

# A STUDY ON PROBLEMS RELATING TO WORKING CONDITIONS AND SOCIO-ECONOMIC CONDITIONS OF CONSTRUCTION WORKERS IN THOOTHUKUDI DISTRICT

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## Abstract

In Economic terms, the construction Industry plays an important role through wide range of operations and projects. It contributes to the growth and development of virtually all other economic sectors. In India It provides for a significant source of direct employment, especially for semi- skilled or unskilled workers, through which a substantial part of ‘the poor’ men as well as women, are able to earn an income. Construction Industry is the second largest employer of human resource, after the agricultural sector providing employment to 33 million people. It provides employment to 14 per cent of employable citizens of the country and also forms an important part of Indian Economy contribution. Due to the advent of industrialization and recent developments, this industry is taking a pivotal role for construction of buildings, roads, bridges and so forth. The workers engages in this industry are victims of different occupational disorders and psychosocial stresses. In India, they belong to the organized and unorganized sectors. However, data in respect to occupational health and psychosocial stress are scanty in our country. It is true that a sizable Number of the workforce is from the unorganized sectors. The working hours are more than the stipulated hours of work – the work place is not proper- the working conditions are non-congenial in most of the cases and involve risk factors. Their wages are also not adequate, making it difficult for them to run their families. In this backdrop the researcher has chosen this topic to study Income and Expenditure pattern and demographic functionaries of the construction workers in Thoothukudi District.

**Key Words:** Construction Industry, unorganized sectors, semi- skilled, unskilled

## Introduction

In India construction Industry is the second largest employer of human resource, after the agricultural sector providing employment to 33 million people. It provides employment to 14 per cent of employable citizens of the country and also forms an important part of Indian Economy contributing about 12 per cent of the GDP. The present asset creation potential of the Industry is estimated at Rs.310, 00 crores contributing its share of 12 per cent to the GDP. The increasing need for the housing and nationwide infrastructure development assures the quantum growth of the Industry. The construction sector is set to grow at a rate of 15 per cent

as a result of the ongoing industrialization, urbanization and growing need for better Infrastructure Nation wide. The construction Industry has string linkages with other industries such as cement, steel, tiles and other materials of the kind. The Industry major encompasses the sectors of real estate, infrastructure and Industrial construction and the activity that exclusively take place in these three sectors constitute the activity in the sphere of construction Industry.

The construction industry is scattered all over the world. It provides large volume of employment. Under the successive five year plans, the importance of construction work has increased manifold in terms of employment generation. Due to the advent of industrialization and recent developments, this industry is taking a pivotal role for construction of buildings, roads, bridges and so forth. The workers engages in this industry are victims of different occupational disorders and psychosocial stresses. The construction workers are confronted with a number of major and minor problems. The seasonal variations in construction activities like the rainy season affect their activities considerably. Consequently, several spells of unemployment occur. The rate of inflation and high cost of construction materials, distribute bottle necks due no such causes as lorry strikes or other social unrests disturb work and several days of work and income are lost. They are victims of headache, backache, joint pains, skin diseases, lung disorders like silicosis, other Muscular skeletal disorder and so on. The repetitive Nature of the work causes boredom and the disproportionate earning compared to the requirements puts them under psychological stress and strain and other abnormal behavioral disorders.

### **Objectives of the study**

1. To analyse the income and expenditure pattern of construction workers.
2. To analyse the wage structure and working conditions of the construction workers.
3. To summarize the findings and suggestions based on the analysis of the study.

### **Methodology**

This study is conducted in Thoothukudi district. The construction workers work under private contractors. In the matter of selection of respondents equal importance is given to categories of employees. Similarly both men and women workers make their living through this profession. So equal proportionate importance in given to male and female workers.

### **Sampling method**

In the study area the number of construction workers is 32,894. The Researcher collected only 400 samples by adopting simple random sampling method.

### **Monthly income of the family**

The earnings of a construction worker has a great significance in the determination of the standard of living of the construction workers family. A construction worker household is not only receiving income from construction work but also from other allied activities like business, agriculture and Government job. The following table shows the monthly income of the family of construction workers in Thoothukudi district.

**Table 1.1**  
**Monthly Income wise Classification of Construction Workers**

Monthly income	Designation of Construction Workers					Total
	Contractors	Mastery	Mason	Male Helpers	Female Helpers	
Below Rs.10000	-	-	44 (30.3)	42 (67.7)	74 (100)	160 (40.0)
Rs.10000-15000	6 (15.0)	31 (39.3)	79 (54.5)	20 (32.3)	-	136 (34.0)
Rs.15000-20000	9 (22.5)	37 (46.8)	22 (15.2)	-	-	68 (17.0)
Above Rs.20000	25 (62.5)	11 (13.9)	-	-	-	36 (9.0)
<b>Total</b>	<b>40</b>	<b>79</b>	<b>145</b>	<b>62</b>	<b>74</b>	<b>400(100)</b>

Source: Primary data

Note: Figures within the brackets indicate percentage to total

From this table it is understood that among 400 respondents, the largest percentage (40%) are earning monthly income of below Rs.10,000. Among contractors, the largest group (62.5%) of respondents are earning monthly income of above Rs.20,000. Among mastery, the largest group (46.8%) of respondents are earning monthly income of Rs.15,000-20,000. Among mason, the largest group (54.5%) of respondents are earning monthly income of Rs.10,000-15,000. Among male and female helpers, the largest group of respondents are earning monthly income of below Rs.10,000, they are 67.7% and 100% respectively.

#### Number of days working in a month

The number of days working in a month differs from one worker to another worker. The number of working days depends upon the health conditions, availability of work and other conditions. The following table shows the number of days working by the construction workers.

**Table 1.2**  
**Number of days working in a month by Construction Workers**

Number of days working in a month	Designation of Construction Workers					Total
	Contractors	Mastery	Mason	Male Helpers	Female Helpers	
Below 20 days	1 (2.5)	13 (16.5)	35 (24.1)	29 (46.8)	19 (25.7)	97 (24.2)
21 days	3 (7.5)	10 (12.7)	18 (12.4)	5 (8.1)	3 (4.1)	39 (9.8)
22 days	4 (10.0)	15 (18.9)	30 (20.7)	11 (17.7)	20 (27)	80 (20.0)
23 days	4 (10.0)	7 (8.9)	13 (9)	3 (4.8)	1 (1.4)	28 (7.0)
24 days	6 (15.0)	20 (25.3)	44 (30.3)	13 (20.9)	20 (27)	107 (26.8)
25 days	12	7	3	1	1	24

	(30.0)	(8.9)	(2.7)	(1.6)	(1.4)	(6.0)
26 days	10	5	-	-	10	25
	(25.0)	(6.3)			(13.5)	(6.2)
<b>Total</b>	<b>40</b>	<b>79</b>	<b>145</b>	<b>62</b>	<b>74</b>	<b>400(100)</b>

Source: Primary data

Note: Figures within the brackets indicate percentage to total

From this table it is understood that among 400 respondents, the largest percentage (26.8%) are working 24 days in a month. Among contractors, the largest group (30%) of respondents are working 25 days in a month. Among mastery, mason and female helpers, the largest group of respondents are working 24 days in a month, they are 25.3%, 30.3% and 27% respectively. Among male helpers, the largest group (46.8%) of respondents are working below 20 days in a month.

### Wages of Construction Workers

Wages of construction workers differs from one to another depending upon the nature of work. Generally contractors, mastery and masons are earning higher wages than helpers. The following table shows the wages of different designation of construction workers.

**Table 1.3**  
**Wages of Construction Workers**

Wages	Designation of Construction Workers					Total
	Contractors	Mastery	Mason	Male Helpers	Female Helpers	
Below Rs.300	-	-	-	04 (6.5)	24 (32.4)	28 (7.0)
Rs.300-400	-	-	-	26 (41.9)	38 (51.4)	64 (16.0)
Rs.401-500	-	-	16 (11.0)	32 (51.6)	12 (16.2)	60 (15.0)
Above Rs.500	40 (100)	79 (100)	129 (89.0)	-	-	248 (62.0)
<b>Total</b>	<b>40</b>	<b>79</b>	<b>145</b>	<b>62</b>	<b>74</b>	<b>400(100)</b>

Source: Primary data

Note: Figures within the brackets indicate percentage to total

From this table it is understood that among 400 respondents, the largest percentage (62%) are getting the wages of above Rs.500. Among contractors, mastery and mason, the largest group of respondents are getting the wages of above Rs.500, they are 100%, 100% and 89% respectively. Among male helpers, the largest group (51.6%) of respondents are getting the wages between Rs.401-500. Among female helpers, the largest group (51.4%) of respondents are getting the wages between Rs.300-400.

### Source-wise Distribution of Non-Consumption Expenditure

The following table shows the source wise distribution of non-consumption expenditure.

**Table 1.4**  
**Source-wise Distribution of Non-Consumption Expenditure**

Designation	Non-Consumption Expenditure					
	Wedding	Festivals	Loan Repayment	Home maintenance	Others	Total
Contractors	5250 (42.59)	2675 (21.70)	800 (6.49)	1100 (8.92)	2500 (20.28)	12325 (21.16)
Mastery	2750 (26.69)	2600 (25.24)	1900 (18.45)	1250 (12.14)	1800 (17.47)	10300 (17.68)
Mason	4215 (29.24)	2400 (16.65)	3200 (22.19)	850 (5.89)	3750 (26.01)	14415 (24.75)
Male Helpers	2100 (18.92)	1700 (15.32)	4300 (38.74)	550 (4.95)	2450 (22.07)	11100 (19.00)
Female Helpers	1850 (18.32)	1400 (13.86)	4100 (40.59)	450 (4.45)	2300 (22.77)	10100 (17.34)
Total	16165 (27.67)	10775 (18.50)	14300 (24.55)	4200 (7.21)	12800 (21.98)	58240

From this table it is understood that among 400 respondents, the largest percentage (27.67%) spend for wedding. Among contractors, mastery and mason, the largest group of the respondents spend for wedding, they are 42.59%, 26.69% and 29.24%. Among male helpers and female helpers, the largest group of the respondents spend for loan repayment, they are 38.74% and 40.59%.

#### **Problems relating to working conditions among construction workers of different gender group**

Construction workers of different gender group face problems relating to working conditions at different level. The mean score of construction workers of different gender group on each statement obtained was calculated separately. In order to find out the significant difference among the construction workers of different gender group regarding the problems relating to working conditions, data relating to the problems relating to working conditions of the construction workers were collected and the 't' test was administered with the null hypothesis as, **there is no significant difference in the problems relating to working conditions based on different gender group of the construction workers.** The resulted mean scores for construction workers of different gender group on the problems relating to working conditions and the respective 'T' statistics are presented in Table.

**Table 1.5**  
**Problems relating to working conditions based on different gender group of construction workers**

I. No	Problems	Gender Group (Mean Score)		T Statistics
		Male	Female	
1.	Bad treatment at worksite	3.6227	3.6415	0.179
2.	Very short leisure time	3.6542	3.6226	0.721
3.	Hard and very difficult work that are doing	3.7462	3.6730	0.310
4.	Unhygienic condition exists in the working place	3.6234	3.5912	0.758

5.	Existence of non-democracy in construction works	3.7005	3.6352	0.591
6.	Construction employees are not adjustable	3.5838	3.5975	0.118
7.	Feel unhappy to come to the working place every day in the morning	3.5025	3.5472	0.391
8.	Poor friendship with co workers	3.3976	3.4591	0.538
9.	Proper training is not given before entering the main occupation	3.4112	3.7723	2.429*

**Source: Derived Data**

\*-Significant at 5 per cent level

From the above table, it is understood that the important problems relating to working conditions among the male construction workers are hard and very difficult work that are doing and existence of non-democracy in construction works as the mean scores are 3.7462 and 3.7005 respectively. The above table further reveals that the important problems relating to working conditions among the female construction workers are hard and very difficult work that are doing and bad treatment at worksite as the mean scores are 3.6730 and 3.6415 respectively. Table shows that a significant difference for the different gender group of construction workers was identified regarding the problems relating to working conditions such as proper training is not given before entering the main occupation since the respective “T” statistics were significant at 5 per cent level.

#### **Problems relating to working conditions based on different age groups of the construction workers**

Construction workers who belong to different age groups face problems relating to working conditions at different level. Nine different problems relating to working conditions were identified and given in the table. The mean score of different age groups of construction workers on each statement obtained was calculated separately. In order to find out the significant difference in problems relating to working conditions based on different age groups of construction workers, ANOVA was attempted with the null hypothesis as, **there is no significant difference in problems relating to working conditions based on different age groups of construction workers.** The resulted mean score of the different age groups of construction workers on the problems relating to working conditions and the respective ‘F’ statistics are presented in Table.

**Table 1.6**  
**Problems relating to working conditions based on different age groups of Construction workers - ANOVA**

I. No	Problems	Age Group (Mean Score)					F Statistics
		Below 25 years	26-35 years	36-45 years	46-55 years	Above 55 years	
1.	Bad treatment at worksite	3.9412	3.7000	3.6452	3.5813	3.5736	0.522
2.	Very short leisure time	3.7752	3.7635	3.7214	3.6500	3.4706	0.394
3.	Hard and very	3.6977	3.6667	3.6393	3.6287	3.5882	0.096

	difficult work that are doing						
4.	Unhygienic condition exists in the working place	3.8217	3.7667	3.6650	3.5924	3.1765	1.629
5.	Existence of non-democracy in construction works	3.9500	3.8605	3.6355	3.6129	3.5294	2.787*
6.	Construction employees are not adjustable	3.7364	3.6667	3.6471	3.5517	3.5337	0.674
7.	Feel unhappy to come to the working place every day in the morning	3.7287	3.6333	3.4956	3.3941	3.1765	1.815
8.	Poor friendship with co workers	3.6434	3.4164	3.3500	3.2956	3.1176	1.747
9.	Proper training is not given before entering the main occupation	3.6357	3.6167	3.4428	3.3153	3.0000	2.587*

**Source: Derived Data**

\*-Significant at 5 per cent level

From the above table, it is understood that the important problems relating to working conditions are existence of non-democracy in construction works and bad treatment at worksite among the construction workers who are in the age group of below 25 years as the mean score is 3.9500 and 3.9412 respectively. The table further clearly shows that the important problems relating to working conditions are existence of non-democracy in construction works and unhygienic condition exists in the working place among the construction workers who are in the age group of 26 to 35 years as their mean score is 3.8605 and 3.7667 respectively. The table further reveals that the important problems relating to working conditions in the age group of 36 to 45 years are very short leisure time and unhygienic condition exists in the working place since the mean score is 3.7214 and 3.6650 respectively. The table further indicates that the important problems relating to working conditions in the age group of 46 to 55 years are very short leisure time and hard and very difficult work that are doing since the mean score is 3.6500 and 3.6287 respectively. Further it is found that the important problems relating to working conditions for the age group of above 55 years are hard and very difficult work that are doing and bad treatment at worksite as the mean score is 3.5882 and 3.5736 respectively. A significant difference among the construction workers of different age groups were identified regarding the different problems relating to working conditions such as existence of non-democracy in construction works and proper training is not given before entering the main occupation since the respective "F" statistics were significant at 5 per cent level.

### Problems relating to working conditions based on marital status of the construction workers

Construction workers who belong to different marital status face problems relating to working conditions at different level. The mean score of different marital status of construction workers on each statement obtained was calculated separately. In order to find out the significant difference in problems relating to working conditions based on different marital status of construction workers, 't' test was attempted with the null hypothesis as, **there is no significant difference in problems relating to working conditions based on different marital status of construction workers.** The resulted mean score of the different marital status of construction workers on the problems relating to working conditions and the respective 't' statistics are presented in Table.

**Table 1.7**  
**Problems relating to working conditions based on different marital status of Construction workers – 't' test**

I. No	Problems	Marital Status (Mean Score)		T Statistics
		Married	Unmarried	
1.	Bad treatment at worksite	3.9286	3.9091	1.097
2.	Very short leisure time	3.9826	3.7273	0.224
3.	Hard and very difficult work that are doing	3.8571	3.8387	0.651
4.	Unhygienic condition exists in the working place	3.9643	3.8287	0.739
5.	Existence of non-democracy in construction works	3.8571	3.7261	0.868
6.	Construction employees are not adjustable	3.8214	3.7727	0.806
7.	Feel unhappy to come to the working place every day in the morning	3.8074	3.7273	1.045
8.	Poor friendship with co workers	3.8909	3.8636	4.111*
9.	Proper training is not given before entering the main occupation	4.0909	3.8929	3.340*

**Source: Derived Data**

\*-Significant at 5 per cent level

From the above table, it is understood that the important problems relating to working conditions are proper training is not given before entering the main occupation and very short leisure time among the construction workers who are married as the mean score is 4.0909 and 3.9826 respectively. The table further clearly shows that the important problems relating to working conditions are bad treatment at worksite and proper training is not given before entering the main occupation among the construction workers who are unmarried as their mean score is 3.9091 and 3.8929 respectively. A significant difference among the construction workers of different marital status were identified regarding the different



problems relating to working conditions such as poor friendship with co workers and proper training is not given before entering the main occupation since the respective “t” statistics were significant at 5 per cent level.

### **Problems relating to working conditions based on different educational qualification of the construction workers**

Construction workers who belong to different educational qualifications face problems relating to working conditions at different levels. The mean score of different educational qualifications of construction workers on each statement obtained was calculated separately. In order to find out the significant difference in problems relating to working conditions based on different educational qualifications of construction workers, ANOVA was attempted with the null hypothesis as, **there is no significant difference in problems relating to working conditions based on different educational qualification of construction workers.** The resulted mean score of the different educational qualification of construction workers on the problems relating to working conditions and the respective ‘F’ statistics are presented in Table.

**Table 1.8**  
**Problems relating to working conditions based on different educational qualification of Construction workers - ANOVA**

I. No	Problems	Educational Qualification (Mean Score)				F Statistics
		Primary	Secondary	Degree	Uneducated	
1.	Bad treatment at worksite	3.7000	3.6493	3.2105	3.5641	0.734
2.	Very short leisure time	3.8083	3.7292	3.4737	3.6410	0.773
3.	Hard and very difficult work that are doing	3.5500	3.6354	3.6789	3.6546	0.472
4.	Unhygienic condition exists in the working place	3.4917	3.6563	3.0526	3.6821	2.535*
5.	Existence of non-democracy in construction works	3.6583	3.6389	3.8947	3.7692	0.413
6.	Construction employees are not adjustable	3.5417	3.6250	3.5263	3.5641	0.117
7.	Feel unhappy to come to the working place every day in the morning	3.2833	3.5938	3.5789	3.5692	1.604
8.	Poor friendship with co workers	3.2083	3.5137	3.2632	3.3949	1.272
9.	Proper training is not given before entering the main occupation	3.6042	3.8947	3.4256	3.3014	2.769*

**Source: Derived Data**

\*-Significant at 5 per cent level

From the above table, it is understood that the important problems relating to working conditions are very short leisure time and bad treatment at worksite among the construction workers who are primary educational qualification as the mean score is 3.8083 and 3.7000 respectively. The table further clearly shows that the important problems relating to working conditions are proper training is not given before entering the main occupation and very short leisure time among the construction workers who are secondary educational qualification as their mean score is 3.8947 and 3.7292 respectively. The table further reveals that the important problems relating to working conditions among the construction workers who are degree qualification are existence of non-democracy in construction works and hard and very difficult work that are doing since the mean score is 3.8947 and 3.6789 respectively. The table further indicates that the important problems relating to working conditions among the construction workers who are uneducated are existence of non-democracy in construction works and unhygienic condition exists in the working place since the mean score is 3.7692 and 3.6821 respectively. A significant difference among the construction workers of different educational qualification were identified regarding the different problems relating to working conditions such as unhygienic condition exists in the working place and proper training is not given before entering the main occupation since the respective "F" statistics were significant at 5 per cent level.

**Findings**

- Majority (40%) Construction Workers are earning monthly income of below Rs.10,000. Among contractors (62.5%) of respondents are earning monthly income of above Rs.20,000.
- Majority (26.8%) Construction Workers are working 24 days in a month, among (30%) of contractors working 25 days in a month
- (62%) Construction Workers are getting the wages of above Rs.500, Among Construction Workers 100% of contractors and mastery daily wage is above 500.
- It is observed that most (27.67%) Construction Workers spend their earnings for wedding.
- It is observed that the problems relating to working conditions among the male construction workers are hard and that are doing very hard work and existence of non-democracy in construction works as the mean scores are 3.7462 and 3.7005 respectively.
- It is analyzed that the problems relating to working conditions are existence of non-democracy in construction works and bad treatment at worksite among the construction workers who are in the age group of below 25 years as the mean score is 3.9500 and 3.9412 respectively.

- The problems relating to working conditions are proper training is not given before entering the main occupation and very short leisure time among the construction workers who are married as the mean score is 4.0909 and 3.9826 respectively.
- It is observed that the problems relating to working conditions are very short leisure time and bad treatment at worksite among the construction workers who are primary educational qualification as the mean score is 3.8083 and 3.7000 respectively

### Suggestion & Conclusion

Construction sector falls on unorganized sector, unorganized workers mean they are not able to organize themselves in their work. The wage of construction workers is determined according to the market trend but it should be determined according to their talent. Their wage level is not fair while compare to their work. The workers strive hard to save their earning and majority of the workers saves their money in bank. It shows even though they find difficult to save their money they save their earnings through bank. The workers are facing huge problem regarding salary level and job security. The leisure time of the workers must be increased and there should be a humane treatment at the worksite. To solve all these problems the workers must register themselves in the construction workers federation and create a union to safeguard them.

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