

A Various Factors Affecting Labour Productivity and Method to Improve It

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Abstract: - As we know India is a very developing country and there are many modern and developing cities. Bhand (M.P.) is also are developing cities of India. And various count. Project and industries getting their way Bhand for their project and count. Labour productivity is become highly important and big issue now daily. Because to complete count. Project on time we have to know about the Labour productivity in Bhand. Labour productivity is a very big problem and big issue for count. Works On the basis of previous study, questionnaire forms were developed or informed and there are 25 factor on it after that we went on approximately every count. Project which are running in Bhand. And near areas and find the most approve factors that effects count. Labour productivity in Bhand and new by the area. The after the RII analysis, we ranted each and every factor on the basin of data. By project manger project co-ordains, site-engineer and after Labour contractor.

These some -: top rated factors such as following as.

- (i) Labour supervision.
- (ii) Delay in payment
- (iii) Communication between site man yurt and Labour
- (iv) Material shortages
- (v) Working over line
- (vi) Accident as a routs of poor site safety program
- (vii) Team spirits
- (viii) Reward
- (ix) Labour ovation
- (x) Labour uses drags and any when
- (xi) Weather changes

This all factors in mind when scheduling their construction project Bhand. And other some imp. Method the improve it; there are some such as following.

1. Proper training to the Labour.
2. Proper and in advance material management.
3. Payment is on him. To the workers.
4. Methodical flow of work.
5. Advance site lay out.
6. Maintain work discipline.
7. Facilities to the Labour (Rat room par pour break)
8. Maximum use of advanced machinery and automation system.

Introduction -:

Construction business is playing a very important role in the economic growth of country and sub egests strong position in the nation's developments plans. In Indians construction business these are Very big economic part in our country.

Construction is a lay factor to the national bargain for continues all around the world as traditionally it look up a big portion in nation's total employment. In today's time safety in construction is needles to nation with a lot of money comes the company of big risks. The intensity of the risk is indeterminate with respect to times. Now what is the method which made to be determined?

- a. The section of real various perceived risks.
- b. The economic qualification of risks.
- c. The factice import and the control of a type of risks.

The construction business of India is major and very imp. Factor of the developed as it creates times through various related sector to everyone. The sector is basically based on Labour and containing third party jobs gives employment to millions of people.

On the basis of literature survey some basis Idea about the Labour productivity is came out, mentioned are some view of research on Labour productivity and method to improve it.

1. According to Richard L. Toker "to improve productivity attention must be focused on the management issue.
2. Polat and Arditi (2005) states that "to improve productivity different policies are to be adopt for different countries because they are not similar.
3. Adrian (1987) defines that to improve Labour productivity firstly improve the basis Labour factor which effects Labour productivity like, union legacy seasonality, motivational factor management etc.
4. Olomolaife (1987) classified productivity factor into two major categories.
 - (a) External factor (outside control)
 - (b) Internal factor (inside control)

Factors affecting Labour productivity based on research and situation survey and the method to improve it.

S. no. factor affecting Labour productivity and there are four groups and divided in among factors.

1. Management groups
2. Technological group.
3. Human / Labour group
4. External group.

Management group

1. Labour supervision
2. Delay in payment.
3. Lack of construction manger leadership.
4. Communication between site management and Labour.
5. Unavailability of suitable tools.
6. Materials shortage.
7. Lake of training offered to operatives.
8. Lack of suitable rest area offered to Labour on site.
9. Working overtime
10. Accidents as a result of poor site safety program.

Technical groups

1. Clarification in technical specification.
2. Team spirits.
3. Rework
4. Delay in inspection by the Engineer.
5. Design complexity level.

Human / Labour group

1. Labour fatigue.
2. Labour skill
3. Availability of experienced Labour
4. Labour motivation
5. Labour uses drugs and any other.

External Groups

1. High / low temperature.
2. Rain.
3. High humidity.
4. High winds.
5. Weather changes.

Methodology and Analysis

The methodology opted and worked for this research paper is questionnaire survey. The form is generated which contains 25 factors which is directly effects the constructions Labour productivity (it is based on literature survey and Pomona's interview). Then after that creating the questionnaire front we went stoning almost all the construction site in Bhind. (Near the Bhind area) and also meet contractor the basis of their experience and knowledge they ranked our factor exist on the ordinary scale from 1 to 5. We collected the form in which they ran fuel the factors 1-5.

The scale shown in table 1.1 represent value 1-5 which types of effects.

Item	Scale
No effect	1
Little effect	2
Moderate effect	3
Strong effect	4
Very strong effect	5

And when we collected all data by scale ranking 1-5 used the method of relative importance index (RII) for the analysis of the data. By the help of the formula and these method RII is a very and mostly used to decide the research works.

$$RII = \frac{(5 \times N_5 + 4 \times N_4 + 3 \times N_3 + 2 \times N_2 + N_1)}{(5 \times (N_1 + N_2 + N_3 + N_4 + N_5))}$$

N_1 = No effect

N_2 = little effect

N_3 = moderate effect

N_4 = Strong effect

N_5 = Very strong effect

RII value always lies b/w 0 to 1 ($0 < \text{RII} < 1$)

Factors	RII	Ranking
Labour supervising	3.65	1
Delay in payment	3.60	2
Communication b/w site management and labour	3.35	3
Material shortage	3.35	4
Working over time	3.25	5
Accident as a result of poor site safety program	3.20	6
Team spirits	2.90	7
Rework	2.90	8
Labour motivation	2.70	9
Labour uses drugs and any other	2.70	10
Weather changes	2.30	11

Results and discussion –

After doing RII calculation the RII values are care out for the each factors we ranked the factors have are the list of top 11 most factors that mostly affects the construction Labour productivity. After getting highest RII value 3.65 Labour supervision is reached as no. 1 factor which effects constructions Labour productivity in Bhind. (Near area) and we can say most imp. Thing to be considering when project in going to schedule in Bhind Labour supervision is most imp. Factors of 11 top rated factors and these ranked is No – 1.

Delay in payment in ranked as factors No. After getting value 3.60 it is also to imp. Factor of RII value of top II ranked. As factor No. 2 on the basis of value 3.35 it is also top 11 factors and it is also imp. Factor of Labour productivity in Bhind (Near area).

Communication between site management and Labour ranked as factor No. 3 on the basis of value 3.35 it is also top 11 factors and it is also imp. Factors of Labour productivity in Bhind (Near area).

Material shortages are one of the key factors in Ranked 4 no. 3.35 RII value it is also top 11 factors it also imp. Factors of Labour productivity in Bhind. No. 3 and No. 4 is some ranking it is some. The ranked 3.35.

Team spirits and rework is No. 7 and No. 8 this ranked is RII value 2.90 this imp. Factor is Labour productivity in Bhind.

Weather changes is last one factor and it's ranked is 11th And the RII value of is 2.30 respectively. And in some factor are creating big effects on Labour productivity in Bhind (Near area).

Guidelines for improving the Labour productivity -

1. Proper training to the Labour.
2. Motivation class is organized to worker towards project completion.
3. Proper and in advanced material management.
4. Payment is on time to the workers.
5. Methodical flow of work.
6. Advance site layout
7. Maintain word disciplains.
8. Maximum use of advanced machinery and automations system and etc.

Conclusion and recommendation –

This research work is designed to identify the causes of probable factors there are affecting is very high Labour productivity in building constructions and other construction site. The survey results are subjected to analysis and the ranking of factor is calculated using RII. 25 factors considered in the research us constructions professionals. And a proper suggestion to study about the various construction factor affecting productivity and the method to the improve it.

Priya- Conclusion and recommendation –

The total knowledge of every subject is imp. All this time and for Bhind. City this study on Labour productivity will give for much on to the own name and contraction and this is improvement in Labour productivity, and method to improve it. These are some recommendation for the improvement of construction Labour productivity in Bhind (Near the area)

1. Labour supervision this occurs which supervision is diverted from productivity. Plant and work to analysis manages added or other changes not in the original work and schedule.
2. In Bhind perception the payment delay should not we happened on the construction project which work on site are very much needed the money a study till that 80% of labour earn money every day and parches the delay needed to cook food. If a new construction project If about to start to Bhind. So they have to be in mind that they have enough money to give payment on time to complete their project on time.
3. Communication between site management and labour is also reducing the labour productivity. It is big problem so reduce this factor affect direct for management for labour productivity.
4. The material management team should have aware the about material stoking can also come lower labour productivity.
5. Rework also reducing the labour productivity so to reduce this factor to affect labour productivity.
6. Team sprit the bonding between staff who work closely in team and happy productivity work plan has been recognized for decades.

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