



To Study of Labour Friendly Human Resources Management System and Identify the factors Affecting on Labour Productivity in Construction Company by using RII Method

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Abstract

Construction industry is one of the largest industries in the world. In all the developing and developed countries, construction sector has an important role. Labour friendly HRM or green human resources management is the concept which is generally use in IT sectors, Research Centers or manufacturing industries, But Human Resources Management or labour friendly HRM is as far from construction sectors. It has been noticed there is an acute shortage of skilled and unskilled labours at various sites in Pune and nearby area, due to this most of project delay. This is an effort to study the situation, reasons behind it. This paper focus on survey carried out for finding the situation of LFHRM syatem, HRM practices which we correlate with Labour productivity through questioner survey and by using RII method we try to find out the factors from various group related to productivity of labour

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Key Words- Construction Industry, LFHRM, Labour Productivity, Survey, RII [Relative Important Index]

1. INTRODUCTION

The construction industry is one among the most important sectors employing sizable amount of individuals, providing work to significant proportion of the labour market and providing significant share of the planet Gross Domestic Product (GDP). Labour friendly HRM is also called Green Human Resource Management. In construction sector we have the various categories of employees from Top Management to Bottom management. Bottom management is most dominated or most underestimate level of organization, where most of the times we are not focusing on bottom management which is backbone of every company after Top management. It has been noticed there is an acute shortage of skilled and unskilled labours at various sites in Pune and nearby area. The shortage is having a cascading effect on schedule, cost and overall performance of the contractor as well as final completion of the project. This is an effort to study the situation, reasons behind it, seek alternatives considering the cost and schedule implications. We divide the various factors related with labour productivity in three groups i.e. in Human Factors Group, Technical Factors Group and Management Point Factor Group.

2. OBJECTIVE OF PAPER

1] To study the concept of labour Friendly Human Recourses Management and different factors affecting on labour productivity through various papers, journals, books, e-contents which is important for sustainable growth of organization.

2] To Design a questioner for collecting data from various sites/Companies for HR practices in their organization & factors affects on labour Productivity through questioner survey.



3] To find out actual situation of HRM in construction company and their practices towards this. As well as to find out different factors which is related to labour productivity through RII method.

3. LITERATURE REVIEW

As per Malkani Z.A.K. and Kambekar A.R housing industry often experiences complexities in meeting project completion schedule and finance thanks to nonavailability of sufficient number of skilled labors and staff to hold out the planned work. These types of situation are often managed and it efficiently possible to handle such issues with proper utilization of human resource management techniques to avoid shortage of labor.

The author Dr. S C Das, Mr. Raj Kumar Singh said, Eco-friendly HRM remains in the groundbreaking phase in India. This particular study describes how green HR and HRM professionals are able to use a growing body of expertise to enable them to all over their organizational sustainability passage. The author referred to the policies, methods, devices which make employee of the company is actually going green for the gain of the person, society, planet as well as business organization.

As per Othman, A. Idrus & M. Napiah, for sustainable development of project Human Resources Management system is very important. He distributes 150 questionnaires in to contractor while as his get only 25 feedback return. The author suggest some method for improving HRM are,

- ✓ Ensure frequent communication between personnel and laborers
- ✓ Appoint experienced or well trained project managers to handle project
- ✓ Assign more skilled workers in project
- ✓ Ensure participation and team belonging is developed within the development team
- ✓ Evaluation of personnel and workers conducted regularly
- ✓ Provide sufficient and effective training
- ✓ Start the team building even before the project starts (during conceptual stage)
- ✓ Provide reward for personnel and laborers with good performance

The Sherif M. Hafez, Remon F. Aziz, Enas S. Morgan, et.al., describes that the one among the most factors that had influence within the housing industry growth is productivity which mainly related to the labor performance. The target of this research is to spot and rank the relative importance of things seemed to affect labor productivity. The author comprising 27 productivity factors, classified under the subsequent four primary groups: (a) Technological (b) Management (c) Human/Labor and (d) External. This paper is more closely of our objectives so we consider this paper for preparing the questionnaire for finding factors affecting on labour productivity.

As per Dharani K to identify factors which are affecting labour productivity and also to study causes i.e. labour problems on site and its effects on the construction projects. Some of the important factors affecting labour productivity are: quality of site management, labour experience, misunderstandings between labour and superintendent etc. The author tries to relate the ill effects of falling labour productivity with the productivity of other resources such as material, equipment and capital. This thesis restricts itself to the survey and research in the Indian context. Analysis of obtained data was done using different statistical methods

As per Aman Agrawal , Srijeet Halder, the construction industry is one among the most important industries in India. But the bulk of the development projects have suffered from delays. Less than expected labour productivity has been a frequent explanation for delay in construction projects. Although measuring labour productivity is straightforward and easy, controlling it's often not. The author use RII method to find out factors influences labour efficiency at work. By analyzing the different factors following measure suggested by author for better labour productivity are,

- ✓ Daily meetings.
- ✓ Training and motivation for the labours.
- ✓ Skilled labours.
- ✓ Site administration.
- ✓ Proper maintained personal protective equipment.



Q.7	Does your company conduct online/offline training for its employees in every year?	8	18	8	1
Sr. No.	Questions to be ask to Participants	Answer of Question			
		YES	NO	Partially	No Comments
Q.8	Does your company adopt online process for performance appraisal?	6	19	3	7
Q.9	Does your company use Video Conferencing and Telecommuting system to contact you for routine meetings?	18	10	7	-
Q.10	Does Your Company Provide A Provided Fund Facilities To Every Employee Onsite & Offsite Project	8	16	2	9
Q.11	Does your company pay your salary or wages every month? ON TIME?	12	13	6	4
Q.12	Does Your Company Provide You Accommodation Onsite for labour?	11	13	6	5
Q.13	Does your Company Provides all facilities like, Water, Electricity, and Medical Facilities etc.. for labour onsite?	21	2	8	4
Q.14	Does Your Company Provide Safety & Safety Kits to all worker onsite?	21	8	4	2
Q.15	Does your company Provide best Tools & Plant to Labour for work?	22	7	4	1
Q.16	Does your company provide Extra Remuneration for extra Work?	21	6	7	1
Q.17	Does Your Company provide CL, ML Leaves for labour ?	6	16	7	6
Q.18	Does your company enforce to contractors to follow HRM system of your company for labour?	14	6	10	5
Q.19	Does your company have good communication system from Top Management to Bottom Management?	12	9	9	5
Q.20	Does Your company provide Transportation facilities to worker?	22	3	9	1
Q.21	Does company provide free health checkup to all labours in week/Months?	10	11	11	3
Q.22	Does company provide fund for medical emergency to labour?	24	2	6	3
Q.23	Does your company regularly follow up problem of your worker on site with contractor or without contractors?	23	5	6	1
Q.24	Does your company takes feedback on paper or off paper from labour/Worker?	9	19	5	2

C] COLLECTION OF DATA FOR FACTORS AFFECTING ON LABOUR PRODUCTIVITY

Marks for Question is as per follows,

- 1) 1 – No Effect
- 2) 2 – Poor Effect
- 3) 3 – Medium Effect



4) 4 – Strong Effect

5) 5 – Very Strong Effect

Sr. No.	Factor	Factors Affecting on Labour Productivity	Very Strong Effect	Strong Effect	Medium Effect	Poor Effect	No Effect	RII	RANK
1	A	Human Group							
	A2	Health Condition of Labour	26	10	1	-	-	98.86	1
	A10	Relation of Labours in team	21	14	-	-	-	92.00	2
	A5	Experience of Labour	19	15	1	-	-	90.29	3
	A8	Mental Condition of labour on site	18	15	2	-	-	89.14	4
	A9	Family Condition & Attarction	15	17	3	-	-	86.86	5
	A1	Age of Labour	15	14	5	1	-	84.57	6
	A6	Facility provide to Labour	8	19	6	2	-	78.86	7
	A7	Condition of Environment on Site for labour	10	13	10	2	-	77.71	8
	A3	Mentality of Labour	11	9	8	6	1	73.14	9
A4	Motivation of Labour	4	14	10	6	1	68.00	10	
2	B	Technical Group							
	B6	Inspection Delay	16	18	1	-	-	88.57	1
	B5	Rework on Site	18	13	4	-	-	88.00	2
	B1	Not Friendly with New Technology	13	17	5	-	-	84.57	3
	B3	No Clear instruction regarding work	11	19	5	-	-	83.43	4
	B2	Complex design and plan on Site	15	12	6	2	-	82.86	5
	B7	Change of Work scope	11	17	3	4	-	80.00	6
	B4	No Specification guidelines for work	10	13	10	2	-	77.71	7
	B9	Site layout & Site conditions	7	18	5	4	1	74.86	8
B8	Change of Technology & Materials	9	10	10	5	1	72.00	9	
3	C	Management Point Group							
	C7	No facilities for labour	20	14	1	-	-	90.86	1
	C2	Overtime on Site	17	18	-	-	-	89.71	2
	C1	Delay In Payment	18	15	2	-	-	89.14	3



C3	No Payment of Extra Work	17	15	3	-	-	88.00	4
C11	Lack of Fund for Project	14	21	-	-	-	88.00	5
Factor	Factors Affecting on Labour Productivity	Very Strong Effect	Strong Effect	Medium Effect	Poor Effect	No Effect	RII	RANK
C13	Work Pressure for completion of task within time	15	19	1	-	-	88.00	6
C10	Lack of Material on site	13	22	-	-	-	87.43	7
C9	Lack of Equipment available on site	14	19	2	-	-	86.86	8
C14	Inadequate Size of Labour Gang	14	18	3	-	-	86.29	9
C5	Lack of Labour Supervision	13	19	3	-	-	85.71	10
C6	No Feedback from Labour	16	14	4	1	-	85.71	11
C12	Contractors & Engineers Attitude	12	20	3	-	-	85.14	12
C8	No Safety provision for labour	11	21	3	-	-	84.57	13
C4	Construction Methods	8	22	5	-	-	81.71	14
C15	Political Pressure or Government Policy	11	17	6	1	-	81.71	15

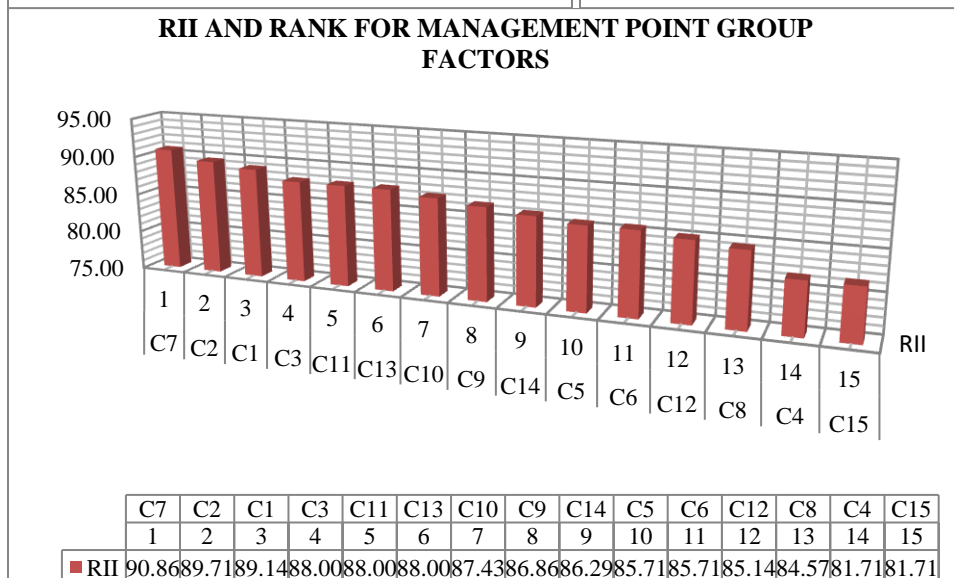
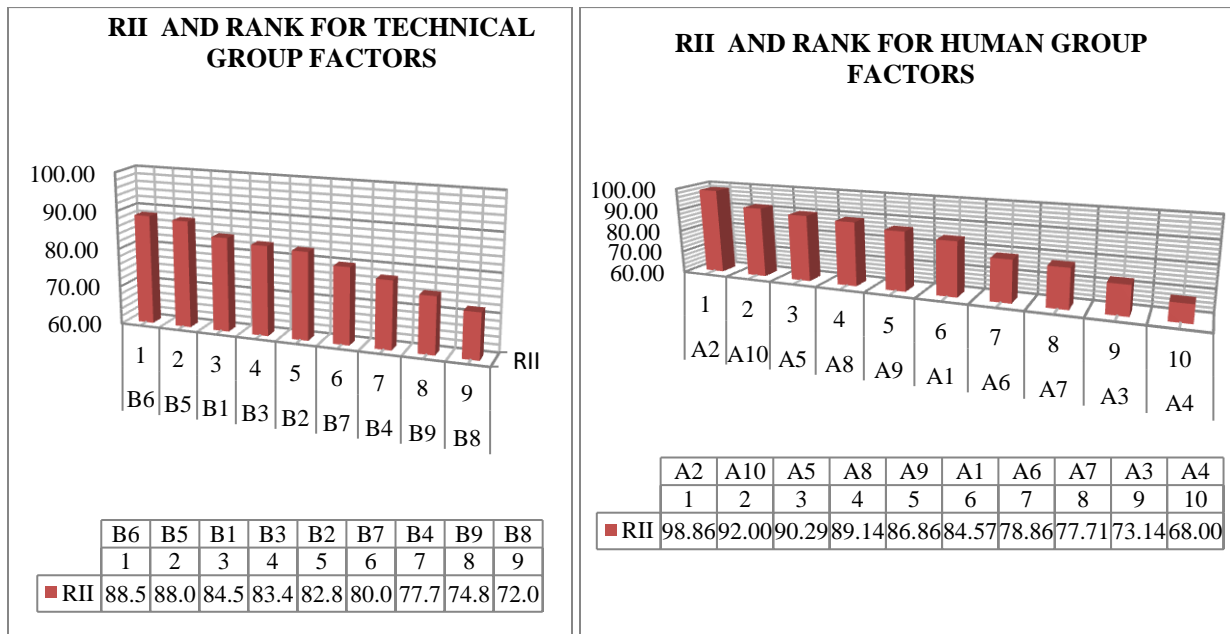
Sample Calculation for RII for A2

RII Calculation

RANK

$$\frac{(5*26+4*10+3*1+2*0+1*0)}{(5*35)} \times 100 = 98.86$$

2



7. DISCUSSION & CONCLUSION

The Labour friendly HRM & Labour productivity is a like coin which have 2 sided for sustainable development of company. This questioner survey clear indicates that in construction company only some reputed company have HR department & HR manager who is directly responsible for Human Recourses problem, While as small companies does not having such kind of system. Most of the major construction groups follow the HR related policys so problem of labour non availability is less for these companies, while as minar companies face these problems. In factors which we need to consider for labour productivity in Human Group are A2, A10 and A5, in Technical groups B6 and B5, while in management points group C7,C2,C1,C3,C11 or simply we say all factors are important. So we conclude that if Management creates a labour friendly environment in company and follow the Human Resources System then the productivity of labour may be increase, because after all Labour Productivity is also depends on Human Recourses Practices in construction companies.



8. FUTURE SCOPE

The future scope is very wide for this concept. We need to check when we made a labour friendly Human Resources policy in Construction Company then the productivity of labour on site before policies implements and after policies implement. But for this we required lot of time. So we will continue this study after this COVID-19 pandemic situation.

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