

## PROFILE OF CONSTRUCTION WORKERS IN KERALA

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### ABSTRACT

This paper intends to examine the profile of the sample workers in Kerala- both members and non-members. The socio economic status of the people is usually determined by their relative position in various prestige hierarchies like education, income level, size of family, *etc.* This paper analyses data relating to the profile of the sample respondents. For the purpose of the study, a member means a construction worker who has enrolled to the Kerala Building and Other Construction Workers Welfare Fund Board (KBOCWWFB) and a non-member means a worker who works in the construction field but not enrolled to the Board. The statistical technique of Chi-square test was used to analyze the significant difference of various parameters between the members and non-members as well as among different districts.

**Key words:** Kerala state, members and non-members, skilled and unskilled workers, head worker, wage fixation.

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## INTRODUCTION

Kerala, the southwest end of the Indian sub-continent, with a relatively low Per Capita Income (PCI) but with high degree of social development was a matter of great interest to social scientists and administrators for the last three decades. It has the second highest density of population (819 persons per sq.km) among all states in India. The state sustains about 3.1 per cent (Census 2001) of the country's population, even though its share in the geographical area is comparatively less (1.2 per cent). The declining trend of the rate of population growth since 1981, a high average age at marriage, high level of acceptance of family planning practices, a relatively low and slowly declining mortality rate, low death rate, a high degree of population mobility and steady improvement in the health indices of the state are comparable with that of even developed countries. The state is known for its vast reservoir of an educated labour force and a sizeable number of work forces working in the gulf countries and other western countries, there by earning a substantial amount of foreign exchange for the country by way of inward remittances.

Workers belonging to the unorganized sector also dominate labour market in Kerala as elsewhere in India. The total workforce in Kerala as per 2001 census is 10.3 million. Out of these only 12.8 per cent work in the organized sector, the remaining 87 per cent of labour force work in the unorganized sector. Further, like other parts of the country, consequent upon the economic reforms initiated by the Government in 1991, significant number of organized labour has been transferred to the unorganized sector from the organized sector.

### Personal Profile of the Sample

The sample consists of a total of 2000 construction workers selected from four districts. It includes 1000 workers enrolled to the Board (members) and 1000 workers not enrolled to the Board. The selected four districts are Thiruvananthapuram as the capital of Kerala State, Ernakulam as the construction activities take place on a mass scale, Malappuram as the people spent a major portion of their earnings from gulf countries on construction activities and Wayanad as the construction has less significance.

### Sex wise distribution of the sample

Sex is an important factor that determines the role of a worker in construction industry.

Usually female workers in this sector are employed mainly as unskilled workers or helpers. These female workers will remain as a 'helper' in this sector till their retirement or death. There is no practice of employing women workers in this sector as skilled or main workers at any time. They are generally entrusted with the preliminary works like loading and unloading or carrying of materials required for the work, washing and cleaning of tools before starting and after completion of the work. It is one sector where the discrimination in wages to women still exists. Though they do the same work as that of male workers, they only get their normal wage rate which is less than that of male helpers. For example, in Malappuram District female helpers in the construction sector will get only Rs 150 per day while male helpers get Rs 200 per day. Thus, those female workers who want to undertake skilled work and upgrade their skill, this sector is not an attractive one.

**Table 1 Sex wise distribution of the sample (in percentage)**

<i>Sex</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Member	81.10	18.90	100.00
Non-Member	90.10	9.90	100.00
Total	85.60	14.40	100.00

Source: Survey Data

Table 1 shows that male dominate the sector in both the cases of members and non-members. However, the female participation in the case of members is double when compared to the non-members.

#### **Age wise distribution of the sample**

Age is the key variable in the unorganized sector of employment. It indicates the maturity and experience in the work situation. Construction is an activity, which requires much physical stamina and effort. Hence this work can be done only by people of younger age. The age composition of the respondents is presented in Table 2.

**Table 2 Age wise distribution of the sample (in percentages)**

<i>Age (in years)</i>	<i>14-20</i>	<i>21-40</i>	<i>41-50</i>	<i>51-60</i>	<i>Above 60</i>	<i>Total</i>
Member	3.10	48.90	31.30	14.70	2.00	100.00
Non-Members	4.30	68.20	17.90	9.60	0.00	100.00

Total	3.70	58.55	24.60	12.15	1.00	100.00
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Source: Survey Data

Majority of the employees, both members and non-members, are in the age group of 21-40, the age of youth and the age in which the physical power is maximum. The figure 4.1 shows the age wise distribution of the sample.

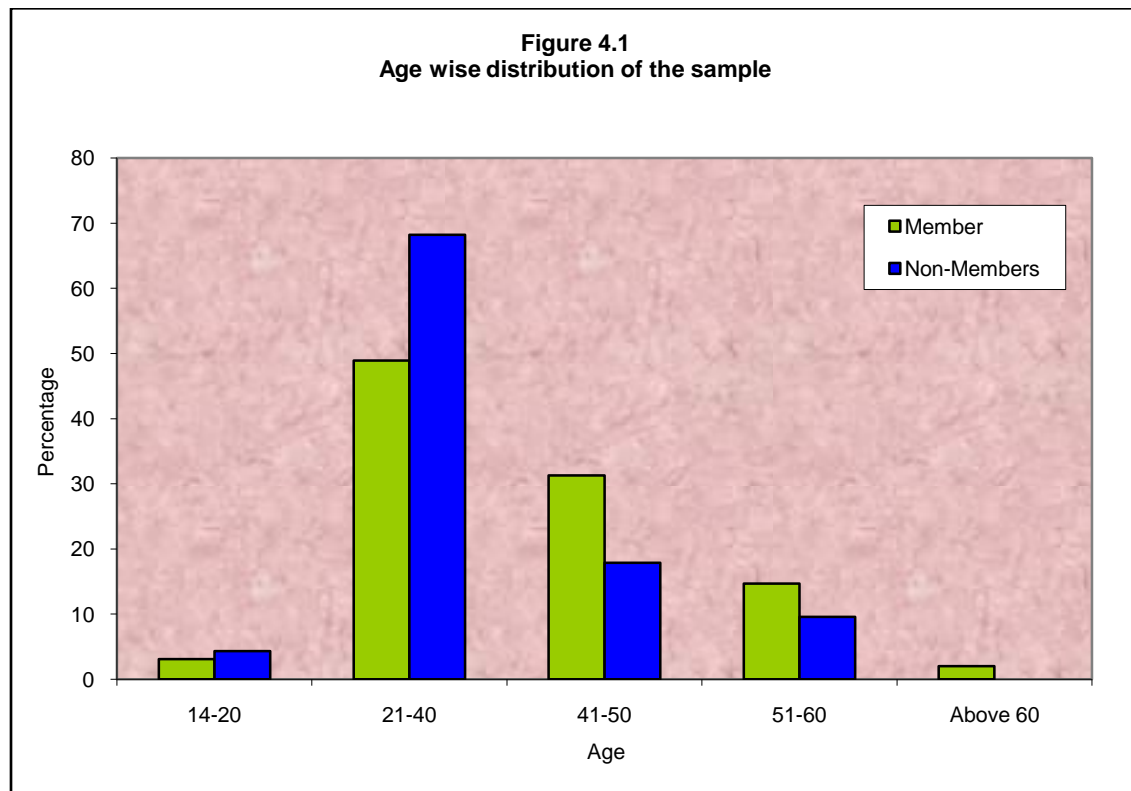


Figure 4.1 shows that majority of the workers are in the prime working age of 21-50 and there is a decreasing trend in the number of workers when there is an increase in age. It is quite natural that when a person gets aged, he has to leave the labour market. Moreover in construction sector, workers have to do very hard and difficult jobs which require better health and physique. This can be ensured only at young age. Thus it can be assumed that age and health restrict them to continue in the sector for a longer period.

#### Religion wise distribution of the sample

As a secular state religious composition does not have much significance in India. However, religion had great influence in this sector in the past. Many of the jobs like masoning, wood works, metal works *etc* were reserved to certain castes like *perumannan*, *vishwakarma*,

black smiths *etc.* But now this tendency is changing. Workers belonging to different caste and communities are working in this sector.

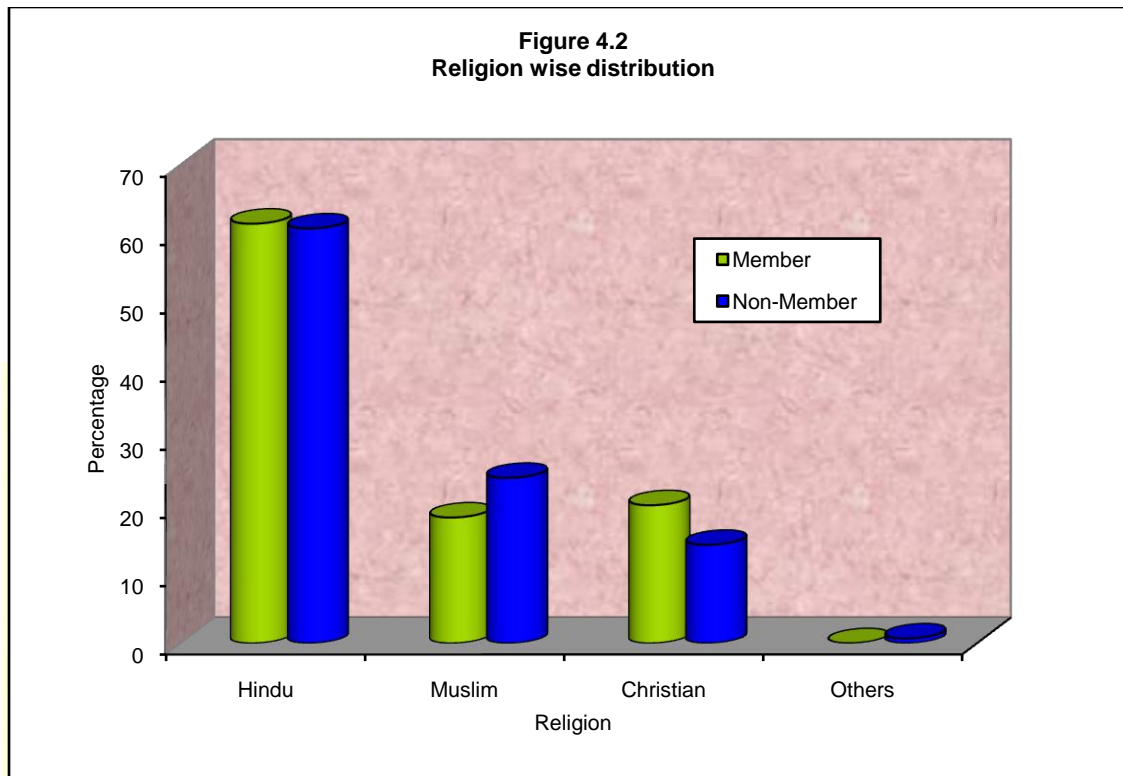
**Table 3 Religion wise distribution (percentage)**

<i>Religion</i>	<i>Hindu</i>	<i>Muslim</i>	<i>Christian</i>	<i>Others</i>	<i>Total</i>
Member	61.40	18.40	20.20	0.00	100.00
Non-Member	60.70	24.20	14.40	0.70	100.00
Total	61.05	21.30	17.30	0.35	100.00

Source: Survey Data

As shown in Table 3 the survey data revealed that out of 2000 workers, 61.05 per cent were Hindus, 21.30 per cent Muslims, 17.30 per cent were Christians and 0.35 per cent belonged to others; this include mainly by those who are not ready to disclose their religion. In the case of Muslims, the second largest religion in the state, the percentage of enrollment to the Board is the least- only 18.40 per cent. This may be due to lack of political awareness and organization among the Muslim workers. Among members Christian community occupy second, but among non-members Muslim community rank second.

Figure 4.2 show the religious composition of the sample workers, both members as well as non-members.



**Type of family**

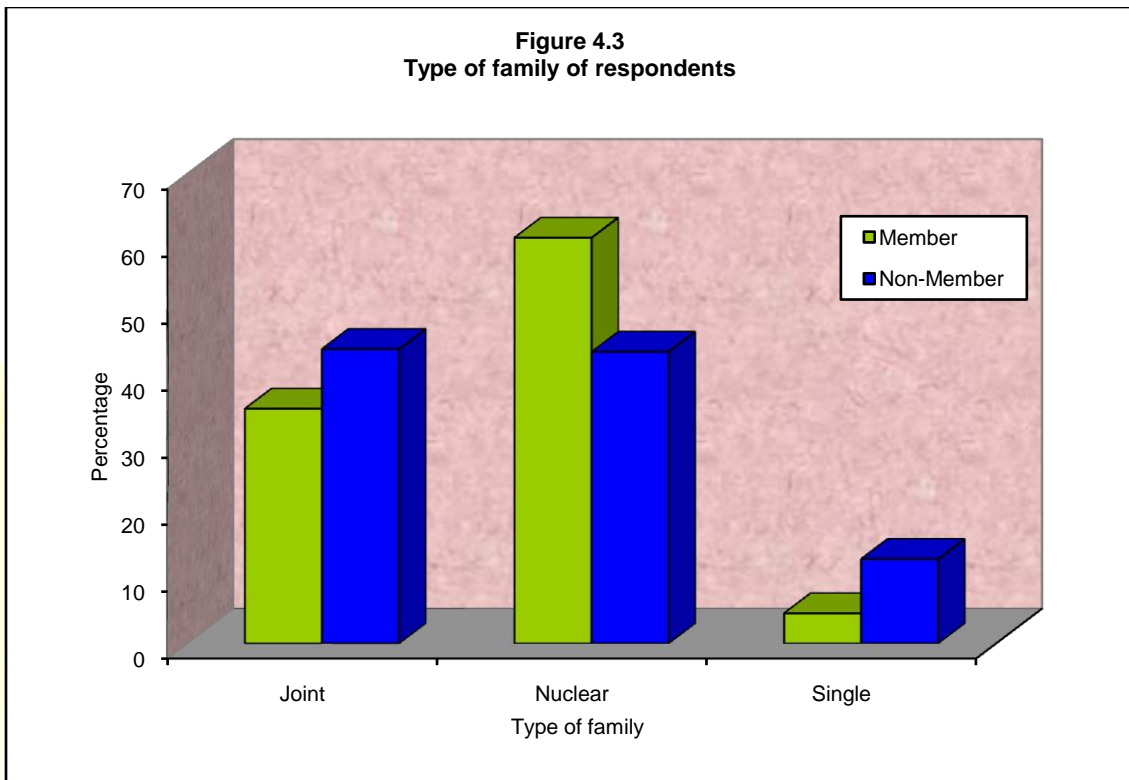
The developments in science and technology also affected the pattern of family system in the society. The era of joint family system has gone and this is the age of nuclear families. The nature of family-single, nuclear or joint is considered to be an important economic indicator of the socio-economic progress.

**Table 4 Type of family (percentage)**

Type of family	Joint	Nuclear	Single	Total
Member	35.00	60.50	4.50	100.00
Non-Member	43.90	43.50	12.60	100.00
Total	39.45	52.00	8.55	100.00

Source: Survey Data

From the Table 4 it can be seen that 60.50 per cent of members and 43.50 per cent of non-members are nuclear families. Figure 4.3 shows the type of family of respondents.



### Dependent members

Number of dependent members is a major factor influencing the economic status of the workers. It also affects the work participation rate. Table 5 shows the number of persons who depend up on the workers for their livelihood.

**Table 5 Number of members depending on the workers (percentage)**

<i>Number of Dependents</i>	<i>Members</i>	<i>Non-members</i>	<i>Total</i>
No dependents	1.50	1.80	1.65
1-2	43.50	35.40	39.45
3-4	40.50	41.20	40.85
5-7	12.70	16.60	14.65
Above 7	1.80	5.00	3.40
Total	100.00	100.00	100.00

Source: Survey Data

It is also observed that the calculated value of Pearson Chi-square = 28.8982,  $df = 4$ ,  $p = 0.000008$ . Since  $p < 0.05$  there exist highly significant difference among members and non-members with regard to the number of dependent persons to be supported.

#### Other earning members in the family

The survey also analyzed the number of independent earning family members living along with the workers (Table 6).

**Table 6 Number of Independent members in the family (percentage)**

<i>Number of Independents</i>	<i>Member</i>	<i>Non-members</i>	<i>Total</i>
No Independents	26.10	14.10	20.10
1-2	63.50	59.00	61.25
3-4	8.90	18.60	13.75
5-7	1.50	7.20	4.35
Above 7	0.00	1.10	0.55
Total	100.00	100.00	100.00
Pearson Chi-square: 120.033, $df = 4$ , $p = .000000$			

Source: Survey Data

Further, as the calculated  $p$  value is less than 0.05, it can be concluded that there exist highly significant difference among members and non-members in respect of the number of independent members in their family.

#### Nature of work performed

Nature of work performed, skilled or unskilled, main worker or helper is an important factor influencing the wage rate, income level and the socio-economic status of an employee. For the purpose of the study the construction workers have been defined as those who have to use their physical stamina as part of their work. Thus, Engineers, Architects, Site Supervisors, Electro-Mechanical workers have been excluded from the purview of the study. For analytical purpose the workers are classified in to seven categories, which include skilled workers like Masons, Carpenters, RCC or Concrete Workers, Wiremen, Painters and Unskilled workers like helpers and Others (Table 7).



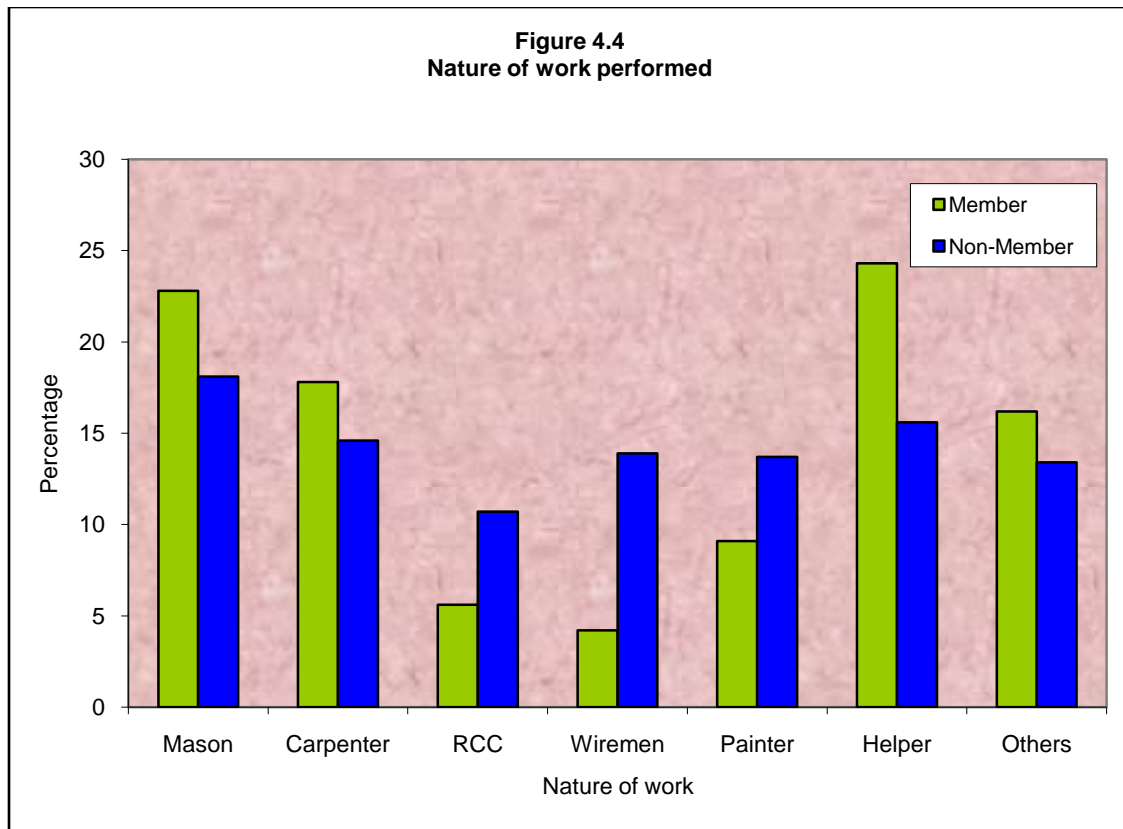
**Table 7 Classification of Workers according to the work done (percentages)**

<i>Nature of work</i>	<i>Member</i>	<i>Non-Member</i>	<i>Total</i>
Mason	22.80	18.10	20.45
Carpenter	17.80	14.60	16.20
RCC	5.60	10.70	8.15
Wiremen	4.20	13.90	9.05
Painter	9.10	13.70	11.40
Helper	24.30	15.60	19.95
Others	16.20	13.40	14.80
Total	100.00	100.00	100.00

Source: Survey Data

From Table 7 it can be seen that about two-fifth of the members are enrolled to the Board as unskilled workers in the category of helpers and others. The lower per cent enrollment of certain categories of employees suggests the need for awareness to enhance the enrollment of workers belonging to these categories.

The nature of work performed by the sample workers is presented in Figure 4.4.



Further the p value (0.00) is less than 0.05, which shows that significant differences exist between the members and non-members regarding the nature of work performed.

### Experience in the Work

The employment in this sector requires some experience and therefore, usually workers enter in to this sector as helpers or unskilled workers till learning the job. Earlier, it took 3 to 4 years to study the job and workers worked as helpers during this period along with their parents and relatives. During this period these workers get only a lower wage, though the skilled worker collect full wage from the employers. Thus, this is the period during which the workers are exploited by their co-workers or skilled workers. But this situation has changed. Now it takes only one or two years for getting proficiency in the work. This is partly due to the caliber or absorption capacity of the workers and partly due to the increasing demand of the skilled workers in this field which give chance to even semi skilled workers to work as skilled. The percentage wise experience in the work is presented in Table 8.

**Table 8 Experience in the work (percentage)**

<i>Experience as</i>	<i>Member</i>	<i>Non-member</i>	<i>Total</i>
Unskilled	99.4	99.3	99.35
Skilled	62.7	82.7	72.7
Head worker	13.8	22.1	17.95

Source: Survey Data

After becoming skilled worker, some efficient skilled worker may become as head worker by employing some employees under them. They take some subcontract or piecework on contract basis from the employers or main contractors. There fore, this is a step towards becoming a contractor. The study found that only 17.95 per cent of workers, 13.8 per cent of members and 22.10 per cent of non-members worked as head worker.

**Experience as unskilled worker**

Almost cent percent of the workers, 99.4 per cent of members and 99.3 per cent non-members, started their work in this sector as unskilled workers or helpers. This includes both men and women.

**Table 9 Experience in unskilled worker (percentage)**

<i>Unskilled Worker in years</i>	<i>Member</i>	<i>Non-members</i>	<i>Total</i>
Below 5	62.68	85.10	73.88
5-10	15.39	9.16	12.28
10-15	9.56	2.22	5.89
15-20	5.03	1.01	3.02
20-25	2.82	0.40	1.61
25-30	2.01	0.91	1.46
30 Above	2.52	1.21	1.86
Total	100.00	100.00	100.00

Pearson Chi-square: 148.279, df = 6, p = . 000000

Source: Survey Data

The Table 9 shows that majority of the members and non-members have the experience of unskilled worker only for a period of less than 5 years. The percentage of members having experience of 5 to 10 years is 15.39, 10 to 15 years is 9.56 and 15 to 20 years is 5.03. In the case of non-members, only 15 per cent has an experience of more than 5 years; 9.16 per cent have an experience of 5 to 10 years, 2.22 per cent have an experience of 10 to 15 years, and the remaining 3.53 per cent have experience of more than 15 years in this sector as unskilled worker. It was found that they were mostly female workers who have no chance of becoming a skilled worker.

Further, the Pearson Chi-square is 148.279, at  $df = 6$ ,  $p = .000000$ ; which is less than 0.05 showing that the difference between members and non-members in their experience as unskilled worker is significant.

### Experience as skilled worker

Construction sector is a sector which requires much experience and skills, and hence this sector finds it difficult to get skilled workers. There is no difficulty to find job opportunities to the skilled workers in the sector. Compared to the members, the percentage of non-members is higher with regard to experience of skilled work. Only 62.7 per cent of members have the experience of skilled work, while 82.7 per cent of the non-members have the experience of skilled work.

**Table 10 Experience as skilled worker (percentage)**

<i>Skilled worker (in years)</i>	<i>Member</i>	<i>Non-members</i>	<i>Totals</i>
Below 5	27.59	37.97	33.49
5-10	34.29	29.38	31.50
10-15	15.95	13.06	14.31
15-20	11.32	7.01	8.87
20-25	6.54	4.96	5.64
25-30	2.87	7.01	5.23
Above 30	1.44	0.60	0.96
Total	100.00	100.00	100.00

Pearson Chi-square: 39.5871, df=6, p=. 000001

Source: Survey Data

Table 10 shows that the majority of members worked as skilled worker for 5 to 10 years while majority of non-members worked as skilled worker for less than 5 years. Out of the remaining members 27.59 per cent of the workers worked as skilled worker for less than 5 years, 2.87 per cent worked for 25 to 30 years and 1.44 per cent worked for more than 30 years as skilled worker. On the other hand, in the case of non-members 29.38 per cent of the workers worked as skilled worker for 5 to 10 years and 13.06 per cent worked for 10 to 15 years.

The study also found that Pearson Chi-square is 39.5871, at df = 6, p = .000001, which is less than 0.05, showing the significant difference exist among members and non-members regarding the years of experience as skilled worker.

### Experience as head worker

After some years of skilled work, the workers in this sector lead other skilled, semi skilled and unskilled workers. There will be a gang of workers under them consisting of all categories of workers. They will find job to the workers in their gang and may charge a commission for this from the workers or from the employers. The individual workers need to search jobs individually. The Head workers also provide training to the entrants, but the new entrants are treated only as apprentices.

**Table 11 Experience as head worker**

Head worker (years)	Member	Non-members	Totals
Below 5	61.59	57.47	59.05
5-10	26.09	17.19	20.61
10-15	10.14	19.91	16.16
15 above	2.17	5.43	4.18
Total	100.00	100.00	100.00

Pearson Chi-square: 10.6731, df = 3, p = .013641

Source: Survey Data

As given in Table 8 the study found that only 17.95 per cent of workers, 13.8 per cent of

members and 22.1 per cent of non-members have the experience of Head Worker. Out of these 61.59 per cent of the members and 57.47 per cent of non-members have the experience of head worker only for less than 5 years, 26.09 per cent of members and 17.19 per cent of non-members have the experience of head worker for 5 to 10 years, 10.14 per cent of members and 19.91 per cent of non-members have the experience of 10 to 15 years as head worker and only 2.17 per cent of members and 5.43 per cent of non-members have the experience of head worker for more than 15 years.

From the study it was also found that 38.73 per cent of Head workers trained 11 to 15 workers, 23.67 per cent trained up to 5 workers under them. The percentage of Head workers who trained above 15 workers is 19.18 and that of 6 to 10 workers is 18.42.

**Basis of wage fixation**

Mainly there are three types of wage payment in this sector.

**Time rate**

This is the common form of wage payment in which wages is paid on the basis of time, mainly number of days worked by the worker.

**Piece Rate system**

Under this system the payment is made on the basis of the units or quantity of work done. Different units of measurement as shown in Table 12 are used to measure the work done by the employer.

**Task rate**

This is a type of contract work in which the employer or contractor offers to the worker a fixed amount for completion of a specified work.

**Table 12 Units of measurement of different types of work**

<i>Sl No</i>	<i>Type of Work</i>	<i>Units of measurement</i>
1	Foundation and Basement	Cubic feet
2	Late rite or stone work/mason work	Number of stones
3	Wood works–frames and doors of windows and doors	Number of pieces
4	Concrete work	Cubic feet/ or square feet

5	Industrial work/grill work	Kilo grams
6	Plastering work	Square feet
7	Marble/Granite/Tile work	Square feet

Source: Field observation.

From Table 12 it can be seen that the square feet is mainly used for masonry and tile works. Number of stones is also used for some mason work. For concrete work both square feet and cubic feet are used. In the case of carpentry like windows, doors *etc.* number of pieces is counted to determine the wages.

The study shows that 67.30 per cent of members and 61.50 per cent of non-members get wages on time basis, 20.30 per cent of members and 19 per cent of non-members get wages on piece work basis, and 9.10 per cent of members and 17.50 per cent of non-members on task basis.

### Level of Education

Educational qualification is an important variable, which determines the quality of work as well as the socio-economic status of an individual. Further, the participation of employment in the broader socio economic context of society has become feasible only through education. Education also provides the necessary equipment for entering in to the job market especially in the formal and organised sector.

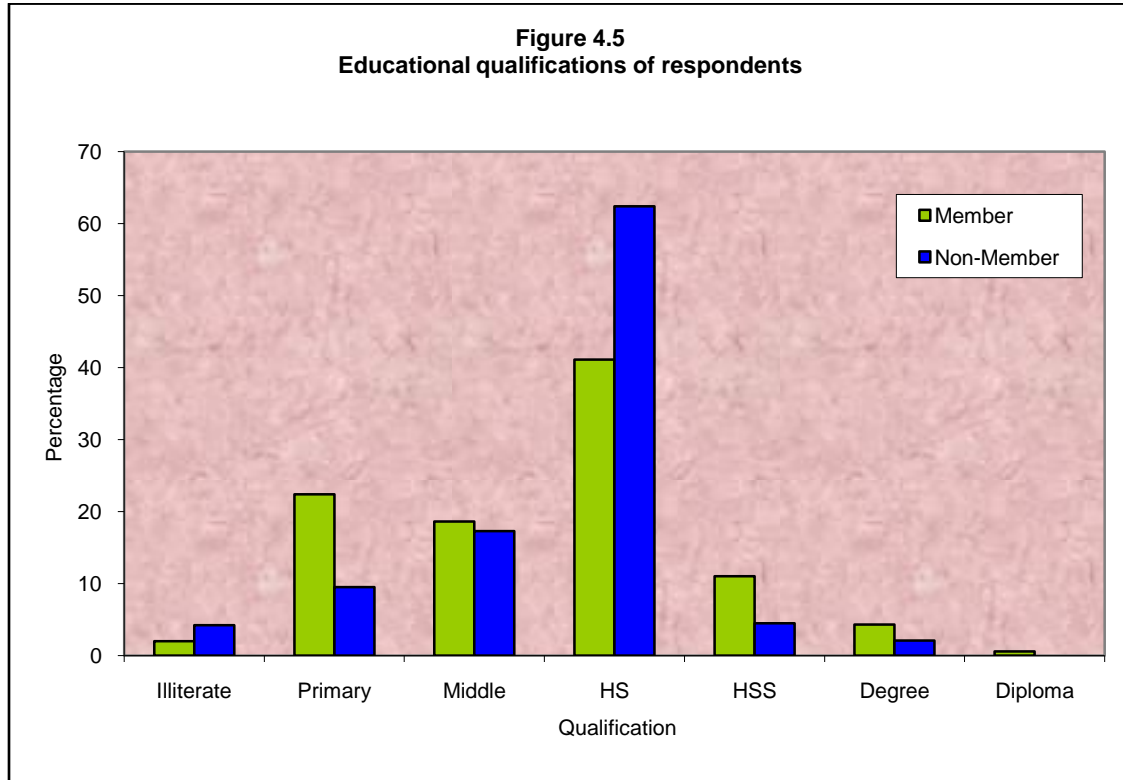
**Table 13 Educational qualification of respondents (percentage)**

	Illiterate	Primary	Middle	HS	HSS	Degree	Diploma	Total
Member	2.00	22.40	18.60	41.10	11.00	4.30	0.60	100.00
Non-Member	4.20	9.50	17.30	62.40	4.50	2.10	0.00	100.00
Total	3.10	15.95	17.95	51.75	7.75	3.20	0.30	100.00

Source: Survey Data

As per Table 13 only 2 per cent of the members and 4.2 per cent of the non-members are

illiterates. The highest per cent of illiterates is in the district of Malappuram and Wynad followed by Ernakulam. More than half of the respondents have qualification up to high school level. This enables them to make simple calculations related to their work. This is evident from Figure 4.5.



It may be also be noted that there are no workers in the sector with post graduation showing that this job does not require the service of such highly qualified persons. Further, highly qualified persons are reluctant to work in the construction sector.



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