

**IMPACT OF COVID-19 PANDEMIC ON THE
CONSTRUCTION INDUSTRY IN
MALAYSIA: ISSUES AND CHALLENGES**

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IMPACT OF COVID-19 PANDEMIC ON THE CONSTRUCTION
INDUSTRY IN MALAYSIA: ISSUES AND CHALLENGES

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ABSTRACT

The COVID-19 pandemic in Malaysia has left a lasting impact on the construction industry with a suspensions and delays in projects progress and completion schedule that has created uncertainty at present and in the years ahead. It suffered a loss of approximately RM19 billion and also had to bear excess costs which also included more than 4,000 infections at various work sites as of December 2021 making it extremely vulnerable. While the pandemic may have brought with it some silver linings, it is crucial that the industry players to conduct research broadly and openly, lest future pandemic preparedness in research repeat the hard-fought lessons of today. The purpose of this research is to explore, explain and determine the factors that facilitate cause and effect of Covid 19 pandemic to the construction industry with a specific focus on the housing development's issues and challenges. The study aims to provide a comprehensive analysis of the impact of the COVID-19 outbreak to contractors, developers and/or industrial players in Malaysia, society and the economy and to investigate the preventive measures taken to reduce the impact. Qualitative research approach using a single case study method was adopted for the data collection. The data was collected from multiple sources of evidence which comprised of semi-structured interviews, documentation review, observation and archival records. In-depth interviews were conducted with 50 individuals which comprise of founder, owner, director, shareholder, manager, engineer, consultant and worker of construction and housing development companies. This appropriate study design, collaboration, data collection and data sharing shall enable to unpacks the key responses to the issues and challenges, the efficacy of current initiatives, and summarize the lessons learnt as an update on the information available to the industry, business, authorities and societies. In addition, this research is to develop and evaluate innovative strategies and technologies to improve access to the project management, quality, safety, and cost effectiveness in the construction industry. This report review captures a number of specific suggestions for support. For example, support for the industry players, government, societies, key management and workers, creating safer construction site's environments, wide-scale financial support, greater awareness around the industry which were badly affected by COVID-19 and putting in place robust processes for learning and reflection on the impact of the pandemic. This report will benefit construction firms, governments, leaders, and customers in addressing a pandemic-like situation in the future.

Keywords: Impact of Covid-19 pandemic, construction industry, housing development, research, study, social-economy, analysis, company and government policy

APPROVAL

This is to certify that this thesis conforms to acceptable standards of scholarly presentation and is fully adequate, in quality and scope, for the fulfilment of the requirements for the degree of Doctor of Business Administration (DBA).

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25th April 2024

DECLARATION

I hereby declare that the thesis submitted in fulfilment of the PhD degree is my own work and that all contributions from any other persons or sources are properly and duly cited. I further declare that the material has not been submitted either in whole or in part, for a degree at this or any other university. In making this declaration, I understand and acknowledge any breaches in this declaration constitute academic misconduct, which may result in my expulsion from the programme and/or exclusion from the award of the degree.

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A handwritten signature in black ink, appearing to read 'Zainudin Bin Awang @ Omar', written over a horizontal line.

Signature of Candidate:

Date: 25 April 2024

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LIST OF ABBREVIATION

COVID-19	Corona Virus Disease 2019
MCO	Movement Control Order
EMCO	Extended Movement Control Order
SOP	Standard Operation Procedure
MYMP	M.Y.M.P. Sdn. Bhd.
PR1MA	Perumahan Rakyat 1 Malaysia
SPNB	Syarikat Perumahan Negara Berhad
CIDB	Construction Industrial Development Board
KPKT	Kementerian Perumahan dan Kerajaan Tempatan
KKR	Kementerian Kerja Raya Malaysia (Ministry of Works)
JKR	Jabatan Kerja Raya (Department of Works)
REHDA	Real Estate and Housing Developers' Association Malaysia
PKMM	Persatuan Kontraktor Melayu Malaysia
SMEs	Small Medium Enterprises
CEO	Chief Executive Officer
BOD	Board of Directors
WFH	Work from Home - remote working
LFH	Learn from Home - remote education
SLR	Systematic Literature Review

CHAPTER 1

INTRODUCTION

1.0 Chapter Overview

This chapter explains the background of study, statement of the problem, objectives of the study, as well as the scopes and importance of the case study. Background of the problem shall arouse interest and able to convince the reader that the research is justifiable and the problem is worth researching to resolved challenges and issues and well as to respond to the social concerns. Statement of the Problem shall clearly define the ‘problem’ that the intended study is going to answer, such as basic difficult and area of concern. It will be very well framed, clear, precise, specific, measurable and attainable. The chapter will demonstrate the objectives of this research, which is to examine the impacts of the COVID-19 pandemic on construction industry and housing development in Malaysia.

The research will be based on goal oriented to explain, to explore, to predict or to describe the objectives of the study. This chapter will also underline the core research questions and scopes that to be investigated and explored. It will be used as base line of the method in data collection. This chapter will also provide the significance of the study which will focus on the specific benefits of the research in the field, society, and various people and institutions. Further to that, the delineation of the research problem will be outlined to show the explication of relationships among variables or comparisons discussed in each chapter. This chapter will be briefly summarised to get a clear overview of the study.

1.1 Introduction to the Issues of the Study

Corona virus disease 2019 (COVID-19) pandemic has swept across the globe causing hundreds of thousands of deaths and enforcement of movement control order (MCO) that lead to closing borders, shutting down economies and wreaking havoc on an unprecedented. The pandemic has changed the world, not only because of the disease itself, but because of the long-term effects of the world's reaction to the pandemic. It has led to a dramatic loss of human life worldwide and unprecedented challenge to public health, food systems and the world of work.

The COVID-19 pandemic in Malaysia was a part of the worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). As of February 2023, the country is ranked third in the number of COVID-19 cases in Southeast Asia behind Vietnam and Indonesia. It was recorded over 5 million confirmed COVID-19 cases, a high of approximately 323,000 active cases, nearly 40,000 deaths, and over 66 million tests. (Center for Strategic and International Studies, 2021). (Ministry of Health (Malaysia, 4 January 2022.)

The first cases in Malaysia were confirmed among travellers from China in Johor via Singapore on 25 January 2020, and continued to be limited to a few imported cases until March 2020, when several local clusters emerged. (Sipalan & Holmes, 18 February 2020). The most notable was a Tabligh Jamaah religious gathering in Sri Petaling, Kuala Lumpur that sparked a massive spike in local cases and imported cases to neighbouring countries. (Ng, 5 April 2020). By the end of March, the total number of cases had risen from below 30 to over 2,000 active cases across the country. (From the Desk of the Director-General of Health Malaysia (30 March 2020), 27 February 2021).

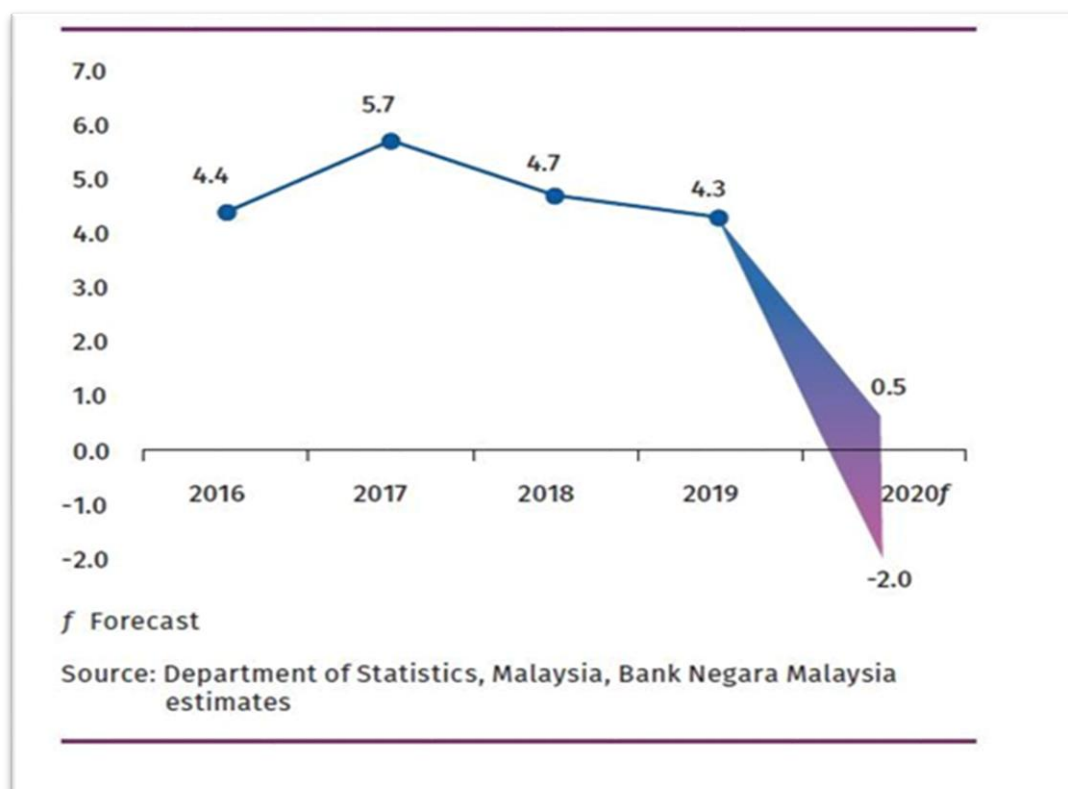
In response to the surge of cases in March 2020, the Malaysian government led by Prime Minister imposed a nationwide lockdown known as the Movement Control Order (MCO). It came into effect on 18 March 2020 and was supposed to be ended on 31 March 2020, but was extended to early May 2020. (Prime Minister's Office of Malaysia, 11 August 2021). By that time, the MCO had led to a gradual decline in daily infections. The government progressively relaxed lockdown restrictions in a staggered phase; beginning with the "Conditional Movement Control Order" (CMCO) on 4 May 2020, which allows most business sectors to be reopened under strict standard operating procedures (SOPs), followed by the "Recovery Movement Control Order" (RMCO) on 10 June 2020. (Tee, 18 July 2020). The government had planned to end the RMCO on 31 August 2020, but measures were extended until the end of the year, with several sectors remaining closed and strict travel restrictions from several countries remaining in place, due to the continuous detection of imported cases. (Yusof, 29 August 2020).

The third wave of COVID-19 infections in the country occurred as a result of the Sabah state election in September 2020 and several outbreaks at Top Glove facilities in late 2020. (Rampal & Liew, 2021). The Malaysian government responded by restoring CMCO restrictions in most states since November 2020 to counter the outbreak. By mid-January 2021, the pressure of COVID-19 on the country's healthcare system led to the reintroduction of MCO restrictions across various Malaysian states and federal territories, which was extended to March 4, 2021. (Rodzi, 11 January 2021) A nationwide state of emergency was also declared on 12 January 2021 by the Yang di-Pertuan Agong, suspending Parliament and State Legislative assemblies and granting the Prime Minister, Muhyiddin government emergency powers until 1 August 2021. (FMT Reporters, 12 January 2021)

The government lifted MCO restrictions in all states and federal territories, due to a decline in new cases by early March 2021. However, the restrictions were reinstated in several states in mid-April as infection cases rose again. The government reintroduced a nationwide MCO once more from May 12, 2021 after novel SARS-CoV-2 variants detected in Malaysia and a record surge in daily COVID-19 cases and deaths. (Palansamy, 10 May 2021). The MCO was strengthened and extended indefinitely into a "total lockdown" from June 1, 2021 due to the severe and continued spread of the Delta variant led to Malaysia's healthcare system capacity being reached in some regions. (Babulal, 3 June 2021)

Malaysia announced its intention to transition to treating COVID-19 as an endemic disease by the end of October 2021, with more generalised restrictions being eased. Following high vaccination rates in the adult population against COVID-19 and a decrease in the number of severe cases of the disease since September 2021, (The Star reporters, 21 September 2021.) A fifth wave, the Omicron variant led to record daily cases in February and March 2022, but was marked by lower numbers of hospitalizations and deaths than during the spread of the Delta variant. As of March 2022, the BA.2 Omicron subvariant was projected to be the dominant strain in the country. (Teoh, 21 March 2022). The onset of the pandemic in early 2020 coincided with an initially unrelated political crisis that hampered the government's early response, and the repeated COVID-19 waves and emergency measures exacerbated ongoing political instability throughout 2020 and 2021. The country's vaccination programme, which commenced in late February 2021, has fully inoculated over 80% of the population and 97% of adults as of 24 April 2022. (Ministry of Health Malaysia, 4 January 2022.)

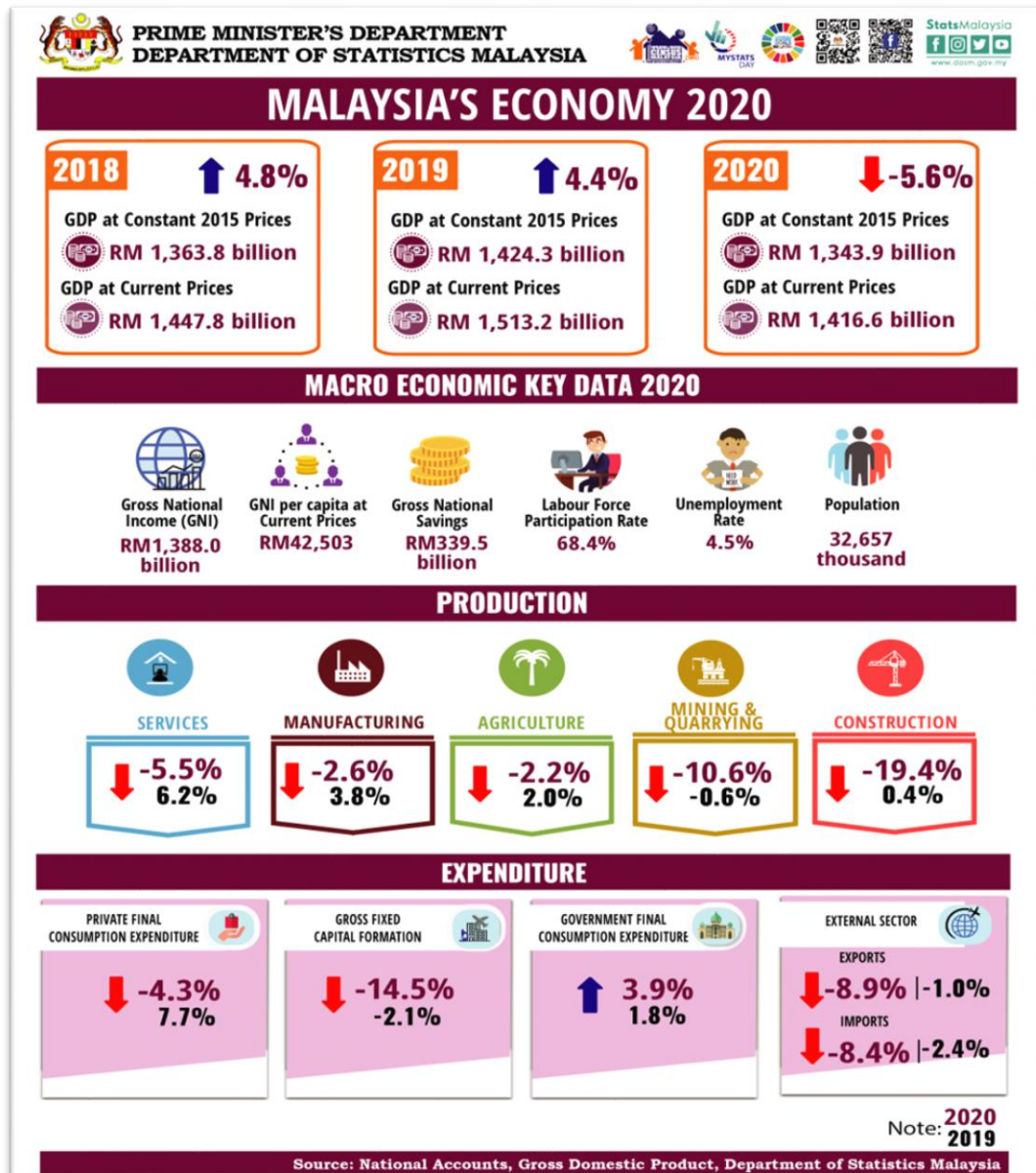
Figure 1.1: Malaysia's GDP growth 2016-2020



Source: Bank Negara Malaysia (2020)

The COVID-19 pandemic has had a severe Malaysia's economic impact, devaluing its currency, shrinking its GDP and has had far-reaching effects on Malaysian society. Millions of businesses, institution, companies, especially small & medium enterprises (SMEs) face an existential threat. During pandemic, the real GDP growth in 2020 was forecasted to drop from 4.0% to -2.9%, with up to 2.4 million job losses, of which 67% were from the unskilled worker's category. (Bank Negara, 2020). Fortunately, 2020 Malaysia's economy contracted by 5.6 per cent from a growth of 4.4 per cent in the preceding year due to the restrictions on economic activity resulting from the containment measures in response to COVID-19 pandemic. The last seen declined of Malaysia's economic was in 2009 (-1.5%), and the economy downturn of 5.6 per cent (2020) was the lowest after 1998 (-7.4%). (DS. DR. MOHD UZIR MAHIDIN, 11 May 2021).

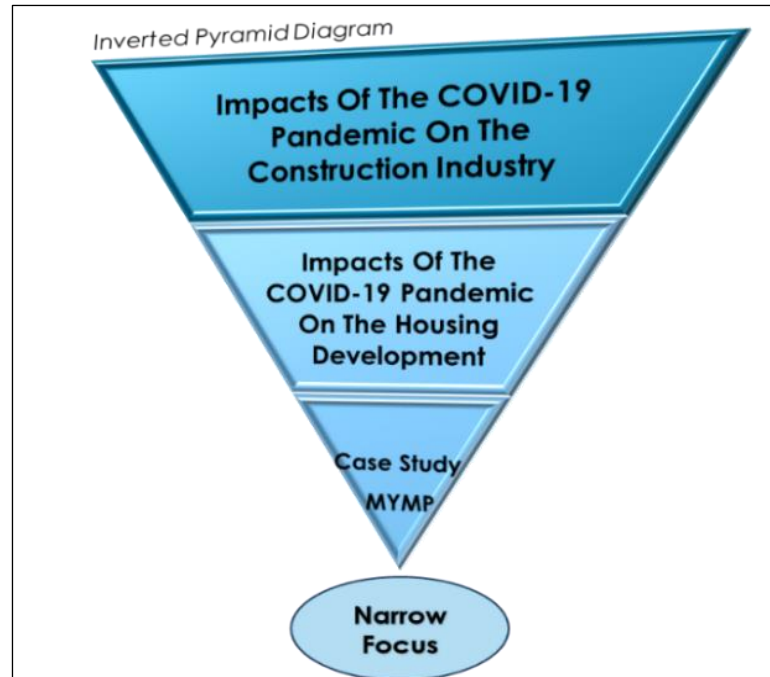
Figure 1.2: Malaysia's economy outlooks 2020



In 2020, Malaysia's GDP in current prices stood at RM1.42 trillion, while in constant 2015 prices, it has amounted to RM1.34 trillion. Following the weakened domestic economic activities and the external sector, Gross National Income per capita has deteriorated to RM42,503 from RM45,311 recorded in 2019. (DS. DR. MOHD UZIR MAHIDIN, 11 May 2021)

1.2 Background of the Study

Figure 1.3: Inverted pyramid: The most focused issues



First part of this of this study is to explore and determine the factors that facilitate cause and effect of COVID-19 pandemic to the construction industry in Malaysia generally. The construction industry in Malaysia was severely affected by the COVID-19 pandemic. Most construction work were halted throughout the MCO. Even after the MCO was lifted, contractors have continued to encounter disruption, such as stringent standard operating procedures on health and safety measures (“SOPs”) for construction sites. Such disruption has prevented them carrying out their works as originally and normally envisaged. As a result, it has had an impact on workers, production costs, and project completion timelines, resulting in operational issues and policy concerns. The industry experts are aware that as much like everything else, Covid-19 pandemic especially the MCO measures have significantly impacted the construction industry and the national economy indirectly. Therefore, this study aims to examine and highlight the effects of the COVID-19 pandemic on Malaysian and to

suggest or propose a solution with sustained and targeted policies, technologies and plan to support Malaysia's construction industry's socio-economic growth.

With it aims to provide a more comprehensive analysis, the first part of the study shall further discuss on the impact of the COVID-19 outbreak to the housing developers and/or real estate players, with a specific focus on the housing development's issues and challenges. This narrower scope of study is crucial since records revealed that the COVID-19 pandemic has significantly impacted real estate development and the housing market. The development of real estate or housing development has significantly impact socio-economic growth and infrastructure development. This thesis also provides a comprehensive literature review of the latest academic insights into how the COVID-19 pandemic has affected the housing or real estate market. Moreover, these findings are linked to comprehensive statistics of each real estate sector's performance during and after the crisis. Finally, the study shall include an outlook and discusses possible future developments in housing development segment in Malaysia, to ensure adequate housing and infrastructure construction, job creation, community cohesion and higher living standards as well as national economic stability.

Second part of the thesis is a single case study, highlighting a real case one construction company; M.Y.M.P. Sdn. Bhd.; how it was affected by the impact of COVID -19 pandemic, and how does it survive the challenges. The case study is very important to support this research (thesis) since it is one of the commonly used approaches which has the ability to support deeper and more detailed investigations for each case. Case study research is also used to study current events related to actual track records and evidence that cannot be manipulated. Case study research uses a variety of evidence obtained from different sources, such as documents, artifacts,

interviews and observations, and also from various sources of evidence that may be available in previous studies.

MYMP is considered one of hundreds Malaysian construction companies that was affected by the COVID-19 pandemic that began in early 2020 and ended in the end of 2021. Like other company, MYMP is not permitted to continue operation during the MCO period in 2020, and resulted to face many direct and indirect challenges from the worldwide and nationwide lockdown. In addition to schedule adjustments, daily cleaning on jobsites and in the office, and increased material prices and lead times, MYMP also had to contend with the unknowns of the future. Projected job loss, subcontractor and developer relationship changes, and the crash of specific construction sectors were all indirect impacts that MYMP had to contend with amidst the pandemic. The study highlighted MYMP's ability to face, overcome and survive the COVID-19 impacts and recession through conservative practices and proper planning.

1.2.1 Impact to the Construction Industry (General)

Since the COVID-19 pandemic struck Malaysia as early as February 2020, it has reported a lasting impact on the construction industry with project suspensions and delays. It also had to bear excess costs which included many infections at various work sites as of, making it extremely vulnerable. The Malaysian Government had enforced the Movement Control Order (MCO) on 18th March 2020 in its lock-out option and the construction sector suffered a large decline of RM18.5 billion during the interval period of the Movement Control Order (MCO) between March and April 2020. (Dr Afizah Ayob, 2021).

The majority of construction activities, except those categorised as critical and essential services, were halted via MCO, eventually resulting in a 30% loss of

manpower and their income. It also caused decreasing in the consumption of construction materials by 42% or equivalent to RM4.6 billion. (Dr Afizah Ayob, 2021). During the Conditional MCO in May and June 2020, contractors continued to experience difficulties, such as the incorporation and implementation of standard operating procedures (SOPs) on health and safety measures for construction sites. It has prevented contractors from continuing their projects in a conventional manner.

Despite MCO 2.0 and 3.0 announced in October 2020 and May 2021, respectively, daily COVID-19 cases continued to increase and making it extremely vulnerable. (Dr Afizah Ayob, 2021). Many construction sites have been closed and several were found to be opened, however, are unable to operate at full capacity. One of the reasons for that was the lack of workers, materials and capital, including concerns about the risk of infection. The movement of workers between construction sites has been identified as the main cause of the spread of COVID-19 at construction sites. With the increase in cases at construction sites, the Malaysian government authorities has increased monitoring and inspection of sites throughout the country through an inter-agency construction site enforcement committee, which includes the CIDB, Occupational Safety and Health Department, Public Works Department, Public Works Department.

The authorities had conducted site inspections and issued warnings, including stop work orders on construction sites because they were found not to comply with MCO standard operating procedures. Beside labour constraints, contractors faced the typical impact on the financial issues, project delivery issues, difficulty in honouring various contracts, economic downturn, and supply chain management issues. The value of construction projects awarded fell 42 percent for the period January to October 2020 compared to the same period in 2019. Construction industry suffered a