

## **CHAPTER 5: CONCLUSION AND SUGGESTIONS**

### **5.1 INTRODUCTION**

Major objective of this concluding chapter is to address research questions by delivering the research findings in a summarized form; hence conclusions are put forward accordingly. Eventually, this chapter ends with suggestions for future researchers and construction organization.

### **5.2 CONCLUSION**

Construction site involves a variety physical activities of workers, movements of construction plants and the exposure of the nearby general public therefore by managing safety within the construction site has to involved different processes in order to ensure that the site is a safe working environment for workers and its surroundings.

With the demands of the proposed development construction projects that are in place in the future for Fiji, it is therefore the aim of this research study is to explore the safety management of construction site in Fiji with its main outcome is to contribute to providing knowledge of how safety is managed in construction industry in Fiji.

The results from the two case studies have been explored and several interesting and important findings were identified. These research findings, that

are expected to provide an appropriate solution to the research problems, are identified and presented as follows:

### **5.2.1 SAFETY PRACTICES**

The safety practices that are currently being practised at the site are safety policy, safety inspection, safety zones, personal protective equipment, safety training, safety meetings, emergency support systems and fall systems.

### **5.2.2 PROBLEMS RELATED TO SAFETY PRACTICES**

Regardless of having safety practices being exercise at the site, there were few related problems being identified and these are poor communication, poor management commitment, poor behaviour and attitude, and lack of funds.

### **5.2.3 STRATEGIES TO REDUCE THE SAFETY PRACTICES RELATED PROBLEMS**

To withstand problems faced within the construction site, few strategies were identified. These strategies are effective safety training to workers, full commitment needed from the management team, allocation of sufficient budget and issuing of fine and penalties towards unsafe behaviours.

#### **5.2.4. SUMMARY**

Generally it can be concluded that the construction site has a well-structured safety practice in place. However, there were a few problems related to this implementation of these safety practices. With that few of the strategies were also identified as to reduce the safety problems within the sites which generally cover the level of awareness, good safety implementation and providing available resources.

#### **5.3 SUGGESTIONS**

These suggestions and recommendations are based on the result, discussion and conclusion of this research study and are presented as follows:

##### **5.3.1 RECOMMENDATION TO THE ORGANIZATION**

- a) It is recommended that toolbox meeting shall be a contractual requirement as it will be a compulsory activity in managing site safety with everyone playing their roles accordingly.
- b) It is further suggested that companies should continue to provide safety training to all level of workers as this contributes to changing the behaviours of workers attitudes towards a safe and healthy site.

### **5.3.2 RECOMMENDATION TO FUTURE RESEARCHERS**

- a) An aspect that could be improved for future research is the selection of project type. Rather than ongoing construction housing projects generally, it is strongly suggested to focus similar studies on other infrastructure project type and its scale.
- b) Future researchers might also be suggested to focus its targeted respondents on similar work position and background in a construction project.
- c) Future researches are recommended to increase the number of targeted respondents to have sufficient data for comparable purposes.
- d) Future researches may also further the targeted respondents to safety representatives and officers from the contractor's side of the project.

The researcher hopes that this study will inspire additional research and the development of further guidelines and proposals to assist practitioners in the field of construction management.

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## APPENDIX 1

### Re: Request for Consent

Bula vinaka,

I am Mr Sokovoli B Odrovakavula, a former graduate student from the Fiji National University and an employee at Housing Authority of Fiji. Currently I am pursuing my Undergraduate Master's Degree Program in Civil Engineering (Project Management) at the (Universitas Atma Jaya Yogyakarta) Yogyakarta, Indonesia.

In completing the Program, I have a keen interest in carrying out my research thesis on the topic, "**Exploring Safety Management at Construction Site with a Case study from Fiji.**"

The proposed research will be focusing on :

- (Site Safety Knowledge )the practice of H&S at your current construction site
- (Factors affecting site safety) - reasons of non - adhering to proper H&S
- (Methods of Improving Project Safety Management) - developing strategies

The reason I choose the Proposed topic basically to come up with an idea of minimizing workplace (construction) accidents in Fiji , viewing that Safety at Construction site is one of vital factors in a Construction Project Cycle measuring the productivity and completion could be determine on the influence of good / bad H&S practice .

With the above I sincerely request your kind assistance in providing with any information that could be helpful in justifying the H&S issue and contribute in the compilation of my research thesis proposal

Therefore this letter serves to request your consent on participating in a case study, where I will be interviewing respective safety officer or project manager who are currently engage to project works. The interview will take time approximately 60 minutes.

The interview will be recorded, with your permission, to help in transcribing. The voice recording will be transcribed by me. Only I will hear the recordings. You will be permitted to review the transcript of your interview to correct any errors or remove any information you wish to redact. Participants for this research project have been purposefully selected based on their experience and background.

Hopefully for a favourable response.

'Terima Kasih'  
Vinaka Vakalevu .

Kind regards,

Soko. (PH/ WatsUp# : +62 85335048817) Email: [odrototo@gmail.com](mailto:odrototo@gmail.com)

## APPENDIX 2

Interview questions on questioners

Dear Respondent

The purpose of this interview question on questioners is to study “**Exploring Safety Management at Construction Site – a case study of contractors in Central Division, Fiji Islands.**”

Your responses are purely for academic and development purpose and data collected will be strictly treated with utmost confidentiality and anonymity.

### **Section A: General Information & Project Details**

In this section, I would like to obtain brief background information about yourself, the length of your working experience, the type of working organisation, the type of project you implementing site safety and your level of hands on experience in managing safety in construction projects.

Please state your company name

Please state your name:

Number of working years in construction industry:

1-5    6-10    11-15    16-20    20 – above

For the current project, please state your position?

- Safety Manager
- Safety Officer
- Safety Representative

How many years have you been working on this current position?

Current Project details:

Project Name:

Project type (New works/ Extension works/Alteration/Maintenance

Project schedule for completion (Number of Weeks):

Current percentage of completed works:

Briefly explain your roles on the current project:

## **Section B: Safety Management at Construction Site**

In this section, I would like to obtain your professional perception and opinions on knowledge of site safety management in your current construction site project with also identifying the safety practices currently being adopted and its implementation. Moreover to identify problems related to those safety practices and the strategies to reduce the safety practices related problems.

(Please express your views without restrain on the issue under scrutiny)

### **Part One: Knowledge on Health and Safety**

1. Can you please tell me in your own terms, what is Safety Management?
2. Please express in your own views on Health & Safety aspects in general on the current project you are engaged into?
3. What are your comments on the Management Commitment towards site safety?
4. Please explain what is your experience with handling safety documentation?
5. As a safety person in your current project, please briefly explain what are your Core Work Duties?

### **Part Two: Safety Practices**

Some of the following safety practices being reviewed in the study are listed below with few questions. Please answer the following questions to each practice if only being exercised at your company. If some of these safety practices is not being exercised by your company, please do not answer.

#### **A. Safety Policy**

1. Who is responsible in establishing, policies? How is it monitored and reviewed?
2. Please explain what is the objective of you company's Health and Safety policy?
3. What local or international regulation/standard your company's safety policy is in compliance with?
4. What does your company policy mainly emphasizes on?
5. How your company's safety policy is made accessible to all construction personnel on site?

### ***B. Safety Inspection***

1. Express in your own terms how safety inspection is implemented? What are your views on the nature of these inspections?
2. What are your objectives when conducting site safety inspection?
3. How do you conduct inspection and How often?
4. What are some key hazards areas that you focuses on while conducting site safety inspection?
5. During site safety inspection what action to do you execute when safety issues arises from the site?

### ***C. Safety Training***

1. As a safety officer, please express your views on the importance of education and safety training?
2. What are the objective and goals of your company in engaging this safety practice (Safety Training)?
3. Up to what level of workers classification is the training provided?
4. How does you company carry out education and training for the following workers classification? (please explain)
  - I. New recruited workers
  - II. Supervisor and Managers
  - III. Job specific
  - IV. If any other, please specify
5. How to do you measure safety when training is completed?

### ***D. Safety meeting***

1. What are your objectives in conducting a safety meeting?
2. For the following, please express in details what are the agendas, topics discuss during safety meeting? Who is involved in setting up agendas? Who is required to be present at the meetings?
  - I. Daily meetings
  - II. Weekly meetings
  - III. Monthly meetings
3. Please express you views on how effective of these meetings mentioned above?
4. What are your views if safety toolbox meeting to be a contractual agreement between all parties in a construction project?
5. Express your views on the importance of “Tool Box Meeting”

### ***E. Personal protective equipment (PPE)***

1. What are some basic compulsory PPE your company's have for the project?( for workers and the site itself)

2. Who is responsible for providing PPE to your site workers? How do you determine the right PPE to be used in your current project?
3. What are your general views on the Company's PPE system?
4. Who is responsible for monitoring PPE compliance at the site?
5. How do you find PPE compliance at the site?

#### ***F. Safety areas / zoning***

1. Express your views on the existing site safety zones layout?
2. How do you find workers behaviour on this safety zones?
3. Who is responsible for the designing of proper safety zones within you construction site? How is it executed?
4. How do you control hazards within this safety zones?
5. What do you implement towards unsafe acts within this safety zones?

#### ***G. Emergency Support***

1. What are some emergency support devices and systems available at the current construction site?
2. What your views on the implementation of such emergency system?
3. What are your views on the level of commitment when emergency drills are practice at the site?
4. Who is responsible for the monitoring of emergency support system?
5. How often do you carry out safety drills?

#### ***H. Fall Protecting System***

1. What are some falling protecting system being used in your current project?
2. Express you view on the importance of fall systems in construction industry?
3. How are this fall systems being monitored at the site?
4. What are your views on the existing fall system in terms of its safeness and existing conditions

If there are other safety practices which is not been mentioned, briefly identify and explain in details its objective, importance and what is it emphases on.

