforts taken by workers to avail the existing health care services.

In order to study these factors,

(a) In the unorganised sector, taking into consideration the four categories of workers employed in the yarn spinning industry, Kokkothamangalam, a small village in Shertallai taluk has been selected for the study.

(b) In the organised sector three factories ie Kerala State Coir Corporation (government factory), Aspinwall & co. (private factory) and Kerala State Coir Mats and Mattings Cooperative Society Ltd (co-operative society owned) has been selected from Alleppey town on the basis of number of workers employed and depending on their ownership pattern.

A variety of tools such as observation, interview schedule, informal interviews and bibliographical studies were employed to generate qualitative and quantitative data. Based on simple random sampling, these tools were administered to one hundred and fifty workers from the unorganised sector and one hundred workers (60 men and 40 women workers) from each factory in the organised sector. From the analysis, we can summarise the following major trends:

1. In terms of religion and caste, the coir workers as a whole are by and large (a homogenous group) from Ezhava caste of Hindu religion. In terms of gender, the workers in the unorganised sector are all women workers
whereas in the organised sector majority are men workers confirming that participation rate of women workers in organised (manufacturing) industries is lower.

In the unorganised sector, majority of the workers are in the age group of 20-40 years whereas in the organised sector majority of the workers (both men and women) are in the age group of 30-50 years.

2. Broadly, we can identify two trends in the level of coir workers education.

Among the men workers in the organised sector of the industry, (all three factories included), majority of them have had education till primary level.

In the case of women workers, the workers both in organised and unorganized sector have education till upper primary level. This confirms the low level of illiteracy in the state, even in the lower strata of economy.

3. In both organised and unorganised sector of the industry, the workers be it men or women are forced to work because of the sordid sustenance situation within the family. In such a scenario, it becomes important for each and every member of the family to add to the overall income of the family. This is manifested in the poor educational level and low occupational status of family members.

The trend of children joining their parents occupation to contribute to the family income is considerably diminishing in the industry as the workers want their children to get out of the traditional occupation of coir yarn spinning and coir mats weaving. A small percentage of the children of workers in organised sector are slightly contributing to the family income.
4. Most of the workers (both men and women) in the two sectors of the industry are married. The spouses of the majority of women workers in both sectors are engaged mainly in works like toddy tapping, coolie, arrack shops, working in tea-shops, etc. Spouses of some of the women workers in the organised setup are working in the mat-weaving sector.

The spouses of the men workers (in the organised sector) are engaged either in domestic work, coir-weaving sector or coir yarn spinning sectors. The spouses of both men and women workers generally do not have steady jobs and their working days ranges from ten to fifteen days a month considering the seasons. Thus the workers be it man or woman have to contribute materially to the family income as their spouses are penniless for nearly half a month.

5. Almost all of the coir workers in the unorganized sector are residing in the rural areas and that majority of them are from nuclear families. In the organised sector, majority of the workers (both men and women from all three factories) are from nuclear family and are residing in urban or semi-urban areas.

1. The land holding pattern (of the coir worker) in both the organised and unorganized sector of the coir industry shows that a coir worker (be it man or woman) own about 5 to 10 cents of land on which the house is located. The land here cannot be cultivated due to the black colour of the coastal soil.
2. The housing conditions of the workers reveal that, most of the women coir workers in the unorganized sector live in semi-pucca houses with two rooms, tiled roofs but unfinished walls and floors. Most of them do not have any facility for electricity and use oil lamps or kerosene lamps for lighting. Proper sanitation facilities are not available to most of the workers. Only a few who live in one lakh-housing colony, a housing programme implemented by the government, have some sort of sanitary facilities.

Most of the workers in the organised sector (both men and women in all three factories) live in pucca houses with tiled roofs, cement floorings and brick walls. Most of the workers have houses with two rooms, one kitchen and a small portico. They also have made use of the availability of electricity by fully electrifying their houses. They also have made use of the sanitary facilities available to them as majority of the workers have proper sanitary facilities in their houses.

7. Regarding income of the workers in the industry: In the coir yarn spinning sector, discrepancy exists between the four categories of workers regarding their weekly income, the third category of workers who are employed by households who are not members of the society get the least payment whereas the fourth category of workers who depend on home based production gets the highest weekly payment.
In the coir goods weaving sector, variations exist between the weekly income received by men workers and women workers. The men workers in all three factories (receive above and around Rs.300/- per week) generally receive the same amount as weekly wages: (1) In the case of women workers in this sector, those working in Kerala State Coir Corporation and Kerala State Mats and Matting Society receive lesser weekly wages compared to their colleagues in Aspinwall and Company. Even these workers' wages are lesser than the men workers. This points out the discrimination in wages based on gender.

A couple of workers in both the sectors of the industry are earning some money other than their weekly wages, but this amount is found to be negligible as its mostly from poultry and cattle rearing.

(2) The main expenses of all workers both in the organised sector or unorganised sector of the coir industry is food for daily survival. The analysis of expenditure of a worker reveals that In the unorganised sector, the daily expense of a worker is about Rs.25/- for food alone whereas in the organised sector, irrespective of gender, the expense of a worker for food is up to about Rs.30/- to Rs.40/- per day. In addition to this the men workers (in the organised sector) are found to spend Rs.50/- per week for beedis and alcoholic drinks.

(3) As the wages they get are not enough for daily subsistence, the coir workers in both the sectors are forced to borrow money.

For day to day survival, the workers in the unorganised sector have borrowed money mainly from shopkeepers, friends and neighbours. But in certain cases in
the fourth category of workers, money is also borrowed for buying green husks for retting and retted husks for defibring. Some of them also borrow for buying medicines.

For the organised sector, coir workers have borrowed money for daily living from shopkeepers, neighbours and also from the respective factory regardless of sex of the worker. Some have also borrowed for education of children and for buying medicines.

Coir workers, in both organised and unorganized sectors, belong to that class which suffers extreme economic deprivation. All the workers in both sectors are still indebted either to factory or to the shopkeepers. Inspite of their liabilities, all the coir workers in organised sector and very few in unorganized sector have saving habits (and save mainly through local chitty funds).

1. In the coir spinning sector, as the production of yarn needs natural retting facilities, the working place is situated near the backwater. The two main types of work carried out in this sector are defibring of retted husks and spinning of the fibre into yarn. Both the activities are carried out under the blazing sun. Defibring activity is carried out near the backwater directly under the sun. The workplace is polluted with mud and water together with the particles of defibred husk. Regardless of their age, the posture adopted for this activity is squatting position for beating the husks with wooden mallets. In the spinning of yarn, both sitting and standing positions are adopted for work as the spinning by “ratt” needs one person to turn the ratt’s wheel and two persons to spin the fibre from its needles.
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In the organised sector, the term “organised” itself gives a structured aura to this sector. The work is generally carried out in the factory worksheds. The main type of work carried out here is spooling, weaving and dyeing. The spooling of yarn, is mainly done by women workers. The work almost resembles the making of yarn by ratt and the posture adopted is standing and bending position. ‘Dyeing’ of yarn is done in separate sheds either by hand or semi-mechanised dyeing utensils. This is the most dangerous part of the work as the worker is in direct contact with the chemicals. In the weaving of coir goods, the work is carried out in weaving sheds using “dharis” which is manually operated (ie by using hands and feet). The work place is found to be polluted with the dust from yarn. In both dyeing and weaving, the posture regardless of age adopted is standing continuously till the work gets over. These two works are mainly done by men workers.

2. Regarding the analysis of the facilities available in the work place:

In the “unorganized” sector, as the name itself suggests all the facilities including basic amenities like drinking water and sanitary facilities are found to be lacking.

In the organised sector in all the three factories, even though there is drinking water facility, proper sanitation and ventilation facility is found to be lacking. The factories lack most of the facilities as per the regulation of the Factories Act (eg. creches, proper ventilated work areas, etc).

Hence the location and ecological conditions of the work place together with the nature of work and the facilities accessible to them are significant occupational parameters which have implications for the health of the worker.

1. Coir industry (both sectors included) can be termed as “seasonal industry” as minimum work is available during the monsoon season and maximum work is
done during the winter periods. During the rainy periods due to lack of sunshine and raw material (ie availability of husks), no work is done in the unorganized sector as it is impossible to produce coir yarn. Due to the non-availability of coir yarn, no work is carried out in the coir weaving sector, as coir yarn is the chief raw material of the weaving sector.

2. In the unorganized sector most of the workers work for around ten hours a day (8 o’clock in the morning to 6 o’clock in the evening) with half an hour lunch break. They work around six days a week and 9-10 months a year.

In the organised sector (in all these factories), the men workers work for 9 hours a day (8.30am-5.30pm) with one hour lunch break, whereas the women workers work for the same hours a day (8.30am-5.30pm) with half an hour lunch break. The workers work around six days a week. Both Kerala State Coir Mats and Mattings Cooperative Society and Aspinwall & Co, tries to get work partly during the lean months, the quantum of work available to workers in Kerala State Coir Corporation is considerably negligible. Thus strenuous work and lack of systematic work are consistent features of this industry be it the organised or the unorganized sector.

8. The mode of payment in the industry as a whole, is carried out by piece-rate manner. A handful of the workers in the organised sector work on the basis of time-rate.

In the unorganized sector, minimum wages are fixed for spinning of 100 yards of yarn and defibring 100 retted husks at Rs.18/- per day. The workers earn differently, but most of them earn around Rs.15/- per day. The third category of workers are over exploited as they need to work overtime and they are neither paid extra wages, nor the minimum wages fixed by the government.
In the organised sector, the wages received by the men and women workers are different. The minimum wages fixed for 100 yards of yarn spooled is Rs.60/-. But most of the women workers earn only around Rs.25/ to 30/- per day. For the men workers wages are fixed around Rs.100 to 125/- per day depending on the design of the mat to be weaved. But majority of the workers receive only Rs.50 to 60/- per day. Here the women workers are more exploited as they receive only less wages compared to their counter parts for the same amount of work done. This points out the discrimination still prevalent in the industry even with the addition of new legislative provisions.

The above clarifies that whether it is the unorganized or the organised sector, the attributes of the occupation in which the workers are tied up, demands more labour on lesser wages.

The women workers in both the sectors of the industry have to play a dual role and many find it extremely difficult to carry on work at home due to the long tiresome hours they have to spend at the work place in totally adverse working conditions.

In the organised sector, the workers also have to put up with the discrimination (regarding wages) against their counterparts, and they also give the men workers a superior status stating that their (men workers) work is more strenuous.

Therefore the women workers in the coir industry are victims of insecurity and inadequate income and have to be content with low paid, low status jobs.

The perceived health problems of the coir workers are of two types: (a) work related health problems and (b) general health problems.
11. In the unorganized sector, in all the four categories of workers, allergies of skin and respiratory organs, body-ache and pains and gynaecological complaints due to postural positions are the commonly perceived work related health problems. The general health problems noticed among workers in this sector are rheumatic complaints, chest pain, head ache, etc.

In the organised sector, in all the three factories irrespective of gender, the perceived health problems are mainly body ache, infections of skin and respiratory organs, rheumatic complaints and chest pain. These problems are in association with the earlier mentioned working conditions.

Among the women workers in the organised sector, almost half of the study population suffers from problems linked with reproductive tract infections.

There is an increase in the prevalence of ulcer among men workers in the organised sector of coir industry. In the organised sector, men worker’s proneness to tuberculosis cannot be ruled out as a handful of workers in the age group of 50-60 years are suffering from T.B.

9. All workers in the coir industry irrespective of gender, develop one or the other health problems soon after they start working. This shows the high occupational risk involved in the industry.

10. The workers in the organised sector avail benefits like annual leave, provident fund, sick leave and medical benefits from E.S.I. hospitals as per the E.S.I. Act. In addition to this the women workers in this sector also avail the maternity benefits. It is noted that due to lack of interest of the management of all the factories, the workers cannot avail these benefits at the needed time.
11. The workers in the coir industry, despite their poor economic conditions have taken action to ameliorate their problems.

For instance, in the unorganized sector, most of the workers have utilized the services made available to them inspite of the long queues and lack of medicines in the hospital.

In the organised sector, most of the workers in all the three factories irrespective of gender, have availed the services provided by the E.S.I. hospital in Alleppey and the government hospital. This is regardless of the long queues to see the doctor and lack of medicines, in dispensaries in both the hospitals. In addition to this the workers also have to put up with the lack of interest to their health problems from the E.S.I. administrative authority and sometimes they have to pay (money to) the doctor to have a check-up(examination). Complaining(protesting) to the management about the problems faced in the E.S.I. hospital has been to no avail. Hence the workers are forced to be content with the limited services attainable to them.

12. The workers in the coir industry including both sectors have to spend a substantial part of their income for medicines. For them, falling ill, for a day is a major catastrophe as they lose a day's wages.

In the unorganized sector, for any accidents or injuries that occur in the work place neither the employees nor the society takes responsibility for the happening.

In the organised sector, for any accidents that happen in the work place, they avail compensation taking into consideration, the extent of the injury and the days they have worked in the factory.
13. The evolution of trade union in Kerala interlinked land labour and credit markets. Unions are hence considered as an important apparatus for airing the injustice done to the workers. A strong union movement in coir industry is a confirmation of the consciousness of the worker in the coir industry as a whole. Heedless of a long history of unionisation, the achievements of the union is not very encouraging. Trade union has helped the workers constantly by increasing the daily wages and thereby eroding the cheap labour concept prevalent in the industry.

In the unorganized sector, the overall working conditions remain static even after all the strikes and demonstrations held by trade unions. In the organised sector, the trade union is not able to overcome the problems like providing daily work and to take a positive action to bring changes to the present system of treatment persisting in the E.S.I.

14. The Management of the organised factories always have a negative attitude to the workers regarding their day-to-day problems and their main focus of interest is to increase their export rate.

15. According to the workers in the organised sector, the working conditions prevalent in the coir yarn spinning sector is quite pathetic. Their opinion is that at least medical benefits (from E.S.I hospital) should be made available to the workers in this sector and that the trade unions should take a strong intervene to provide the workers at least with this basic facility.

Coir Industry is a major traditional industry providing employment to a vast majority of the rural work force. Various developments have contributed to coir industry replacing agriculture as the dominant employer of rural work force. This
was mainly because of bad conditions of work in agriculture sector like low income, lack of continuous work, lack of security etc. But due to the seasonal structuring of coir industry, the conditions here are much worse.

A unique characteristic feature which this study highlights is the 'seasonal' nature of the industry. In the coir industry, during the lean periods of monsoon, spinning of coir yarn becomes highly impossible and this leads to the scarcity of yarn which in turn affects the manufacturing unit. Especially in the months of June, July and October, the quantum of work done in organised sector is quite negligible whereas no work is carried out in the unorganised sector.

There exist major as well as marginal differences in the living and working conditions between the organised and unorganised sector. However, one cannot conclude that these differences are any indication of the better well-being among the organised workers. The differences can be seen from the following:

(a) In the unorganised sector, workers start working at a very young age where in the organised sector, they start working after the age of 30 years.

(b) The housing conditions of a worker in the unorganised sector is pathetic as they live in semi-pucca structures and do not have any facility for electricity, and proper sanitation is also found lacking, whereas an organised sector worker lives in pucca house with proper electrical and sanitation facilities.

(c) In comparison with unorganised, the term "organised" gives a secure status to the sector as the workers in organised sector avail the
benefits like Provident Fund, sick leave, gratuity, medical benefits etc. as per the various Acts and Laws protecting the industry whereas a worker in the unorganised sector does not receive any such facilities including the basic amenities like drinking water, basic sanitation facility in the workplace etc. On the other hand, in terms of wages received in a week, there is only a slight difference noticed among the women workers in both the sectors.

(d) Regarding health care facilities for the workers in the unorganised sector, the government hospital forms the main source of health services whereas in the organised sector, this is from ESI dispensary and government hospitals. This is in spite of long queues and lack of medicines in both the government hospital as well as in the ESI dispensary. This indicates that special provisioning of health care for the organised sector has not led to any perceptible improvement.

(e) The major distinguishing characteristic is the presence of disparity in wages among male and female workers in the organised sector for the same amount of time. The female workers receive less than half of what the male workers receive as wages in a day and this is attributed to the nature and character of the work they do.

All this has been in spite of the prevalence of strong union movement in the industry which is engaged in fighting for the workers' rights.
The female workers in the industry are more exploited due to insecurity, inadequate income and their double burden as mother and supporter of their family.

The study, thus, has shown mainly the interlinkages between living and working conditions which force the workers to live at the subsistence level.

If we compare the coir industry to another traditional industry in Kerala like the handloom industry, the notable feature is that the raw material for weaving, that is yarn, is mainly the product of organised sector and is supplied to the weavers from the organised mills whereas in the coir industry, it is the reverse. Unlike coir industry, which is highly politicised and unionised, handloom sector in Kerala is devoid of political protection by trade unions. The working contracts in the handloom industry are highly diverse and informal and lacks bargaining power. A common feature of both the industries is abundance of disorganised labour and like in coir industry, here too the welfare benefits are only applicable to a portion of the labour force. Coir industry thrives on the exploitation of cheap labour, be it organised or unorganised sector. In the organised sector, even with all the benefits under the various acts, the services the worker gets is dismal and most of the clauses of the Acts have remained only on paper.

"Health" of a worker is a product of the interaction between the social conditions, the economic gains obtained from work and the pattern and process of work which affect the workers' life. Amidst the pressures of handling the
insecurities of their work, the demands of the manufacturers and the problems of living, their health needs generally do not assume priority.

The policy implication of this study could be delineated as follows:

(i) A general improvement in working conditions in both organised and unorganised sectors of the coir industry;

(ii) The Employees State Insurance Scheme (ESI) should be made more responsive and effective and it should be extended to the unorganised sector. This could well be a long term measure.

(iii) Equal remuneration for equal work, and measures to narrow the gender divisions in the industry.

(iv) Establishment of formal interaction between organised and unorganised sectors of the industry. This should be commenced as a long term policy.

(v) A mechanism to appropriate the export earnings for the welfare of the workers as the export earnings by the industry do not result in any perceptible improvement in the living and working conditions of the workers.