

A Study On Employee Welfare Measures In Construction Industry In India

P.Chandrasekaran, P.Ganeshprabhu

Abstract: In India, the welfare benefit to the employees whether it be statutory or voluntary is available only to the workers employed in formal sector, who are hardly 10%. Left over 90% of the labors, who are more than 40 crores in number, and employed in unorganised / informal sector like construction, agriculture industry is either deprived their rights. In this project, an attempt has been made to study of the welfare measures available in construction industries. The statistics have been composed through primary survey by administering a detailed questionnaire to section of the employees selected at random. The percentage analysis is used to know the satisfaction level of the employees regarding welfare measures as suggested in the Factories Act, 1948.

Key words: Job, Labour, Productivity, Safety, Satisfaction, Security, Wages, Welfare

1. INTRODUCTION

Human resource is an significant factor in the growth of the construction industry and therefore understanding the labour behavior is very much essential to progress the effectiveness of production (Ganeshprabhu et. al 2016). Labour is considered to be most essential of a nation as they make all prosperity from natural assets and is the pillar for the development of the nation. Utilization of any resource largely depends on the efforts and the worth of the labour assets of the nation. Labours are essential as they need to operate the machineries and equipment. They holding responsibilities and modernizing new procedure in order to increase the effectiveness of the process and enable a nation to get industrially developed. Building and Construction industry is familiar as the unorganized sector involving financial activity after agriculture in India with massive temporary and casual labour. Such industries make demand for both skilled and semi-skilled labour power. The labors face inherent risk to life/vital body parts due to job-related dangers with lack of basic facilities and insufficient welfare amenities. Lack of safety, lack of skills, lack of quality materials, low wages, communication barriers like that mostly make mental pressure to the labours and it totally disturbs the labour production efficiency (P.Ganeshprabhu et al. 2015) The proprietors benefit from fulfilled personnel as they are more likely to revenue from lower staff income and higher productivity if their workers knowledge a high level of job satisfaction (Spector 1997). However workforces are fulfilled with some work provision necessities, most of the labors are very displeased with working situation and work benefit of the work provision requirement (Humphrey Danso 2012).

In spite of statutory requirements and enforcing agencies in the welfare amenities were absent and hence welfare examination and empowerment of welfare examiners are essential (Koshan 1975). Women building workers stated that labour welfare benefits and schemes were not at all appropriate to them (Tikoo et all 2013). An administration's necessity to attract and hold valued workers in a highly competitive labour market is a strong inspiring factor for increased administrative awareness and action with regard to implementation and management of Work life Balance WLB policies (Helen De Cieri et al 2007). The female workforces that they were not provided with any basic facilities except drinking water on the sites and the women workers were engaged in unskilled jobs (manually carrying/transferring construction materials) facilities except drinking water on the sites) (SEWA 2000)

The Government of India passed the legislation namely, Building and Other Construction Workforces (Regulation of employment and conditions of services) Act, 1996 but not enforced properly. According to the Report of the Committee of Labour Welfare setup by the Government of India in 1969, labour welfare refers to "the measures, which promote the physical, psychological and general well-being of the working population.

2 OBJECTIVES OF THE STUDY

- To study the current welfare measures adopted by the organization.
- To recognize the impact of the welfare measures upon the worker's health and productivity.
- To pin point disparity in the existing welfare facilities.
- To identify the place of deviation in the implementation of welfare measurers from the statutory regulation of the Factories Act.
- To recommend suitable remedies related to welfare problem so as to increase the job satisfaction and productivity.

3 METHODOLOGY

The methodology followed in the project work is formulated in the form of flow chart as below

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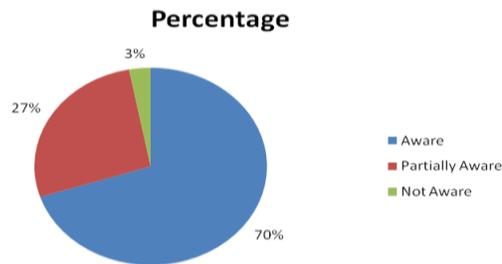
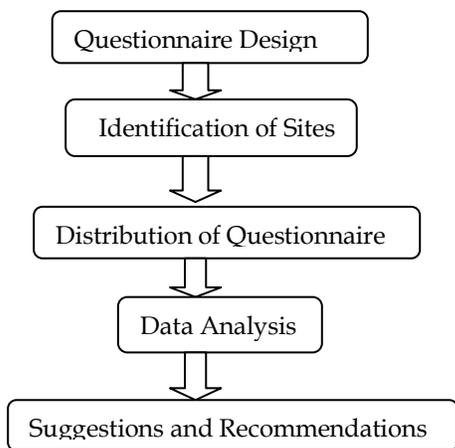


Fig. 1. Welfare Measure Awareness among Labourers

From Fig 6.1, it can be observed that nearly 97% of the labourers are aware and partially aware about the existing welfare measures. This implies that they have enough information regarding the welfare measures and hence they can accurately specify their level of fulfillment in various welfare measures showed in the survey. The overall satisfaction level of welfare measures provided in the working area of the respondents are represented in the form of chart as shown in Fig 6.2

4 QUESTIONNAIRE DESIGN

The investigation is carried out by framing a questionnaire and conducting a survey among numerous employees in nine construction firms to know about their view regarding the level of fulfillment in the welfare measures provided by their organization. Six point Likert scale is used in which the scale ranges from 0 to 5 with the level of satisfaction varying from highly dissatisfied to highly satisfy. The various categories of welfare measures analyzed in the questionnaire are as follows

- Statutory welfare measures
- Non-statutory welfare measures
- Wages and Leave
- Safety measures
- Recreation facilities
- Social security measures

Apart from the above listed welfare measures, the impact of these welfare measures is also analyzed.

5. WEIGHTED MEAN AVERAGE AND PERCENTAGES METHOD

The data examination is carried out by finding the weighted mean average of various provisional amenities under each category of welfare measures. For easier interpretation, the weighted mean average is converted into percentage score using the formula $\text{percentage score} = (\text{Mean score} - 1) \times 25$. It is carried out by making an assumption that mean score of 1 corresponds to 20 percent, 2 corresponds to 40 percent, 3 to 60 percent, 4 indicates 80 percent and finally 5 denotes 100 percent.

6 DATA ANALYSIS AND INTERPRET ION

The welfare measures awareness among the employees is recognized from the survey and is presented in the form of chart in Fig 6.1

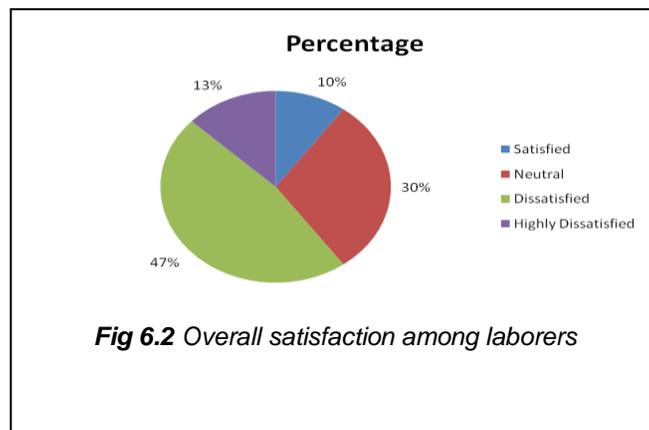


Fig 6.2 Overall satisfaction among laborers

From Fig 6.2, it can be inferred that only 10% of respondents are satisfied with the existing welfare measures provided in their working area, while nearly 50% are dissatisfied. This shows that the welfare measures must be enhanced for the satisfaction of the laborers to provide a better working environment.

7.1 STATUTORY WELFARE MEASURES

Table 7.1 Statutory Welfare Measures-Satisfaction

Provisional Facilities	Weighted Mean Average score	Percentage
Canteen	3.72	68
Rest rooms	4.20	80
Drinking water	4.38	85
First aid	4.31	83
Sitting Facilities	3.89	72
Lighting	3.93	73
Washing	3.46	62
Accommodation	4.11	78
Medical Facilities	3.96	74
Transport Facility	3.55	64
Overall Mean	3.95	74

From the table 7.1, it can be inferred that the level of satisfaction of restrooms, Drinking water and First aid facilities

are above 80%. On the other hand, canteen, washing and transport facilities are in the range of 60 to 70%, while lighting, sitting, and medical and accommodation facilities are in the intermediate range of 70 to 80 percentage. Overall a satisfactory level of 74% is achieved in the statutory welfare measures among the respondents. These are the basic important amenities to be provided for the laborers to relieve them from their job stress and provide a healthy atmosphere. The relation between the numerous provisional amenities and their corresponding weighted mean average score is expressed in the form of graph as shown in Fig 7.1

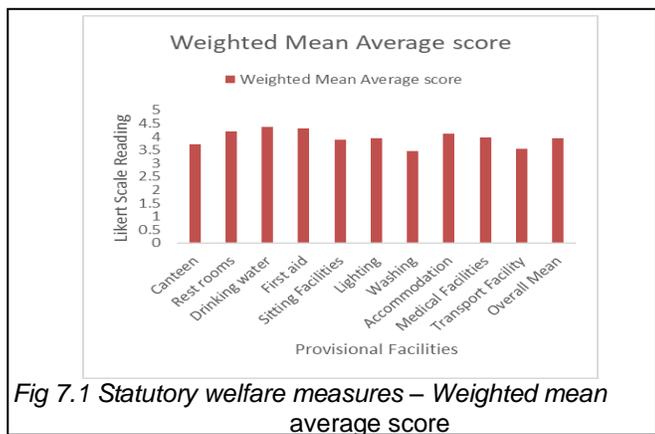


Fig 7.1 Statutory welfare measures – Weighted mean average score

7.2 NON-STATUTORY WELFARE MEASURES

Table 7.2 Non-Statutory welfare measures- Satisfaction

Provisional Facilities	Weighted Mean Average score	Percentage
Personal Health Care	3.52	63
Flexi time	3.24	56
Employee Assistance Programs	3.38	60
Higher Education	3.67	67
Training	3.76	69
Counseling Services	3.67	67
Overall Mean	3.54	64

From the table 7.2, it can be obviously noted that the fulfilment level of all the non-statutory measures among the labourers are up to a moderate extent. There is not much difference in the satisfaction level of different non- statutory measures as seen in statutory welfare measures. The flexi-time is the minimum satisfied provision in non-statutory measures with 56%, while the training is the maximum satisfied provision with a percentage of 69. Providing proper training conditions can improve the productivity of the laborers and benefit the organization. Counseling services improves the mind of the labourers to relieve from stress. A mean percentage of 64 denote that all the provisions need to be improved to a certain extent to enhance the satisfaction of the labourers. The relation between various non-statutory welfare measures is shown in Fig 7.2

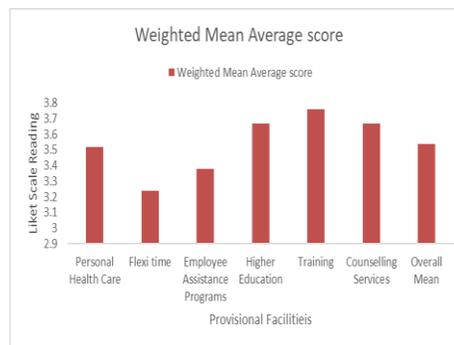


Fig 7.2 Non-statutory welfare measures – Weighted mean average score

7.3 WAGES AND LEAVE

Table 7.3 Wages and Leave- Satisfaction

Provisional Facilities	Weighted mean average score	Percentage
Salary	3.43	61
Overtime wages	3.34	59
Travel Allowance	3.52	63
Incentives	3.17	54
Holidays	2.65	41
Casual Leave	2.82	46
Sick & Medical Leave	3.73	68
Overall Mean	3.24	56

From the table 7.3, it can be observed that the labourers are normally not satisfied with their wages, allowances and the leave facilities provided by the organization. Incentives, Overtime wages and other additional allowances must be improved as a mean of motivation for the labourers towards their work. Regarding the wages, the level of satisfaction towards incentives is lesser. Though there is moderate satisfaction towards sick and medical leave, the holidays and casual leave provided in the construction industry does not satisfy the labour community. The level of satisfaction towards holidays is 41%. This can be improved by providing holidays at regular intervals for labourers to relieve their work pressure and work in a satisfying environment. The relation the measures and their weighted mean average scores are represented in the form of graph as shown in Fig 7.3

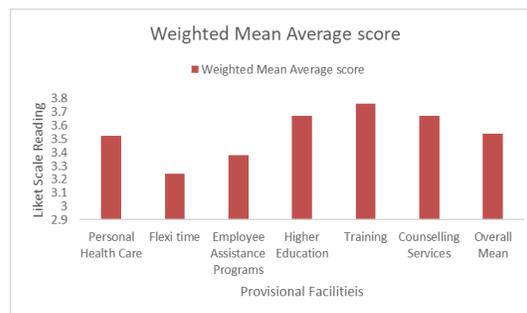


Fig 7.3 Wages and Leave – Weighted mean average score

7.4 SAFETY AND RECREATION FACILITIES

Table 7.4 Safety and Recreation Facilities- Satisfaction

Provisional Facilities	Weighted mean average score	Provisional Facilities
Safety Guidelines	3.91	73
Helmets	3.8	70
Shoes	4.02	76
Eye and Ear Protection	3.49	63
Fire Extinguisher	4.18	80
Ambulance	3.75	69
Overall Mean	3.86	72
Recreation Facilities		
Cultural Programs	3.08	52
Tours	2.89	47
Reading Rooms	2.75	44
Indoor games	2.97	49
Overall Mean	2.92	48

From the table 7.4, the safety facilities provided is somewhat satisfactory but it still needs improvement to make the labourers work in a non-hazardous environment without risking their life. Shoes, Helmets and other protection equipment must be made mandatory to achieve complete satisfaction regarding their safety. Working in an atmosphere with utmost importance to safety generally increases productivity. The recreation facilities in the construction industry do not satisfy the labour force. The level of satisfaction is higher for cultural programs with 52%, while all other recreation facilities fall under 50%. Providing these facilities makes the labourers to relieve their stress and will be a part of an entertainment. The overall mean percentage of 72% in safety denotes moderate satisfaction among labourers. On the contrary, an overall 19 percentage of 48 in recreation denote dissatisfaction among labourers. The relation between the safety measures and their weighted mean average score is expressed in the form of graph as shown in Fig 7.4.1 and the relation between the Recreation Facilities and their weighted mean average score is expressed in the form of graph as shown in Fig 7.4.2



Fig 7.4.1 Safety measures – Weighted mean average score

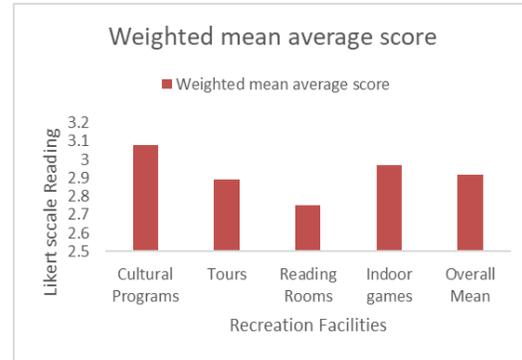


Fig 7.4.2 Recreational Facilities – Weighted mean average score

7.5 SOCIAL SECURITY MEASURES

Table 7.5 Social Security Measures – Satisfaction

	Weighted mean average score	Percentage
Workers Compensation	3.53	63
Pension	3.75	69
Provident Fund	3.89	72
Gratuity	3.57	64
Insurance Scheme	3.72	68
Accident Benefit Scheme	3.95	74
Overall Mean	3.74	69

From the Table 7.5, it is identified that the social security measures provide only moderate satisfaction to the labour community. Accident benefit scheme provides maximum satisfaction of 74%, while all other social security measures fall in the range of 60 to 70 in percentages. Enhancing the social security measures instills job security in the minds of labour, which motivates them to work towards the goals of an organization. The overall satisfaction level is 69%. The relation between the social security measures and their weighted mean average score are represented in the form of graph as shown in Fig 7.5

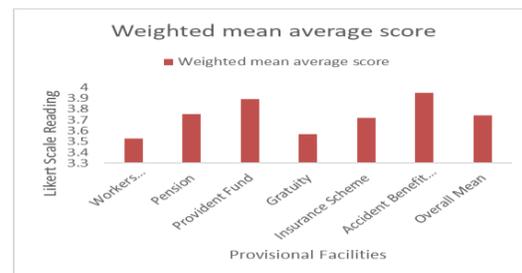


Fig 7.5 Social security measures – Weighted mean average score

7.6 IMPACT OF WELFARE MEASURES

Table 7.6 Impact of Welfare Measures

Provisional Facilities	Weighted mean average score	Percentage
Increases Productivity	3.97	74
Reduces Wastages	3.57	64
Creates Industrial Relations	3.74	69
Helps Team Spirit	4.10	78
Reduces Employee Absenteeism	4.06	77
Increases Job Satisfaction	4.07	77
Improves Physical and Mental Health	4.14	79
Improves Quality of Work Life	4.43	86
Overall Mean	4.01	75

From the table 7.4 data in which eight factors were considered for the survey, of which improvement in the quality of work life gives maximum satisfaction among the labourers with a percentage of 86. Other considered positive factors like productivity, team spirit, job satisfaction, Improvement in physical and mental health ranges from 70 to 80%. The labour workforce feels that when the previously discussed steps were implemented to elevate the satisfaction level of labourers, it in turn improves the various positive factors mentioned above and hence the organization can achieve their goals at a faster pace. The relation between the impact measures and their weighted mean average score are represented in the form of graph as shown in Fig 7.8.



Fig 7.8 Impact of welfare measures- weighted mean average score

8 RESULTS AND DISCUSSIONS

- From the survey conducted, it has observed that the company provides several welfare measures for its employees.
- In general, most of the employees are satisfied with medical facilities extended to them.
- From the data analysis it is clear that 70% employees are aware with the current welfare measure policies.
- 47% of employees are dissatisfied with their welfare facilities.
- Above the 80% of employees said that there are sufficient number of drinking water, restroom and first aid facilities.
- The training gives the maximum satisfied provision with a percentage of 69.
- Regarding the wages, the level of satisfaction towards incentives is lesser.

- The level of satisfaction towards holidays is 41%.
- The level of satisfaction is higher for cultural programs with 52%, while all other recreational facilities fall under 50%.
- Accident benefit scheme provides maximum satisfaction of 74%, while all other social security fall in the range of 60% to 70%.
- The quality of work life gives maximum satisfaction among the labours with a percentage of 86. Other considered positive factors like productivity, team spirit, job satisfaction, improvement in physical and mental health ranges from 70% to 80%.
- Most of the employees agreed that labour turnover can be reduced through proper motivational techniques

9 CONCLUSION

Employees are satisfied with various facilities like festival advances, medical, lighting, sitting and drinking water. It is observed that the welfare measures reduce the labour absenteeism and increase the efficiency of the employees. Also, they are directly related with productivity and to achieve it the companies provide many welfare packages to employees for increasing the efficiency and productivity. Fair wages to be provided based on the contribution of employees to the firm with job security, safe health working environment etc. which increases the productivity and minimize the cost.

REFERENCES

- [1] Ganesh Prabhu,P. (2001). Study on the influence of stakeholders in construction industry. International Journal of Engineering Technology, Management and Applied Sciences. 4(6), 31-45
- [2] Ganesh Prabhu, P. and D. Ambika, D. (2013). Study on behaviour of workers in construction industry to improve production efficiency. International Journal of Civil, Structural, Environmental and Infrastructure Engineering Research and Development. 3(1), 59-66
- [3] Spector, P.E. (1997). Job satisfaction: Application, assessment, causes, and consequences. Thousand Oaks, CA. Sage Publications.
- [4] Humphrey Danso. and John Kobina Antwi. (2012). Evaluation of the factors influencing time and cost overruns in telecom tower construction in ghana. Civil and Environmental Research. 2(6), 15-24
- [5] Koshan Manjulika. (1975). Labour Welfare in India, in Uppal, J.S. (Eds.) India's Economic Problems: An Analytical Approach", Tata McGraw Hill Publishing Company Limited, New Delhi, 203-219
- [6] Tikoo, S. Gupta, J. and Meenu. (2013). Labour welfare benefits-more needs to be done for women construction workers. Global journal of management and business studies. 3(10), 1109-1118
- [7] Helen De Cieri. Barbara Holmes. Jacqui Abbott and Trisha Pettit. (2007). Achievements and challenges for work/life balance strategies in Australian organizations.The International Journal of Human Resource Management,16(1),90-103, <https://doi.org/10.1080/0958519042000295966>.
- [8] http://www.sewa.org/Services_Work_Security_Insurance.asp
- [9] Ganesh Prabhu, P. Vignesh, A. Pavithran, K. Karthikeya, U.

- and Nagarajan, R. (2019). Study on stress evaluation of south indian workers in construction industry. Afro - Asian International Conference on Science, Engineering & Technology, 6-18, DOI: 10.13140/RG.2.1.1801.3608
- [10] Ganesh Prabhu, P. Vijay, G. Manikandan, SB. Muneerswaran, M. and Mohamed Yasar Arabth, A. (2015). Study on risk computations in construction industry at Madurai, Afro - Asian International Conference on Science, Engineering & Technology, 104-117, DOI: 10.13140/RG.2.1.3636.3682
- [11] Dabke, S. Salem, O. Genaidy, A. and Daraiseh, N. (2006). Job satisfaction of women in construction trades. *Journal of construction engineering and Management*, 134(3), 205-216
- [12] Danaher, P. J. and Haddrell, V. (1996). A comparison of question scales used for measuring customer satisfaction. *International journal of Service Industry Management*, 7(4), 4-26.
- [13] Diaz-Serrano, L. and Cabral, V.J.A. (2005). Low pay, higher pay and job satisfaction within the European Union: Empirical evidence from fourteen countries. IZA Discussion Papers No. 1558, Institute for the Study of Labour (IZA).
- [14] Gazioglu, S. and Tansel, A. (2002). Job satisfaction in Britain: Individual and job-related factors. *Economic Research Centre Working Papers in Economics 03/03*, Ankara.
- [15] Hoppock, R. (1935). *Job satisfaction*. Harper and Brothers, New York: Harper. James, P. M., Braam Rust, A. A. and Kingma, L. (2012). The well-being of workers in the south african construction industry: A model for employment assistance. *African journal of business management*, 6(4), 1553-1558
- [16] Laryea, S. (2010). Health and safety on construction sites in Ghana. In: the construction, building and real estate research conference of the royal institution of chartered surveyors, Dauphine University, Paris, France.
- [17] Lise M. S. and Timothy A. J. (2004). Employee attitudes and job satisfaction. *Human resource management*, 43(4), 395-407.
- [18] J.S. Bridle, "Probabilistic Interpretation of Feedforward Classification Network Outputs, with Relationships to Statistical Pattern Recognition," *Neurocomputing—Algorithms, Architectures and Applications*, F. Fogelman-Soulie and J. Hérault, eds., NATO ASI Series F68, Berlin: Springer-Verlag, pp. 227-236, 1989. (Book style with paper title and editor)

10.ANNEXURE: QUESTIONNAIRE

10.1 ANNEXURE - I BASIC DETAILS

Sl.No.	Description
1	Experience <ul style="list-style-type: none"> • 01-03 years • 03-05 years • 05-10 years • More than 10 years
2	Nature of Work <ul style="list-style-type: none"> • Residential • Industrial • Commercial
3	How do you feel the present work <ul style="list-style-type: none"> • Heavy • Normal • Light
4	Are you Aware of welfare measures <ul style="list-style-type: none"> • Aware • Partially aware • Not aware
5	Your overall satisfaction towards labour welfare in your company <ul style="list-style-type: none"> • Highlysatisfied • Satisfied • Neutral • Dissatisfied

First aid					
Transport					

Non Statutory welfare measures	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
Training					
Personal Health care					
Employee assistance programs					
Flexitime					
Higher education					
Counseling					

10.2 ANNEXURE - II LABOUR WELFARE MEASURES

The following provisional facilities refer to the welfare measures under different categories. Identify your level of satisfaction with the following measures.

Wages and leave	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
Salary					
Overtime wages					
Travel allowance					
Incentives					
Holidays					
Casual leave					
Medical leave					

Statutory welfare measures	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
Canteens					
Restrooms					
Drinking water					
Accommodation					
Sitting					

Social security measures	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
Accident benefit scheme					
Pension					
Provident fund					
Insurance					
Gratuity					
Compensation					
Lighting					
Washing					
Medical facilities					

Safety facilities	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
Safety guidelines					
Shoes					
Helmets					
Eye and ear protection					
Fire extinguisher					
Ambulance					

Recreational facilities	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
Cultural programs					
Tours					
Reading rooms					
Indoor games					

10.3 ANNEXURE - III IMPACT OF LABOUR WELFARE MEASURES

The following factors refer to the advantages due to the implementation of welfare measures

Impact of welfare measures	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Increases Productivity					
Reduces Wastages					
Creates Industrial Relations					
Helps Team Spirit					
Reduces Employee Absenteeism					
Increases Job Satisfaction					
Improves Physical and Mental Health					
Improves Quality of Work life					