Socio-economic condition of women construction workers in Kannur district, Kerala

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Abstract

Background/Objectives: Today, economic independence is the prime basis for improving the status of women in India. It is highly emphasized that women work participation is crucial in enhancing social and economic status as well as improving their assertive roles in the household decision making. In construction activities, health is the important determinant of employment, and it is the deteriorating factors consider to workers especially the women, they are simultaneously engaging in economic and non-economic activities. This study is an attempt to understand the socio-economic condition of women construction workers and a special emphasis has given to identify the work related problems of women in Kannur district.

Methods/Statistical analysis: The study largely relays on field data which were collected from 50 respondents in Kannur district. A sample size of 50 women respondents were selected from the district by employing simple random sampling method. The respondents were interviewed with a well-structured schedule. Simple percentage and regression analysis was used to interpret the data.

Findings: As far as the problems faced by the workers are concerned, 100 percent of the workers are dealing with health problems and 82 percent of the workers faces financial problem. About 30 percent of the workers are facing other problems such as sanitary facility, drinking water facility, wage problems etc. The main health problems faced by the workers are muscle pain, allergy, cough, asthma problem, etc. About 8 percent of the workers are suffering from all of these problems. The nature of hospital preferred by the construction workers is mainly government hospitals. About 86 percent of the women workers opined that their status in the society has been improved by doing construction work.

Improvements/Applications: Encourage the construction workers saving habit through initiating banking awareness and ensure adequate insurance facilities for the construction workers. Ensure equal wage for the work in the unorganised sector and renew the wages yearly. Give proper guidelines and awareness about medical insurance, various schemes and financial support, programme offered through welfare board and initiative workers to take membership in the welfare board.

Keywords: female construction workers, socio-economic condition, occupational health hazardous, women empowerment.

1. Introduction

India is the second largest populated country in the world where the construction labour force is estimated at 30 million people; about half are women [1]. The employment of women in the construction work falls under the service sector which is of unorganized category. In this field, both male and female workers are engaged. Women account for half of the total construction labour workforce. Women workers are most exclusively unskilled, casual and of manual labourers. They are mainly engaged in carrying bricks, cement, sand and water and also for digging earth, mixing cement and breaking stones [2]. The construction sector is providing employment to 7% of total world employment [3].

According to the government of India report, the construction industry employs about 31 million people and creates assets worth over ₹. 200,000 million in every year [4]. In India, it is the largest employer of unorganized labour next to agricultural sector [5]. The construction sector in India has contributed ₹1,965,550 million to the GDP at factor cost in 2006–07, marking an increase of 10.7% from the previous year

and the sector 's share to GDP has increased from 6.1% in 2002–03 to 6.9% [6]. About 16% of the India's working population largely relays on construction industry for earning livelihood and the Indian construction industry providing employment to about 31million people and creates assets worth over ₹ 200,000 million in every year [7]. Nowadays the construction industry in India is facing the problem of shortage of labour. The number of skilled labourers in the construction sector has gradually declined from 15.34% in 1995 to 10.57% in 2005 at the same time the proportions of unskilled workers have gone up from 73.08% in 1995 to 82.45% in 2005. The construction labourers are seems most vulnerable segments of the unorganized sector as there is no adequate job opportunity and income for them [8].In Kerala, the structural transformation of women's activity has indeed taken place in the state with primary sector losing its importance and tertiary sector taking up its place [9]. The peculiarity of women employment in Kerala is their high proportion in the service sector. In Kerala, there is 0.63% increases in women labour force in 2001 and out of that 24.3% are participating in the construction sector [10]. Kannur is one of the northern and one of the most urbanized districts in Kerala. Due to its geographical, political and economic situation, 47% of people are primarily engaged in construction activities. There is 1.7% increase in women participation in construction sector out of 17.8 percent increase in women labour force [11].

2. Statement of the problem

Kerala has made exemplary progress on labour welfare front but the occupational statuses of the women working in the unorganized sector are very weak. The women construction worker faces different socio- economic problems and also many work-related health problems. Women workers are mostly unskilled casual manual labourer. They are employed in construction sites for carrying bricks, cement, sand, water, digging earth, mixing cement and breaking stone. The women are given common chores including transporting of materials around the site. They are rarely found in male-dominated skill trades like carpentry, masonry, plumbing, electrical wiring. There is wage disparity between the male and female workers. Women labourers are paid fewer wages. The government has enacted "Building and other Construction Workers Act, 1996 for the benefit of workers. The illiterate workers are not aware of their rights provided in the act. The risk involved in construction work is very high particularly for women workers who have to climb great heights with the load on their heads. Accidents involving simple injury occur almost every day, while fatal accidents occur occasionally. The major cause of accidents is falling from great heights, falling of heavy objects or collapsing of ladders. Long working hours, lack of proper nourishment, lack of safe drinking water are some of the occupational hazards due to which women are not being able to work for longer periods. Safety risks, health hazards, low wages, poor working conditions are some of the problems faced by the women labourers. They are not aware of their legal rights ensured by the Government. The study intends to analyze the socio-economic condition of women construction workers in Kannur district and a special emphasis was given on investigating health hazards and other work related problems.

3. Objectives of the study

The specific objectives of the study are:

- 1. To examine the socio economic profile of the women workers in Kannur district.
- 2. To examine the working condition and occupational health hazards of the women workers.
- 3. To list out the problems faced by the women workers in the family and society.

4. Methodology

The study has relied upon both primary and secondary data. Primary data were collected randomly from 50 women workers in Kannur municipality. To collect information about the socio-economic condition, problems at workplace and health hazards of the workers, a well-structured schedule was used. The workers are directly met from their workplace mostly during lunch break and observed their working condition. Secondary data were obtained from various sources such as ILO, Economic Review, government reports, journals, and books. Simple percentage analysis and regression analysis was used to interpret the data.

5. Results and discussions

According to the 2011 census Kannur district has a population of 2,525,637. The district has a population density of 852 inhabitants per square Kilometer (2,210/sq mi) [12]. Its population growth rate over the decade 2001-2011 was 4.84 percent. Kannur has a sex ratio of 1133 females for every 1000 males. The literacy rate is 95.41 percent. Now Kannur is one of the most important investment destinations of the people, especially in construction and real estate. The majority of construction site works are of a temporary nature. The present study focused on the construction industry which is a crucial one as far as Kannur district is concerned. Construction workers are habited Kannur district from early periods since this area has rich late rite stone mines. There are many problems like health problems, social security problems, problems of wage etc are prevailing among construction workers.

5.1. Age composition

Workers are classified into five age groups which are depicted in Table 1. Out of 50 samples, the majority workers belong to 45-50 followed by 26 percent are in the 50-55 age group. It is inferred from the table that 11 percent of workers are included in the age group of 40-45. Only 8 percent of workers are belonging to the age group of 50-55 and 4 percent of workers are in the age group of 35-30. From the total sample, none of them belongs to the age group of below 30. It could be clear that the new generation is not interested in working in the construction field. As far as the marital status is concerned, it is revealed that among the 50 samples, 72 percent workers are married and they are living with their husband. 14 percent are the widow and 12 percent are unmarried. Only 2 percent workers are divorced.

Table 1. Distribution of the respondents by age

Age	No of female workers	Percentage
30-35	0	0
35-40	4	8
40-45	11	22
45-50	14	28
50-55	8	16
55-60	13	26
Total	50	100

Source: Primary Data

5.2. Educational status

Education is an important factor that is capable of determining the economic as well as social status in everyone's life. In this case, we are looking whether the workers are educated or not. Table 2 shows the education status of the women workers. About 50 percent of the workers having primary education whereas 46 percent are secondary educated and 4 percent of workers are illiterate. The majority of the workers are primary educated. Poor educational status coupled with the absence of bargaining power has resulted in the problem of low levels of wages and income accruing to workers. Lack of education has also meant very poor levels of awareness of rights among the workers.

Table 2. Educational status of the respondents

Education	No of female workers	Percentage
Illiterate	2	4
Primary	25	50
Secondary	23	46
Graduate	0	0
Total	50	100

Source: Primary Data

5.3. Monthly income

Construction workers are wage earners and their wage is fixed in nature. The daily wage is given either every Saturday or when the work is completed. Mostly in Kannur areas, the wage has been given on

Saturdays. Table 3 shows that 48 percent of the respondents have earned an income of 4000-6000 and 24 percent of the workers come under the category of 2000-4000. Only 12 percent of the workers' income is above 10000.

Table 3. Classification of the respondents on the basis of monthly income

Monthly Income	No of female workers	Percentage
2000-4000	12	24
4000-6000	24	48
6000-8000	5	10
8000-10000	3	6
Above 10000	6	12
Total	50	100

Source: Primary Data

5.4. Expenditure pattern

The expenditure pattern of the workers and their family is represented in the Table 4.It is inferred from the table that only small percent of workers spent amount between Rs 1000-1500 per month. About 24 percent of the workers spend ₹. 1500-2000 and 26 percent of workers belonging to ₹. 2000-2500. About 40 percent of the workers have come under the category of above 2500. It is revealed that the propensity to consume is very high.

5.5. Membership in SHG

Table 4. Monthly expenditure of the family

Monthly expenditure	No of female workers	Percentage
1000-1500	5	10
1500-2000	12	24
2000-2500	13	26
2500and above	20	40
Total	50	100

Source: Primary Data, 2016

Nowadays, SHG has got more importance, and also many women are joining and actively participate to various activities of SHGs. Table 5 shows the number of workers are engaged SHGs activities. It is found that 52 percent of the workers have membership in the SHG while 48 percent are not a member of SHGs.

Table 5. Classification on the basis of membership in SHG

SHG	No of female workers	Percentage
Yes	26	52
No	24	48
Total	50	100

Source: Primary Data, 2016

5.6. Seasonal employment

There are many jobs which are seasonal. In this case, availability of construction work construction work seems to be limited in monsoon whereas continues job availability in the summer and winter seasons. Table 6 exhibits the seasonality of construction work. 60 percent of the workers opined that the employment is not seasonal while 40 percent of the workers opined that work is seasonal in nature. It is noted that they are ready to go for other works such as beedi work, stitching, NREGP etc. during the off-season.

Table 6. Seasonality of the work

Employment seasonal	No of female workers	Percentage
Yes	20	40
No	30	60
Total	50	100

Source: Primary Data

5.7. Time of work

Table 7. Classification of workers according to their working hours

Time of work	No of female workers	Percentage
Below 8 hours	4	8
8 hours	36	72
Above8 hours	10	20
Total	50	100

Source: Primary Data, 2016

Each work is having a time schedule. Normally, maximum hours of time are regarded as eight hours but in the unorganised sector it has not prevailed. It is possible to categorize the hours of work into three- below eight hours, eight hours and above eight hours. The classification of workers as per their daily hours of work is exhibited in the Table 7. The statutory laws in the organized set up expect the workers to work for 8 hours per day. Construction workers asked to work more than 8 hours. From the Table 7, it clear that 72 percent of the workers are work for 8 hours while 20 percent of the workers belong to the category of overtime (above 8 hours). There are some workers working below 8 hours.

5.8. Occupational status

The construction sector consists of a series of work which are collectively called construction work. The works such as carpentry, stone work, roof work, electrical work, tile/bricks/block works and concrete works, etc. Women are employed in construction sites for carrying bricks, cement, sand, water, digging earth, mixing cement and breaking stones. From these categories, the sample respondents are classified into four on the basis of their work.

Table 8. Classification of construction workers by occupation

Type of work	No of female workers	Percentage			
Sand	2	4			
Stone	9	18			
Concrete	20	40			
All of the above	19	38			
Total	50	100			

Source: Primary Data, 2016

It is shown in the Table 8 that about 40 percent of the workers are engaged in concrete work, 38 percent of the workers are in carrying stone and 38 percent of the workers do all the work. Lowest percent of workers are engaged in sand work (4 percent). The workers carry 40-80 stone in a day and also the weight of the cement slack is about 50kg. One of the main hindrances for the workers is the distance to the workplace. When the distance of the workplace becomes too far the effort taken by the workers should also become very high. It is implied that the distance between workplace is categorized into four and most of the workers are coming from above 11 kilometres. While the distance between works place of some others is in the category of 1-4 kilometer. 32 percent of the workers are having a distance of 4-8 (16 percent) and 8-11 (16 percent) kilometer. Women workers find it very difficult to travel a long distance and then get into work. Also, it makes very difficult to manage their household activities. To achieve in their targeted place there is a need of the mode of conveyance. About 42 percent of the workers use bus as their conveyance and some

prefer both bus and walking (40 percent). Only 18 percent of the workers walk to their construction site. No accommodation facility is given to the workers.

5.9. Saving habit

Saving habit is very essential in the life of each person which allocated from income with an expectation to meet future benefit and needs. Here, we look the saving habit of the women workers in a month which is shown in Table 9. That out of 50 samples, 42 percent of the workers have the saving in between the ₹. 500-1000 whereas 36 percent of the workers save the amount of 0-500 rupees/month. Only 6 percent of the workers save more than 1500. Most of the workers use their salary for family expenditure. So their marginal propensity to consume is very high and marginal propensity to save almost zero.

Table 9. Monthly saving habits of the respondents

Saving	No of female workers	Percentage
Nothing	2	4
0-500	18	36
500-1000	21	42
1000-1500	6	12
Above 1500	3	6
Total	50	100

Source: Primary Data, 2016

5.10. Regression analysis of income and saving pattern

1. Hypothesis testing

H0: The marginal propensity to save is low for the women construction workers. Related to income and saving pattern of the women construction workers, the following regression line is fitted. Simple regression model is used in this context as shown in Table 10.

 $S_i = \alpha + \beta Y_i + U_i$

Where, S = Saving

Y = Income, The estimated result is $S = 482.3 + 0.02Y_i$

Table 10. Regression analysis

			I able 1	.u. Regressic	ni alialysis			
Regression Stat	tistics							
Multiple R	0.129							
R Square	0.016							
Adjusted R	-0.003							
Square								
Standard	419.18							
Error	9							
Observations	50							
ANOVA								
	Df	SS	MS	F	Significance			
					F			
Regression	1	1435149	143514.9	0.816	0.370			
Residual	48	8434535	175719.5					
Total	49	8578050						
	CoEfficit	Standad	t Stat	P- value	Lower95%	Upper95%	Lower	Upper 95.0%
	S	Error					95.0%	
Intercept	482.29	126.21	3.82	0.0003	228.51	736.07	228.51	736.07
X Variable 1	0.0186	0.020	0.903	0.370	-0.022	0.060	-0.022	0.0602

This means that suppose their income is 100 then they save only 2 rupees from that. It can be stated that their income is mainly used for consumption purpose. So that we accept the H_{\circ} the marginal propensity to save of the women construction worker is low.

5.11. Debt of the respondents

Each person takes loan for many purposes due to low income and the workers are not able to meet their needs with their limited income. The debt status of women construction workers is shown in Table 11. The debt burden of construction workers shows that about 82 percent of the workers are in debt trap whereas 18 percent of workers have not taken any loan from bank or other financial institutions. The debts are taken for different purposes including buying vehicle, for construction of house, marriage, education, etc. Table 12 shows that about 38 percent of workers have taken loan for constructing house. 10 percent of the workers have taken loan to meet health care expenditure and 10 percent for the education of the children. 8 percent of workers have taken loan for marriage purposes of their children. The main reason for their debt is inadequacy of income and growing expenditure.

Table 11. Distribution of workers by debt

Debt	No of female workers	Percentage
Yes	41	82
No	9	18
Total	50	100

Source: Primary Data, 2016

Table 12. Purpose of debt

Purpose	No of female workers	Percentage
Health care	5	10
Construction	19	38
Education	5	10
Marriage	4	8
Others	8	16

Source: Primary Data, 2016

5.12. Problems of the construction workers

Construction workers stick to their profession, even though construction activity forms part of the unorganized sector. Among the sample workers, 50 percent of the workers are having experience of 10-20 years and 26 percent of them having only below 10 years experience and 16 percent are having 20-30 years work experience and 8 percent of them are having experience of more than 30 years. There are so many problems which are faced by the workers in the construction sector. These problems are categorised under two heads-health problems and financial problems which is shown in the Table 13.Almost all the workers are suffering from health problems while 82 percent among them faces financial problem. 30 percent of the workers face other problems such as shortage drinking water facility and sanitary facility, poor living condition, long hours of work, gender discrimination and low wage.

Table 13. Distribution on the basis of problems faced by Construction workers

Problem	No of female workers	Percentage
Health Problem	50	100
Financial Problem	41	82
Others	15	30

Source: Primary Data, 2016

5.13. Health problems

For women, the work in the construction sector is too risky and also there are so many problems faced by them at work place. Health problems related constitute the major problem for women workers because they are physically poor. The main health problems faced by them are given in Table 14.It is depicted in the table that out of the 50 samples, all are suffering from anyone of the health problems. About 60 percent of the workers having muscle pain and 12 percent of the workers are suffering from allergy. Workers who face

the problem of coughed are 10 percent and asthma and breathing problem are found among 10 percent of workers. It could be noted that 8 percent of the workers are suffering from all these problems. If all workforces are suffering from health related problem, there will be a significant impact on productivity.

Table 14. Distribution of workers according to reported health complaints

Health Problem	No of female workers	Percentage
Muscle pain	28	60
Allergy	6	12
Asthma and breathing	5	10
Cough	5	10
All of the above	4	8
Total	50	100

Source: Primary Data, 2016

5.14. Nature of hospital

There are many hospitals available in the district such as private hospitals, government hospitals etc. The preference of the hospital by the worker is shown in the Table 15. Majority of the workers have preferred government hospital due to the availability of free medicine and free checkups. And also their financial status makes them incapable to afford costly treatment from private hospital. 8 percent prefer primary health centre and 4 percent prefer both private and government hospitals.

Table 15. Nature of hospital, construction workers preferred

radio 201 Hataro di Hospital, della della Horitaro presenta		
Hospital	No of female workers	Percentage
Government	42	84
Private	2	4
Primary health centres	4	8
Both Government and Private	2	4
Total	50	100

Source: Primary Data, 2016

5.15. Medical insurance

Provision of adequate social protection of workers engaged in informal sector is emerging as an important policy consideration throughout the world. Healthy and unhygienic work sites were major contributory factors towards health insecurity. Absence of adequate protection mechanism evolved either by the state or by the employers compounded the risk bearing confronted by the workers. As we know that the work is so risky in the construction industry there should be a need of taking a medical insurance. Table 16 reveals that about 72 percent of the workers in the sample are deprived of health security. Only 28 percent of workers are belonging to the group of having insurance. The construction work is highly risky, even though health is the important determinant of their jobs but most of them are not taking any health insurance policies, it is because of they are not aware of the health insurance.

Table 16. Distribution of workers on the basis of medical Insurance

Medical insurance	No of female workers	Percentage
Yes	14	28
No	36	72

Total	50	100
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Source: Primary Data, 2016

5.16. Wage of the respondents

The wages given to the workers per day varies place to place and work site to work site. Table 17 shows that out of 50 samples, 38 percent of the workers have received the wages of ₹. 450 per day. 24 percent of the workers have only ₹. 400 wages per day. 22 percent of the respondents have got a wage of ₹. 500 per day while only 12 percent of the workers have got a wage of ₹. 600. And also 2 percent of workers have wage more than ₹. 600 per day. Table 18 shows the distribution of the respondents on the basis of gender discrimination in wage. It is clear from the table that 50 workers argued that there exists wage difference between men and women.

Table 17. Distribution on the basis of wage

Wage Class (in Rs.)	No of female workers	Percentage
400/day	12	24
450/day	19	38
500/day	11	22
550/day	1	2
600/day	6	12
650/day	1	2
Total	50	100

Source: Primary Data, 2016

Table 18. Discrimination in wage

Wage difference	No of female workers	Percentage
Wage Discrimination Exist	50	100
No Wage Discrimination	0	0
Total	50	100

Source: Primary Data, 2016

There are no much differences in the working hours of both men and women but they are not getting equal wages. On the other hand, wage satisfaction is considered, only 18 percent of the workers are satisfied with their wage whereas 82 percent of the workers are not satisfied. They have to work 8 hours and some are working for more than 8 hours. Least percentage of workers satisfied with the wage. They complain that they are not getting a wage for their effort. The membership of the women workers in the welfare board shows that almost 70 percent of the workers have membership and about 30 percent of the workers not having a member in the welfare board. About 45.71 percent of the workers benefited from the board, some of the benefits are cash award, financial assistance for the marriage of their children, educational aid for SSLC students, etc. On the other hand, 54.2 percent of the workers are not benefited. It is found that out of total respondents, 52 percent of the workers are aware of the welfare programs given by the construction welfare board whereas 48 percent workers are not aware of it.

6. Suggestions

- 1. Provide awareness about different welfare scheme to workers and need to have an adequate intervention from the government authorities required ensuring the health, safety and welfare of the construction workers.
- 2. Encourage the construction workers saving habit through initiating banking awareness and ensure adequate insurance facilities for the construction workers.
- 3. Ensure equal wage for the work in the unorganised sector and renew the wages yearly
- 4. Give proper guidelines and awareness about medical insurance, various schemes and financial support,

programme offered through welfare board and initiative workers to take membership in the welfare board.

- 5. To create regulatory body or a grievance redressal to handle various issues, problems and complaints of women workers in the construction field.
- 6. Lack of skill and higher education are the matters to prefer this risky job by women workers. Providing training and skill development will helps them to choose better jobs.

7. Conclusion

The construction industry in India stands as an important contributor of the development as it creates investment opportunities across the various related sectors. Construction industry has been providing seven percent of total world employment. Literacy rate, life expectancy and many other indicators show that Kerala women are far ahead of their counter parts in the rest of India. Female employment has been regarded as a central vehicle related to improvement in women status. According to Census 2011, there were 14 districts, 63 TALUKS, 520 towns and 1018 villages in the State of Kerala. The total population of Kerala is 3,34,06,061 with 1,60,27,412 males and 1,73,78,649 females and the total number of households in Kerala is 78,53,754. The females work participation rate is 18.23 percent. On the other hand, census data on Kannur district has shown that the district has a population of 2,525,637 and 31 percent (about 5 lakh) population engaged in either main or marginal works. It could be emphasised that about 50 percent male and 14 percent female population are working population. The provision of adequate social protection for workers engaged in informal sector is emerging important policy considerations throughout the world especially for women; it is in this context that an attempt whose made in this study to examine the question of social protection for informal sector through an analysis of factors like working conditions, security of employment etc. The study was based on empirical information generated through a primary survey in Kannur district. It should be recognized that the workers need to have a good working condition, receive a minimum wage and access to a minimum amount of social security.

The main problems faced by them are the lack of security, there is no security for their life in the working site. Some other problems faced by them are the health and financial problems. There is a working of a welfare board for the construction workers while many are not aware of this scheme and also the members in this board are unaware of the benefits. The $\chi 2$ test result shows that the wage is not paid based on the age or the years of experience of the workers. The workers need the safeguard for their life and also getting a maximum benefit from their work this is because to support their family and children. There is a scope to conduct an in depth study in future to know the working condition of the women construction workers.

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