

THE IMPACT OF REGULATION ON CONSTRUCTION LABOUR PRODUCTIVITY

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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ABSTRAK

Produktiviti buruh dalam industri pembinaan telah menurun dengan ketara. Oleh itu, terdapat keperluan untuk menilai produktiviti buruh pembinaan pada hari ini. Peraturan telah dikenal sebagai salah satu faktor yang boleh menjejaskan produktiviti secara langsung. Objektif kajian ini adalah untuk mencari kesan peraturan yang berbeza mengenai produktiviti buruh pembinaan di Malaysia dan mengenal pasti cabaran yang berkaitan dengan peraturan. Data telah dikumpulkan dengan melakukan sesi wawancara individu sebanyak 12 responden dari seluruh Malaysia. Analisis telah dilakukan dengan menggunakan analisis tematik yang merupakan kaedah analisis kualitatif. Keputusan menunjukkan bahawa peraturan memberi kesan ke atas produktiviti buruh pembinaan secara positif dan negatif dari segi masa, kos, proses dan sumber manusia. Cabaran yang disebabkan oleh penguatkuasaan peraturan adalah kekangan masa, birokrasi, pengurusan, permintaan sumber manusia, profesionalisme dan etika.

ABSTRACT

Labour productivity in the construction industry has significantly declined. Therefore, there is a need to assess construction labour productivity on the present day. Regulation has known as one of the factors that may directly affect productivity. The objective of this study is to find the impact of different regulations on construction labour productivity in Malaysia and identify challenges associated with regulations. Data has been collected by doing individual interview session of 12 respondents from across Malaysia. The analysis has been done by using thematic analysis which is a qualitative method of analysis. The results show that regulations give an impact on the construction labour productivity positively and negatively in term of time, cost, process and human resources. The challenges that have been caused by enforcement of regulation are time constraints, bureaucracy, management, human resources demand, professionalism and etiquette.

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LIST OF SYMBOLS

% Percentage

LIST OF ABBREVIATIONS

| | |
|------|---|
| GDP | Gross domestic product |
| TFP | Total factor productivity |
| RFI | Requests for Information |
| MPC | Malaysia Productivity Corporation |
| MOW | Ministry of Works |
| CIDB | Construction Industry Development Board of Malaysia |
| CIMP | Construction Industry Master Plan |
| BEM | Board of Engineers Malaysia |
| LJBM | Board of Quantity Surveyors Malaysia |
| IEM | Institution of Engineers Malaysia |
| PAM | Malaysian Institute of Architects |
| ISM | Institution of Surveyors Malaysia |
| PTW | Permit to Work |
| SOP | Standard operating procedure |
| PMA | Lifting Machineries Certificate |
| PPE | Personal protective equipment |

CHAPTER 1

INTRODUCTION

1.1 Introduction

The construction industry is very important to our country. The construction industry has contributed to the economy and progress nationally compared to other industries such as manufacturing and automotive industry that involve internationally. In the construction industry, productivity has seen to be decline by time. The productivity as a definition is generally the ratio of output to input. The productivity also can be defined as the ratio of total output to total work hour which will be related directly to the construction labour productivity.

Construction productivity is widely measured in the form of unit rate which is the number of actual work hours required to perform the appropriate units of work (Jang et al., 2011). However, units of measurement change with the construction activity depending upon the types of input and output. Nevertheless, the importance of productivity in reducing the cost and generating profit is central across all industries including the construction industry (Hasan et al., 2018).

The construction labour productivity is one of the keys to success on the construction project as the labour play a major role in the completion of the construction project. The present of foreign labour in the construction project also have created some problematic issues when it related to regulation. Therefore, regulation might be important for the contractor to regulate foreign labour intake. The usage of regulation on construction always viewed to be positive to handle the problem but how far regulation will impact the construction labour productivity?

1.2 Problem Statement

Many regulations have been introduced to construction project management as the guidelines. Even though the regulation has been successfully implemented, the impact of the regulation on construction labour productivity is still unknown. Therefore, there is a need to do research of this matter to identify whether the regulation gives impact and creates challenges on the regulation enforcement at the construction project.

1.3 Research Questions

This study has enhanced the understanding on the impact of regulation on the construction labour productivity by raising some important research question that related directly to the research topic.

Table 1.1: Research questions versus form of questioning

| | |
|---|--|
| Are regulation being negative impact on construction labour productivity? | If yes, how and why? If no, how so and why? |
| Have regulation give challenges on the construction project? | How? Why? |
| How regulation give impact on construction labour productivity? | How? |
| Are there potential impact on different regulation on construction labour productivity? | If yes, how and why? If no, how so and why? |
| How do construction industry faced the regulation to increase construction labour productivity? | How? |

1.4 Objective

Below are the objectives of this study:

- To find the impact in different regulations on construction labour productivity in Malaysia.
- Identify challenges associated with regulations.
- Identify the different regulations that affect the construction labour productivity.

1.5 Scope of Study

This study was focused on the impact of regulation on construction labour productivity in Malaysia. The data were provided by the professional and management involved directly in the civil engineering field. This research involving three construction stakeholders which are contractor, consultant and government. This group of stakeholders is chosen because they are the professional, highly knowledgeable and skillful in the construction field. The method of study is using individual interview session with open-ended questions. The data has been analysed by using a thematic analysis.

1.6 Research Significant

The uses of regulation have been discussed widely in the construction industry as a tool to control the construction activities. For an instant, the existing of safety regulation at the construction site have minimised the number of accidents.

Hence, this study was developed to investigate the impact of regulation on construction labour productivity. This study will help to show the impact that appears when different regulation was applied.

Finally, this study can be served as a review to the construction industry on the existing regulation. Therefore, they can improve to maximise their construction labour productivity in the future.

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