

# STUDY OF ABSENTEEISM ON ROAD CONSTRUCTION SITE: CAUSES, CO-RELATION AND REMEDIES

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**Abstract** - The construction industry in India today is labor oriented i.e. it depends on the human workforce for its working. Today out of the many problems faced by the construction industry in India 'absenteeism is one of the major problems which directly affect the productivity of any construction site. As more the magnitude of absenteeism more is the loss of productivity on site. The objective of this paper is to identify the causes of absenteeism on various sites in construction industry, their correlation and remedies. No such study has been done till date. The population for the study comprises of semi-skilled and unskilled labor from road construction site in construction industry, which is in progress, the total sample size for this study is of 126 staff (labourers) from 8 site activities each. The source of data collected was through questionnaire which was a close -ended questionnaire and discussion with workers. Statistical method i.e. Spearman's Rank co-efficient method is used to correlate the data as spearman's rank correlation method is used for analysis of qualitative data.

**Key Words:** Absenteeism, Construction Industry.

## 1 INTRODUCTION

Absenteeism can be defined as the practice or habit of being an absentee and an absentee is one who habitually stays away from work. Absenteeism is a habitual pattern of absence from a duty or obligation. The construction industry in India today also is labour oriented i.e. it depends on the human workforce for its working. Today out of the many problems faced by the construction industry in India 'absenteeism' is one of the major problems which directly affect the productivity of any construction site. More the magnitude of absenteeism; more is the loss of productivity on site. There needs to be a proper study to have a check on absenteeism, its causes, types and remedies. It is often easier for the construction organizations to make arrangement to cover staffs, which are going to be off for long periods. However, employees taking odd days off here which become more problematic and can have an immediate impact. If remain unchecked, this type of absence can send out the wrong signals to colleagues who, in some jobs, are likely to have to cover for those absent. If employers fail to take action, a bugging turn mentality may emerge. Frequent absence may have serious repercussions where staff is employed in customer-facing roles or employed on construction site. The impact of absence may be most directly felt and the need to arrange cover at short notice may be paramount. This adversely affects the progress of work and loss of resources. Thus, there is a need for such study in construction industry. Till date a lot of study has been done on absenteeism in various fields, but the irony is that civil industry being the most labour oriented, no such study has been carried out on absenteeism - its causes, types and remedies. This study focuses on the absenteeism of workforce in the construction industry, along with the different types and different causes of absenteeism. This study also includes seeking out the remedial measure of absenteeism in construction sector.

## 2 SCOPE OF WORK

This project is about absenteeism of semi-skilled and unskilled labour on site, their causes of absenteeism. The Project's focus is on comparing the causes of absenteeism faced by labours on road site selected, bringing into picture the major causes which play a prominent role in absenteeism of labour on site. In this project we will focus on establishing the correlation between the causes of absenteeism for the data collected from eight activities on site in India. Study has been done analytically and recommendations / remedies are suggested to minimize the quantum of absenteeism.

## 3 RESEARCH OBJECTIVE

The research objectives of this study are as follows:

- (i.) To identify the causes of absenteeism on road construction site.
- (ii.) To identify which causes play a prominent role in absenteeism and which causes are secondary.
- (ii.) A comparative analysis of the causes of absenteeism of labours in various activities on a site.

(iv.) To suggest remedial measures to reduce the rate of absenteeism on construction site.

#### **4 LITERATURE REVIEW**

From the various literature mainly journal & conference paper studied it can be seen that a major quantum of absenteeism is observed among the semi-skilled and unskilled category of labour. Absenteeism is more prominent in lower sections of the society.

We are going to keep this approach in present project work.

#### **5 RESEARCH METHODOLOGY**

The source of data collected was through questionnaire which is close-ended questionnaire and discussion with workers. The close-ended questionnaire was filled up by a 3 point rating system in which a rating of 0 to 3 is given to each cause of absenteeism. The cause which has a high impact on the absenteeism of labour was given 3 points and the one which had low impact was given 1 point whereas the cause which was null and void with respect to that particular labour was awarded 0 point. Statistical method i.e. Spearman's Rank co-efficient method was used to correlate the data as spearman's rank correlation method is used for analysis of qualitative data.

##### **5.1 Causes of Absenteeism**

Labour observed that high base The Royal Commission Labour observed that absenteeism among Indian labour is due to rural orientation and their frequent urge for rural exodus. According to Acharyas "In modern industrial establishment the incidence of industrial fatigue, mal nutrition and bad working conditions aggravate that feeling for change among industrial worker and sometime impel them to visit their village home frequently for rest and relaxation."

From the literature study the general cause of absenteeism may be summarized as below:

##### **5.2 Maladjustment with Site /Factory**

In factory the worker finds caught with unfamiliar surroundings or factory walls, he is bewildered by heavy traffic, by strangers speaking different and subjected to strict discipline and is ordered by complete strangers to do things which he cannot understand. As a result, he is under constant strain, which cause him serious distress and impairs his efficiency. All these factors tend to persuade him to maintain his contacts with village.

##### **5.3 Social and Religious Ceremonies**

Social and religious ceremonies divert workers from workers to social activities. In large number of cases incidence of absenteeism due to religious ceremonies is more than due to any other reason.

##### **5.4 Housing Conditions**

Workers also experience housing difficulties. Around 95% of housing occupied by industrial workers in India is unsatisfactory for healthful habitations. This leads to loss the interest in work.

##### **5.5 Work Fatigue**

Low wages compel a worker to seek some part time job to earn some side income. This often result in constant fatigue, which compels to remain absent for next day.

##### **5.6 Unhealthy Working Conditions**

Irritating and intolerable working conditions exist in a factory. Heat, moisture, noise, vibration, bad lighting, dust fumes and overcrowding all these affect the workers health causing him to remain absent from work a long time.

##### **5.7 Absence of Adequate Welfare Activities**

High rate absenteeism is also due to lack of adequate welfare facilities Welfare activities include lean drinking water, canteen, room shelter, restrooms, washing and bathing facilities, first aid appliances etc.

##### **5.8 Alcoholism**

Some of the habitual drunkards spend whole of the salary during first week of each month for drinking purpose. Therefore 2 or 3 weeks after getting their salary absent themselves from their work.

##### **5.9 Indebtedness**

All those workers who undergo financial business usually borrow money lenders at interest rate which are very high, which non often cumulates to more than 11 - 12 times their actual salaries. To avoid the moneylenders, they usually absent themselves from work because they are unable to return the money in stipulated time. All those workers who undergo financial business usually borrow money lenders at interest rate which are very high, which non often cumulates to more than 11 - 12 times their actual salaries. To avoid the moneylenders, they usually absent themselves from work because they are unable to return the money in stipulated time.

### 5.10 Improper & Unrealistic Personnel

Policies Due to favouritism and nepotism which are in the industry the workers generally become frustrated. This also results in low efficiency, low productivity, unfavourable relationship between employee and supervisor, which in turn leads to long period of absenteeism.

### 5.11 Inadequate Leave Facilities

Negligence on part of the employee to provide leave facility compel the worker to fall back on ESI leave. They are entitled to 50 days leave on half on pay. Instead of going without pay the worker avail them of ESI facility.

### 5.12 Effects of Absenteeism on Progress of Civil Industry

It is quite evident that absenteeism is a common feature of industrial labour in India. It hinders industrial growth and its effect in two-fold.

#### 5.12.1 Loss to Worker

Firstly, due to the habit of being absenting frequently worker's income is reduced to a large extent. It is because here is a general principle of "no work - no pay". Thus, the time lost in terms of absenteeism is a loss of income to workers.

#### 5.12.2 Loss to Employers

On the other hand, the employer has to suffer a greater loss due to absentees. It disturbs the efficiency and discipline on site consequently, production on site is reduced. In order to meet the emergency and strikes, an additional labour force is also maintained by the industries. On certain occasions, those workers are employed who present themselves at site gates. During strikes they are adjusted in place of absent workers. Their adjustment brings serious complications because such workers do not generally prove themselves up to work. Higher absenteeism is an evil both for workers and the employers and ultimately it adversely affects the production of industries.

#### 5.12.3 Loss to the Country

A major portion of India's economy depends directly and indirectly on construction sector; and construction sector in India depends mainly upon its labours.

Thus, loss to the construction industry due to absenteeism will further result in loss to the country.

## 6 CORRELATION

The correlation was carried out based on the data collected from various activities on site. The activities are as follows

1. Sub-grade Preparation
2. Granular Subbase (GSB) Laying
3. Dry Lean Concrete (DLC) Laying
4. Pavement Quality Concrete (PQC) Laying
5. Road Furniture
6. Batching Plant Ready Mix Concrete (RMC)
7. Crusher
8. Miscellaneous Works

**Table -1:** Sample Table format

| Causes                     | Activity |         |
|----------------------------|----------|---------|
|                            | II (X)   | III (Y) |
| Health Problems            | 1.2      | 1.75    |
| Festivals                  | 2.2      | 1.7     |
| Work Fatigue               | 0.85     | 1.3     |
| Lack of Interest in Work   | 0.3      | 1.15    |
| Lack of Interest with Site | 0        | 0.7     |
| Less Wages                 | 0.45     | 1.25    |
| Inadequate Leaves          | 0.25     | 0.45    |
| Other                      | 0.45     | 1.2     |

Following is a specimen calculation of Spearman's rank correlation coefficient for the causes of absenteeism between Granular Subbase (GSB) Laying & Dry Lean Concrete (DLC) Laying

$$\rho = 1 - \frac{6 \sum d^2}{n(n^2 - 1)} = 1 - \frac{6 \times 4}{8(8^2 - 1)} = 0.952$$

Spearman's rank correlation coefficient for the causes of absenteeism between Granular Subbase (GSB) Laying & Dry Lean Concrete (DLC) Laying is 0.952.

| Act X | Act Y | Rank x | Rank y | d | d <sup>2</sup> |
|-------|-------|--------|--------|---|----------------|
| 0     | 0.7   | 1      | 2      | 1 | 1              |
| 0.2   | 0.45  | 2      | 1      | 1 | 1              |
| 0.3   | 1.15  | 3      | 3      | 0 | 0              |
| 0.85  | 1.2   | 4      | 4      | 0 | 0              |
| 1.45  | 1.25  | 5      | 5      | 0 | 0              |
| 1.75  | 1.3   | 6      | 6      | 0 | 0              |
| 1.9   | 1.75  | 7      | 7      | 1 | 1              |
| 2.65  | 1.7   | 8      | 8      | 1 | 1              |
|       |       |        |        |   | $\sum d^2 = 4$ |

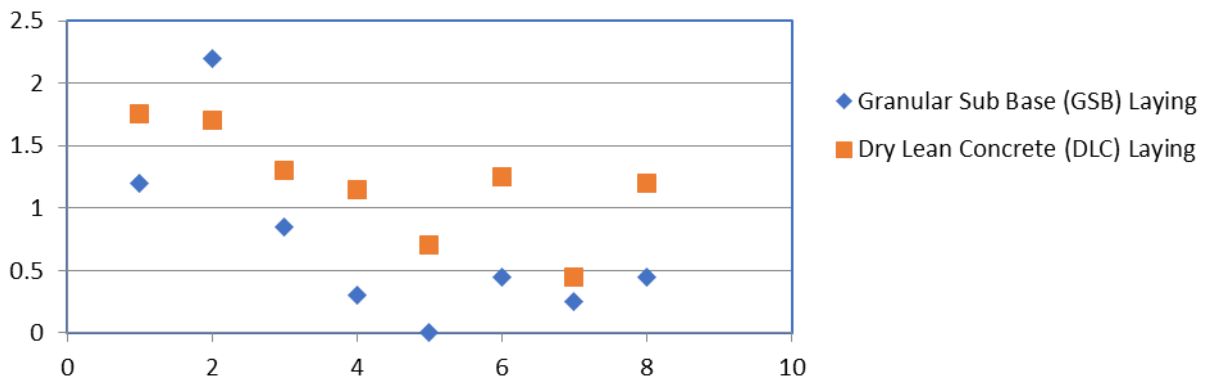


Chart -1: Name of the chart

The above graph is a Scatter Diagram of Spearman's rank correlation coefficient for the causes of absenteeism of Granular Sub Base (GSB) Laying V/s Dry Lean Concrete (DLC) Laying. Similarly the correlation coefficients were calculated for all the 8 construction activities.

## 7 REMEDIES

1. With the knowledge of causes of absenteeism, the absenteeism can be dealt in much more effective way as directly the cause will be treated.
2. Absenteeism can be dealt by application of proper personnel policies as the labours directly come under the domain of Human Resource.
3. Health problems are the major cause of absenteeism among the workers.
4. Seasonal and climatic changes are the reason behind the health problems of the labours.

5. Health problems can be minimized by providing proper medical check-up camps for the labours on regular intervals.
6. The employer can at least provide one meal of the day which is a proper balanced meal.
7. Along with the weekly off some fix number of holidays can be allotted to the labours on monthly / yearly basis.
8. Semi-skilled and unskilled labour impart more absenteeism as compared to the skilled labour.
9. Absenteeism is one of the reasons of cost overrun which is rarely taken into account (loss in time and production).
10. Increase in productivity with reduction in time will definitely yield more profits.
11. Socio-economic conditions of the workers will also rise as they can have better quality of life through increased income.

## 8 CONCLUSION

This study will prove to be very useful for the construction industry in order to improve its productivity through reduction in the magnitude of absenteeism. As no such study has been done earlier in construction sector, this study can be very beneficial. The benefits gained by the companies will be in terms of increased productivity leading to increased profits. The additional expenses suffered by the construction companies in order to cover up for the absent work-force can be clearly seen by the companies and right remedial measures on time can be taken. A large amount of delay experienced by the construction companies to finish a particular work due to absenteeism of work force will be reduced as this study will be a remedial measure for absenteeism amongst the work force.

## REFERENCES

- [1] CédricAfsa and Pauline Givord, The impact of working conditions on absenteeism
- [2] Denise Baker-McCleary et al, Absence management and presentecism: the pressures on employees to attend work and the impact of attendance on performance
- [3] Ernest B. Akyeampong, Trends and seasonality in absenteeism
- [4] Ernest B Akyeampong, Union Moment in Transition
- [5] Ernest B Akyeampong. Absences from work revisited
- [6] Ernest B. Akyeampong. Fact-sheet on work absences
- [7] Ernest B. Akyeampong, Missing work-Industry differences
- [8] Espen Bratberg and Karin Morstad, Work Sick, Worker Responses To A Financial Shock
- [9] Harald Dale-Olsen Absenteeism, Efficiency wages and economic incentives.
- [10] Harald Dale-Olsen, Sickness absence, performance pay and teams.
- [11] Howe Chern Wang et al, emotional intelligence, boredom, procrastination and job stress.
- [12] Jos N. van Ommeren and Eva Gutiérrez-i-Puigaraú. An empirical analysis of Absenteeism.
- [13] Mariajosé Romero and Young-Sun Lee, A National Portrait of Chronic Absenteeism in the Early Grades.
- [14] Monojit Chatterji and Colin Tilley, Theoretical approaches to managing sickness absenteeism.
- [15] Morten Nordberg and Knut Roed, Absenteeism,health insurance and business cycle.
- [16] Peter Skogman Thoursie, Reporting Sick.
- [17] Sarah Brown and John G, Absenteeism, 'Presenteeism', and Shirking.
- [18] Tyra Ek Haugen, Outcomes of Rehabilitation Programs-Labor market transitions and job durations.
- [19] Vincenzo Scoppa and Daniela Vuri, Absenteeism and Unemployment Protection Legislation Evidence from Italy.