



IMPROVEMENT OF LABOUR PRODUCTIVITY IN CONSTRUCTION INDUSTRY

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Abstract:

Construction is labour oriented business. Most of the event laborers shift to cities square measure from poor families and square measure illiterate. Their lack of education and talent produce their selections very restricted. when they come back to large cities, they have to face numbers of problems due to the dearth of expertise and lack of ability. There square measure quite twenty 5 million of construction workers in Republic of Asian nation. Performance of labour in building construction is littered with such loads of things and is often connected to the performance of it slow, value and Quality. Therefore, it is vital to evaluate factors touching labour productivity in building construction. Construction is that the world's largest and most tough business. Human resource today incorporates a strategic role for productivity increase of any organization, and this makes it superior among the commercial competition. With the effective and optimum uses of it, all the advantages provided by the productivity growth are going to be obtained. Construction could also be a key sector of the economic system for countries all around the world, as traditionally it took up a huge portion in nation's total employment and its important contribution to a nation's revenue as a whole. However, until today, construction industries square measure still facing sort of problems regarding the low productivity, poor safety and keep quality. Productivity is that the one in each of the foremost important issue that have an impression on overall performance of any little or medium or huge construction industry. There are unit sort of things that directly affects the productivity of labour, so it is vital for associate organization to visualize and establish those factors and take an appropriate action for rising the labour productivity. At the little level, if we tend to tend to improved productivity, ultimately it reduces or decreases the price of project and provides overall best performance of project. There square measure sort of activities involved among the construction industry .

1. Introduction

Productivity is that the foremost mentioned topic among the construction industry. Productivity is that the relation of output to any or all or any or variety of the resources won't to show out that output. Resources comprise labour, capital, time, energy, material etc. Productivity interprets directly into value savings and profit. $Productivity = \text{output} / (\text{resource used})$.

Labor productivity is one in every of the smallest amount studied areas among the development trade. Productivity improvement succeed high value production with minimum investment. Considering the very fact that profit margins square measure tiny on construction comes, value savings related to productivity square measure crucial. The chief obstacle to up labor productivity is mensuration labor productivity. Poor productivity of construction employees is one in every of the causes of value and time overruns in construction project. This paper focuses on improvement of labour productivity within the industry. It covers the development labour productivity definitions, aspects, factors moving and strategies to boost it. This study provides a pointers for necessary steps needed to boost construction labour productivity. The productivity of labour particularly} necessary especially in developing countries, wherever most of the building construction work continues to be on manual basis. The implementation depends to varied extents on property demands at the worldwide, national, regional, local, company and individual level. up the assembly potency is that the most difficult issue in each developed and developing countries.

1.1-Labour productivity problems Construction needs in depth manual labour.



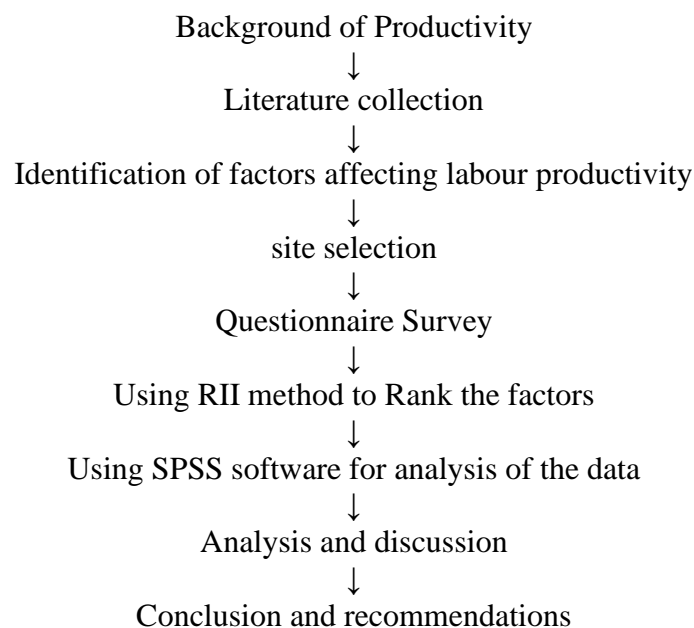
Human performance and productivity are dependent on each other. Therefore, the foremost normally used live of productivity is that the constant contract bucks of latest construction work per work hour (Hendrickson 1998). A study by Teicholtz (2004) unconcealed that over forty years (1964-2003) the development trade lags compared to any or all alternative non-farm industries in developing and applying labor saving techniques and work instrumentality for labor. Figure 2-1 depicts construction labor productivity changes as against all non-farm industries from 1964-2003 .

Many definitions of the word “productivity” exist. For the premise of this study the MerriamWebster definition are going to be used. Merriam-Webster defines productivity because the quality or state of being productive. Labor productivity is usually measured as output per employee or output per labor-hour. though there are endless definitions for productivity, all of them talk over with productivity as a comparison of input versus output. $Productivity = Output/ Input$. hyperbolic productivity happens once either• Output is constant, whereas input is reduced .

2. Objective

- To study the vital factors affecting labour productivity
- Analyze and calculate the vital of these factors poignant labour productivity.
- To create correct tips ,and vital recommendations to attain the utmost labour productivity in construction industry.

3. METHODOLOGY



4. ANALYSIS-RESULT & DISCUSSION

SPSS Statistics are software system package used for statistics analysis. SPSS is among the foremost wide used programs for statistics analysis in scientific discipline. it's additionally employed by market researchers, health researchers, survey firms, government, education researchers, selling organizations, and others. the initial SPSS manual has been represented in concert of "sociology's most influential books" for permitting normal researchers to try and do their own statistical analysis .In addition to statistical analysis, knowledge management .

Frequency Statistics :-The Frequencies procedure provides statistics and graphical displays that are helpful for describing many sorts of variables. to make a table of frequencies (number of occurrences of given categories), by analyzing by suggests that of descriptive Statistics, the frequency within the needed variables would be calculated. Figure shows concerning choose the variables to be pictured



within the frequency table by moving them from the left- to the righthand box. SPSS provides the user further choices, as well as statistics, charts, and format.

Statistics :

	unskilled	unavailability	shortage	absenteeism	delay
Valid	45	45	45	45	45
Missing					

Table 4.1 Frequency table of factors labour affecting productivity

Frequencies :

Unskilled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Practically ignored	2	4.4	4.4	4.4
	Does not affects	3	6.7	6.7	11.1
	Moderately affects	9	20.0	20.0	
	Highly affects	31	68.9	68.9	100.0
	Total	45	100.0	100.0	

Table 4.2 Frequency table of unskilled labour affecting productivity

Unavailability

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Practically ignored	2	4.4	4.4	4.4
	Does not affects	3	6.7	6.7	11.1
	Moderately affects	11	24.4	24.4	35.6
	Highly affects	29	64.4	64.4	100.0
	Total	45	100.0	100.0	

Table 4.3 Frequency table of unavailability of material affecting productivity

Shortage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Practically ignored	2	4.4	4.4	4.4
	Does not affects	4	6.7	8.9	13.3
	Moderately affects	12	26.7	24.4	40.0
	Highly affects	27	60.0	64.4	100.0
	Total	45	100.0	100.0	

Table 4.4 Frequency table of shortage of tools & equipments affecting productivity

Absenteeism

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Practically ignored	1	2.2	2.2	2.2
	Does not affects	5	11.1	11.1	13.3
	Moderately affects	14	31.1	31.1	44.4
	Highly affects	25	55.6	55.6	100.0
	Total	45	100.0	100.0	

Table 4.5 Frequency table of frequent absenteeism of labour affecting productivity

Delay

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Practically ignored	1	2.2	2.2	2.2
	Does not affects	4	8.9	8.9	11.1

Moderately affects	17	37.8	37.8	48.9
Highly affects	23	51.1	51.1	100.0
Total	45	100.0	100.0	

Table 4.6 Frequency table of Delay in Payments/wages of labour affecting productivity

Pie Chart_- A Pie Chart is a type of graph that displays data in a circular graph. The pieces of the graph are proportional to the fraction of the whole in each category. In other words, each slice of the pie is relative to the size of that category in the group as a whole. The entire “pie” represents 100 percent of a whole, while the pie “slices” represent portions of the whole. Pie charts are generally used to show percentage or proportional data and usually the percentage represented by each category is provided next to the corresponding slice of pie. Pie charts are good for displaying data for around 6 categories or fewer.

Practically ignored : 4.4% , Does not affects : 6.7% , Moderately affects : 20.0% , Highly affects : 68.9%

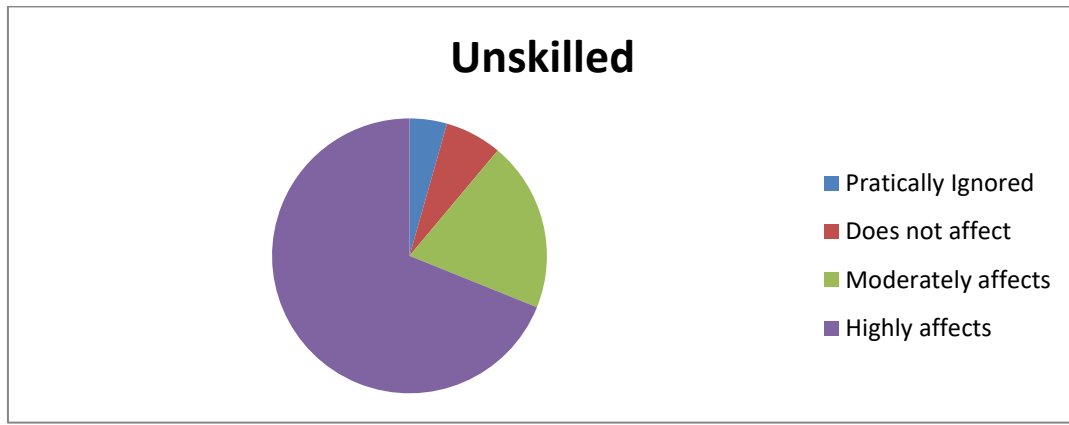


FIG 4.1 Pie Chart of unskilled labour affecting productivity

Practically ignored : 4.4% , Does not affects : 6.7% , Moderately affects : 24.4% , Highly affects : 64.4%

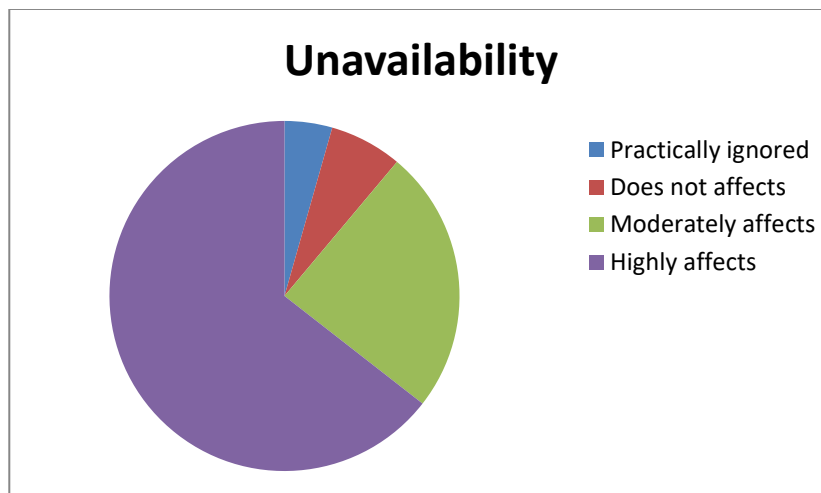


FIG 4.2 Pie Chart of unavailability of material affecting productivity

Practically ignored : 4.4% , Does not affects : 8.9% , Moderately affects : 26.7% , Highly affects : 60.0%

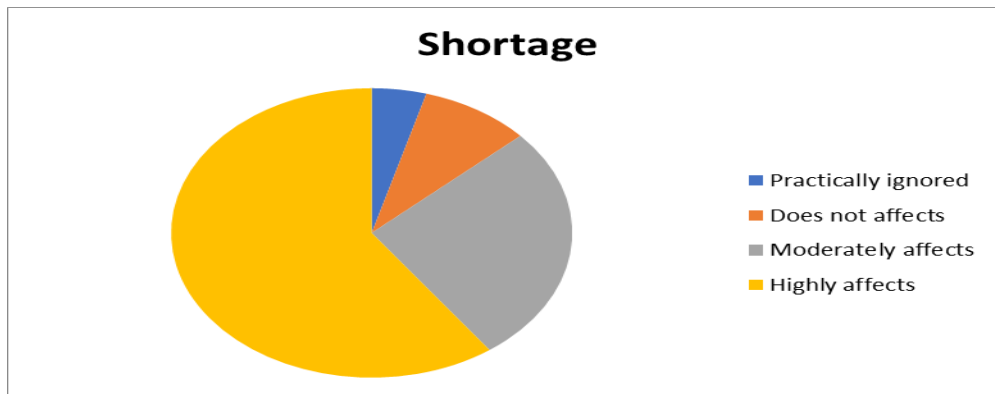


FIG 4.3 Pie Chart of Shortage of tools and equipments affecting productivity
Practically ignored : 2.2% , Does not affects : 11.1% , Moderately affects : 31.1% , Highly affects : 56.8%

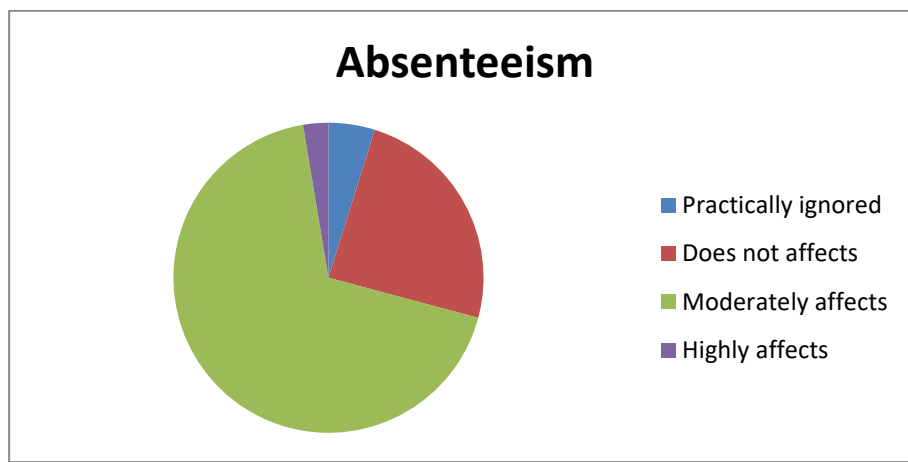


FIG 4.3 Pie Chart of Shortage of tools and equipments affecting productivity
Practically ignored : 2.2% , Does not affects : 8.9% , Moderately affects : 37.8% , Highly affects : 51.1%

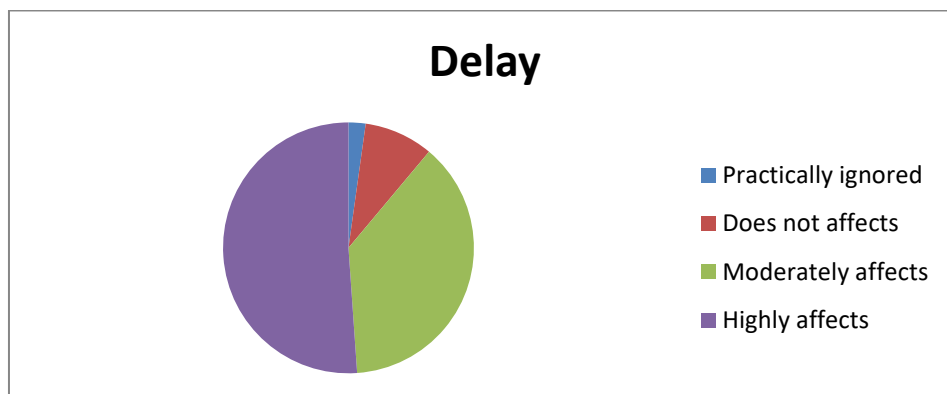


FIG 4.5 Pie Chart of Delay in payment/wages of labour affecting productivity

5. CONCLUSION

- A thorough literature review has been conducted during this analysis paper for the identification of the five main factors that live affecting labour productivity in construction industries so as to advocate the measure needed to enhance the labour productivity. The survey is predicated on the literature review solely and therefore, restricted to past analysis conducted on this specific topic and covers the recent journals accessible.
- A form survey was conducted with construction industries specialists to hunt their opinion on this matter. The conclusion are often made up of the study are summarized below:-



- There are several challenges face by construction industries however one among the foremost important issue is low labour productivity.
- The construction labour productivity influences the profit of the construction works.critical issue that affects the labour productivity will facilitate to develop ways to scale back inefficient and to a lot of effectively manage construction labour forces. this may not solely improve the project performance of construction firms however additionally create them a lot of competitive and consequently increase the possibilities of survival among this extremely competitive sector.
- The gift study known 5 factors namely:-
 - a. Unskilled labour
 - b. inaccessibility of materials
 - c. shortage/breakdown of tools and equipment
 - d. frequent absence of labour
 - e. Delay in payment
- Construction business is rated mutually of the key industries within the ever growing world. Study and information of productivity are important as a result of low productivity causes losses to the governing agencies and additionally influence the economy of the construction business , which may any result in loss of the economy of the country .

6. References

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