

Bulacan State University Main Campus Infrastructure Projects in the New Normal: A Compliance Assessment in Safety and Health Protocols

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Abstract:

Most construction site workers in developing countries like Nigeria do not follow the health and safety measures on sites (Kawuwa, 2018). The Construction industry is the most-risky of all industries in terms of health and safety hazards. Construction workers on site should have the knowledge of health and safety and apply the knowledge while working on the site. The fact that a construction task or work environment is considered risky and hazardous does not mean that its susceptibility to accident and is not controllable; this largely depends on “Work station” which is humanly controllable. Safety records in most advanced countries have proven this to be true (Samuel, 2014). World Health Organization declared the situation a public health emergency of international concern on January 30, 2020. Between January and February, there was spread of COVID-19 cases in all 31 provinces of mainland China (WHO, 2020). All public and private construction projects shall be allowed in areas under General Community Quarantine (GCQ) and Modified General Community Quarantine (MGCQ). Heads of the Implementing Office will issue the Construction Quarantine Pass to all qualified workers of concessionaires, contractors, subcontractors and suppliers. The Quarantine Pass must clearly state the identification, designation, nature of work, validity, and destination of the worker. Contractors shall provide their personnel and workers continuous supply of vitamins, particularly vitamin C, other over-the-counter medicines, quarantine facilities, and oxygen tanks for emergency purposes. A sufficient number of qualified safety officers must be assigned at all project sites to ensure strict compliance with the DOLE D.O. No. 13, Series of 1998 and the DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19. Sharing of construction and office equipment is discouraged. However, if necessary, the shared equipment must be disinfected in between transfers among personnel. (DOLE-OSHC, 2020). The study aims to assess if the Safety and Health Protocols set by IATF for the construction project in the area covered by the ECQ, MECQ, GCQ, and MGCQ were properly observed. This study makes use of the descriptive survey method to obtain date and information needed in determining the Safety and Health Protocols in Bulacan State University Main Campus Infrastructure Projects. Contractors and construction managers should keep abreast of the province’s health and safety guidelines they must bring themselves within compliance or shutdown immediately. Results showed that respondents agreed that safety and health protocols are being observed in Bulacan State University Construction Projects. **Keywords — covid-19, health and safety, protocol, construction**

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Introduction

The Bulacan State University started as an intermediate school in 1904. It was established during the early years Of the American occupation by virtue of Act 74 of the Philippine Commission in

1901, which created the then Department of Public Instruction with the mandate to establish schools in every pueblo of the country and reorganize those already existing. Instructions in the intermediate schools established during that time were supplemented with trade or industrial instruction.

The conversion into a university provided more impetus to the administration to implement a wide range of institutional development programs, which included upgrading of academic qualifications of faculty members, streamlining the curricular programs by creating colleges and institutes, securing state-of-the-art instructional facilities, physical plant development and expansion, and broadening access to education by establishing additional satellite campuses (BulSU, 2020). As one of the premier state universities in the region, Bulacan State University expanded significantly not just in its satellite campus but in its main campus as the seven hectares land expanded by twenty-four hectares additional. Significant physically development emerged as multilevel buildings are constructed simultaneously.

On January 30, 2020, the WHO declared the situation a public health emergency of international concern. Between January and February, there was spread of COVID-19 cases in all 31 provinces of mainland China. Wuhan was the epicenter of the epidemic, with 83 percent of all the cases and 95 percent of the deaths in China on February 21 (WHO, 2020). Wuhan's COVID-19 cases also showed a 100-fold infection rate (per million population) and a four-times-higher CFR (4.2 percent), compared with those in other areas in China (WHO, 2020). All public and private construction projects shall be allowed in areas under General Community Quarantine (GCQ) and Modified General Community Quarantine (MGCQ). Any person below 21 years old and above 60 years old, those with immune deficiencies, co-morbidities, or other health risks, pregnant women, and those who reside with the aforementioned, shall not be part of the workforce for construction projects except as may be allowed under the Revised Omnibus Guidelines issued by the IATF. The "Prior to Deployment Procedures" include a 14-day quarantine or Covid-19 testing as prescribed by the Department of Health for all qualified workers. They may also be retested as necessary. Heads of the Implementing Office will issue the Construction Quarantine Pass to all qualified workers of concessionaires, contractors, subcontractors and suppliers. The Quarantine Pass must clearly state

the identification, designation, nature of work, validity, and destination of the worker. This pass covers the transit of workers to and from areas under different types of quarantine. Concessionaires, contractors, subcontractors and suppliers shall provide for their workers welfare facilities and amenities which includes accommodation and proper hygiene in compliance to the physical distancing requirements. All projects must be in compliance with DOLE D.O. No. 13, Series of 1998, and the DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19 (DOLE-OSHC, 2020). Contractors shall provide their personnel and workers continuous supply of vitamins, particularly vitamin C, other over-the-counter medicines, quarantine facilities, and oxygen tanks for emergency purposes. Adequate food, safe/potable drinking water, disinfectants, and hand soaps shall be made available by the concessionaires, contractors, subcontractors, and suppliers to their in-house personnel. A sufficient number of qualified safety officers must be assigned at all project sites to ensure strict compliance with the DOLE D.O. No. 13, Series of 1998 and the DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19. Sharing of construction and office equipment is discouraged. However, if necessary, the shared equipment must be disinfected in between transfers among personnel. (DOLE-OSHC, 2020).

Objective of the Study

The study aims to assess the compliance of Bulacan State University Main Campus Infrastructure Projects in terms of Safety and Health Protocols set by Covid-19 Inter-Agency Task Force.

Statement of the Problem

Can Bulacan State University Infrastructure Projects be able to comply with the Health and Safety protocols set by Covid-19 IATF in its Construction Project Sites? the study sought to answer the following:

- 1.)Is the safety and health protocols in terms of social distancing, proper sanitation, wearing of facemask and monitoring of body temperature being observed?
- 2.)Are there readily available safety officers, medicines and healthy facility in the construction sites?
- 3.)Do the workers secured their health ID or Medical Clearance as fit to worked?

3.)Workers certification as fit to work.

The researcher formulated 11 statements. Each item used a five-point Likert scale:

- 1= Strongly Agree 2=Agree
 3=Moderately Agree 4= Disagree
 5=Strongly Disagree

Methodology

Methods and Techniques Used

This study makes use of the descriptive survey method to obtain date and information needed in assessing the compliance in terms of Safety and Health Protocols by the Bulacan State University Main Campus Infrastructure Projects. This survey was devised based upon the criteria formulated by the researchers. Questionnaires were also utilized to gather relevant and pertinent data and information needed to answer the questions of the study.

Population and Sample of the Study

The subjects of the study were the personnel/workers directly involved in construction site in the Bulacan State University Main Campus Infrastructure Projects. The researcher involved 30 respondents from the Project Management Office who directly monitor and supervise the workers in the infrastructure projects within the Main Campus using the random sampling method to answer the survey of the Safety and Health Protocols of Bulacan State University Infrastructure Projects.

Construction of the Instrument

The construction of the instrument of the Assessment Safety and Health Protocols in Bulacan State University Main Campus Infrastructure Projects was based on the following criteria:

- 1.)safety and health protocols set by Covid-19 IATF
- 2.)Availability of safety officer/s medicine and health facility on site.

Statistical Treatment of Data

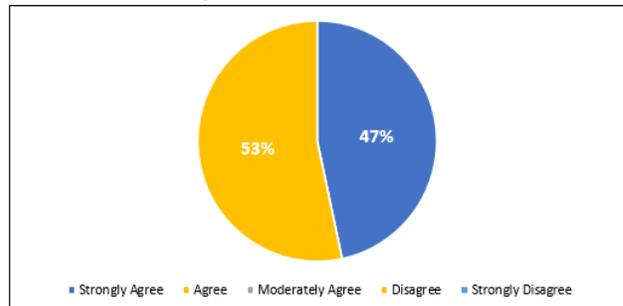
The Assessment Safety and Health Protocols in Bulacan State University Main Campus Infrastructure Projects was derived from the respondents using a five-point Likert scale interpreted as follows:

Point Scale	Interpretation
1-----	Strongly Agree
2-----	Agree
3-----	Moderately Agree
3-----	Disagree
4-----	Strongly Disagree

After the questionnaires were gathered, they were sorted, tabulated and treated in the following manner. Mean was computed to describe the responses of the respondents on the Safety and Health Protocols Compliance Assessment.

Results And Discussion

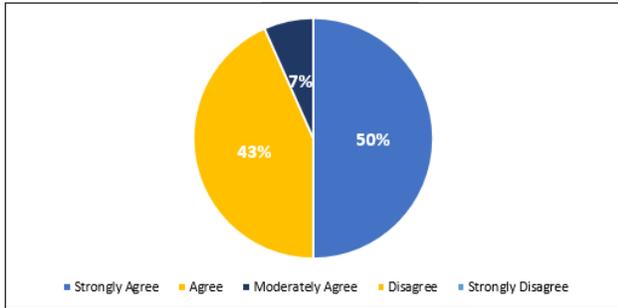
Chart No. 1: Workers employed in the construction have health certificate from the Infirmary/ Health ID from City Government as fit to work.



Respondents agreed (53%) and strongly agreed (47%) that workers employed in Bulacan State University Main Campus Infrastructure Projects

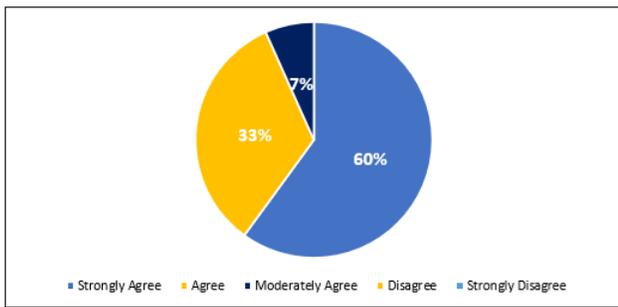
have health certificate from the Infirmary or Health ID from City Government as proof that they are fit to work and don't have any health condition.

Chart No. 2 There is proper monitoring of body temperature before the work start and whenever necessary



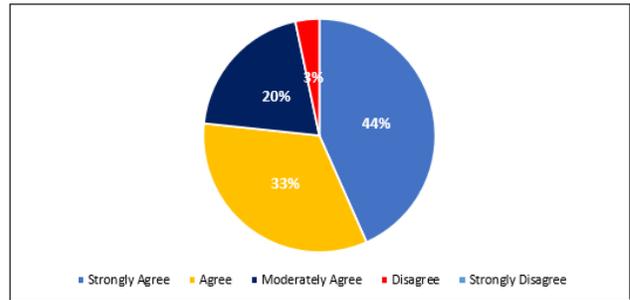
Half or 50% of the respondents strongly agreed that there is proper monitoring of body temperature to all the workers before they start to work while there is 7% of the respondents that are moderately agree that there is proper monitoring of body temperature being conducted.

Chart No. 3: Proper hand/ body sanitation are observed in the work area before and after work.



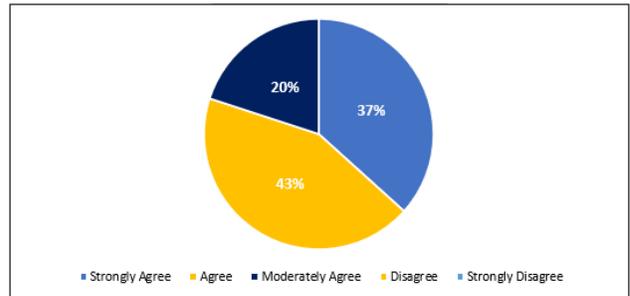
60% or majority of the respondents strongly agreed that the workers sanitize their hand or body before and after work, while there is 7% of the respondents that are moderately agree that there is proper hand/ body sanitation are observed in the work area before and after work.

Chart No. 4: Personnel/ workers involved in the construction are wearing facemasks at all time



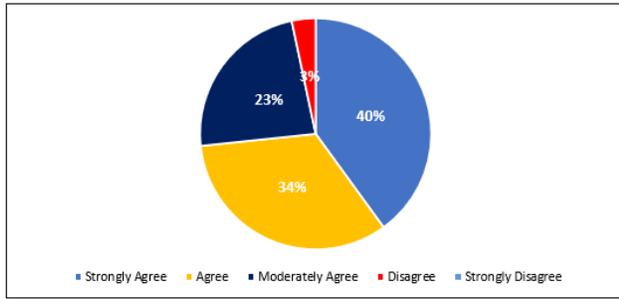
44% of the respondents strongly agreed that workers are wearing facemask all throughout the working time. There is 3% of the respondents that were disagreed that workers involved in the construction are wearing facemasks at all time.

Chart No. 5: Social distancing are observed by the personnel/ workers in the construction site.



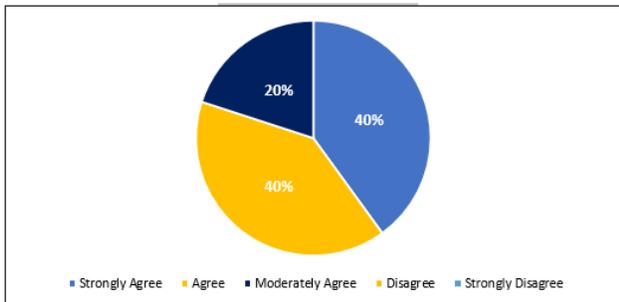
Majority of the respondents (43%) agreed that workers are observing social distancing while at work, while 20% of the respondents moderately agreed due to the observation that not all the time workers are observing social distancing.

Chart No. 6: Workers are wearing standard safety gears for construction.



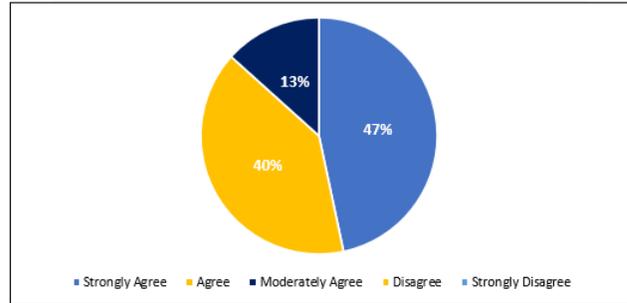
Majority of the respondents (40%) strongly agreed and (34%) agreed that workers are wearing standard safety gears for construction, while there are 3% of the respondents that disagreed that all workers are wearing standard safety gears while at the premise of the construction site.

Chart No. 7: There is a conduct of standard disinfection for the tools/ equipment within the area whenever needed



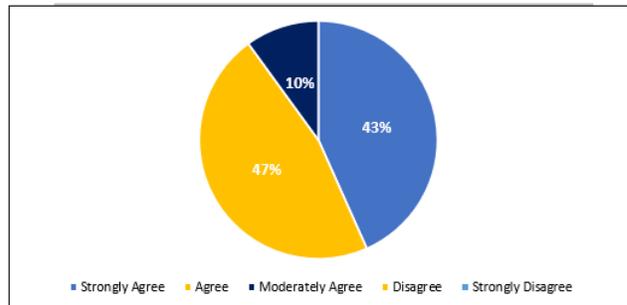
40% of the respondents strongly agreed and another 40% agreed that there is a conduct of standard disinfection for the tools and equipment to ensure safety and health protocols. There are 20% of the respondents that moderately agreed that standard disinfection for tools and equipment are being conducted in the construction sites.

Chart No. 8: There are readily available first aid kit or medicine in the site



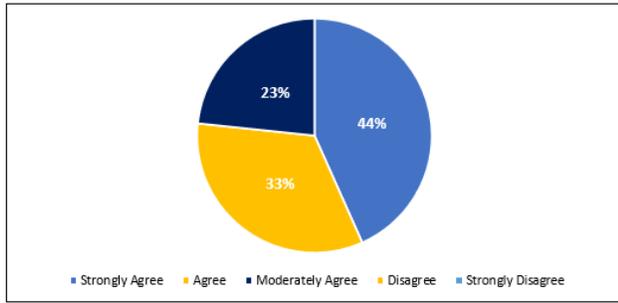
Majority of the respondents strongly agreed that there are readily available first aid kit or medicine available at the construction site/s for the use of the workers in case of emergency. Meanwhile, there are 13% of the respondents that are moderately disagreed that there are available first aid and medicine at the construction site/s.

Chart No. 9: There are a trained safety officers present in the site at all time



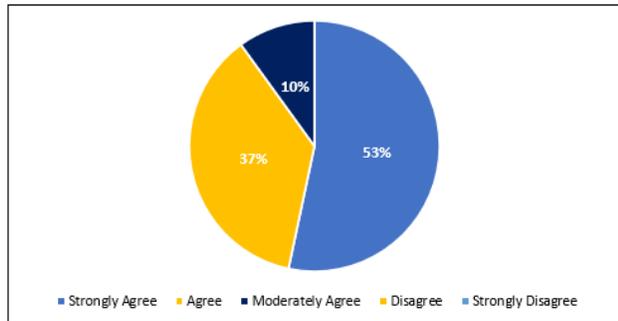
There is a positive response from the respondents that there are trained safety officers monitoring at the site at all time as (47%) agreed, and (43) Strongly agreed while there is 10% that are moderately disagreed.

Chart No. 10: There is provision of infirmary/ isolation room in case of emergency (ex. covid suspected person)



Result shows that there is 23% of the respondents that are moderately agreed about the available provision of infirmary/ isolation room in case of emergency (ex. covid suspected person), although, there are 44% strongly agreed and 33% agreed that there is provision of infirmary/ isolation room in case of emergency in majority of the construction sites.

Chart No. 11: There are posted health and safety standard signage/s in strategic location



Result shows that 53% of the respondents strongly agreed that there are posted health and safety standard signages within the premise of the construction site. While there 10% of the respondents that are moderately agreed about the availability of health and safety standard signage/s posted in strategic location.

Conclusion:

Generally, Bulacan State University Main Campus Infrastructure projects are in compliance with the Covid-19 Inter-Agency Task Force safety and

health protocols standards. Workers have health certificate from the Infirmary or Health ID from City Government as proof that they are fit to work and don't have any health condition. There is regular proper monitoring of body temperature to all the workers before they start to work. 60% or majority of the respondents strongly agreed that the workers sanitize their hand or body before and after work. Respondents strongly agreed that workers are wearing facemask all throughout the working time. The workers are observing social distancing while at work, although there is 20% of the respondents moderately agreed due to their observation that not all the time workers are observing social distancing as it is deemed unavoidable in construction. There is standard disinfection for the tools and equipment to ensure safety and obey health protocols, but then again, there are 20% of the respondents that moderately agreed that standard disinfection for tools and equipment are being conducted in the construction sites. There are readily available first aid kit or medicine, provision of infirmary/ isolation room in case of emergency as well as safety officer readily available at the construction site/s for the use of the workers in case of emergency. Respondents strongly agreed that there are posted health and safety standard signages within the premise of the construction site/s. Meanwhile, there are 13% of the respondents that are moderately disagreed that there are available first aid and medicine at the construction site. 23% of the respondents that are moderately agreed about the available provision of infirmary/ isolation room in case of emergency (ex. covid suspected person) and 10% of the respondents are moderately agreed about the availability of health and safety standard signage/ posted in strategic location.

Recommendations:

Contractors and construction managers, and supervisors through the supervision, monitoring and approval of the Project Management Office of Bulacan State University shall ensure that 100%

compliance to the standards set by IATF be observed at all time to ensure health and safety of all individuals working in the infrastructure projects in Bulacan State University Main Campus is in place. It is highly recommended that results with moderately agree and most specifically with disagreed responses on the following areas be addressed in order to attain 100% compliance:

1. Proper monitoring of body temperature be conducted on a regular basis.
2. Proper hand/ body sanitation be administered before and after work.
3. Wearing of facemasks at all times be monitored.
4. Wearing standard safety gears be ensured.
5. Standard disinfection for tools and equipment be monitored at all time.
6. Available first aid and medicine at the construction site be supplied.
7. Trained safety officer be visible and available at all time.
8. Provision of infirmary/ isolation room in case of emergency (ex. covid suspected person) must be provided in all construction sites within the main campus;
9. Health and safety standard signage/s be posted in strategic location, visible and readable.

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