

## **ACCIDENTS AT CONSTRUCTION SITES- A LEGAL PERSPECTIVE**

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### **ABSTRACT**

In India, construction industry is the second largest employer after agriculture. Throughout the world, the construction area of civil engineering is one of the most hazardous industries [1]. The number of fatal accidents which occur at construction sites is quite alarming. The major cause was identified to be fall of from heights and through openings. The Indian construction labor force is 7.5% of the total world labor force and it contributes to 16.4% of fatal global occupational accidents [1]. It is also very hazardous with almost six times as many fatalities and twice as many injuries per hour worked relative to a manufacturing industry [2]. India has the highest accident rate of accidents among construction workers globally, based on a recent study by the International Labor Organization (ILO) that cited a survey by one local aid group showing that 165 out of every 1,000 workers are injured at construction sites [3]. Large scale companies can afford to have separate safety departments to ensure safety at jobsites, but small scale companies are not aware of the safety requirements that could prevent construction site accidents. There is a need to understand the causes of accidents, preventive measures, and development of safe work environment at construction sites. There is also a legal perspective related to construction accidents, which deals with the compensation amounts, financial aid and insurance policies that are available for injured workers.

**Keywords:** Construction, Workers, Accidents, Labor, Legal, Reporting.

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### **I. INTRODUCTION**

In the economic point of view, the construction industry plays a vital role as it typically contributes to 10 per cent of a developing country's GNP. Construction industry also constitutes around 40% to 50% of India's capital expenditure on various sectors like highways, roads, railways, irrigation etc. The construction sector is one of the most hazardous industries in the world. According to a study conducted by Prof Dilip Patel, about 38 workers die every day at construction work sites in the country [3].

The construction site accidents tend to happen due to various factors like lacking of organizational arrangements, risky practices, poor administration responsibility, deficient wellbeing information and preparing of laborers unaware of safety rules. Due to these factors, many construction workers get exposed to getting injures or even losing their lives. It can happen because of a wide range of possibilities like fall from heights, electrocution, stuck in between, collapses, etc. Few accidents bring about just a minor injuries while others can be fatal. Therefore, it becomes a vital responsibility of authorities and organizations to follow safety standards, provide adequate safety facilities and take safety measures so as to ensure labor safety at construction sites.

Laws such as BOCW Act, 1996 and Factories Act, 1948, etc. deal with two of the important aspects of safety management in the construction industry, first one being the rules and regulations to be followed by the organizations and employees to ensure safety and minimize the risk of accidents and the second aspect which targets the legal support to be provided to the victims by the causer. It was also been found out by Mr.Vipul Pandya of BMS, an NGO based in Ahmedabad, that many construction accident cases go unreported in India. The wide range of reasons for under reporting of cases include perceptions of injuries as "small" and "part of the job" as well as fear of negative consequences, which may follow injury reporting.

The aim of this project is to analyze construction accidents data through survey and study the legal aspects related to construction accidents in India. The collected data can also be used to understand the reasons behind under reporting of accident cases and illegal compensations in construction industry.

## II. LITERATURE REVIEW

One of the major reason behind the increase in construction site accidents in recent years in has been due to the negligence either from the organization or the construction workers. One of the major point of debate arises when dealing with non-reporting of cases. Even though there are various laws that support construction workers in case of accidents, there are cases that don't get reported. Non-reporting of cases is an accustomed factor which brings down the actual numbers of the construction accidents from being recorded. The statistical data of construction site accidents in India are far from accurate because of this factor, where cases don't get reported more often than not.

The idea behind the research is to identify the reasons for the non-reporting of cases and find solutions for the scenario to change, over the course of next few years. Though there hasn't been much changes over the years, identifying the causes could pave way to a new evolution or changes in the upcoming years. This way everyone will be aware of the exact number of construction accidents that happen around us, by whose negligence they were caused and were the victims compensated accordingly. This will make sure that the organizations take safety measures and precautions to minimize the amount of accidents to construction workers. Even in case of rare accidents, they will take full responsibility in compensating the injured and their families by law.

There are some identified causes which lead to non-reporting of accident cases in the construction industry. One of the major reason is that organizations either use their power to subside the case or compensate the injured workers illegally without a witness from the concerned authorities. Construction workers are not aware of their duties and rules, so they fail to report the cases which eventually go unnoticed, losing out on their compensation at times. Some construction workers feel it is uncomfortable to go against the superior power and decide to remain quiet. There are victims who feel the methods and procedures to report the cases and claiming compensations are complicated, so they tend to violate their sense of responsibility and ignore reporting. These are some known reasons from the previous research in publications, but identifying the other major reasons, both in the perspective of the victims as well as the legal perspective is the focal point of this research.

## III. METHODOLOGY

The methodology is designed in order to identify the different legal aspects related to construction accidents sites and to reflect on safety management objectives. Initially, a detailed questionnaire is designed in order to quantify the criteria influencing the safety at site.

(i) General information: Profession, age, experience.

(ii) Accident data: number of accidents, type of injury, and reason for accidents, reporting, compensations.

In the next two steps, the questionnaire is distributed and the filled questionnaires are collected back from respondents. A total of 92 responses were collected from a range of professionals like lawyers, doctors, police officers and laborers. Table 1 shows details of number of respondents.

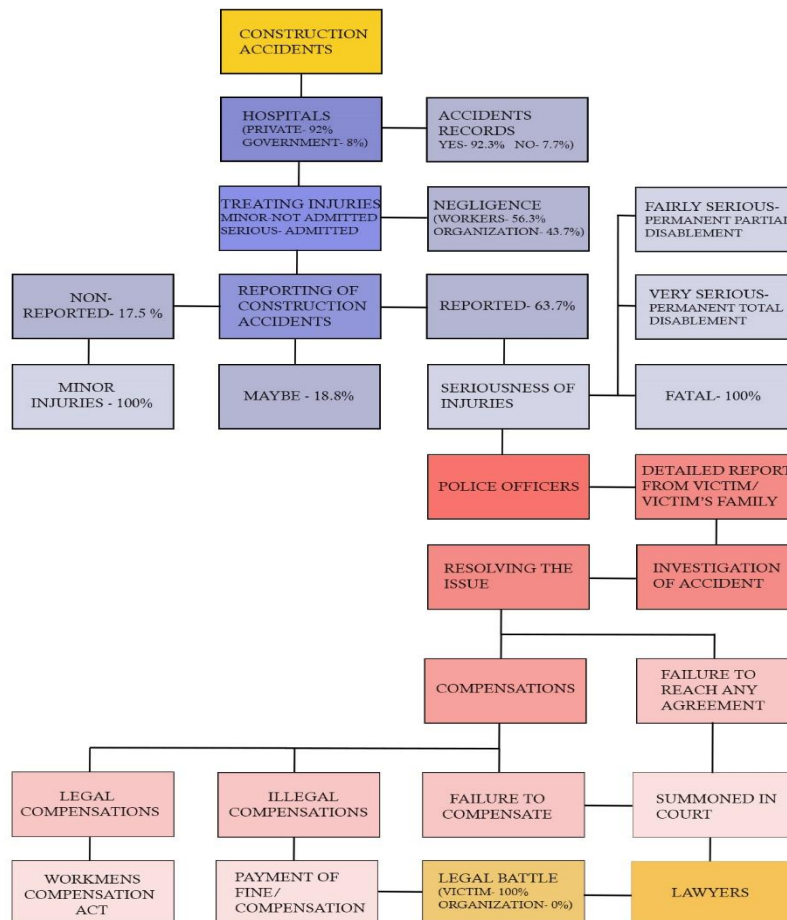
In the last step, findings based on the questionnaire and interviews were used to analyze the causes of accidents and the related legal aspects.

**Table 1: Responses**

Construction workers	60
Lawyers	6
Police officers	12
Doctors	12
Organizations	2

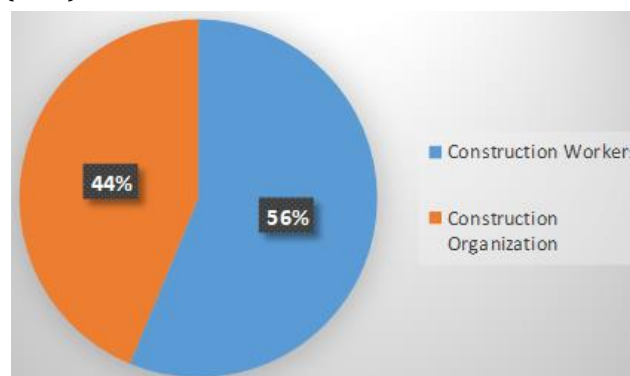
#### IV. OBSERVATIONS

Based on the survey, the roles and responsibilities of various professionals involved during construction accidents were identified. The following flowchart depicts the same:



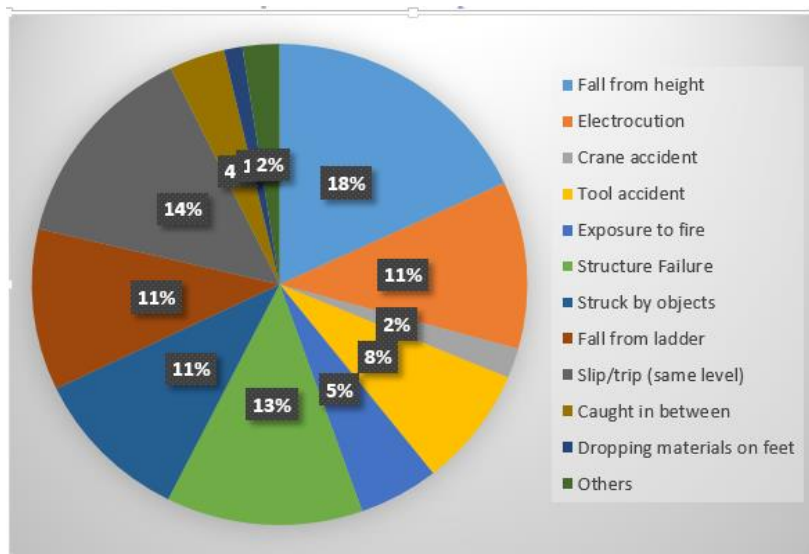
**Figure 1: Roles and responsibilities flowchart**

The negligence of construction workers lead to more accidents (56%) compared to the negligence of construction organizations (44%)



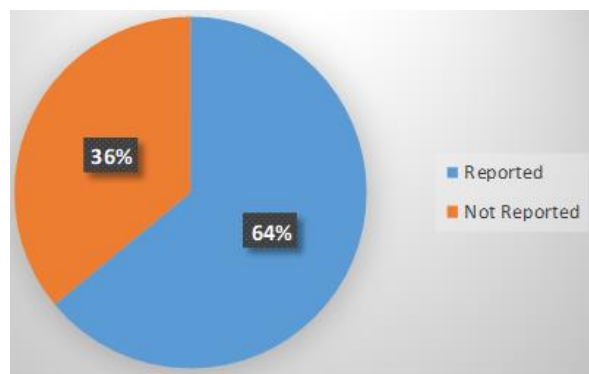
**Figure 2: Negligence**

Fall from heights, one of the “fatal four” was the most frequent type of construction accident (18%) followed by slips/ trips (14%), structure failure (13%), struck by objects and electrocution (11%).



**Figure 3: Causes of construction accidents**

Among the reported cases (64%) all of them were either serious or fatal injuries, while almost all of the minor injury cases were not reported and ignored



**Figure 4: Reporting of construction accidents**

## V. OBSERVATIONS

Although fatal four are the most deadly causes of construction accidents, slips and trips are one of the most frequent causes. Majority of the construction workers believe they themselves are responsible for most construction accidents, their own negligence. The key issue behind non-reporting of accident cases and illegal compensations to break law was due to lack of awareness among construction workers, who aren't aware of the basic laws and legal support they could get in case of construction accidents. In case the disputes are taken to court, victims have a certain chance of winning the case. Due to the lack of awareness, most workers settle for lesser compensations. These transactions between employers and victims happen without the presence government officials. Hospitals fail to consider minor injuries serious enough to be reported, which in turn leaves many minor injury cases unnoticed by government statistics.

## VI. CONCLUSION

A governing body to monitor and ensure safety at construction sites should be formed, who should take responsibility to host events for construction workers on a regular basis, at different places throughout the country, to create an awareness programs for construction workers to enroll themselves. Through these events, the workers should be educated about the Acts and laws related to construction accident, measures to ensure safety and the legal support they can get in case of accidents. By doing this, workers will have a basic knowledge on what has to be done in case of site accidents, right from reporting to claiming compensations legally. This will make sure that construction organizations take serious measures to ensure safety and compensate the victims legally in case of accidents. The body should also take responsibility in

monitoring the hospitals' procedures of reporting construction accident cases, making sure even slightest of accidents aren't ignored. Motivating the construction workers through rewards, on a regular basis, for following all the safety procedures properly will turn out to be a driving force for them reducing the frequency of accidents due to negligence

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