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Table 6 also shows a cross comparison of level of knowledge on disaster management among the employees and their job positions. Job positions were designated into two, being job position below the officer rank or officer rank or above. The results in Table 6 above presents that both employees with adequate and inadequate level of knowledge were almost equally distributed with regard to the job position designation employed. For both officers and below officers rank, the proportion of respondent with or without adequate knowledge on emergency preparedness were similar; 78.4% and 79.2% or 21.6% and 20.8% respectively. The job position of employees therefore had no effect on their knowledge concerning emergency or disaster management among employees at Cocoa House.

The floor of work of employees was compared against the level of knowledge on emergency/disaster management in the organization. Table 6 shows that the floors were grouped into two, being from the basement or ground floor to the third floor and from the fourth floor to the six floor. The designations used were considered the distance from the ground. The study found that the distribution of employees from the basement to the third floor did not differ much in terms of level of knowledge on emergency/disaster management as compared to those in floors from the fourth to the last. The results recorded 31.9% and 28.3% for adequate and

inadequate knowledge respectively for basement to third floor workers whereas 68.1% and 71.7% were attained from adequate and inadequate knowledge respectively for those who worked in the fourth floor or higher. The insignificant relationship between the variables was further proven using the chi-square computations and an attained p-value of 0.694 being way above alpha (0.05). Hence floor of occupation did not contribute to any difference in knowledge on emergency management among employees.

Finally, religion as a demographic factor was compared with the level of knowledge on emergency/disaster management. Results show that only Christians and Muslims were captured in the study and among them 51 out of the 104 respondents had adequate knowledge on emergency management whereas 53 did not. Statistically, no significant relationship was found between the level of knowledge on disaster/emergency management and the religion of employees in Cocoa House.

#### **4.7 Emergency/Disaster plan at Cocoa House**

The goal of emergency preparedness is to provide the basic steps for responses to emergencies that are threat to organization and the records needed for continuity of operations. Survival is getting through the immediate emergency. It also means maintaining the competitive edge and financial sufficiency of an organization immediately and after an emergency.

Preparedness process may lead to written records and information for emergency preparedness plan. Management accords the plan the necessary authority, structure, policies, procedures, and provide resources to equip the organization through an emergency.

The study established that Cocoa House has an emergency/disaster plan formulated in 2009 which outlines various responsibilities and authority. It contains most of the major components of standard emergency/disaster preparedness plan. The exception was that it does not include plans on terrorism safety. The outline of the emergency/disaster preparedness plan at Cocoa House is shown below.

#### **4.7.1 Policy Statement**

Emergency plan includes the policy statement in the formulation process. The policy is said to be communicated by the management of the organization, which clearly mandates the implementation of the emergency preparedness plan. It links goals and aims so that everybody in the organization knows what the plan intends to achieve.

#### **4.7.2 Responsibilities and Authority**

The policy statement describes wider responsibilities of key personnel. The plan list the positions deemed to activate the plan as well as the conditions those designated personnel authorized to activate the plan. The emergency intervention team and their roles and responsibilities are also stipulated in plan.

#### **4.7.3 Hazard and risk assessment**

Cocoa House emergency/disaster preparedness team are mandated by the authorities to have a bi-annual full scale assessment of the organization and its surrounding for new hazards and threats. The plan shows a detailed profile of the existing hazards.

#### **4.7.4 Task Organization**

Several external teams are involved in the plan. Each team and its responsibilities are included in the plan. These partners included in the emergency process, are Ghana Armed Forces, Ghana Police, Ghana Fire Service and National Disaster Management Organization, (NADMO).

#### **4.7.5 Information Dissemination Procedures**

The emergency/disaster plan details how employees should communicate in an event of an emergency. It explains employees should use a dial-up telephone, radio, cellular telephone, or any method of communication available at the time. It outlines the various authorities who are to be contacted in an event of an emergency/disaster.

#### **4.7.6 Mitigation Checklist**

The emergency/disaster plan listed special mitigation measures that included use authentic electrical cables, prohibition of smoking within the Cocoa House, yearly civil work evaluation of the structure, provision of fire extinguishers and presence of trained emergency/disaster personnel and continuous education of employees in emergency/disaster issues.

#### **4.7.7 Preparedness Checklist**

The emergency/disaster plan addresses unique emergencies and how they should be handled. It provides for both minor and major emergencies and include both Cocoa House and community-wide events. Cocoa House has a checklist that covers various emergencies/disasters and the necessary steps and knowledge to prepare against and control the emergency.

#### **4.7.8 Response Checklist**

Cocoa House emergency/disaster preparedness includes a response checklist for the various emergencies in the plan. The steps are sequential from the mitigation phase to the recovery phase for any emergency addressed. Sample of checklists included were the records recovery priority and record schedule lists, disaster recovery services, disaster recovery resources, and procedures, and equipment and supply lists. The plan shows when an emergency status are upgraded from one level to the next level.

#### **4.7.9 Recovery Checklist**

Recovery checklist at Cocoa House shows the continuing steps from the response level to the recovery level. The recovery checklist indicates brief statements concerning particular activities to be performed in the recovery level.

#### **4.7.10 Training Programs**

The emergency/disaster plan provides how employee training is planned and organized. It showed at minimum, response personnel should be trained annually. The training program is included in the plan and documents areas in which employees are to be trained and the frequency of the training to be given. It states that in the event of resources shortage to conduct training in-house, then training will be outsourced to professionals in the field.

#### **4.7.11 Testing Procedures**

The plan includes goals, aims, and detailed schedules for conducting drills or simulations. Cocoa House emergency/disaster plan also contains specific testing procedures that are done only by the partner agencies.

#### **4.7.12 Damage Assessment**

Plans include guidelines for evaluating damage and channeling it to the right authority. Damage evaluation included, detailing a team to evaluate the damage immediately after an emergency. It shows procedure to document damage to institution's assets, recording and reporting the results to the right authority.

#### **4.7.13 Communications Directory**

The emergency plan includes information the preparedness team gather during development of the plan. It also includes an appendix of information containing various addresses (including e-mail) and names (individual and company), telephone numbers, as well as inventories. This list was separate because the information changes frequently, and is updated as and when necessary.

#### **4.7.14 Succession of Authority**

The plan also has succession plan in it. When organization loses one or more of its members, the remaining members would be assigned temporary authority. The plan includes a concise and clear statement of line of authority and composition of emergency/disaster committee, even when main officers are absent.

#### **4.7.15 Review and Update the Plan**

The plan shows when and how the preparedness and response teams should review and update the plan. It spells out how to integrate new things and information can be added into the plan. Changes made to the plan are communicated to authorities and employees. These changes are documented showing the description of the change. This documentation gives the historical development from its inception to the current period.

#### **4.7.16 Test the Plan**

Organization's testing or exercising an emergency preparedness plan is very crucial. Its purpose serves to ensure that the plan is adequately functional and to train all employees.

The plan indicates that the organization must provide annual drills and exercises/simulations. It mandates the coordinator to change the type of drills depending on the type of emergencies they simulate towards. It also permits the coordinator to plan a tabletop exercise, functional exercise and full-scale exercise as and when necessary.

#### **4.8 Key informant semi-structured interview results**

Key informants semi-structure interview information gathered from four (4) persons instead the proposed ten (10) persons due to their heavy workload and external schedule. The interview on emergency or disaster preparedness in Cocoa House identified five themes.

#### **4.8.1 Emergency/Disaster policy at Cocoa House**

All the four key informants corroborated to the existence of emergency/disaster policies that governed preparedness at Cocoa House. There was also disaster risk and vulnerability profile that outlined the organization's main hazards and threats, but the hazards were not ranked according to calculated risk. The latest vulnerability assessment was conducted in 2010 and was conducted by Ghana fire service. The policy called for a vibrant emergency preparedness committee for effective and efficient emergency response and recovery at all levels of the organization. The emergency preparedness committee also mandated by the policy to prepare and coordinate all emergencies by making right policy decisions, gathering resources, and providing need support to organization and communities when emergencies occurs. One of the key informants said "the policy contains splendid ideas and rules but you know in our part of the world nobody respects policies". He said the policy has many plans but the plan on fire prevention is the only one given attention.

#### **4.8.2 Hazard/Risk/Vulnerability assessment**

Information gathered from the interviews with key informants show that employees were living in fear and anxiety. This is because they can personally attest to their vulnerability considering the location of Cocoa House and its surroundings. "After the 2010 vulnerability report, no such thing has been done in this organization" said an informant.

A vulnerability/Risk assessment identifies hazards and threats, defines their possible impact on a community, organization, or property and provision of information that is important for emergency mitigation, preparedness, response and recovery. This is not given the needed attention that could promote sustainable development of the organization.

It was clearly made known that there was no vulnerability assessment committee. It was not also clear how soon vulnerability assessment will be done within the organization. Furthermore, the previous risk profiles did not show what factors made the organization vulnerable, and the possible impacts of the hazards and threats.

Some informants believed emergencies and disasters were unpredictable and uncommon in Cocoa House. This may account for non-existence of the vulnerability/risk assessment committee and the lack of risk and hazard profiling for the last five years.

#### **4.8.3 Implementation of emergency/disaster preparedness plan**

The emergency/disaster plan is just one of the aspect of the emergency/disaster planning process. The existence of an emergency/disaster plan does not guarantee that the organization is prepared. It does also mean that the emergency plan is anything more than a paper on the shelves that is dusted off when an emergency/disaster occurs (FEMA, 2010; Bennett *et al*, 2007). However, it does not mean the plan is less essential in preparing for emergencies and disasters.

Ghana Cocoa Board is responding positively to the call by the national policy on organizations to have emergency preparedness plan. Cocoa House has emergency/disaster preparedness unit that is responsible for emergency preparedness activities.

#### **4.8.4 Monitoring and Evaluation of employee's emergency/disaster preparedness**

The emergency/disaster preparedness process is not totally complete without the means of monitoring and evaluation. Monitoring and evaluation helps emergency planners to track

progress towards achievement of the goals and objectives by analyzing root causes of defects and defining corrective measures.

Most of the key informant did not know about drills and simulation exercises were conducted at Cocoa House. The sole informant who knew about it said it has never been given prominence and recognition it deserve. This is because, simulation exercises and drills were on a small scale that it did not attract attention of workers/employees. The workers or employees had a negative attitude towards drills and exercises and so they knew little about the conduct of drills and exercise

#### **4.8.5 Emergency/Disaster Training and Education**

Most of the informants who were interviewed had not attended any training/workshop in preparedness of emergencies and disasters. None of them could list any topics covered in the training/workshops. Some of the informants claim they learnt about emergencies/disaster as modules in the various universities. “There is no even new employee entry orientation on emergency/disaster preparedness”, said an informant. “Much needs to be done concerning training and educating staff at Cocoa House on emergency and disaster” said another informant. The Cocoa House might have an emergency/disaster plan, but without training/workshop and education, the employees who are supposed to make use of the emergency/disaster plan may lack preparedness skill for emergencies.

## CHAPTER FIVE

### 5.0 DISCUSSIONS

This study was carried out to evaluate the emergency/disaster preparedness plan and its implementation at Cocoa House, a six storey high building and head office of Ghana Cocoa Board. Furthermore, knowledge of employees on emergency preparedness was also evaluated.

Strategic emergency/disaster preparedness plan is required to ensure that common goals and common practices are pursued within and across organizations (WHO, 2006). Emergency/disaster Plan is also required in order to ensure effective coordination of activities thereby guaranteeing good results.

#### 5.1 Emergency/Disaster Plan in Cocoa House

In 1996, Act 517 passed by the parliament of Ghana mandated public institutions and organizations such as Ghana Cocoa Board to draw up an emergency/disaster plan consistent with that for large institutions, or organization. This led to the formulation of an emergency preparedness plan at the COCOBOD in 2009, which is currently used by the organization.

In this study, all key informants who were persons with knowledge on emergency preparedness confirmed the existence of an emergency/disaster plan in the organization which is also adopted for use at the Cocoa House. The emergency/disaster plan contains almost all major components of a standard disaster plan as previously described in the results above. Nowadays, terrorism has become an important component in emergency/disaster plans and therefore there was the need to include preparedness towards a terror attack in the current plan.

## 5.2 Emergency/Disaster preparedness plan implementation

Cocoa House had a disaster unit which oversaw the day to day management of emergency preparedness and safety. However, there was no emergency/disaster committee in place. For an effective implementation of disaster management plans, it has been suggested that large organizations need to form emergency committees to oversee the effective implementation of emergency/disaster plan (Sutton, 2006). It is possible that management have misconstrued the emergency department for a disaster committee, which are supposed to be two separate entities in any organization. Several studies (WHO, 2009; Collins *et al*, 2008; Jerolleman *et al* 2012; Koehler, 2003) have suggested that that many organization in one way or the other tend to focus on one or two hazards and ignore other equally important threats and hazards. This assertion was corroborated in the current study where emergency preparedness was focused on smoke and fire prevention or containment.

As part of effective implementation of emergency/disaster plan, it is recommended that employees are occasionally taken through workshops and disaster management simulations, including emergency/disaster exercises and drills. The emergency/disaster preparedness plan at Cocoa House has such a provision. However, it is either infrequent or employee participation in these workshops/simulations is usually low with less than 50% participation. This situation does not auger well for the organization's emergency/disaster preparedness effort. There is the need to enforce mandatory participation of employees in emergency/disaster training and workshops. Surprisingly, almost all respondents knew the immediate action to take in an event of an emergency. This could probably be due to employees receiving information on emergency/disaster situations from other sources such as television, radio or the internet.

### **5.3 Employees' knowledge on emergency/disaster preparedness.**

Studies have shown that most employees were usually aware of multiple disasters that could occur and therefore affect them in a defined period. However, floods and fire outbreaks are the most common disasters that employees perceive as likely to occur within their work place or its immediate surroundings. This is consistent with findings in this study where employees perceived fire or flood as the most likely emergency/disaster that could happen. In general, fires and floods have been the most persistent disasters in Ghana, as well as in Accra, which have resulted in loss of lives and property. In fact, in mid-July, there was a fire outbreak at the Abuja market just adjacent to the Cocoa House.

Majority 74(70.5%) of employees said they had knowledge in the use of fire extinguishers. This seems to suggest that employees would be able to combat at least small fire outbreaks thereby preventing loss of lives and property.

Effective emergency/disaster communication is an important component of disaster management. It is absolutely important for employees in any organization to understand the channel of communication in the case of an emergency. In this study, 71(67.6%) of respondents said they had knowledge on how to report an emergency and who to report to. Effective communication between emergency first responders and employees in an organization is critical and has always yielded satisfactory results when done right during emergency situations. Miscommunication among employees and between employees and external disaster management agencies have resulted in destruction of lives and properties due to unnecessary delays before help is provided by the expert external agency. With regards to Cocoa House there is ultimate hope that employees would use their emergency communication ability to get information across

to the right authorities, individuals and organizations concerned on time during emergencies. Majority of employees 84(80%) in Cocoa House said they knew how to evacuate from the building in case of an emergency. Experience demonstrates that people who are aware of evacuation procedures and who engage in escape drills are more successful in safely escaping buildings than are those who are unfamiliar with the procedures, (Palen et al, 2007). It is very crucial during and after emergency or disaster to know the number employees who were at work and the number of employees that are still present. The presence of adequate, well designed emergency/disaster exit routes in buildings is a modern mitigation measure to facilitate evacuation of victims who unfortunately find themselves trapped during emergency/disaster. Employees' awareness of the presence of the exit routes coupled with knowledge on how to use these exit routes is a good measure that they would be able to evacuate in times of emergency/disasters. Fortunately in this study majority of employees were aware of emergency exit points. It is therefore not surprising that 81(77.1%) were also able to identify an emergency assembly point.

The fact that most employees knew their roles and responsibilities during an emergency would suggest that workers were highly aware of the emergency/disaster plan. However, it has been reported that knowledge in itself does not always translate to action (CDC, 2013; Uddin *et al*, 2008). The fact that more than 50% of employees do not participate in emergency/disaster preparedness drills and simulation exercise could mean that care must be taken not to substitute knowledge for practicality. During emergencies/disasters some key people must lead in management. In situations where roles and responsibilities are not designated to individuals, there is a likelihood of confusion leading to delays and possible loss of lives and properties. .

Overall, there is an emergency/disaster plan that governs emergency and disaster preparedness at Cocoa House. Also, employees have good if not excellent knowledge on emergency/disaster preparedness. There is an existing emergency/disaster risk profile that showed the organization's main hazards but did not include terrorism.



## CHAPTER SIX

### 6.0 CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Conclusions

This study found the existence of an emergency/disaster preparedness plan at Cocoa House. However, an emergency/disaster committee usually responsible for making recommendations as well as overseeing implementation of the plan had not been duly constituted.

In general, employee's perception of knowledge on emergency/disaster preparedness was very good. However, employees' participation in drills and simulation exercises on emergency/disaster preparedness conducted was low, and therefore employees' perception of their knowledge emergency/disaster preparedness cannot wholly be attributed to the organization's effort but individual effort to be abreast with knowledge on emergency/disaster due to the rampant fire outbreaks and floods in Ghana.

The organization has adequate emergency/disaster resources such as fire extinguishers, personal protective equipments, and communication gadgets. However, it lacked trained emergency personnel to use such equipment and avenues is not well planned to effectiveness.

## 6.2 Recommendations

The study recommends the following based on the findings made;

1. A review of the disaster/emergency policy of the organization in a more proactive manner. This can be achieved through proper mitigation practices through the setting up of a well composed emergency/disaster management committee. This committee should be composed of at least one member from each department in the organization and should be headed by an emergency/disaster management experts or a safety expert.
2. Workers should be well equipped materially and in knowledge on the best practice in emergency/disaster management and should be trained by experts in the field. Drills and simulation exercises should be used to train employees to get them fully prepared for emergencies. Simulation should be well planned to mimic real disaster situations. This will be a good means of measure the actual preparedness of employees for emergency/disasters.
3. The organization should make it a point to have their building well evaluated in terms of strength by civil engineering experts such that any hitch or loophole of weakness can be worked on and expert recommendations made and carried out to the latter. This will ensure the optimum safety of employees and reduce any disaster costs.
4. Employees should be given induction orientation in emergency/disaster preparedness when employed to signal the importance of emergency preparedness in Cocoa House

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APPENDIX I

DISASTER PLAN CHECKLIST

**Name of Investigator:** Ninkabs Ninsaw Kpau

**Date:** .....

**Introduction:** A disaster plan is an agreed set of arrangements for responding to and recovering from disasters and it describes responsibilities, management structures, strategies, and resources for preparing, responding to, and recovering from disasters (WHO). Organizations should have a well-documented and tested disaster plan in order to respond in an efficient and effective way.

Without a disaster plan, institutions may fail to respond effectively and efficiently and there may be improper use of resources. There may also be many points of command, with staff doing their work without effectively contributing to the response.

This checklist has been designed to assess the disaster plan of Ghana Cocoa Board. It is based on the recommended components described by nonprofit coordinating committee of New York.

Instructions: This checklist is for assessing the disaster plan of Ghana Cocoa Board. Indicate with an (X) in the relevant column showing whether the component is available or not.

PLANNING TEAM	YES	NO
Planning Team established?	<input type="checkbox"/>	<input type="checkbox"/>
Planning Team Schedule Established?	<input type="checkbox"/>	<input type="checkbox"/>
Budget Developed?	<input type="checkbox"/>	<input type="checkbox"/>

INTERNAL PLANS AND POLICIES REVIEW

Evacuation Plan?	<input type="checkbox"/>	<input type="checkbox"/>
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Fire Protection Plan?	<input type="checkbox"/>	<input type="checkbox"/>
Safety and Health Program?	<input type="checkbox"/>	<input type="checkbox"/>
Security Procedures?	<input type="checkbox"/>	<input type="checkbox"/>
Insurance Programs?	<input type="checkbox"/>	<input type="checkbox"/>
Employee Manual?	<input type="checkbox"/>	<input type="checkbox"/>

CODES AND REGULATIONS REVIEW

Fire Codes?	<input type="checkbox"/>	<input type="checkbox"/>
Electrical Codes?	<input type="checkbox"/>	<input type="checkbox"/>
OSHA Regulations?	<input type="checkbox"/>	<input type="checkbox"/>

CRITICAL SERVICES AND OPERATIONS REVIEW

Services provided by your company identified?	<input type="checkbox"/>	<input type="checkbox"/>
Operations vital to the continued functioning of the facility?	<input type="checkbox"/>	<input type="checkbox"/>
Equipment vital to the continued functioning of the facility?	<input type="checkbox"/>	<input type="checkbox"/>
Personnel vital to the continued functioning of the facility?	<input type="checkbox"/>	<input type="checkbox"/>
Services provided by vendors identified?	<input type="checkbox"/>	<input type="checkbox"/>

INTERNAL RESOURCES AND CAPABILITIES REVIEW

Personnel

Fire Warden(s)?	<input type="checkbox"/>	<input type="checkbox"/>
CPR Training?	<input type="checkbox"/>	<input type="checkbox"/>
First Aid Training?	<input type="checkbox"/>	<input type="checkbox"/>

Equipment

<input type="checkbox"/> <input type="checkbox"/>		
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>
Communications?	<input type="checkbox"/>	<input type="checkbox"/>
First Aid Supplies?	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Power?	<input type="checkbox"/>	<input type="checkbox"/>

Backup Systems (Arranged with other facilities)

Payroll?	<input type="checkbox"/>	<input type="checkbox"/>
Communications?	<input type="checkbox"/>	<input type="checkbox"/>
Customer Services?	<input type="checkbox"/>	<input type="checkbox"/>
Computer Support?	<input type="checkbox"/>	<input type="checkbox"/>

EXTERNAL RESOURCES REVIEW

	YES	NO
Emergency Management Office?	<input type="checkbox"/>	<input type="checkbox"/>
Fire Department?	<input type="checkbox"/>	<input type="checkbox"/>
Police Department?	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Medical Services?	<input type="checkbox"/>	<input type="checkbox"/>
Telephone Companies?	<input type="checkbox"/>	<input type="checkbox"/>
Electrical Utility?	<input type="checkbox"/>	<input type="checkbox"/>
Insurance Policy Review with Broker?	<input type="checkbox"/>	<input type="checkbox"/>

PLAN DEVELOPMENT

Plan Purpose?	<input type="checkbox"/>	<input type="checkbox"/>
Responsibilities of key personnel?	<input type="checkbox"/>	<input type="checkbox"/>
The types of emergencies that could occur?	<input type="checkbox"/>	<input type="checkbox"/>
Where response operations will be managed?	<input type="checkbox"/>	<input type="checkbox"/>

EMERGENCY MANAGEMENT ELEMENTS IN PLACE

Direction and Control?	<input type="checkbox"/>	<input type="checkbox"/>
Communications?	<input type="checkbox"/>	<input type="checkbox"/>
Life Safety?	<input type="checkbox"/>	<input type="checkbox"/>
Property Protection?	<input type="checkbox"/>	<input type="checkbox"/>
Community Outreach?	<input type="checkbox"/>	<input type="checkbox"/>
Recovery and Restoration?	<input type="checkbox"/>	<input type="checkbox"/>

**EMERGENCY RESPONSE PROCEDURES ADDRESSED**

- Assessing the situation?
- Protecting employees, customers, visitors, equipment, vital records, and other assets?
- Getting the business back up and running?

**PROCEDURES FOR BOMB THREATS ADDRESSED**

- Warning Employees and Customers?
- Communicating with personnel and community responders?
- Conducting an evacuation and account for all persons in the facility?
- Shutting down operations?
- Protecting vital records?
- Restoring operations?

**SUPPORT DOCUMENTS AVAILABLE**

YES NO

- Emergency Call Lists –People responding, their responsibilities and phone numbers?
- Employee Lists - Employees with their home phone numbers?
- Resource Lists – Equipment and supplies that could be needed in an emergency?

**DEVELOPMENT PROCESS**

YES NO

- Task list identifying persons, tasks and timetables?
- Needs of disabled persons and non-English speaking personnel?
- Training schedule for employees established?

**PLAN DISTRIBUTION**

- Copies distributed to employees?

Current date and revision number on plan?

#### PLAN IMPLEMENTATION

All personnel trained in procedures?

Orientation and Education Sessions?

Walk Through Drills?

Evacuation Drills?

Plan tested to assure that employees know what to do?

#### EMPLOYEE TRAINING ADDRESSES:

Individual roles and responsibilities?

Information about threats, hazards, and protective actions?

Notification, warning and communication procedures?

Means for locating family members in an emergency?

Emergency response procedures?

Evacuation, shelter and accountability procedures?

Location and use of common emergency equipment?

#### PLAN EVALUATION AND MODIFICATION

A formal audit of the plan conducted at least once a year?

Does the plan reflect lessons learned from drills and actual events?

Are photographs and other records of facility assets up to date?

Are the names, titles and phone numbers in the plan current?

#### APPENDIX II

INFORMED CONSENT: Non- Key Informants

#### **Institutional Affiliation**

Department of Biological Environmental and Occupational Health Sciences (BEOHS): School of Public Health, College of Health Sciences, University of Ghana-Legon.

## **Background**

Dear Colleague, my name is Ninkabs Ninsaw Kpau and I am a student at University of Ghana, School of Public Health. In partial fulfilment of my Master's Degree in Occupational Hygiene, I am conducting a research on knowledge of emergency/disaster preparedness and intervention among employees of Ghana Cocoa Board Head Office.

I would be very grateful if you could be a participant in this study. If you agree, you are kindly requested to complete the questionnaire below as accurately and completely as possible. The objective of the study is to assess your knowledge with regards to the management of emergencies and disasters such as fire, flood, smoke and earthquake. The study has been approved by the management of Ghana Cocoa Board and Ghana Health Services ethics committee.

The information you give will be kept confidential and your name shall not appear on the questionnaire. As a participant, the study is voluntary and you are under no obligation to fill the questionnaire. You can also drop-out of the study at any time if you do not feel comfortable.

The risks to you by participating in this project are minimal. However, it is possible you may be frustrated by the questions asked or the time needed to participate.

If you have any questions about this project or your participation, you can email me via ([fredatech@yahoo.com](mailto:fredatech@yahoo.com)) or call on 0244028108. You may also contact Madam Hannah Frimpong, GHS-ERC administrator on issues of ethics, on 0243235225 or 0507041223.

I hereby consent to take part in the research on Emergency/Disaster preparedness and intervention among employees of Ghana Cocoa Board. The study investigator has explained to me the nature of the study and I understand that participation is voluntary and I can pull out of the study if I wish to do so. I am aware that there is no direct material or financial benefit to me accruing from participation in this study. I understand that I will not lose my current privileges by participating in this study. I understand that the information I give is confidential and my name shall not appear on the questionnaire. I have had an opportunity to ask questions and I fully understand the objectives of the study. I consent voluntarily to participation.

Name of Participant (Please print): .....

Signature of Participant: .....

Date: .....

I have explained the nature of the study to the participant and have witnessed the signing of the consent form by the participant. I accept that the participant can pull out of the study if they wish to do so. Name of Researcher (Please print): .....

Signature of Researcher: .....

Date: .....

QUESTIONNAIRES- Non Key Informants

Code:

**Section 1: Demographics**

1. What is your gender?  Male  Female
  
2. Age at next birthday.  Below 20  20-30  31-40  41-50  51-60  
 61+
  
3. How many years have you worked in your current position?  Less than 1 year  1-5 years  5-10 years  10-15 years  15-20 years  More than 20 years
  
4. What is the highest level of education that you have completed?  Primary school  
 Secondary school  Certificate  Diploma  Undergraduate Degree  
 Postgraduate Degree  Other (specify).....
  
5. Job position: .....
  
6. Department: .....
  
7. On which floor of Ghana Cocoa Board Head Office building do you work?  
.....
  
8. Religion:  Christianity  Islam  Buddhist  Hindus  
 Africanism

**Section 2: Emergency/Disaster knowledge and awareness**

9. Are you aware of any disasters that have occurred in your area in the past 5 years?  
 Yes  No.

10. To your knowledge, which of the following emergencies is/are likely to occur in your area?

(Please check all that is applicable- more than one answer if applicable)  Floods  Fires

Excessive smoke  Building collapse  Earth quake  Heart attack

None of the above  Not sure  other (specify).....

11. Do you know your role during emergency/disasters?

Yes  No.

12. Are there emergency exits in your organization?

Yes  No

13. Are there fire extinguishers at the workplace?

Yes  No.

14. Do you know how to use a fire extinguisher?

Yes  No.

15. Have you attended any workshops/training related to emergency/disaster?

Yes  No

16. How would you rate your current knowledge regarding the management of situations in

emergency/disaster?  Excellent  Good  Fair  Poor

17. Emergency/Disaster planning is only for administrative staff and heads of departments.

Yes  No  Don't know

18. Do you need to know about emergency/disaster plans?

Yes  No  Don't know

19. Does your organization provides adequate personal protective equipment for staff members?

Yes  No  Don't know

20. Does your organization conduct emergency/disaster drills or exercises?

Yes  No  Don't know

21. Does the organization conduct training/workshops to educate staff members on emergency/disasters?

Yes  No  Don't know

21. Have you participated in emergency/disaster preparedness drills?  Yes  No

23. Do you know what to do in the event of an emergency/disaster?

Yes  No  Don't know

24. Have you participated in emergency preparedness drill in the last 12 months?

Yes  No  Don't know

25. Have you already identified emergency assembly point in your organization?

Yes  No

26. Do you know the person to report an emergency incident to in your organization?

Yes

No

27. Do you know how to evacuate yourself during an emergency/disaster?

Yes

No

Thank you



## APPENDIX III

### KEY INFORMANTS INFORMED CONSENT

#### **Background**

Dear Sir/Madam, my name is Ninkabs Ninsaw Kpau and I am a student at University of Ghana, School of Public Health. In partial fulfilment of my Master's Degree in Occupational Hygiene, I am conducting a research on knowledge of emergency/disaster preparedness and intervention among employees of Ghana Cocoa Board Head Office.

I would be grateful if you could be a participant in this study. If you agree, you are kindly requested to complete the questionnaire below as accurately and completely as possible. The objective of the study is to assess your knowledge with regards to the management of emergencies and disasters such as floods, fire, smoke, and earthquake. The study has been approved by the management of Ghana Cocoa Board and Ghana Health Services ethics committee.

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I hereby consent to taking part in the research on Emergency/Disaster preparedness among employees of Ghana Cocoa Board Head Office. The study investigator has explained to me the nature of the study and I understand that participation is voluntary and I can pull out of the study if I wish to do so. I am aware that there is no direct material or financial benefit to me accruing from participation in this study. I understand that I will not lose my current privileges by participating in this study. I understand that the information I give is confidential and that my name shall not appear on the questionnaire. I have had an opportunity to ask questions and I fully understand the objectives of the study. I consent voluntarily to participation.

Name of Participant (Please print): .....

Signature of Participant: .....

Date: .....

I have explained the nature of the study to the participant and have witnessed the signing of the consent form by the participant. I accept that the participant can pull out of the study if they wish to do so. Name of Researcher (Please print): .....

Signature of Researcher: .....

Date: .....

KEY INFORMANTS QUESTIONNAIRES

Code:

Section 1: Demographics

1. What is your gender?  Male  Female
2. Age at next birthday.  Below 20  20-30  31-40  41-50  51-60  
 61+
3. How many years have you worked in your current position?  Less than 1 year  1-5 years  5-10 years  10-15 years  15-20 years  More than 20 years
4. What is the highest level of education that you have completed?  Primary school  
 Secondary school  Certificate  Diploma  Undergraduate Degree  
 Postgraduate Degree  Other (specify).....
5. Job position: .....
6. Department: .....
7. Religion:  Christianity  Islam  Buddhist  Hindis  
 Africanism

**Knowledge on emergency preparedness and Intervention (Part II)**

8. What is Emergency/Disaster Preparedness?  
.....  
.....
9. What is your current background knowledge about disaster preparedness, response, recovery and mitigation?  None  Basic  intermediate  Advance
10. Do your organization have an emergency preparedness action plan?

Yes                                       No                                       Don't know

11. Has your organization's emergency preparedness plan been updated in the last one year?

Yes                                       No                                       Don't know

12. Has drill been conducted in your institution in the last 12 months?

Yes                                       No                                       Don't know

13. Has your organization had emergency preparedness drill with first responders in the last

12months?  Yes                                       No                                       Don't know

14. Shelter-in-place refers to?

.....

15. Would you be willing to offer your skills in a disaster situation?

Yes                                       No

16. Are you interested in helping to create and participate in your organization's emergency plans?

Yes                                       No

17. Does your organization have specific guidelines to help evacuate persons with disabilities during disaster?

Yes                                       No

18. What type of special training do you receive? (Please select all that apply.)

AED training                                       CPR and/or first aid training

Crisis management                                       Fire suppression

Hazardous materials response and containment

Training in assisting persons with disabilities during a disaster

Training in dealing with hazardous materials

Training in keep others calm in a crisis                                       None of the above

**Thank You**

## APPENDIX IV

### Key Informant Interview Guide

**Name of Interviewer:** Ninkabs Ninsaw Kpau

**Date of Interview:**

**Introduction:** My name is Ninkabs Ninsaw Kpau and I am studying for a Master's Degree in Occupational Hygiene at the University of Ghana, School of Public Health. I am carrying out a research on emergency/disaster preparedness among employees of Ghana Cocoa Board Head Office. This is in partial fulfilment of the requirements of the degree. I would like to ask you some questions on emergency/disaster preparedness. The information you give will be instrumental in the strengthening disaster preparedness not only at Cocoa House but also at other Ghana Cocoa Board subsidiaries.

**Notes for Interviewer:** This is an interview guideline and the questions provide the general information required for the study. The guide contains six sections: General information; policy issues; vulnerability assessment; emergency/disaster planning; training and education; and monitoring and evaluation.

#### Section I: General Information

1. What is your current position at the organization?
2. How long have you been working in that position?
3. Are you a member of the emergency/disaster preparedness committee? (Ask about their role in the committee)

4. Have you had any direct personal or professional experience of an emergency or disaster (ask interviewee to describe their experience, what were their concerns)

## Section II: Disaster Preparedness Policy

5. What legislation governs disaster preparedness at Ghana Cocoa Board Head Office? (Probe: these may be in the form of Acts (Disaster management Act)). If there is legislation then who formulates it and is there a process of consultation of key stakeholder. If no legislation find out whether interviewee thinks in terms of the importance of legislation.)

6. What does this legislation say about Disaster Preparedness in the public institution? (Probe: find the main issues in the legislation and find out if there are any requirements that organization should have preparedness plans; find out what the interviewee thinks about the legislation; does interviewee place any importance to legislation regarding disasters).

7. Do you have any comments on?

i) The organization's policy on Emergency/Disaster preparedness

ii) The country's emergency/disaster preparedness policy.

(Probe: is the policy adequate in their view and are there any changes that need to be done, if the country or organization does not have what interviewee think should be done).

## Section III: Vulnerability Assessment.

8. Is there an existing disaster risk profile that shows the potential hazards that may affect the organization? (Probe: Find out whether there has been any vulnerability assessments done and if none does the interviewee think it is important to conduct the vulnerability assessment).

9. If there is an existing disaster risk profile, what processes (or tools) were used to come up with this profile?( Probe: find out how the vulnerability assessment was done and if possible get a copy of the tools used for this process)

10. Do you have any further comments on the organization's vulnerability assessment?

#### Section IV: Organization Emergency/Disaster plan

11. Who is involved in disaster preparedness planning at the organization? (Probe: find out if there is a multidisciplinary disaster preparedness committee.)

12. Does your organization have a disaster plan? (If yes ask for a copy and indicate that the plan will be reviewed using a checklist to find out whether the main components have been included; if no ask whether they think it is important to have one).

13. Who was involved in the formulation of the disaster plan? (Probe: find out if the employees were consulted in the formulation process of the plan)

14. What hazards are covered in this plan? (Probe: Find out whether this plan uses the WHO "all hazard" policy or there are different plans for different hazards).

15. Do you have any further comments on the emergency/disaster plan (Probe: Do they think it adequately covers all issues on disaster preparedness at the organization).

#### Section IV: Training and Education

16. What measures are in place in order to ensure that the staff members know about disasters and disaster preparedness plans? (Probe: elicit whether interviewee will volunteer information on any training and education of staff members; ask about their opinion on the importance of staff education and training)

17. In your opinion, do you think employees know what to do when there is a disaster or emergency?

#### Section V: Monitoring and Evaluation

18. What measures are in place for monitoring and evaluating the disaster planning process? (Exercises, drills).

19. How do you assess or how are you going to assess the disaster preparedness plan?

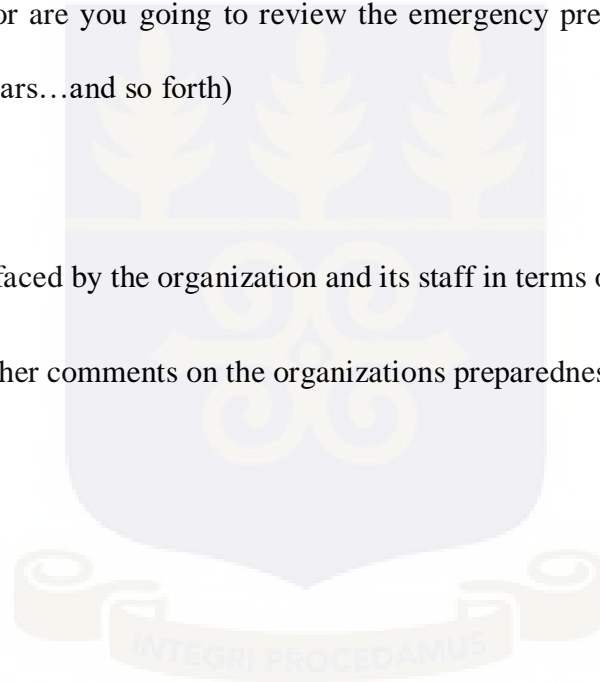
20. How often do you, or are you going to review the emergency preparedness plan? (Yearly, every 6mnths, every 2 years...and so forth)

#### Conclusion

21. What challenges are faced by the organization and its staff in terms of disaster preparedness?

22. Do you have any further comments on the organizations preparedness for disasters?

**Thank you**





## GHANA COCOA BOARD

COCOA HOUSE  
P. O. BOX 933  
ACCRA  
GHANA

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661757/678916/678972  
FAX: 233-302-667104/669808  
E-mail: cocobod@cocobod.gh  
WEBSITE: www.cocobod.gh  
CABLE: COCOBOD, ACCRA.

IN YOUR REPLY

PLEASE QUOTE:

PER/INT/AT/V.22/262

DATE: 13<sup>th</sup> April 2015

SCHOOL OF PUBLIC HEALTH  
COLLEGE OF HEALTH SCIENCE  
P. O. BOX LG13  
LEGON-ACCRA  
GHANA

Dear Sir

**RE: LETTER OF INTRODUCTION- MR KPAPU NINKABS NINSAW**

We acknowledge receipt of your letter dated 24<sup>th</sup> March, 2015 on the above mentioned subject and are pleased to inform you that approval has been given for the above-named student to collect relevant information from Ghana Cocoa Board for his research work on the topic **"EMERGENCY/DISASTER PREPAREDNESS AMONG EMPLOYEES OF GHANA COCOA BOARD, COCOA HOUSE."**

We hope the information gathered will be used for academic purposes only.

Kindly inform him to contact the Prin. Disaster Management Co-ordinator, Special Services Department Cocoa House, Accra for assistance.

You can rely on our co-operation.

Yours faithfully,

**F.A. TEMANG**  
**DIRECTOR, HUMAN RESOURCE**

cc: Dep. Human Resource Manager  
Director, Special Services  
Prin. Disaster Management Co-ordinator

\*Cal/zg