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ANALYSIS OF FACTORS MOTIVATING THE BUILDING AND OTHER CONSTRUCTION WORKERS FOR REGISTRATION UNDER THE BUILDING AND OTHER CONSTRUCTION WORKERS WELFARE BOARD

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ABSTRACT

This study aims to observe and know the Labour welfare measures which play a significant role that influencing the level of job satisfaction of employees and help the employers in indifferent ways. So certain amount of investment for the success and the progress of the organizations or the construction sites and somehow for the society. The universe of the study includes three hundred building construction workers from different construction sites within the Mayurbhanj district of Odisha. After collecting the data, they were coded and analysed by using SPSS. Binary Logistic Regression Analysis was used to show the relationship between the registration of construction workers and different labour welfare measures of OB&OCWWB. Results indicated that the registration of building construction workers depends upon the increased monetary benefits that they receive from the welfare board. This registration of the workers under the board does not depend upon their age, level of education, type of work, duration of working hours, tenure of job, and other basic amenities they receive from the board. The result of the binary logistic regression shows that different welfare measures significantly affect the registration of building construction workers under the welfare board.

KEY WORDS: *Welfare Measures, Binary Logistic Regression, Construction Worker, Welfare Board, Construction Sites.*

1. INTRODUCTION

According to social institutions, industrialization level, and overall level of social and economic development, the concept of labour welfare is dynamic and has been interpreted in different ways for different countries from time to time. The provision of various amenities and facilities within and around the workplace for the betterment of employees is known as welfare measures. The International Labour Organisation (ILO) report states labour welfare as, "Such services, facilities, and amenities as may be established in or in the vicinity of undertakings to enable the persons employed in them to perform their work in healthy, congenial surroundings and provided with amenities conducive to good health and high morale." (Chaubey, & Rawat, 2016). The concept of labour welfare is elastic and versatile, and it varies greatly depending on places, times, industries, countries, social norms, and values, the level of industrialization, the general social-economic development of people, and political ideologies prevailing at particular moments (Manasa, 2015).

This study evaluates different programs and policies affecting Building and Other Construction Workers (BOCW) in the Mayurbhanj District and summarises a detailed examination of the socio-economic complications of governmental interventions within this vulnerable workforce. So in this paper first we discuss different benefits received by building construction workers in the study region and the impacts of schemes on their socio-economic conditions.

2. LITERATURE REVIEW

Prasad et al. (2011) the study explain that the building and construction industry is demanded by both skilled and semi-skilled labour forces. The main focus of the study was to determine how commonly known welfare programs are how far along the programs are implemented and where obstacles may be encountered. The chi-square test and comparative research have been used to verify the inferences of the analysis. The outcome of the study shows that 92.5% of the workers have been denied access to welfare benefits. Only 24% of participants were aware of the welfare measures.

Mishra (2017) this study states that job insecurity and workplace hazards are two significant issues that India's unorganised sector employees face daily. The objectives of the paper are to talk about the term informal economy and the condition of workers in the unorganised sector and government initiatives for workers' welfare. The observations show that the government's efforts to cope

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with the situation and the state of employees in the informal sector have been declining. Further, the paper studied the key initiatives of the government of India in the Unorganised Worker's Social Security Act 2008.

Ulle et al. (2018) this study explain the labour welfare measures at Go Go International Private Limited and evaluate the relationship between labour welfare measures and employee satisfaction. The majority of welfare facilities deal with sanitation and hygiene which does not create dissatisfaction among professionals to provide welfare measures. The term labour welfare programme includes the protection advancement and also refers to provide improved working conditions such as good lighting, warm control, cleanliness, toilet, drinking water facilities, and safety initiatives. The study is based on descriptive statistics.

Xie, L. L. et al. (2022) proposed the concept of career promotion for construction workers in Guangzhou city of China. In this study, he examined the different factors that have influenced the careers of the construction workers in the city. They identified different critical factors and then suggested different measures to the government and the enterprises that can improve the path of their career promotion. For testing the hypothesis they used the binary logistic regression model to show which factors were influencing the construction workers' career promotion. According to the authors, this study explored the career promotion of frontline construction workers first time in the city.

3. OBJECTIVE

To evaluate different underlying factors that motivate building and other construction workers for registration.

4. RESEARCH METHODOLOGY

The present study is to reach the specified objective, for a survey of 300 construction workers which have conveniently selected from various construction sites in Mayurbhanj Districts. After collection of data it was revised, coded, put into SPSS software. In this study Binary logistic Regression is used to test whether the different welfare measures have any significant impact on construction worker's registration under the welfare board. There are two variables in this model.

Dependent Variable: Registration of building construction workers under the welfare board. **Independent Variables:** Age, Level of Education, Type of Work, Tenure of Job, Duration of Working Hours, Basic Amenities, Year of Experience in Construction work, Death and Funeral Benefits, Social Benefits and Security Benefits.

5. ODISHA BUILDING AND OTHER CONSTRUCTION WORKERS WELFARE BOARD

The Construction Workers Welfare Board was established by the Government of India under Regulation of Employment and Conditions of Service Act, 1996. The central objective of the board is to control the employment and working conditions of building and other construction workers and to provide for their safety, health and welfare measure and for other matter connected therewith. The Odisha Building & Other Construction Workers' Welfare Board has been established on 03.01.2004 under section 18 of the Building & Other Construction Workers (RE&CS) Act, 1996 to manage its Fund and funding benefits to the beneficiaries registered under it. The Govt. of India has directed that a 1% cess will be collected on the building costs incurred by an employer or constructor. The cess collected has been deposited in the fund of Odisha Building & Other Construction Workers' Welfare Board for welfare of the registered building workers.

6. DIFFERENT BENEFITS RECEIVED BY RESPONDENTS

In any organisation or construction site, Construction worker welfare measures are initiated by the organisation with the purpose to increase their job satisfaction, improve their motivation and assurance toward organisation. In this present study out of 300 respondents, 172 respondents are registered construction workers under OB&OCWWB. The registered construction workers have get a labour card and ensure the job security and health security from the government or from the welfare board.

Table-1 Different Benefits Received by Construction Workers

Name of Benefits	No. of Benefits	Percentage
Death Relief	56	32.56
Funeral Assistance	26	15.11
Assistance for Purchase of Safety Equipment	81	47.1
Financial Assistance For Children Education	46	26.75
Maternity Benefits	22	12.8
Marriage Benefits	58	33.72
Assistance for Purchase of working Tools	70	40.7
Assistance for Purchase of Bicycle	149	86.63
RPL & Skill Development Training	10	5.81

(*Sources: Primary Data)*

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The above Table-2 shows the respondents have acquired different benefits after registering under OB&OCWWB: Death relief, Funeral assistance, assistance for purchase of safety equipment, Financial assistance for children Education, Maternal benefits, Marriage benefits, Assistance for purchase of working tools, Assistance for purchase of bicycle, RPL & skill development training. From the registered construction workers, 56 respondents are getting death relief of ₹ 1,00,000/- for normal death and ₹ 2,00,000/- monetary help for accidental death (*Bharti, R., & Bhatt, S. (2019*). This amount has been given to the nominee of the registered worker. In funeral assistance, 26 respondents are getting the benefit from the board for doing the rituals either for their father, mother, husband, wife, or relatives. In this benefit ₹. 5000/- monetary assistance is given to the beneficiary. For the benefit of Assistance for the purchase of safety equipment, 81 respondents get the benefit from the board. The board assists ₹.1000/- for safety equipment like- helmets, safety shoes, protective eyeglasses, and gloves. The board gives financial help to the children of the building construction workers who are registered under the board. That amount is different for different levels of education. This monetary assistance motivated the children of the workers to continue their education. In the present study, 26.75per cent of workers received educational assistance from the board. The maternal benefit scheme for women construction workers can help them to get financial assistance during their pregnancy or after pregnancy when they are lactating. To avail of the benefits, the beneficiary has to be registered under OB&OCWWB for a minimum of 1 year. From the study area, 12.8per cent of workers are benefited from the board. They get financial assistance of ₹.10000/- after showing proof of their maternity or baby birth. To explain the marriage benefit of the above table, 58 respondents received the benefits from the board. Now this amount is extended to ₹.50000/-. The assistance for the purchase of working tools benefits was given to 70 registered beneficiaries. The benefit of assistance for the purchase of bicycles, 149 respondents are getting the benefit. ₹.4000/- is given to the beneficiaries for the bicycles. From the study region, 10 workers received the benefit of RPL & skill development training from the board. In this scheme, an assessment process is used to evaluate a person's existing skill, knowledge, and experience gained either by formal, non-formal, or informal learning.

7. BINARY LOGISTIC REGRESSION

Logistic regression is easy and simple to understand in the machine learning binary classification algorithm and the interpretation of the model is very satisfactory. The effect of various features can be found based on their weights (Allison, 2012). Research on construction workers is mostly used logistic regression analysis (Zhang et al., 2015; Zong et al., 2017). In this paper 10 independent variables are either numerical or categorised variables with the dependent variable, which is the "Registration of worker," being a dichotomous variable. In this study the binary logistic regression is suitable for the significance test because the sample size is sufficient and the observation values are independent of each other (Allison, 2012).

7.1 VARIABLE SETTING AND ASSIGNMENT

The following ten explanatory variables present a summary of the factors influencing construction workers' registration, like age, level of education, type of work, tenure of job, duration of work, basic amenities, year of experience in construction work, death, and funeral benefits, security benefits and social benefits. Among the 10 explanatory variables, five of them like Level of Education, Type of Work, Tenure of Job, Basic Amenities, and Year of Experience in Construction work are involved in classified data. The remaining five explanatory variables are set as quantitative data, including age, duration of working hours, death and funeral benefits, social benefits, and security benefits. The dependent variable is set to 1 if a worker is a registered worker and 0 if not registered.

1. Death and Funeral benefits consist of Death benefits and Funeral Assistance.
2. Security Benefits consist of Assistance for the Purchase of working Tools, Assistance for the Purchase of Safety Equipment, and Assistance for the Purchase of Bicycle.
3. Social benefits consist of Maternity Benefits, Marriage Benefits, and Financial Assistance for Children Education.

7.2 DISCUSSION OF THE MODEL

This work has been one of the study that focused on the more and more registration of construction workers. Three critical factors influencing construction workers' registration under the board were ascertained by binary logistic regression. Demographic characteristics, quality of working life, and different welfare measures; factors can affect construction workers' registration under the welfare board, and each feature is analysed and discussed below. Before running the result of binary logistic regression a multicollinearity test was first calculated for each explanatory variable to avoid the impact of high multicollinearity between the explanatory variables on the regression results. The results are shown in Table 2.

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Table-2 Multicollinearity Test for Explanatory Variables

Collinearity Statistics		
Model	Tolerance	VIF
(Constant)		
Age Range of the Worker	.899	1.112
Level of Education of the Respondent	.862	1.160
Type of Work	.621	1.610
Tenure of Job	.665	1.504
Duration of Working Hour	.909	1.101
basic Amenities	.876	1.141
Year of Experience in Construction work	.947	1.056
Death and funeral benefits	.773	1.294
Security Benefits	.511	1.957
Social Benefits	.596	1.678
a. Dependent Variable: Registered Worker in B&OCWWB		

(Source: Compiled from the data)

Table-3 Estimated Regression Parameters and Significance Test Results

	B	S.E.	Wald	df	Sig.	Exp(B)
Age	-.019	.050	.143	1	.705	.981
Level of Education	3.600	2.266	2.523	1	.112	36.582
Type of Work	-1.026	1.627	.397	1	.528	.359
Tenure of Job	.940	.957	.964	1	.326	2.560
Duration of Working Hour	-.254	.566	.202	1	.653	.776
Basic Amenities	-.528	.982	.289	1	.591	.590
Year of Experience	1.260	.825	2.333	1	.127	3.526
Death and funeral benefits	.368	.165	4.996	1	.025	1.445
Security Benefits	1.200	.312	14.802	1	.000	3.319
Social Benefits	.395	.197	4.002	1	.045	1.484
Constant	-7.430	6.340	1.374	1	.241	.001

(Source: Compiled from the data)

The above Table-3 shows that three benefit factors have passed the significance test. All three benefit factors are significant at a 95 per cent and 99 per cent level of significance. That is death and funeral benefit p value=0.025, security benefit p value= 0.000, and social benefit p value= 0.045. This result shows that the registration of building construction workers depends upon the increased monetary benefits that they receive from the welfare board. In other words, if more and more workers registered under the board they received different types of monetary assistance from the board. This registration of the workers under the board does not depend upon their age, level of education, type of work, duration of working hours, tenure of job, and other basic amenities they receive from the board. The result of the binary logistic regression shows that different welfare measures significantly affect the registration of building construction workers under the welfare board.

8. CONCLUSION

The findings of this research study shall be very important on the theoretical as well as practical scenario. The findings of the study are important to improve the registration of construction workers under the welfare board which improve the condition of the construction workers in the construction sites as well as their day to day life. The apparent output of labour welfare measures are as follows: Sustainable livelihood, Improves physical & mental health, Improves standard of living, Increases Commitment towards work, Increases work motivation, Healthiness and security measures, Economic independence, Educational improvement of children. Majority of respondents believed that welfare facilities implementation increase motivation and productivity. Accordingly to this study welfare facilities positively correlated with job satisfaction of the employees. Future studies could discover other critical work provision necessity dimensions about construction sector. Moreover, upcoming research could examine the influence of workers satisfaction on promotion and growth of the construction sector.

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REFERENCES

1. *Chaubey, D. S., & Rawat, B. (2016). Analysis of labour welfare schemes and its impact on job satisfaction: An empirical study. Management Convergence, 7(2), 45-53.*
2. *Edison Anthony Raj, A., & Julius, S. (2017). Analysis of Labour Welfare Measures and its Impact on Employee's Commitment. International Journal of Advanced Scientific Research & Development (IJASRD), 4(05).*
3. *Mishra, S. (2017). Social security for unorganised workers in India. Journal of Social Sciences, 53(2), 73-80.*
4. *NTF construction (2007), The 3 Types of Construction Projects: Building, Heavy/Highway and Industrial [internet] London, Available from World Wide Web: http://www.constructionace.com/blog/3-typesconstruction- projects-building-heavy-highway and- industrial, [accessed on October 10th 2010]*
5. *Parwez, S. (2016). Labour and labour welfare in special economic zones in India with special reference to Gujarat. South Asian Survey, 23(2), 135-157.*
6. *Prasad, R. S., Rao, K. V., & Nagesha, H. N. (2011). Study on building and other construction workers welfare schemes/amenities in Karnataka. SASTech-Technical Journal of RUAS, 10(1), 59-66.*
7. *Prasad, T. R. (2020). A Study on Welfare Schemes for Migrant Construction Workers in Karnataka. International Research Journal on Advanced Science Hub, 2(Special Issue ICARD 2020), 261-267.*
8. *Raja, V. A. J., & Vijayakumar, V. (2017). A Study On Impact Of Work Stress Among Tile Factory Workers In Special Sample Of Various Factor Analyzing Methods Applying The Different Activity And Style Of Working Employees In India. International Journal of Advanced Research in Management (IJARM), Volume 8, pp. 01–11.*
9. *Reddeiah, S., & Kumari, K. S. (2019). Socio Economic Conditions and problems of Construction Workers-A Case study in Chittoor District. Think India Journal, 22(35), 1907-1927.*
10. *Sahu, R., Padhi, S. K., & Dolai, S. K. (2018). Socio Economic Conditions Of Construction Workers In India: Issues And Challenges. International Journal of Advanced Technology & Engineering Research (IJATER), 1, 175-181.*
11. *Selvam, T. (2017). Problems of construction workers at Tirupattur. Scope International Journal of Science, Humanities, Management and Technology, 3(2), 41-45.*
12. *Ulle, R., Patil, K., & Varma, A. (2018). The Impact of Labour Welfare Measures on Employee Satisfaction.*
13. *Xie, L. L., Luo, Z., & Zhao, X. (2023). Critical factors of construction workers' career promotion: evidence from Guangzhou city. Engineering, Construction and Architectural Management, 30(6), 2334-2359.*