



**6th UNDERGRADUATE  
SEMINAR ON BUILT  
ENVIRONMENT  
AND TECHNOLOGY  
(USBET) 2023**

**SUSTAINABLE BUILT  
ENVIRONMENT**

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# e-Proceeding

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## POST COVID-19 : IMPACT OF LABOUR INSUFFICIENCY IN CONSTRUCTION SITES

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### ABSTRACT

*The COVID-19 pandemic become a significant impact on the construction industry, including the labour supply. The pandemic has led to several challenges for construction companies, including many construction workers have been infected with COVID-19. The objective of this research is to identify the impact of labour insufficiency in construction sites after COVID-19 pandemic. Quantitative method is used in this research. The questionnaires distributed to 55 respondents to contractors G7 at Perak. All the data were analysed by using SPSS version 29 software in descriptive analysis. The finding shows the impact of labour insufficiency are companies financial losses, project delay, construction productivity and labours joint athers industries. This research can be used as a reference to the contractor if there is any contagious outbreak.*

**Keywords:** covid-19, labour, construction industry, construction workers

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## **INTRODUCTION**

On March 2020, The Malaysian government has put in place a number of measures, including the Movement Control Order (MCO). According to Ogunnusi et al., (2020), the COVID-19 pandemic had a significant negative impact on the construction sector in Malaysia. Many construction projects were put on hold across the MCO, with the exception of those deemed crucial or essential services. Contractors have continued to experience disruptions even after the MCO was withdrawn, such as labour insufficiency and those brought on by needing to implement strict standard operating procedures on health and safety precautions for construction sites. Therefore, it is crucial to identify the impact of labour insufficiency in Malaysian construction sites after COVID-19 pandemic.

## **IMPACT OF LABOUR INSUFFICIENCY IN CONSTRUCTION SITE**

The coronavirus, which is known as (COVID-19) pandemic, has brought significant challenges to the development of the world economy and has an unprecedented impact on the construction industry. The impact of COVID-19 has disturbed industrial sectors; especially, the construction industry is badly affected by the adverse impacts. Apart from job risk, workers and professionals who perform their duties on construction sites are at high risk of exposure and infection from aerosol and droplet contamination. Specific data on the risk of infection about workers is not available, which is a major concern for the construction sector. The slow progress of the construction sector in the crisis of COVID-19 grabs the attention of stakeholders. The construction industry business is at risk because of the adverse impact of COVID-19 that leads to a decrease in economic growth (Iqbal et al. 2021). According to Ankan et al. (2021), Corona virus is an infectious disease therefore to stop the spread of this disease, the construction work has been temporarily stopped keeping in mind the concerns of the workers in the construction industry. As a result, construction industries are gaining nothing but losses, which have an impact on world economy. It has also disrupted the transportation system which has disrupted the supply of materials. Many construction companies are going through a financial recession, so companies are laying off a lot of their workers. Overall, construction industry has taken a terrible turn.

ILO Sectoral Brief (2021) stated that, the COVID-19 pandemic has devastated the world of work. Its impact, which varies across sectors, has been significant in the construction sector. As construction is sensitive to economic cycles, construction enterprises and workers are particularly vulnerable to the drastic decline in economic activity resulting from the pandemic. Increased health risks associated with COVID-19 have exacerbated decent work deficits in the sector. Consequently, the sector activity can have a significant impact on income generation and poverty reduction. Its significant job creation potential comes from its labour intensive nature and strong links with other economic sectors. While the construction industry can generate jobs for large numbers of people, these often come without job security, and the labour conditions vary widely around the world. Efforts to stimulate growth and productivity in the sector are important for promoting decent work and more sustainable building practices

According to Alsharaf et al. (2021), significant delays in inspections and securing permits were also reported. For example, one of the interviewed contractors mentioned that as all parties transitioned to the new format of working, there were delays in completing inspections and the certification of work. More specifically, the contractor mentioned that the owner's representative in many cases was unable to stick to the initial timeframe to complete the certification of completed work. In many cases, several inspection-related meetings had to be cancelled and postponed due to the challenges and restrictions of meeting in person. The participants also shared that there were delays with securing permits from various governmental agencies. These delays were largely due to governmental agencies transitioning to working remotely from home and challenges associated with accessing the necessary information and documentation. Productivity rates reportedly suffered across the construction industry. Much of the loss in productivity and efficiency was attributed to the new safety measures that were necessary to protect the workforce as the pandemic continued to progress.

During the pandemic, the situation drastically deteriorated by firstly shortage of construction material supply, which then impacted the construction industry. According to Dr. Yaser. G & Alhagar A., (2020), following the spread of the virus, many countries started implementing several measures to reduce movement of people, and that has mainly obstructed the construction because it requires on-site work and every project member must be available to work, check, and monitor all the work activities. The construction industry is far different from other industries which typically requires on-site involvement of all the project members. Hence, it is crucial to appreciate how the construction industry addresses this unforeseen situation. The companies are not making any kind of profit due to work stoppage in the companies and on the contrary more losses are being incurred and not only the company is losing money but also all the suppliers who are providing the required materials to different companies to be used in construction sector, all those suppliers are also incurring huge losses. Since the closure of the company, the supply chain has been shut down and the factories that produce goods have stopped production, resulting in many losses of them.

A significant challenge reported by some of the participants was the long-term effects of the pandemic on the construction workforce. For example, several project managers and supervisors alluded to the economic downturn that was previously experienced during the Great Recession when a large number of construction workers abandoned the construction industry to join other industries. These workers never returned to the construction industry following the recovery and that this has resulted in a large deficit in the number of skilled workers in the industry. It's been worried that the current pandemic will further aggravate the situation if the laid-off workers choose to transition to other industries and not return.

## **RESEARCH METHODOLOGY**

This research used quantitative method to achieved the objective. Quantitative method that explain its findings in numbering form. The secondary data were from articles and

journals. The primary data is a questionnaire. The questionnaire has two sections. Demography is covered in the first section, followed by the impact of labour insufficiency in construction site. Questionnaires were distributed to 55 contractors Grade 7 in Perak. The list of contractors was extracted from the CIDB website. There are only four questions covered in this research. The respondents need to answer Likert five-point scales in the questions, varying from strongly agree to strongly disagree. All the data from the questionnaires were analysed by using SPSS software in Descriptive Analysis. Descriptive Analysis in SPSS can be retrieved by clicking Analyze Menu → Descriptive Statistics. Detailed information can be obtained using Frequencies. The results are presented in the table 1.

## ANALYSIS OF FINDINGS

This section consists of four (4) questions that were asked regarding the impact of labour insufficiency in construction sites after COVID-19. There are 81.3% male respondents and the balance 18.8% were female. 43.8% of the respondents have 4-6 years experiences and 36.3% of 7-9 years in construction industry. Table 1 indicating the analysis and the breakdown of the mean score and the rank.

**Table 1: The impact of labour insufficiency in Malaysian construction sites after COVID-19 pandemic**

Variables	Frequency of Likert-Scale					Mean Score	Perception Level	Rank
	1	2	3	4	5			
1.Companies financial losses	0	0	0	2	53	4.94	<i>Strongly Agree</i>	1
2.Project delayed	0	0	2	10	43	4.69	<i>Strongly Agree</i>	2
3.Construction productivity	0	0	1	10	44	4.66	<i>Strongly Agree</i>	3
4.Labours joined other industries	0	0	4	13	38	4.53	<i>Strongly Agree</i>	4

The analysis in Table 1 shows that the variable breakdown determine the impact of labour insufficiency in Malaysian construction sites after COVID-19 pandemic, all the question has a positive perception level which is strongly agreed level, or the majority is at the highest rank. From the breakdown companies financial losses received the highest mean score which is (Mean=4.94). This is followed by third and fourth rank which are Project delayed and Construction Productivity with the mean of (Mean=4.69) and (Mean=4.66) respectively.

Research conducted at Sibul, Sarawak revealed the 175 contractors G1 agreed that the COVID-19 pandemic caused delays in project completion (Lam et al, 2022). Tekin, (2022), in the research reveal in Turki construction industry clearly show that

construction labor productivity was deeply affected by the coronavirus disease (COVID-19) pandemic. Finally, the lowest rank which is fourth rank is Labours joined other industries with the mean score of (Mean=1.50).

## CONCLUSION

In conclusion labour is an essential resources to carry-out physical work on construction site. Totally, all the work on site required labour to achieve the work progress. The Covid-19 outbreak affected labour insufficiency on construction site. The research revealed four impact of labour insufficiency in construction sites after COVID-19 pandemic based on highest to lowest ranking. There are company financial losses, project delayed, construction productivity and labours moving to another industries. As a result of the findings, the contractors must be ready for any future uncertainty, to prevent the project from being postponed and abandoned. All the related parties in construction industry can utilise the findings and assist in improving in the subject matter. The target respondent's area can be widened for future study so that it does not merely concentrate on Perak's contractors in Grade G7 only. Aside from that, additional research with a larger number of respondents and a wider range of respondents is required to obtained more precise findings on the impact of labour insufficiency on Malaysian construction sites after the COVID-19 pandemic.

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Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim  
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Sekian, terima kasih.

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Saya yang menjalankan amanah,

**SITI BASRIYAH SHAIK BAHARUDIN**  
Timbalan Ketua Pustakawan

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*Setuju.*

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