

CHAPTER I

INTRODUCTION

1.1. **Background**

Yogyakarta becomes one of the provinces in Indonesia that is experiencing rapid growth in construction industry. It can be seen from the many construction projects such as buildings construction, roads, bridges, and so on. However, the implementation of construction work sometimes faces many obstacles, which one of them is construction delays. The factors that cause the delay can come from various things.

Construction workers have significant portion in every engineering project. They build roads, houses, also maintain public infrastructures. Their jobs include many hazardous task and condition such as work at high place, dust, electrical equipment that can be dangerous if used by people with no ability to operate.

Construction project is a risky occupation for field workers. In 2017, based on BPJS Employment data, the number of work accidents in Yogyakarta reached 998 cases. Contractors can mitigate risk and ensure their teams follow required safety procedures. Completing safety meeting forms and inspection checklists become important to ensure that company has gone through the requisite measures to follow safety standards. Some research has been performed to analyze construction-work safety.

Construction delays become one of problems that sometimes occur for some projects in Yogyakarta. It is known that construction projects in Yogyakarta has

experienced a delay for around 30% of the plan in 2017. Construction delays is considered as time lag in completion of activities from its specified time as per contract or can be defined as late completion or late start of activities to the baseline schedule, directly affecting specified cost. As a result, there will be extensions of time required which will further result in fine, increased cost due to inflation, termination of contract, etc. Therefore, delay in construction project has a negative effect on clients, contractors, and consultants in terms of growth in adversarial relationships, mistrust, litigation, arbitration, and cash-flow problems.

This study presents the research findings on relation between accidents and its impact in construction delays. This is helpful for researchers and professionals which involved in civil engineering field to understand the importance of safety control, so that it doesn't cause significant losses for construction projects parties in Yogyakarta.

1.2. Research Questions

This study will be conducted generally based on the following questions:

- a. What kind of factors that cause accidents on construction projects in Yogyakarta?
- b. How much the frequencies of accidents that happen on construction projects in Yogyakarta?
- c. Is there any significant impact of accident frequency on construction delays?

1.3. Expected Benefits of The Study

By doing this study of final project, it is expected to give benefits for either the author or readers, which are:

1. The author as a civil engineering student that will work in civil engineering field directly can get more knowledge about the impact of accidents and its relationship with construction delays.
2. The contractor and other parties in construction project will get a comprehension about the importance of safety control in construction project, because construction project is a field occupation that consist of many dangerous risks, so it is important to give more attention for labor safety, and create a better situation for working to minimize the number of accidents during construction.
3. Give the information for society about the impact of accidents during work and give knowledge about its relation for working delays.

1.4. The Framework of The Study

This final project consists of 5 (five) different chapters, which are:

Chapter I is Introduction; this chapter consist of background of the study, problem statement, expected benefits of final project, the structure of final project, and the originality of final project.

Chapter II is Literature Review; this chapter consist of many theories that used by the author to complete the information and knowledge in doing this study of final project.

Chapter III is Methodology; this chapter consist of the method about the way the author collecting the data including the processes to finish the study and solve the problem.

Chapter IV is Data Analysis and Discussions; this chapter consist of the explanation after all the data collected and its settlement by the author to get the final result of the study.

Chapter V is Conclusions and Suggestions; this chapter consist of the final statement as a conclusion of the study from chapter one until four and also giving suggestions for readers.

1.5. Originality of Final Project

Based on several studies by the other surveyors, some of them have already discussed about the important of safety control management in construction projects. But, no one of them focusing on the impact of safety control management on construction delays. So that, the author takes this case of study to complement the other researches before.