

LABOUR AND EMPLOYMENT CONDITIONS OF COIR SPINNING WORKERS IN KERALA

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INTRODUCTION

Labour is an integral factor of development. Variations in its quality and quantity affect the specialization and division of labour and the market for goods and services. Kerala's economy draws much sustenance from the age old traditional industries of the where more than 15 lakh persons are employed. One of the most important traditional industries of Kerala is coir industry.

Coir Industry is a major traditional industry in Kerala in terms of the employment generation and foreign exchange it earns. it is labour intensive and second to agriculture as a source of employment in Kerala. It provides livelihood to nearly 3.75 lakh people and about 80% of them are women. Kerala accounts for 85% of the total production of coir in the country. Most of the industry is concentrated in the 3 southern districts of Trivandrum, Kollam and Alapuzha. 70% of the coir spinning workers of Kerala are employed in these three districts according to a recent census of coir board.

Workers in coir yarn processing are drawn from among the most disempowered social groups, mostly women of lower casts and strata of the society. Despite intense trade unionization the wages in the industry are very low. Further, days of employment in the industry has shrunk to less than six months a year. The ongoing technological change in the industry has implications for vast sections of disempowered people of the State.

Almost 90% of the spinning coir workers are women. They work under inferior working conditions and are faced with occupation related diseases. Moreover, the industry does not provide employment round the year due to various factors. They are yet to avail themselves of the benefits of the social development that Kerala is renowned for. The present study is an attempt to study the employment and labour conditions in coir spinning sector in Kerala.

The major objectives of this paper are 1) to analyze the employment pattern of spinning workers in coir industry, and 2) to explain the problems faced by the spinning workers and suggest remedies for the same.

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The study is based on a random sample survey, personal interviews and informal discussions. The sample consists of two hundred spinning workers from the district of Alapuzha, forty each from four Gram Panchayats viz., Kanjikuzhi, Thanneermukam, Chennam Pallipuram and Panavally. Also another forty are drawn from Cherthala Municipality. Various simple statistical tools such as ratios, percentages, charts, tables etc. are used to analyze the data. Apart from the data collected through the primary sources, secondary data sources like state economic review, various publications of Coir Board and the Department of Economics and Statistics etc. are also relied upon.

Several studies have been conducted about the coir industry over the years. Dr. T. M. Thomas Isaac, (1982, 1983) analyses the exploitation of the workers and their reaction to it over the years. He notes that a lot of agitations were resulted due to this exploitation over the years, which led to decentralization of the production units in the industry. Moreover, it is pointed out that this was a strategy of the capitalists to bypass the social limits imposed by the organized working-class to capitalist exploitation in the large scale manufactories.

Joseph and Paliwal (1998), states that coir spinning is a traditional occupation of the inhabitants of coastal Kerala and they belong to absolutely poor families. He also points out that people belonging to all religions are employed in this industry. Most of them have land holdings of less than 10 cents while some being landless. The literacy levels of the people were already high by that time. It was also observed that the old generation of women, i.e. 50 years and above preferred the traditional ratts while the new generation women, i.e. women in their twenties and thirties, preferred the motorized ratts.

Dr. Balakrishnan, (2005) speaks of the complexities of the spinning sector. There exists innumerable grades and sub grades in the industry which gives enough scope for the producer and the wholesaler to hoodwink each other. The earnings of the household units depend on the daily output in the ratt. The dependency rates of the households are high as only 19% of the members are earners while 35% earning dependents and 45% non earning dependents. Moreover, he observes that only about 27% of the family income in the coir households comes from coir activity. The observation that 73% of the family income has to spent on food indicates the poor economic status of these households. He also observes that a wide variation in the employment data exists which is due to the existence of substitute labour, demand for coir, the availability of raw materials etc.

Sujathan, (2009) opines that a substantial wage increase is absolutely inevitable as it is the spinning women of the coir industry who have always remained to be the lowest paid category. He blames the differential wage systems prevailing in various areas to be the reason

for this. He also notes that the benefits of periodical hikes in price of coir products do not reach the labourers or the proprietor, but the middlemen.

Rammohan (1999) makes similar observations and also states that the industry employs in vast numbers, the disempowered social sections, mostly of lower and out castes, and an overwhelming majority of it is women.

COIR SPINNING IN KERALA

In India the coir industry employs more than 6.4 lakh persons of whom a majority is from rural areas belonging to the economically weaker sections of society. Nearly 80% of the coir workers in the fibre extraction and spinning sectors are women.

Spinning coir fibre into yarn takes place exclusively in coastal villages as household cottage industry. Unlike the other textile fibres, the coir yarn is spun into a two-ply and in certain cases, to three-ply yarn. The spinning of coir fibre is done either by the hand or by the use of spinning wheels, (which is called *ratt*) motorized *ratt* or automatic spinning machine.

According to a study by CSES, in 2008 there are 73973 household units, 411 active and functioning co-operative societies and 1087 other units in Kerala which accounts to 75471 total coir units in Kerala. Out of these, 62549 coir units are situated in the district of Alapuzha and they account for 82 % of the total coir units in Kerala. The details are given in the table and figure below.

Table 1: Distribution of Units across Eleven Districts in Kerala (as of 2007)

District	Coir Units	Household Units <i>(% of total coir units)</i>	Co-operatives <i>(active and functioning)</i>	Other Units <i>(exporters, merchants, Large manufacturers, etc.)</i>
Aleppey	62549	61724(98.68%)	152	673
Trivandrum	1562	1443 (92.38%)	50	69
Kollam	1744	1612 (92.43%)	54	78
Kottayam	3313	3241 (97.82%)	26	46
Ernakulam	253	209(82.60%)	21	23
Thrissur	808	757 (93.68%)	12	39
Palakkad	43	25 (58.13%)	4	14
Malappuram	1004	974 (97.01%)	12	18
Calicut	3627	3468 (95.61%)	53	106
Kannur	248	213 (85.88%)	20	15

Kasargode	320	307 (95.93%)	7	6
Total	75471	73973 (98.01%)	411	1087

Source: CSES (2008)

The latest reports from the sector points to a tendency of increase in the rate of closure of spinning units, especially in the rural areas of the state.

In hand spinning the coir yarn is spun using bare hands. In this sector the raw material used was mostly reject and inferior quality husks in the recent past. It was attractive to people since it was very cheap. No initial investment or operating cost is involved in this process and the quality of yarn spun is good. The spinners usually remain in seated position while spinning. This causes great physical strain in the form of sore hands, severe backache, and problems in the urino-genital system.

Ratt is a simple contrivance, like charka used in cotton spinning, for spinning coir fibre. It requires only a low level of investment and no operating or maintenance costs. Excellent quality coir is spun with the help of this. It requires at least three workers. The process of spinning requires special skill and practice. The workers have to walk five to six kilometers daily, in the process of spinning. It could be a household activity. It also employs hired labour. About 23% of workers in this sector are reported to be hired workers.

Motorized *ratts* are the most commonly used method of spinning. This uses the *ratts* which operates with the help of motors. It needs electric power for the operation. This has made spinning more productive and easy. Instead of employing at least three persons to operate a *ratt*, in the traditional method, motorized traditional *ratts* require only one labourer and can employ up to three persons.

The motorized *ratt* uses electricity and it requires only one person to operate. It increases the labour productivity. In this contrivance the workers need not walk, instead, they could either sit or stand and do the spinning. Moreover, they need not have to carry the fibre to be spun, instead they could keep it in a basket and use it. This is more efficient as it provides identical twist and runnage to the coir being spun. Besides, it requires only very little space compared to the other two methods of *ratt* spinning. This method has made spinning much more easy and convenient, without making any compromise on quality.

Introduction of technological change has been top to down in Kerala, and has only superficially reached the household sector, the broadest part of the industry. In fact, a comprehensive survey of the coir industry by the CSES in 2008 showed that the majority of households in the state used mostly intermediate technologies, despite the highly-subsidised and

rigorous promotion of innovations across all stages of coir production. Second in line with regard to popularity and spread were traditional methods, only after which came fully mechanized production technologies. Table 3.5 shows this stark popularity divide between the technologies, taking as example the usage of the electric *ratt*, which is considered by many as a simple but significant innovation.

Table 2: Usage of Technology in *Ratt* Spinning (as of 2007)

Type of <i>Ratt</i>	Household Units <i>(% of total ratts)</i>	Co-operatives <i>(% of total ratts)</i>	Other Units <i>(% of total ratts)</i>
Traditional <i>Ratt</i>	9823 (23.79%)	946 (35.02%)	992 (38.10%)
<i>Ratt</i> fitted with ¼ HP motor	31423 (76.10%)	1263 (46.76%)	1591 (61.10%)
Fully Mechanised <i>Ratt</i>	44 (0.11%)	492 (18.22%)	21 (0.81%)
Total	41290 (100%)	2701 (100%)	2604 (100%)

Source: CSES (2008)

The unpopularity of advanced technologies is distinctive only to Kerala. In the coir industries of Tamil Nadu and Karnataka there are very few units that are not fully mechanised; and technological modernisation has indeed touched the ground.

On a regular working day in the co-operative societies' spinning activities begin around 9.00 a.m. and they work till 5.00 p.m. in the evening. They have about an hour for lunch break. Usually every worker spins a maximum of 70 *mudi*'s (pieces) a day.

The working conditions of the spinners are not very hygienic. The spinning process starts with cleaning, sorting and drying the fibre. The spinners using the traditional motorized *ratts* have to carry the fibre to be spun on the front part of their body around the waste and walk back and forth while spinning.

The dust particles from the fibre could cause respiratory problems. Carrying the fibre on the front part of the body could cause backache. Since they are always looking down many of them also have neck pain. Also it is pointed out that since they use mainly their index finger and thumb for the spinning activity the nerve system of the palms are affected and in the long run they lose the sensitivity of their index fingers and thumbs of their hands.

The coir workers in general have to depend upon the weather as very often they are not able to work during monsoon which is quite strong in kerala. Moreover, there is much uncertainty in the monsoon season due to pouring rains which affects drying and storing of fibre. During summer they have to work under the hot rays of the sun.

THE GOVERNMENT AND THE SPINNERS

Governments at the state and the central level have taken steps to improve the conditions of the coir workers. To facilitate better functioning of the coir sector several Coir co-operative societies or '*Coir vyavasaya sahakarana sangha*'s are established in various areas of the state. The coir board is also established by the central government to enhance the coir industry. Also, there are other institutions such as coirfed, coir workers' welfare board etc. for the elopement of the industry and the labourers.

The coir co-operative societies supply fibre to the registered members and buy back the coir from the workers at the rates fixed by the government. In addition, there are spinning units at the cooperative societies where many women are employed. The societies provide bonus to the workers during the festival seasons. Govt. also provides other incentives to the labourers through these co-operative societies. Recently, through the co-operative societies the government has been providing assistance to build sheds in the spinning areas to help the employees. The financial burden of the initiative will be born at a ratio of 3:1 by the government and the beneficiaries.

According to the Directorate of Coir Development, in 2011 there are 822 coir co-operative societies in Kerala. Among them 172 are dormant, while 154 are under liquidation. There are about 496 active co-operative societies working. The district wise details of it are given in table 3.6.

Table 3: District wise Details of Coir Co operative Societies

Sl.No.	District	Project Offices	No. of Coir Societies as on 31.03.2011			
			Working & New	Dormant	Under liquidation	Total
1	Thiruvananthapuram	Chirayinkeezhu	50	15	30	95
2	Kollam/Pathanamthitta	Kollam	69	50	22	141
3	Kottayam	Vaikom	26	5	6	37
4	Alappuzha	Alappuzha	134	30	18	182
		Kayamkulam	70	10	9	89
5	Ernakulam	North Paravur	13	8	41	62

6	Thrissur	Thrissur	13	11	12	36
7	Malappuram/Palakkad	Ponnani	14	10	2	26
8	Kozhikode	Kozhikode	55	28	11	94
9	Kasargod/Kannur	Kannur	52	5	3	60
Total			496	172	154	822

Source: Directorate of Coir Development, Tvpm.

The Coir Board is a statutory body established under the Coir Industry Act, 1953 for promoting the overall development of the coir industry and upliftment of the living conditions of workers engaged in this traditional industry. It conducts research and development in the field of coir industry and has developed many devices to increase the productivity of the labourers and to improve the quality of coir products.

It is also providing training to a few spinning women in the modern devices and also assists them with the ratts which are given at a very subsidized rate. It has also introduced group insurance for the coir workers. It also provides financial assistance under the scheme of 'Development of Production Infrastructure' (DPI).

The coir board gives a compensation of Rs. 50,000 in case of accidental deaths. It also provides loans to the coir labourers up to Rs. Five lakh and provides a subsidy of 2 lakh on regular repayment. However, we have to admit that the assistance is provided only to a fraction of the total number of the total spinning units of the state.

The Kerala Coir Worker's Welfare Fund Scheme was introduced in January, 1989, under the 'Kerala Coir Workers' Welfare Fund Act 1987. Its objective is to establish and operate a Fund for the welfare of the coir workers and self employed persons in the coir industry in Kerala. The scheme also envisages payment of pension to coir workers who have completed 60 years at the time of commencement of the Act. Besides contribution from the Government of India the fund envisaged contributions from employers, producers of coir and coir products, dealers and the beneficiaries namely coir workers and self employed persons.

Under this scheme educational scholarships are provided, for the children of the members, for post- metric education subject to a ceiling of Rs.500/- per annum per student and Rs.1,500/- for professional courses. The assistance is to be given in the form of grant. Other assistances include compensation of Rs. 10,000 in case of accidental death; marriage assistance

of Rs. 2000 to its members and their children; funeral assistance of Rs. 1000; delivery assistance etc.

Most of the women working in the spinning sector are members of the coir “kshemanidhi” and are eligible to get many benefits from government. All the women above the age of sixty receive pension from the government. Most of the concreted houses owned by the spinning workers are built with the financial assistance of the government. Recently, the government has taken steps to build sheds for spinning workers in their work place to improve the work conditions and eighty three of the respondents of the survey benefitted from it. The coir board has also set up group insurance for the workers but none of the respondents had registered their names for this, and in the survey a majority of them have stated that they were not aware of it.

MAJOR PROBLEMS IN THE SPINNING SECTOR

A lot of problems have been faced by the sector and the labourers were very badly affected by them. However, they had to bear up with them as they had no other options but to get along with the same. The major problems faced by the spinning workers in the coir industry are: lesser returns for the hard work; lack of constant supply of raw materials; failure in transmitting the technological advancement in the field to the labourers; failure in providing constant electric power supply; poor working conditions; work related health problems; seasonal unemployment etc. Furthermore, due to these factors changes in the composition of labour is taking place in the spinning sector. These are discussed in detail in this chapter.

Coir sector is one of the lowest paid traditional industries. Besides this the spinning sector is the lowest paid even in the coir industry. The kind of remuneration given to the spinners is piece rate or *mudi* rate. Usually the workers spin up to 70 *mudi*'s a day. The highest wage rate in the spinning sector is given by the coir co-operative societies as it is funded by the government. In the private sector the wage rate is different from place to place and is less than that of the co-operative sector. In addition, the case of the coir spinning workers outside the cooperative sector is more deplorable as they are at the mercy of the entrepreneur who may not be able to pay them better or give any incentives.

Up to 2008 the daily wage rate for spinning was less than Rs. 70 in the co-operative segment. With the emergence of National Rural Employment Guarantee Scheme (NREGS) of the Central Govt. the wages spinning sector was hiked to counter it. Again in 2010 when the NREGS wage rate went up to Rs. 150 the co-operative societies were forced to raise the wage rate to Rs. 150 for 70 *mudi*'s. Recently the central Govt. raised the wage rate for NREGS in

Kerala to Rs. 164 in Kerala and yet in the spinning sector the highest payment remains to be the same at Rs. 150 per 70 *mudi*'s.

This situation prevails while in the other sectors of the economy better wages are given to unskilled women labourers. This is very clearly shown by the Economic Review 2007 of the Kerala Govt. This makes the spinning sector less attractive. The table below shows the daily wage rates for unskilled labourers for four years from 2003-04 to 2006-07 and the per cent growth of the wage rate per year while the wage rate in the spinning sector was only Rs. 70.

Table 4: Average Daily-wage rates of unskilled workers in agriculture

Year	Average Daily Wage Rates of Paddy Field Workers			
	Male	% Growth over previous year	Female	% Growth over previous year
2003-04	148.72	2.6	101.64	1.9
2004-05	165.58	11	115.75	13.9
2005-06	166.39	0.49	108.19	(-) 6.53
2006-07	179.01	7.58	123.96	14.58

Source: Directorate of Economics & Statistics.

Also it has to be noted that the state minimum wage rate at present is fixed to be the same as that of the wage rate in NREGS for unskilled labour. When we look at the wage rate in the spinning sector in this light we have to admit that the highest remuneration fixed in the spinning sector of coir industry which is a skilled labour is less than that of the minimum wage rate for unskilled labour in the state.

It has also been noted that in *panchayats* where NREGS is introduced, the coir spinning workers prefer it to their traditional work. Also it has been noted that there is a scarcity of labour in the spinning sector and as a result several spinning units are either liquidated or dormant. A majority of the spinners also give priority to NREGS and only avail the rest of the time for spinning and allied activities.

Table 5: Minimum wages in various semi and unskilled labour in Kerala

Job	Minimum wages (in Rs)
Agricultural Operation	150
Ayurvedic and Allopathic Medicines	150.06
Beedi and Cigar Industry	133.12
Cashew Industry	198.36
Drying of Coconuts for making Copra	145.12

Handloom Industry	152.32
Match Industry	121.46
Sweeping and Cleaning	156.32
Domestic Workers	130
Coir spinning	100

Source: Paycheck.in (as on 30th March 2010)

Also when we compare with the minimum wages given to women for various types of unskilled jobs we could find that the situation of the spinning women very dreadful. This could be very evident from the table 5.2. This was published by Paycheck.in by 30th March 2010. The table is a clear indicator of lower wage rate in the coir industry.

Kerala, the land of coconuts, unlike in the previous periods is experiencing acute shortage of coconut fibre in the state. Though 45% of the total coconut production in India is from Kerala, the state is not able to feed the increasing demand for the coconut fibre and therefore it has to depend on other states such as Tamilnadu and Karnataka for fibre. This makes fibre very costly.

Moreover, the export of fibre to the other nations, unlike in the previous periods, also increases the demand for fibre. There also exists seasonal unavailability of fibre. These factors have affected the smooth running of spinning sector in the coir industry. Many units were unable to carry out spinning due to the unavailability of raw materials in time.

Though various technological advancements are taking place in the coir sector, very often the knowledge is not transmitted to the labourers. Lack of popularity of motorized rats in Kerala is a perfect example for this. In kerala, one of the factors which hindered the technical advancement in the traditional industries was the defiance towards technological advancement which was due to the fear of the labourers that they might lose their employment opportunities.

In addition, the lower levels of education among the spinners makes it difficult to transmit the new technology to them. Since, majority of the spinners are above the age of fifty they are not open to the new technologies available to them. Though the coir board has taken initiatives to train women to use the modern methods it has benefited only a smaller portion of the spinners.

In the last decade the majority of the spinners have switched over from the use of traditional ratt to motorized traditional ratts for spinning fibre into coir yarn. These motorized traditional ratts need electric power to operate. In a state like Kerala which is facing severe problems in the generation and supply of electric power continuous and unbroken power supply is not guaranteed. In addition periodical increase in the price of electricity also reduces the earnings of the spinners.

Thus lack of continuous power supply due to various reasons also affect the production of coir yarn. During the monsoon season heavy rain is one of the causes of power shortage while in the summer season lack of capacity for electricity production in the state causes a lot of bottlenecks. In case of power failure, they do not have any other option but to stop the work until power returns.

The working conditions of the spinners are very deplorable. They have to do a lot of dirty jobs such as sorting the fibre, drying it in the sun etc. They have to carry the fibre while spinning and walk many kilometers to and fro in the process. There has not been any measures taken by the government or any not governmental agencies to improve the working conditions of the spinners by making it light and easy.

They are also very much at the mercy of the weather as they have to bear the rays of the hot sun in summer and put up with the torrential rain during the monsoon season, which the state of Kerala receives.

The government has taken steps to provide sheds to the spinning women to assist them. The government will provide 75% of the financial assistance and the rest, which is 25% of the finance, has to be paid by the beneficiaries, in installments. However, many of them are not able to find finance for that. It is also noted that many are not aware of this scheme.

The majority of the motorized traditional *ratts* have only one labourer to operate it while its normal capacity is three. This reduces the productivity of *ratts*. Moreover, the unnecessary multiplicity of *ratts* is a burden on the government as it has to spend more money on subsidies. This increases the consumption of electricity in the spinning process. If carefully monitored the productivity in the sector can be doubled, if not more than double.

Besides most of the units being household units, regular work do not take place as it is done when all the other activities of the household is over. Thus spinning has become a subsidiary to the family activities. Moreover, other constraints in labour and raw materials also affect productivity very badly.

The spinning sector is not able to provide regular employment to the workers due to various reasons. The torrential rains of the Kerala coast is one of the reasons for this. It makes it impossible for the workers to dry the fibre for spinning and in addition for most of the workers it is not possible to work in the rain as they do not have any covering over the spinning area to protect them from rain. The seasonal scarcity of the fibre and yarn is another reason for unemployment in this sector. Kerala which was a haven of coconuts is now not able to provide enough raw materials for the coir industry.

Various studies show that there is the problem of disguised unemployment in the sector as more labourers are employed in the sector than the industry requires. It could be also noted that though there has been a drastic and alarming reduction in the number of spinners employed, there has not been a corresponding decline in the total production of coir yarn.

The spinners are affected by various types of health problems. The dust from the fibre and the chemicals used in the formation of fibre cause various kinds of allergy for the labourers. Most of them suffer from work related health problems such as asthma, back and neck aches, soar hands etc. A sample survey conducted among the coir workers by Kitco consultants about the work related diseases among 1000 coir workers is given in the table below. It was found in the survey that 29% of the spinners were affected by these diseases.

These work related sicknesses increase the rate of absenteeism of the spinning women from work.

Table 6: Work Related Diseases Reported by the Respondent Workers

Work Related Diseases	No.	Percentage to Total Number of Workers
Allergy	446	17.8
Body pain/Hand pain/Back pain	208	8.3
Cough	21	0.8
Skin disease	21	0.8
Asthma	19	0.8
Sneezing		15 0.6
Arthritis	12	0.5
Chest pain	7	0.3
Bronchitis	7	0.3
Other diseases	19	0.8

Source: Sample survey by Kitco consultants, 2004.

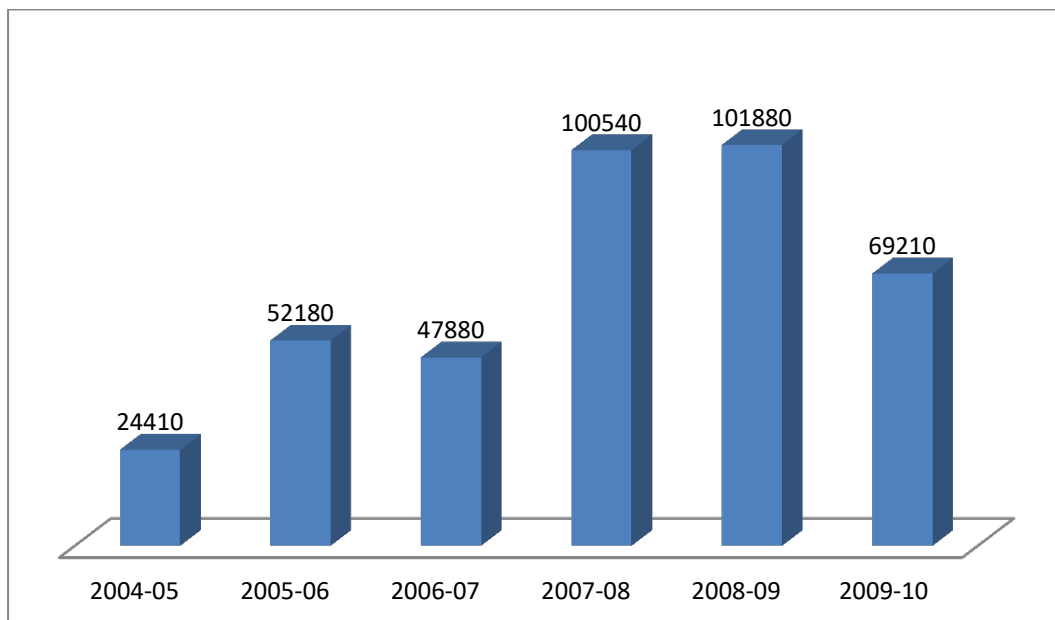
Over the past few years the spinning industry of Kerala has been experiencing serious problems. However, the situation of the spinning sector has remained more or less the same except for a few changes.

Though the global demand for coir products has been increasing despite the depression of 2008 and the recent European Economic Crisis. However, the spinning sector in Kerala has been hit very drastically by the changing economic situations and living standards along with the new employment opportunities such as emergence of NREGS and Self- Help Groups.

The great uncertainty in the spinning sector has lured several workers away from the industry and they went in search of greener pastures. The survey found that the majority of the spinners except those working in the co-operative sector have migrated to NREGS and avail only rest of their time for spinning and allied activities. Also several women previously employed in the co-operative societies have discontinued working there. This is due to the fact that those working at the societies do not have a flexible working hours while those working outside have more flexible working hours.

The table below shows that over the years there has been an increase in the number of spinners up to 2008-09. However, a great decline in the no. of labourers employed in the co-operative societies from the year 2008-09 to 2009-10 is also noticed.

Figure 1: Number of labourers employed in the co-operative societies over the years



Source: Directorate of Economics & Statistics.

The table shows a decline of more than 32% of workers in the co-operative sector in just one year. The situation has become worse ever since and in the survey it was found that many of the spinning units which were previously active have been closed. The situation is very bad in the four *panchayats* which were surveyed. However, the problem is not so acute in the cherthala municipality as NREGS is not functionalized there. However, even there are units which have been stopped their operations, due to other bottlenecks in the industry.

The recommendations of the study are given below:

1. The wage rate should be increased to make it reasonable and attractive to the labourers. A minimum wage rate should be established. In addition, substantial incentives should be provided to the workers. This will prevent absenteeism from the work and increase

the productivity. Besides this will help the spinners to improve their economical conditions and which in turn will enhance the productivity.

2. Steps should be taken to ensure that the results of the research and development and improvements in technology reaches the labourers. There should be proper channels and methods of transmitting the fruits of the technological development to the lower levels. The modernization in the industry will attract more young people into the industry and increase the level of confidence among the workers.
3. Local training centers should be started to train the labourers on the new methods of production.
4. Effective initiatives are to be taken to uplift the working conditions of the employees in the spinning sector. Most people abandon the spinning sector due to its poor and unhygienic working conditions. An improvement in the situation will check the migration of the employees from this sector to the other sectors of the industry.
5. Proper and continuous supply of the raw material, i.e. fibre and yarn should be ensured to facilitate more days of employment. For this, proper fibre and yarn storage facilities should be introduced.
6. Continuous supply of electricity must be provided to the spinning units to ensure proper utilization of the working hours. This will increase productivity as uninterrupted work enhances the morale of the labourers and increase their productivity.
7. To improve productivity in the use of motorized traditional ratts the number of persons working per *ratt* should be increased. The full capacity utilization increases the productivity per *ratt*. In addition, the full capacity utilization reduces the investment cost incurred by the beneficiaries of the *ratts* and it could also save a lot of money for the government which otherwise has to be spent in giving subsidies for the *ratts*. Moreover, this reduces the consumption of the electric power. For a state like Kerala, which is experiencing severe power scarcity electricity saving production should be adopted.

In Kerala, where the standard of living is quite high and the economy is experiencing radical changes, the situation of the coir spinning women has not changed much. When modernization beckons at every walk of life, the life and work of the spinners move more or less in the same direction with the same demand tendencies. The recent report of the coir board shows that the demand for coir products are increasing worldwide and our coir exports are increasing by leaps and bounds. Yet there has not been adequate improvement in the lives of the spinning women and in the spinning sector. Growth which is blind to the facilitators of growth may not be able to sustain itself. Therefore immediate action has to be taken to rescue the coir spinning sector from the great deterioration it is experiencing, by improving the socio-economic conditions of women in the spinning sector.

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