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**EVALUATION OF OCCUPATIONAL HEALTH AND SAFETY HAZARDS IN
COCOA MARKETING COMPANY (CMC) AT KUMASI INLAND PORT**

BY

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(BA Integrated Development Studies)

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requirements for the award of degree of Master of Science in Environmental
Science**

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DECLARATION

I hereby declare that this submission is my own towards degree of Master of Science Environmental Science and that, to the best of my knowledge, it contains no material previously published by another person or material which has been accepted for the award of another degree of the University, except where due acknowledgement has been made in the text.

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DEDICATION

I dedicate this thesis to my family for their support.

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ABSTRACT

Introduction: Ghana depends more on cocoa as a basic supporter of its economy. Nonetheless, management of Occupational Health and Safety (OHS) has been a source of concern to stakeholders in the cocoa industry. The study evaluated Occupational Health and Safety Hazards in Cocoa Marketing Company at Kumasi Inland Port. The study was carried out at Kaase, Kumasi. The current study is descriptive, and explanatory in nature. **Methodology:** A simple random sampling procedure was used to select respondents for the study. The study results were collected from 175 respondents using questionnaire. Quantitative approach was used in the analysis of the data. Descriptive statistics such as frequency, percentage, mean and standard deviation were used to present the results. **Results:** The study found that respondents agreed that cocoa bags falling from height, slips, trips and falls, vehicle related hazards and fire related hazards were common OHS in CMC. Majority of the employees (mean= 4.63) at CMC were aware that the company had health and safety representative and they follow safety procedures (mean= 4.35) when working. Also, stacking hazards (fall from heights) was the most frequent health and safety hazard with cocoa bags falling from height being the highest ranked hazard (mean= 4.65). Fire related hazard was not common and severe in the CMC. The key health and safety management practices adopted by CMC at Kumasi inland port to control the risks of hazards on site were that the supervisor took health and safety of employees very seriously in the company, and that risk assessment is carried out on a regular basis, employees are encouraged to adhere to the OHSA, safety concerns at CMC of employees are listened to by management, and that there was formal health and safety reporting mechanism at CMC. **Conclusion:** It was concluded that, workers in the company are aware of the presence of health and safety representatives as well as the roles they play. However, workers do not take the time to report to them during cases of incident despite the fact that, supervisors take the health of their subordinates seriously. **Recommendations:** CMC should provide more Personal Protective Equipment (PPE) to all employees to help prevent risk and to reduce employees exposure to hazards. There should be regular monitoring on safety and health standards at all times to ensure that all employees complied with safety policies in the company.

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LIST OF ABBREVIATIONS

CMC	Cocoa Marketing Company
OHS	Occupational Health and Safety
OHSH	Occupational Health and Safety Hazards
OSHA	Occupational Health and Safety Act
ILO	International Labour Organization
PPE	Personal Protective Equipment
WHO	World Health Organization
LBC	Licensed Buying Company
QCC	Quality Control Department
WPO	Warehouse, Port and Operation
OHSMS	Occupational Health and Safety Management System
OH	Occupational Hazards
OS	Occupational Safety
HSB	Health and Safety Hazards
OHSB	Occupational Health and Safety Management
OSHP	Occupational Safety and Health Practices

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

There exist increased concerns about the concept of Occupational Health and Safety (OHS) and how it influences the environment, work standards and the general wellbeing of employees at the workplace (Stephens, 2017). Stephens (2017) stated that Occupational Health Safety (OSH) comprises all measures that an organisation puts in place to safeguard the social, physical and mental wellbeing of workers. Guertler et al. (2016) further noted that, a large number of workers die at the workplace other than in world wars. Ansah (2016) stated that every year about 2.3 million people pass on from business related misfortunes of which around 1.95 million is considered to be deadly.

Management of OHS in the cocoa industry does not result in any increased success because of their inability to respect the welfare and health of their workers (Laschinger and Read, 2017).

Cocoa beans which are produced must be transported to warehouses in either of the ports in Ghana (Takoradi, Tema and Kumasi - Inland) to facilitate distribution to both local manufacturing and global production plants. Licensed Buying Companies (LBC) purchase cocoa beans to the advantage of Cocobod, Ghana. They are then sent to various ocean ports by the LBC or private institutions that deal in haulage for shipment before reaching the global market. The beans are sorted in large warehouses before they are stuffed in jute sacks and dispatched or distributed to points of sale. This is to make room for fumigation of the cocoa beans and for the cocoa to withstand the shocks of the oceans (Van Eerd, 2019).

Warehouse is needed in the storage stage in cocoa beans production because all cocoa beans produced cannot be transported from the farm to the final stage of consumption at

a single point in time (Stephens, 2017). Warehouse designed for storing cocoa beans should have the capacity to store cocoa beans properly without any related risk. The capacity additionally streamlines stock put away in the light of constant data about the status of receptacle usage (Yanar et al., 2019). Warehouses are utilized essentially by producers, transport associations, importers, wholesalers and exporters. Warehouses allude to business fabrications which is presented as storerooms for storing products (Guertler et al., 2016).

Dollard et al. (2017) stated that most warehouses are generally designed using hardware and materials that are more physically strong. The warehouses for storing cocoa beans by the Cocoa Marketing Company (CMC) are designed with materials which protect the cocoa beans and keep them under good condition while ensuring safety of the employees. Multinational modern organisations like CMC depend on warehouses to acquire regular supply of cocoa beans to feed their manufacturing companies. Through adoption of warehousing, these companies are able to get regular supply of cocoa beans (Dollard et al., 2017).

Since operations in the warehouses are physically executed, Warehouse Port and Operations and other partners in the cocoa handling process like Cocoa Carriers, agents of the Quality Control Company (QCC) and Security Operatives are exposed to various forms of hazards. Van Eerd (2019) stated that warehouse specialists record high fatality rates in working environments. He further indicted that; they suffer from job related injuries. Ansah (2016) found that the cocoa industry specialists are 2.4 times more prone to respiratory diseases such as bronchitis than those working in other industries. In a study carried out by Gonzales and Hodgson (2018), occupational health and safety constituted around 6% of Australia's GDP from 2002 to 2003. In monetary terms, 4% of the yearly worldwide Gross Domestic Product of \$1.25 trillion is shed off by immediate

expenses of occupational misfortunes and diseases (Modini et al., 2016). It is likewise seen that warehouse labourers are three to four times more probable than other specialists to die from accident at the workplace (Walters et al., 2016).

Ghana is outstanding for its cocoa cultivation and export around the world. The country relies upon cocoa as the main supporter of the economy. Harvest of cocoa assumes a critical part in the economy of the nation with respect to work, salaries and remote trade profit. Lovell and Rosenberg (2016) anticipated that the financial advancement of Ghana would keep depending on income from cocoa exports if cocoa beans are well stored in warehouses and transported to market base on demand.

Despite the contemporary challenges in cocoa warehousing in Ghana, occupational health and safety is a major challenge which is less discussed in the production chain of cocoa beans. Warehouse labourers continue to experience several work-related health and safety problems with little effort from management to address the issues of OHS in the industry. Subsequently, several issues of occupational health and safety management systems (OHSMS) are increasingly becoming the concern of workers in the Kumasi Inland Port. This study sought to assess occupational health and safety hazards at CMC in Kumasi Inland Port.

1.2 Problem Statement

It is the responsibility of every employer to provide its employees with a healthy work environment. This is also applicable to workers in the warehousing sector (Kahn, 2018). As the challenges associated with Occupational Health and Safety (OHS) has generally improved operations of the industries over the past years, the level of workplace injuries, fatalities and occupational illnesses are continually on the increase. This continuous risk associated with workers at the warehousing sector is taking a toll on workers, their

families and on the economy at large (Reese, 2015). This is because, the cost associated with accidents and ill health constitutes an estimated 4% of the global GDP (Battaglia, 2014).

Health and safety management in the warehousing industry in Ghana remains a major concern for stakeholders (Amponsah-Tawiah et al., 2016). Simple tools and equipment are used in the warehouse, depending on its size. The Kumasi Inland Port of CMC is no different. Warehousing activities in the cocoa industry is characterized by dust, noise, chemicals from fogging and fumigation of cocoa, heat and other forms of stress (Amponsah-Tawiah, 2018). Failure to identify these hazards and appreciate their wider implications on human lives and organizational performance is detrimental to the sustenance of the cocoa company. Management of CMC are generally apathetic to health and safety concerns in the company, thus, making them less committed to the idea of enforcing health and safety standards in the organization.

Over the past year, Cocoa Marketing Company Limited has experienced rising medical bills, absenteeism of workers due to illnesses, and reported incidents of accidents in its various warehouses. Between August, 2017 and July, 2018, a total number of eighty-four injuries were reported. Out of these reported cases, majority were first aid cases and others were severe injuries that required further medical attention. The impact of these losses on the operations of the company cannot be overemphasized. Moreover, several issues of occupational health and safety management systems (OHSMS) have become the concern of workers in the Kumasi inland Port.

Gonzales and Hodgson (2018) evaluated the occupational exposure limits for heat stress in outdoor workers in the United States, Amponsah-Tawiah et al. (2016) determined the OHSM and turnover intention in the mines of Ghana, Asibey et al. (2019) assessed the OSHP associated with tricycle operators in Kumasi while Akorede et al. (2018) dealt

with safe work practices among sawmill operators. In Ghana, majority of the research works available are those of the mineral industry, tricycle operators, sawmill workers and traders. None has tackled occupational health and safety in the Cocoa Industry, particularly, the warehouse section of the CMC. It is therefore imperative to evaluate the Occupational Health and Safety Hazards in the Cocoa Marketing Company in Kumasi, specifically, the Kumasi Inland Port and offer the necessary recommendations to improve occupational health and safety among the employees.

1.3 Justification of the Study

Several researches have been conducted on the cocoa industry but little work has been directed at OHS and its implications in warehousing operations in the cocoa industry. OHS is relevant for business as well as legal and social obligations. Organizations appreciate the fact that occupational health and safety prevent workers from being injured. However, adherence to occupational health and safety standards demonstrates that a business is socially responsible and protective while enhancing the brand image and product value. It is against this background that the researcher seeks to evaluate the health and safety management practices at the Cocoa Marketing Company in the Kumasi Inland Port.

1.4 Main Objective

The main objective of the study was to evaluate the occupational health and safety hazards in Cocoa Marketing Company at the Kumasi Inland Port.

1.4.1 Specific Objectives

The specific objectives of the study are to:

1. Identify the occupational hazards prevalent at Cocoa Marketing Company (CMC) Kumasi Inland Port.
2. Determine the level of awareness of the workers on occupational hazards at CMC Kumasi inland Port.
3. To assess the risk associated with occupational health and safety hazards.
4. Examine the leading health and safety management practices adopted by the Kumasi Inland Port to control the exposure to hazards on site.

1.5 Research Questions

1. What occupational health and safety hazards are prevalent at Cocoa Marketing Company (CMC) Kumasi Inland Port?
2. What is the level of awareness of workers on occupational health and safety hazards?
3. What are the risks associated with occupational health and safety hazards?
4. What health and safety management practices are adopted by CMC Kumasi Inland Port to control the exposure to hazards on site?

1.6 Limitations

OHS practices in Ghana is a very touchy issue for both employers and employees which made the study a very challenging one since some of the workers may find it difficult to make themselves available for data collection for fear of losing their jobs. Again, both the scope and methodology of this study may present challenges to the quality of work. Although CMC has three main depots across the Kumasi metropolis (Kaase, Abuakwa

and Asokwa) it is anticipated that each depot may have its unique set of warehouse health and safety issues with its associated limitations to be addressed. Hence, this study is only based on operations.

CMC is a structured organization, obtaining permission to conduct the study was practically difficult task mainly because of the bureaucratic structures in the company. Time was also limited on the part of the researcher as the completion of the thesis is tied with other academic responsibilities.



CHAPTER TWO

LITERATURE REVIEW

2.1 Occupational Health and Safety (OHS)

Every OHS programme is mandated to promoting work environments that are safe. According to Asibey et al. (2019), the WHO identified OHS as the practice of maintaining and promoting the greatest extent of social, mental and physical well-being of employees in every occupational level. This is often done to prevent health departure, adapt jobs to individuals or adapt individuals to jobs and control risks. For efficient programmes in OHS, there exist the necessity to participate and collaborate both management and employees. A condition of OH is not granted enough recognition as compared to issues of OS due to uneasy control of OH (Nawwas et al., 2018).

A healthy workplace according to WHO's is one in which employees and employers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of workers, as well as the sustainability of the workplace by considering the health and safety issues in the physical work surrounding, identifying the health, safety and well-being concerns in the psychosocial work environment including organization of work and workplace culture and exploring the personal health resources in the workplace (WHO, 2017).

Hazards of health encompass the dimensions of the work environment which cumulatively and gradually result in damage of employees' health in the Cocoa Marketing Company.

Measures of OHS over a long period of time is often developed by the company. The Cocoa Marketing Company addresses effects of hazards which can take the form of disorders of muscoskeleton or diseases of the respiratory tract (Moatari-Kazerouni et al., 2015).

2.2 Management of OHS

Management of OHS include programmes which regulate and monitor all incidents which are associated with OHS (Akorede et al., 2018). The entire plan of an institution is often combined to form one unit which addresses the needs of every worker. An effective institutional commitment is often adopted to ensure that conditions of working are safe. According to Kularathna et al. (2016), issues of safety and accidents usually decrease because of management's efforts to safety. He further stated that, the major aim of OHS is to put more efforts to avoiding and reducing diseases or occurrences of accidents.

Periodic checking and observation of working conditions of the environment that are safe need to be regularly carried out. A health plan which includes the entire system of health care should be used to cover employees when conditions of their health arise because of accidents or illness. Sámano-Ríos et al. (2019) stated that, careful record keeping and follow up of all health conditions may result in idea development to improve working environment. Issues of occupational health may also be regarded as crucial, well controlled and managed for institution's success. A successful OHS programme is very important in ascertaining full commitment of management to ensuring effective management of health and safety of their employees. Zhao and Lucas (2015) asserted that, workers consider such programmes to be important when management play a major function. Management of OHS should not be viewed as a divided entity but be fused into activities of workplaces.

2.2.1 Evolution of OHS

In the 19th and 20th centuries, employees carried out operations in their firms as they deemed appropriate. Safety of their employees were not their concern as nobody really

cared about such things. Over the past years, employees who were injured in American industries had to undergo litigation before they could access money for their injuries (Guyton, 1999). Employees however halted such practices as the costs involved was huge. To add, workers were not often successful because under Common Law, employees are not expected to know the hazards that the jobs they are doing can cause to their health. Employers were not responsible however, for injuries caused by negligence of employees (Moatari-Kazerouni et al., 2015).

Due to this, approaches and practices in relation to health, welfare and issues of safety emerged. This called for establishment of the National Safety Council in 1913 that was spearheaded by engineers and managers in under conscious deliberation. Nag et al. (2016) clarified that, there should be establishment of OHS in or near places of employment for welfare of employees. Over the centuries, man has employed agricultural practices including crop production and animal husbandry to meet the basic needs of adequate nutrition, as a means of livelihood to generate employment and as an export potential. Agriculture is no doubt the most important economic activity in the world today (Olawuni and Daramola, 2017). Since the early 1980, food demand in Sub-Saharan Africa has been growing faster than food production resulting in a decrease in the per capital food availability (Conceição et al., 2016). However, it is regrettable to note that this vital role of cocoa farmers and the nation is no more tenable. More so, in a country ranked as the largest producer and with high export potentials in cocoa.

2.3 OHS Hazards Prevalent and Risk at CMC

Viable plans are mostly in place in organizations to reduce the prevalence of work place hazards. Occupational health and safety management framework require different forms of work safety measures to reduce prevalence OHS hazards. As pointed out by Marcatto

et al. (2016) the point of any mischief aversion in work place must be the introduction of risk management measures to reduce prevalence of OHS hazards. Realizing that hazards just assign the likelihood of causing damage, whether the mishap happens or not relies upon working conditions, for example, the danger of the health peril, presentation sum, the degree of the risk factors present, and length of risk factors in workplace.

The likelihood of damage or ailing health happening from work setting is seen as a factor not simply of the idea of the risk but rather the control estimates set up to deal with the hazards (Andersen et al., 2019). Prevalence of safety hazards include perilous circumstances that may cause damage, ailment or even death to employees. These hazards comprise spills on grounds or slipping hazards, ropes running over the floor; working from statures, including stepping stools, frameworks, rooftops, or any raised work zone; unguarded apparatus and moving hardware parts; monitors evacuated or moving parts that a worker can unintentionally contact; electrical hazards like frayed cords, missing ground pins, inappropriate wiring; limited spaces, apparatus related hazards (Amoako, 2019).

Among the large producing countries of cocoa is Ghana with a yearly production which varies from 663, 000 to 1011,000 tons from 2008 to 2011. This estimation has however increased by about 15% over the past few years (Andersen et al., 2019). Activities like handling 65 bags of cocoa beans manually is often executed during unloading and loading of trucks in warehouses. Such operations normally deal with extensively increased levels of physical efforts with increased demand on the skeletal system thus, ultimately resulting in damage of the spine (Okoe Adow et al., 2016).

Workers at the warehouse are often exposed to carrying, lifting, pulling and pushing tasks repetitively, thus needing more twisting and bending. Workers are put at risks when such exposures come into play because of excessive cumulated trauma and fatigue. Risk

of sprains and strains normally occur with manual handling tasks. Workers normally suffer from back disorders when they become frequent, prolonged or even add to inappropriate posture as long as ergonomics is concerned (Kuranchie et al., 2019).

A study by Senthil et al. (2015) showed the connection between pathology and occupational exposures. Literature by Zwetsloot et al. (2017) and Jain et al. (2018) showed that much heavy physical works, body twisting and repeated lifting consistently relate to much greater risks. The adverse effects resulting from these exposures can interfere with activities of daily living and may have negative long-term economic consequences for the individual and community. A study by Jespersen and Hasle (2017) depicted physical prevalence of hazards at the workplace. They included constituents inside the environment which may cause harm to the human body without being in contact with the individual.

Laschinger and Read (2017) also identified ergonomic hazards as one prevalent of workplace hazards which happen when the category of labour, body states and working circumstances put strains on the worker's body. Short-term presentation may result in sore muscles the following day or in the days following introduction, however long-haul introduction can result in serious long-haul sicknesses.

Ergonomic Hazards incorporate inappropriately balanced workstations and seats, visit lifting, poor stance, cumbersome developments, particularly on the off chance that they are redundant, rehashing similar developments again and again, using excessive force, particularly in the event that you need to do it much of the time, and vibration (Senthil et al., 2015). Chemical hazard is also one prevalent of workplace hazard argued by Jespersen and Hasle (2017). It is available when a worker is presented to any concoction readiness in the workplace in any form. Some are innocuous than others,

notwithstanding, to most workers who are exceptionally helpless to synthetic substances, even basic liquids may prompt sickness, skin aggravation, or breathing challenges.

2.4 Awareness level of the Workers on OHS hazards

Safety and health awareness have become essential components in all workplaces. In order to ensure that workers adhere to safety standards while preserving healthy and productive work force, trainings and activities are carried out by employers, stakeholders and labour unions. Severe illnesses and injuries remain challenges for industries in low- and middle-income countries (Laschinger and Read, 2017). Every worker has a fundamental right to work in an environment that is safe and healthy. Irrespective of this, the International Labour Organization has reported that there are more than 160 million workers who report ill owing to hazard exposure at the workplace, whereas more than a million workers have perished due to accidents and diseases at the workplace. The prevalence of occupational accidents and diseases differ hugely among countries, especially among developing and developed countries (Owusu-Ansah, 2016).

In developing countries, employers and stakeholders turn a blind eye on the relevance of practice of OHS at work. This often results due to low degree of knowledge on matters of OHS in Africa. In Sub-Saharan Africa, issues of HIV/ AIDS, malaria, child mortality and water quality which are of public health concern have eclipsed occupational health problems (Khan, 2018).

Due to the same job duties of workers, they are entreated to comply with every protocol of health and safety. This includes putting on every PPE that is available in its right way. Commitment are often needed to ensure efficiency in health and safety as workers have more to gain from programmes that are successful (Kvorning et al., 2015). They are those who lose when the programme fails. To add, they are also the best people to

consult when potential hazards are related to their jobs. The jobs of employees also encompassed reporting every incident, injury, accidents, near misses and hazards just as they happen in relation to needs of policy strategies while acting in a manner which does not put other people at risk. Similarly, such people report incidents immediately to their supervisors while removing themselves from situations that are hazardous which they believe cannot correct themselves. These according to Modini et al. (2016) illustrates that workers are aware of OHS hazards.

Managing occupational health and safety hazards carefully reduces work related accidents and incidents by improving their health (Ametepeh, 2011). They stated that, this reduces truancy while boosting efficiency of workers. In most cases, both economic and moral advantages far outweigh the costs of eliminating occupational hazards (Amponsah-Tawiah, 2018).

2.5 Health and Safety Management Practices Adopted and Strategies to Prevent and Mitigate the Effects of the HSH

Situations where potential injuries, property damage and ill health are caused is referred to as a hazard. These may result in damaging effects (Akpan, 2011). Hazards of health and safety are hard to miss in every institution. They take the form of improper wiring, machinery that are not guarded and spill on the floor. There are various kinds of management practises of OHS which deal with several forms of hazards which have the potential of being related to working conditions based on the kind of job. Hazards may be categorized into biological, ergonomic, physical, mechanical, psychosocial and chemical. Being exposed to such kinds of hazards may be harmful to the health of workers. It is however important to manage and control such hazards in order to ensure the protection of workers 'health at their place of work (Ansah, 2016).

Based on the kind of job they do; workers can be exposed to several chemicals. Such chemicals present themselves in the form of liquid, vapour, particulate matter or gas. Chemical exposure effects may include damages to CNS, cancer, heavy metal poisoning and disorders of the respiratory tract. Lim (2012) asserted that, some hazard kinds include diseases or injuries without gaining direct contact with humans. Environmental factors are the more common kinds of hazards and they include radiation, vibration, noise and temperature (Tustin et al., 2018).

Organizational measurements identify with output measures which is likely to reduce occupational health, and safety, and also the quantity and quality of work performance, accomplished (Asibey et al., 2019). Occupational health and safety management essentially relates to costs. Taylor *et al.* (2003) determine that turned away and genuine costs of mischances and ailments, the costs of productivity misfortunes, and additionally the uses for preventions, thus the basic measurements, are the financial measurements. There are a few ways to deal with the monetary appraisal of occupational health, and safety. The cost-viability analysis, the money saving advantage analysis and concentrates that ascertain the total costs acquired by work-related ailments and mishaps (Kularathna and Perera, 2016). These strategies are for the most part identified with the future costs and investment funds of occupational health, and safety management. In a cost-adequacy analysis, the results of a mediation are adjusted against the costs of non-intercession (Kularathna and Perera, 2016).

Reduction OHS hazards is connected to augment the arrival from a particular spending plan and is estimated in physical units, for example, wounds deflected and life years picked up. In spite of the fact that, it is difficult to gauge the future occupational health, and safety reserve funds, there are some approaches to endeavour to ensure workplace safety. The lessened work output of a harmed employee, for example, can be assessed;

the level of the business' ability to pay for occupational health, and safety measures can be resolved; the normal financial estimation of turned away sick health can be estimated by the normal estimation of each protection approach. Notwithstanding the way that it is hard to evaluate the valuation of life and sick health in money related costs, these measures are helpful to give knowledge in the spared (deflected) costs related with occupational health and safety management.

This condition can diminish association complaints because of high unsafe work environment for workers to be free from occupational hazards and mischances. Organizations with sufficient safety and health approach have a tendency to have a decent corporate picture, fit for pulling in potential investors and customers. Sámano-Ríos et al. (2019), support this thought, organizations which have management duty appreciate the immediate advantage of occupational safety and health.

Factors that influence a worker's choice on the use of PPE are diverse and complex. Circumstances leading to nonuse of PPEs differ from one work environment to another (Kahn, 2018). According to various theories in health behavior research, knowledge is a key component of motivation to engage in health enhancing behavior and/or avoiding unhealthy behavior. When workers are made aware of the hazards and their effects on health and work output, they are more inclined to use PPE to protect themselves from exposure to the hazards. Conversely if workers are provided with PPE but are not told why or how to use PPE, it is likely that such PPE will not be utilized (Nawwas et al., 2018). Nawwas et al. (2018) deemed it necessary to educate and train workers on how to use PPE and thereby give workers adequate knowledge while increasing compliance with PPE use. He went on to say that, knowledge on why the equipment is needed should cover when it is to be used, repaired or replaced and its limitations (Lamm et al., 2007).

2.6 Cocoa Marketing Company (Ghana) Ltd (CMC)

This is an entirely claimed Cocobod backup which is solely obligated to selling cocoa beans cultivated and processed in Ghana to outside and neighbourhood purchasers. It is the duty of CMC to sell and deliver items of cocoa that are partially handled when preparing lines of production abroad. The headquarters of CMC is in Accra with a branch office in London. The main goal of the company is to export beans of cocoa while embracing market outside that would augment trade income of remote countries (Quarmin et al., 2012).

Beans of cocoa that are sold to purchasers outside are often transported every three months as cocoa that is prepared is delivered at regular intervals. Export encompass solitude settlement which are dependent on advertisement of cocoa over the globe at a greater cost. Questions that emerge from the Cocobod and remote purchasers from all fares are often established via CMC assertion in the interest of Cocobod (Quarmin et al., 2012). For the most part, sales are conducted depending on the down premise of money. It is also dependent on the foundation of credit letters as every sale made is to the benefit of Cocobod. CMC was entrusted in the care of Cocobod in the year 1985 with more functions of assuming control works inside the inward marketing system. The same control obligations include receipts of cocoa from LBC while executing basic administrations.

2.6.1 Warehousing and Storage

Warehouses constitute the basic appendages of the industrial departments. It encompasses stores of every material needed by every single unit of the industry while supplying items whenever they are needed (Kolavalli et al., 2012). The assortment of things put away is large to the point that an arranged system is essential to keeping them

safe all together. The put away things ought to be recognized and issued with least endeavours and in least time. This requires an authoritative structure appropriate to bear on different exercises proficiently and gainfully, characterizing the capacities and obligations of each central official, creating a system for standardizing tasks and consistencies in activities, and creating and keeping up records for legitimate bookkeeping, management data and investigation (Mohammed et al., 2012).

Late weights on coordination, expanding client benefit levels, stock decrease, time pressure and cost minimisation have changed the structure of supply chains and the position and working of warehouses inside the supply chains. Warehouses are accessible in each shape and size, from offices of a couple of hundred square meters handling humble throughputs to substantial capital-concentrated establishments with storage limits in the 50,000 or more metric tons extend Company (Benin et al., 2012).

Warehouses exist principally to encourage the development of products to the end client. Since warehouses, storage and conveyance focuses ought to work as indispensable parts of supply chains, basic choices when setting up such offices must be dictated by the general coordination methodologies for administration and cost. Richards (2017) recognize the elements that ought to be considered in building up a warehouse to incorporate; market and item base solidness – Long-term showcase desires for development and for how the item range may create will impact choices on the size and area of a warehouse office, including space for potential extension. Sort of products to be handled – Goods handled can incorporate crude materials, work in advance, spare parts, bundling materials and completed merchandise. Subject to material sorts, sizes, weights, item lives and different qualities, exceptional prerequisites for temperature and mugginess may likewise must be met, and these will affect the kind of warehouse and innovation level. Kind of office, size and area – The sort of activities, outline limit, size

and area of the warehouse will all be affected, if not specifically decided, by its particular role and position in the production network, and the capacity, limit and area of some other offices in the chain. The client base, measure of stock, the requirement for stock decrease, time pressure in the production network and the general administration levels should all be considered when choosing the sort, size and area of the warehouse (Jespersen and Hasle, 2017).

As per Takahashi and Omoto (2017), warehousing takes up to somewhere in the range of 2% and 5% of the cost of sales of a company and with late recharged corporate accentuation on Return on Assets, limiting warehousing costs has turned into a vital business issue. In the present amazingly focused worldwide business condition, a few organizations are robotizing their fundamental warehousing capacities to understand the expansion in throughput rates or stock turns required for their warehousing exchanges to be savvy. In the meantime, proceeded with accentuation on client benefit heightens the trouble of warehouse administrators searching for thoughts to cut expenses and upgrade client benefit in the meantime (Richards, 2017).

2.6.2 Role of Warehouses

In its most fundamental shape, warehousing is just holding products until the point that they are required. Often, a qualification is made between completed merchandise warehouse and a crude materials storeroom. The reality, in any case, is that the capacities performed in a completed merchandise warehouse, getting, putting away, picking and delivering, are indistinguishable to the assignments performed in a crude materials storeroom. Subsequently, both are warehouses (Moatari-Kazerouni et al., 2015). The main legitimate qualification between the two the source from which the merchandise are gotten and the client to whom the items are sent. A crude materials storeroom gets

merchandise from an outside source, stores the items, picks the items and boats them to an inside client. A completed merchandise warehouse gets products from an inside source, stores the items, picks the merchandise and ships the items to an outside client (Akorede et al., 2018).

Moreover, an in-process stock warehouse gets merchandise from an inside source, stores the items, picks the products and boats the products to an inside client, while a circulation warehouse gets products from an outside source, stores the products, pick the items and boats to an outer client. The varieties between these various warehouses are constrained to the perspectives of the sources, management, and end clients of the items. In the event that the essential elements of an office are getting, putting away, picking, and delivering, at that point that office is a warehouse, paying little respect to its situation in a company's coordination (Marcatto et al., 2016).

The assets of a warehouse are space, equipment and personnel. The helpfulness of a warehouse lives in the pragmatic utilization of its assets to fulfil client prerequisites. Client necessities are simply the demand to have the correct item in great condition at the opportune place at the perfect time. Hence, the item should be open and secured (Senthil et al., 2015). In the event that a warehouse can't meet these necessities enough, at that point the warehouse does not increase the value of the item, and truth be told, likely reductions profit from the item. In light of the assessments of a warehouse's assets and the purchasers' demands, the essential target of any warehouse management system is to expand utilization of warehouse space, equipment, work, availability and insurance of all things and in addition data. Warehouse space, specifically, takes up an extremely critical extent of aggregate warehouse costs and should be utilized proficiently (Owusu-Ansah, 2016).

2.6.3 Cocoa Warehousing

Warehousing (storage) takes straightforwardly after creation. The basic role of warehousing in the cocoa inventory network is apparent from the way that it goes before sale and fare. Examining warehousing issues in the cocoa business can, along these lines, be viewed as half of the answer for the issues related with expanding profitable sales and transportation (Benin et al., 2012). Troubles of cocoa warehousing can be designated under space accessibility and quality control.

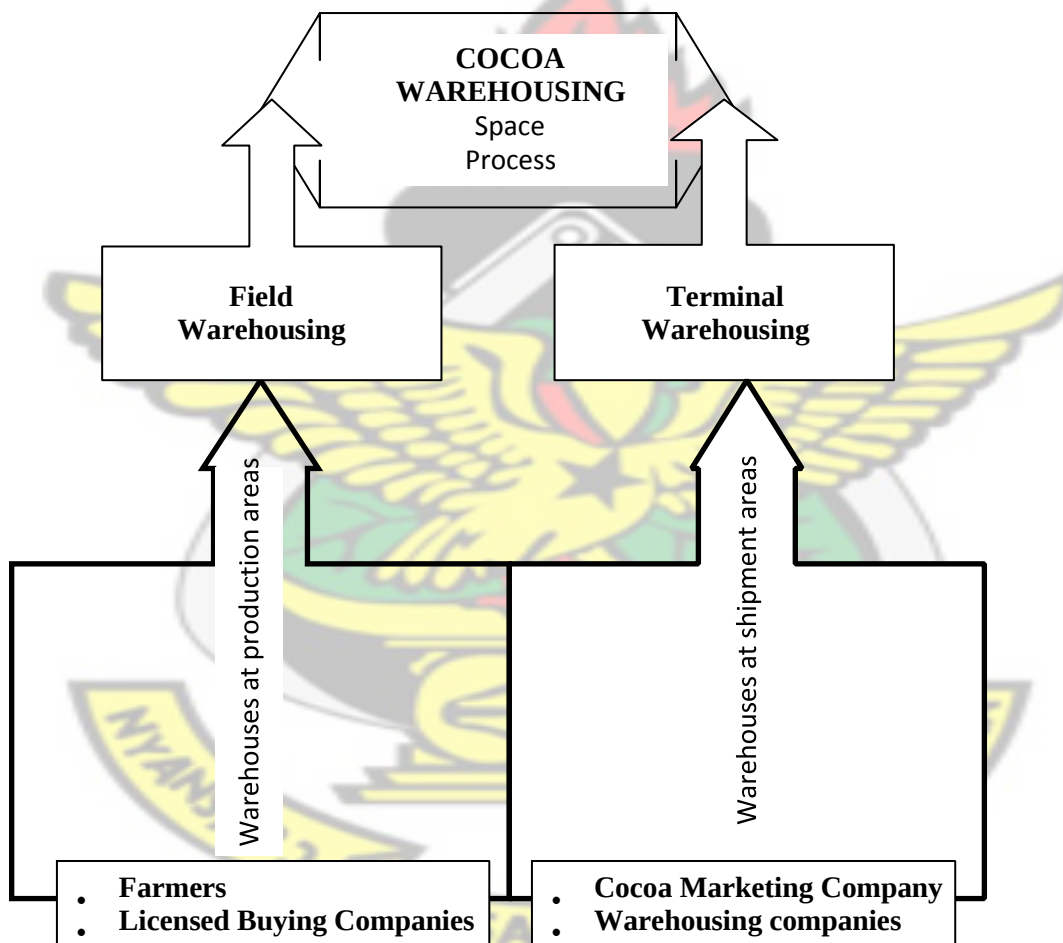
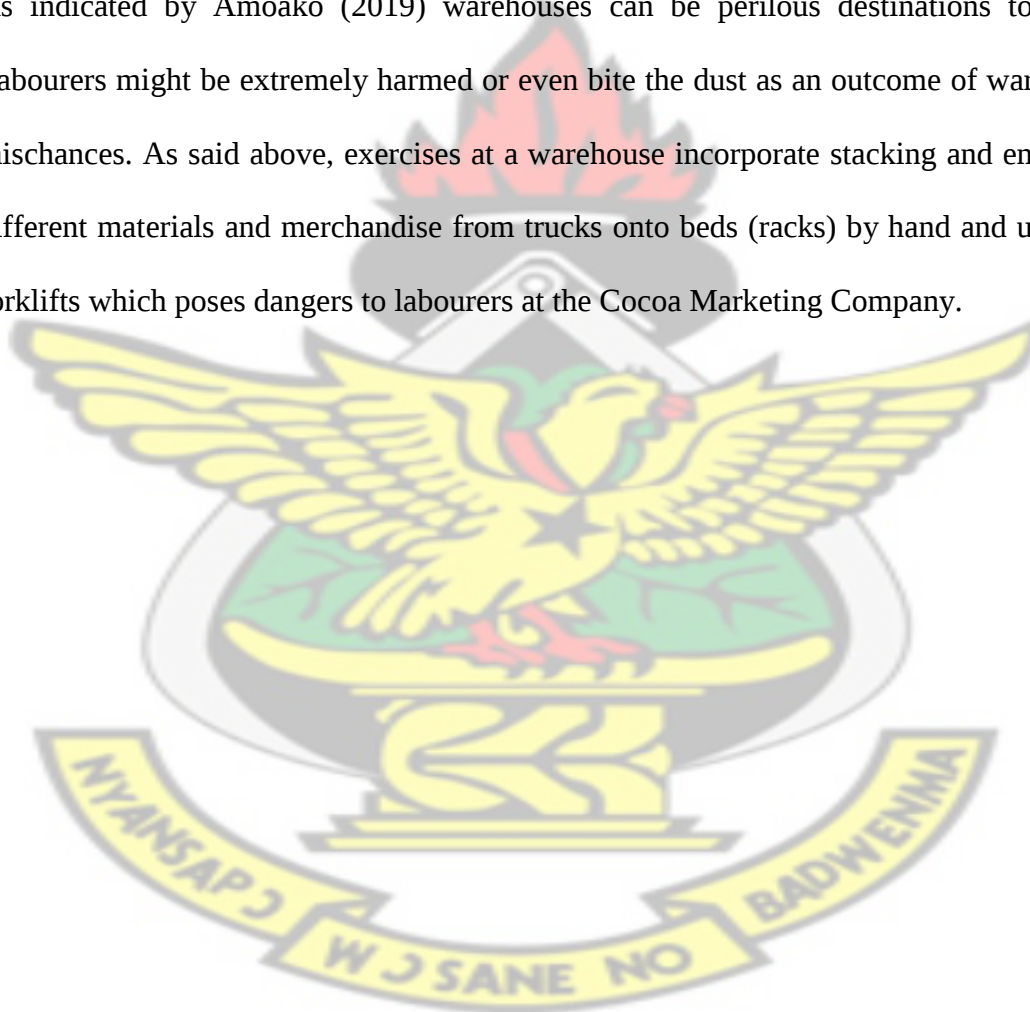


Figure 1: Cocoa Warehousing

From the blueprint above, the adequacy of warehousing cocoa in Ghana relies on space accessibility and effective warehousing forms that guarantee the nature of cocoa beans. Warehousing is done at two critical levels; in the field at the production areas by farmers

and buyers and the Cocoa Marketing Company. Cocoa is brought into their town level terminals by the farmers and immediately moved to greater sheds of the LBC's. Shed groups assemble the packs of cocoa into stacks by hand or at times mechanically utilizing high-pole battery-worked forklifts. Each exertion is made by the merchants to abstain from putting away cocoa in the open, however where this is unavoidable beds are multiplied to keep issues from ground dampness, and create secured promptly with a solid canvas (Sámamo-Ríos et al., 2019).

As indicated by Amoako (2019) warehouses can be perilous destinations to work. Labourers might be extremely harmed or even bite the dust as an outcome of warehouse mischances. As said above, exercises at a warehouse incorporate stacking and emptying different materials and merchandise from trucks onto beds (racks) by hand and utilizing forklifts which poses dangers to labourers at the Cocoa Marketing Company.



CHAPTER THREE

MATERIALS AND METHODS

3.1 Study Area

The study was conducted at Kaase, a suburb of Kumasi. The study area lies between Latitude 6.35° N and 6.40° N and Longitude 1.30° W and 1.35° W. It is elevated from 250 to 300 meters above sea level.

Kumasi Metropolis is one of the thirty (30) Districts in the Ashanti Region. The Metropolis shares boundaries with Kwabre East and Afigya Kwabre Districts to the north, Atwima Kwanwoma and Atwima Nwabiagya Districts to the west, Asokore Mampong and Ejisu-Juaben Municipality to the east and Bosomtwe District to the south. It is approximately 270 km north of the national capital, Accra. It has a surface area of approximately 214.3 square kilometers which occupies about 0.9 percent of the region's land area (Owusu-Ansah, 2016).

Kumasi experiences double rainfall; the major rainy season is between April and July and the minor one is between September and early November. The dry season starts from December and ends in February or March. The mean annual rainfall of Kumasi is 1300 mm with a mean temperature of 28° C (Amoako, 2019).

The Metropolis falls within the wet sub-equatorial type of climate. The average minimum temperature is about 21.5 degrees centigrade and the maximum average temperature is about 30.7 degrees centigrade. The average humidity is around 84.16 per cent at sunrise and 60 per cent at sunset. The moderate temperature and humidity and the double maximum rainfall regime (214.3 mm in June and 165.2 mm in September) have a direct effect on population growth and the environment as it has increased the influx of people from every part of the country and beyond its frontiers to the metropolis.

The Metropolis lies in the transitional forest zone specifically within the moist semi-deciduous South-East Ecological Zone. Predominant species of trees found are *Ceiba*, *Triplochlon*, *Celtis* and other exotic species. The soil in this ecological zone is rich in nutrients for crop cultivation. This vegetative cover partly explains the reason why Kumasi had the accolade the “Garden City of West Africa”. Albeit, the city has lost a sizeable stretch of its vegetative cover to physical construction due to urbanization. However, certain segments of the Metropolis like KNUST Botanic Gardens, Manhyia Gardens and Nhyiaso still have green environments which need conscientious conversation plans.

About 66.5 percent of the population aged 15 years and older is economically active while 33.5 per cent is economically not active. Of the economically active population, 91.4 percent is employed while 8.6 percent is unemployed. Kumasi Cocoa Marketing Company Kaase Depot is one of the cocoa depots in Ghana.



Figure 2: Map of West Africa showing Kumasi and Kaase

Other cocoa depots are Tema and Takoradi. Due to the large scale of cocoa that is stored in the Kumasi Inland Port, this study was conducted in that area. Cocoa beans which are produced in the forest belt of Ghana are transported to warehouses at the three assigned ports (Takoradi, Tema and Kumasi - Inland) for distribution to both global customers and local manufacturing plants. This takes into account fumigation of the cocoa and likewise condition for the cocoa to withstand the threats of the high oceans. The Kumasi Inland port serves as a warehouse for cocoa farming areas in Ashanti Region, Brong Ahafo Region and some parts of Western Region. It is one of the largest cocoa Inland Port in Ghana and as such records a number of Occupation hazards which made the area appropriate for the study.

3.2 Research Design

The researcher employed descriptive and explanatory techniques. The main aim of this selection was to precisely and accurately evaluate and describe occupational health and safety hazards in CMC at Kumasi Inland Port while recommending strategies to prevent and mitigate the effects of the health and safety hazards on the health and well-being of the workers.

According to Tobi and Kampen (2018), scientific descriptions are typically more accurate and precise. Furthermore, this study sought to determine the level of awareness of the workers on occupational health and safety hazards, and to examine the leading health and safety management practices adopted by CMC Kumasi inland Port to control the risks of hazards on site.

Materials used in the study included questionnaires which were well-structured but close ended to make data collection easy. SPSS V.16 software was also used to analyse the data collected for significance.

3.3 Research Population

The target population of this study was made up of all workers of the Cocoa Marketing Company at Kumasi Inland Port. An entire population of 312 were involved in the core processes of the cocoa warehousing from five (5) Departments namely; Warehousing port and operations (WPO) Department, Audit Department, Administration/Human Resource Department, Special Service Department and Shipping Department.

3.4 Methods

A simple random sampling procedure was used to select respondents for the study. Simple random sampling ensures that each member of the population has an equal chance for selection (Leavy, 2017). The Yamene's Sample Size determination formula was used to determine the actual sample to be utilised in the study.

$$n = \frac{N}{1 + N(e)^2}$$

Where n= sample size,

N= target population and

α = confidence level (95%)

e = Significant level of error (0.05) or 5%

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{312}{1 + 312(0.05)^2}$$

$$n = \frac{312}{1 + 312(0.0025)}$$

$$n = \frac{312}{1 + 0.78}$$

$$n = \frac{312}{1.78}$$

$$n = 175.2$$

Therefore, the sample of 175 participants was used for the study.

Workers who were available at the time of data collection were asked to provide information for the study to facilitate drawing of inference. However, particular attention was given to the employees in charge of distribution networks like warehouses. This was because employees at the warehouse are prone to serious occupational health hazards as machines are used there to convey stored cocoa during stacking. Riff et al. (2019) emphasised that this sampling method enables the researcher to select specific subjects who would provide the most extensive information about the phenomenon being studied. The Human Resource Department was consulted and the workers attendance book was used to randomly select the 175 respondents using the lottery method. The employees' names were written on pieces of papers as they appeared in the attendance books and were kept in a container from which a person was asked to pick one at a time. The employees selected for the study were made to answer the research questionnaire.

3.5 Data Collection

A well-structured questionnaire was used to solicit information from respondents selected for this study. The questionnaire was grouped into five sections with Section A being demographic characteristics. Sections B and C included questions aimed at identifying the prevalent occupational hazards at the CMC and those aimed at determining the level of awareness of workers on occupational hazards at CMC respectively. Section D comprised of questions that looked at the risks associated with occupational health and safety hazards while Section E provided questions that examined the leading health and safety management practices adopted by the Kumasi Inland Port to control hazards exposure. The questionnaire was designed using a Likert scale format of 1 to 5 with appropriate meanings. For instance, 1= strongly disagree, 2= disagree, 3=

not sure, 4= agree, 5= strongly agree. The questionnaire was guided by the study's specific objectives.

The respondents were given sufficient time to complete the questionnaire at their own convenience. This was done by allowing the respondents to keep the questionnaire for a day before they were collected back. Some respondents were also assisted to get the questionnaires completed. During the data collection, the researcher reviewed the questionnaire and ensured that all questions in each of the questionnaire were complete and accurate as much as possible. Questionnaire that were not completely answered were replaced. This was to avoid missing values during the analysis stage.

3.6 Analysis of data

The responses were coded and analysed using SPSS version 16. For example, variables such as sex of respondents were categorized and coded as 1=male and 2= female. Also, variable such as age was categorized and coded as 20-29=1, 30-39=2, 40-49=3 and 50 and above =4. The variables under the study objectives were also coded. Codes were given to the scale as strongly agree representing = 5, agree representing = 4, not sure as = 3, disagree representing = 2 and strongly disagree representing = 1.

3.7 Ethical consideration

Ethical issues like consent, anonymity, confidentiality and privacy were observed in the conduct of the study by seeking the consent of management and employees before conducting the study. Respondents were made to understand that the information being collected were solely for academic purposes and nobody directly involved in the research will have access to their information. To make sure no one knows who has given which

information, names and critical details that will reveal the identity of a respondent were not added as part of the data collected.

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CHAPTER FOUR

RESULTS

4.1 Socio-demographic characteristics of respondents

Table 4.1 presents the socio-demographic characteristics of the respondents. From the Table, it can be observed that, out of the 170 respondents, majority of them were males (n= 105; 61.8%) and the remaining (n= 65; 38.2%) were females. In terms of age, about 33.5% of the respondents were above 50 years whilst 42 of the respondents representing 24.7% were in the age category of 30 – 39 years. About 18.8% of the respondents were in the age category of 40 – 49 years. The age group of the respondents showed that majority of the respondents were within the economically active age group.

With regards to respondent status at the company, majority of the respondents (n = 123; 72.4%) were junior staffs whilst 47 of the respondents representing 27.6% were senior staffs. In terms of educational background, majority of the respondents (n = 107; 62.9%) had attained senior high school education (SHS) whilst 2 of the respondents (1.2%) had each obtained a bachelor's degree and Master's degree respectively.

However, in terms of length of working at the company, majority of the respondents (n = 117; 68.8%) had worked at the company for more than 5 years. On the hand, just few of the respondents (n = 15; 8.8%) had worked at the company for more than 10 years. The remaining 38 of the respondents (22.4%) had worked at the company for less than 5 years (Table 4.1).

Table 4.1: Socio-demographic characteristics of respondents

Variables	Frequency (n = 170)	Percentage (%)
Gender		
Male	105	61.8
Female	65	38.2
Age		
20 - 29 years	39	22.9
30 - 39 years	42	24.7
40 - 49 years	32	18.8
> 50 years	57	33.5
Status		
Senior Staff	47	27.6
Junior Staff	123	72.4
Education		
<SHS	59	34.7
SHS	107	62.9
HND	2	1.2
Bachelor's degree	1	0.6
Master's degree	1	0.6
Length of working at the company		
<5 years	38	22.4
>5 years	117	68.8
>10 years	15	8.8

Source: Field survey, 2018

4.2 Identification of Occupational Health and Safety Hazards at CMC Kumasi

Inland Port

The occupational health and safety hazards results is presented in Table 4.2. It was found that majority of the respondents (n = 162; 95.29%) agreed that cocoa bags falling from height, worker falling from cocoa stacks (n = 157; 92.35%), carriers colliding with stacks (n = 131; 77.06) and partial or total failure/collapse of stacks (n = 120; 70.59%) were common among OHSH. It was found that materials falling through the back of stacks (n = 51; 30.00%) was not common stacking hazard OHSH in the CMC.

The study also found that OHSH relating to slips, trips and falls; majority of the respondents agreed that spills of wet substances (n = 168; 98.82%) and slippery surfaces

(n = 151; 88.82%) were common in the CMC. Respondents disagreed that poor lighting (n = 143; 84.12%), wider gaps between gratings or pallets (n = 126; 74.12%), changes in walkway levels and slopes (n = 111; 65.29%) were common OHSW which resulted in slips, trips and fall in the cocoa marketing company.

On vehicle related hazards, the study found that majority of the respondents disagreed that vehicle to vehicle collision at the yard (n = 149; 87.65), pinned between loading pier and the truck or trailer (n = 133; 78.24%), clasped between truck and trailer (n = 126; 74.12%) and hit by or run over by a truck (n = 122; 71.76%) were common OHSW in the CMC.

The study also found that with fire related hazards, majority of the respondents agreed that poor housekeeping (mean=4.11) was common OHSW. It was found that majority of the respondents did not agree that poor wiring systems causes sparks leading to fire outbreak (mean = 1.21), fogging blower sparking leading to fire (mean = 3.12) and smoking in the shed (mean = 2.11) were common fire related hazard in the CMC.

Table 4.2: Occupational Health and Safety Hazards (OHS) at CMC Kumasi Inland Port

OHS	Respondent's response		Mean	SD
	Yes	No		
Stacking hazards (Fall from heights)				
Cocoa bags falling from cocoa stacks	162 (95.29)	8 (4.71)	4.65	0.77
Workers falling from cocoa stacks	157 (92.35)	13 (7.65)	4.63	0.44
Carriers colliding with stacks	131 (77.06)	39 (22.94)	4.24	0.24
Partial or total failure/collapse of stacks	120 (70.59)	50 (29.41)	4.04	0.31
Material falling through the back of stacks	51 (30.00)	119 (70.00)	1.41	0.54
Slips, trips and falls				
Spills of wet substances	168 (98.82)	2 (1.18)	4.75	0.54
Slippery surfaces	151 (88.82)	19 (11.18)	4.53	0.42
Debris and items stored in pedestrian walkways	75 (44.12)	95 (55.88)	3.21	0.53
Changes in walkway levels and slopes	59 (34.71)	111 (65.29)	2.13	0.43
Wider gaps between gratings or pallets	44 (25.88)	126 (74.12)	1.31	0.62
Poor lighting	27 (15.88)	143 (84.12)	1.21	0.42
Vehicle related hazards				
Pinned between loading pier and the truck or trailer	37 (21.76)	133 (78.24)	3.32	0.77
Hit by or run over by a truck	48 (28.24)	122 (71.76)	2.21	0.64
Clasped between trucks and trailer	44 (25.88)	126 (74.12)	1.31	0.69
Vehicle to vehicle collision in the yard	21 (12.35)	149 (87.65)	1.13	0.12
Fire related hazards				
Poor housekeeping	126 (74.12)	44 (25.88)	4.11	0.19
Fogging blower sparking fire	55 (32.35)	115 (67.65)	3.12	0.53
Smoking in the shed	61 (35.88)	109 (64.12)	2.11	0.59
Poor wiring system sparking fire outbreak	19 (11.18)	151 (88.82)	1.12	0.42

Numbers in brackets are percentages and numbers without brackets are respondent counts

NB: SD = Standard Deviation

Source: Field survey, 2018

Table 4.2.1: Stacking hazards versus gender distribution of the respondents

Sex	Stacking hazards					Total
	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	
Female	8 (36.36)	35 (36.08)	19 (51.35)	3 (25.00)	0 (0.00)	65 (38.24)
Male	14 (63.63)	62 (63.92)	18 (48.65)	9 (75.00)	2 (100.00)	105 (61.76)
Total	22 (100.00)	97 (100.00)	37 (100.00)	12 (100.00)	2 (100.00)	170 (100.00)

Numbers in the parentheses are percentages and those outside the parenthesis are absolute counts

Table 4.2.2: Slips, trips and falls versus the gender distribution of the respondents

Gender	Slips, trips and falls					Total
	Strongly agree	Agree	Not sure	Disagree	Strongly agree	
Female	33(35.48)	25(43.86)	7(38.89)	0(0.00%)	0(0.00%)	65(38.24)
Male	60(64.52)	32(56.14)	11(61.11)	2(100.00)	0(0.00%)	105(61.76)
Total	93(100.00)	57(100.00)	18(100.00)	2(100.00)	0(0.00%)	170(100.00)

Numbers in the parentheses are percentages and those outside the parenthesis are absolute counts

Table 4.2.3: Manual operations versus the gender distribution of the respondents

Gender	Manuel Operations					Total
	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	
Female	28(41.79)	14(35.00)	19(41.30)	4(25.00)	0(0.00%)	65(38.24)
Male	39(58.21)	26(65.00)	27(58.70)	12(75.00)	1(100.00)	105(61.76)
Total	67(100.00)	40(100.00)	46(100.00)	16(100.00)	1(100.00)	170(100.00)

Numbers in the parentheses are percentages and those outside the parenthesis are absolute counts

Table 4.2.4: Vehicle related hazards versus gender distribution of the respondents

Gender	Vehicle related hazards					Total
	Strongly agree	Agree	Not sure	Disagree	Strongly Disagree	
Female	28(41.79)	14(35.00)	19(41.30)	4(25.00)	0(0.00)	65(38.24)
Male	39(58.21)	26(65.00)	27(58.70)	12(75.00)	1(100.00)	105(61.76)
Total	67(100.00)	40(100.00)	46(100.00)	16(100.00)	1(100.00)	170(100.00)

Numbers in the parentheses are percentages and those outside the parenthesis are absolute counts

Table 4.2.5: Fire related hazards versus gender distribution of the respondents

Gender	Fire related hazards					Total
	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	
Female	44(40.00)	12(30.77)	8(50.00)	1(20.00)	0(0.00%)	65(38.24)
Male	66(60.00)	27(69.23)	8(50.00)	4(80.00)	0(0.00%)	105(61.76)
Total	110(100.00)	39(100.00)	16(100.00)	5(100.00)	0(0.00%)	170(100%)

Numbers in the parentheses are percentages and those outside the parenthesis are absolute counts

4.3 Awareness Level of the Workers on Occupational Health and Safety Hazards (OHS) at CMC Kumasi

Table 4.3 shows the reliability statistics of awareness level of workers on OHS. To determine the employees' awareness on OHS, the study used that Cronbach's Alpha coefficient to test for the reliability of the scale which showed a Cronbach's Alpha of 0.869. The results implied that the scale was reliable for the analysis.

Table 4.3: Reliability Statistic of Awareness level of the workers on OSH

Cronbach's Alpha	Cronbach's Alpha based on Standardized Items	Number of items
0.846	0.869	9

4.3.1 Descriptive analysis of awareness level of the workers on OSH

Table 4.3.1 presents the descriptive analysis of awareness level of the workers on OSH. From the Table, it can be indicated that, a positive response rate of 4.63 showed that more employees at the CMC were aware that the company had health and safety representatives. This was followed by the fact that more employees had sufficient knowledge of the Occupational Health & Safety Act (mean = 4.56). Dealing on the employees' awareness of OSH in the CMC, the study found that majority of the respondents usually follow safety procedures when working. The recorded mean score of 4.35 showed that employees at CMC were aware of OSH and applied some safety procedures when working. The respondents' awareness of OSH was that CMC employees were aware of OHS which leads to a reduction of accidents in the company. The recorded mean score of 4.26 made it clear that awareness of OSH among employees at CMC helped them to reduce accidents at work setting.

It was found that majority of the respondents agreed that they had copies of the OSHA. This recorded the mean score of 4.25 which also showed that most of the employees at CMC had knowledge of OSHA. The respondents agreed that they were provided with the necessary skills as employees in the organisation to perform their work safely. The recorded mean score of 4.13. It was also found that the respondents were not sure as to whether they know their rights as an employee when it comes to health & safety issues. This recorded a mean score of 3.13. The study also found that respondents disagreed that safety awareness campaigns are held on a regular basis (mean = 1.31). Also, majority of

the respondents disagree that safety meetings are held regularly with CMC employees (mean = 1.21).

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Table 4.3.1: Awareness level of the workers on OHS

Awareness of OHS at CMC	Respondent's response		Mean	SD
	Yes	No		
I have sufficient knowledge of the Occupational Health and Safety Act	157 (92.35)	13 (7.65)	4.56	0.42
We have a copy of the OHSA on CMC premises	122 (71.76)	48 (28.24)	4.25	0.54
I know my rights as an employee when it comes to health and safety issues	101 (59.41)	69 (40.59)	3.13	0.43
We are provided with the necessary skills as employees in the organisation to perform our work safely	115 (67.65)	55 (32.35)	4.13	0.42
I usually follow safety procedures when working	132 (77.65)	38 (22.35)	4.35	0.54
We have a health and safety representative at CMC	162 (95.29)	8 (4.71)	4.63	0.43
CMC employee awareness to OHS will lead to a reduction of accidents	124 (72.94)	46 (27.06)	4.26	0.53
Safety meetings are held regularly with employees	49 (28.82)	121 (71.18)	1.21	0.62
Safety awareness campaigns are held on a regular basis	62 (36.47)	108 (63.53)	1.31	0.42

Numbers in the parentheses are percentages and those outside the parenthesis are absolute counts

NB: SD = Standard Deviation

Source: Field survey, 2018

4.4 Risk Associated with Occupational Health and Safety Hazards

The risks associated with occupational health and safety hazard among employees of CMC as indicated by the study respondents is presented in Table 4.4. It was found that OHS such as stacking hazards (fall from heights) was the most frequent and result in high severity in the CMC. From table 11, stacking hazards (fall from heights) had a frequency of 6.534 within a week and was very severe (2.562). This was followed by manual operations with average occurrence of 5.531 in a week and severity average of 2.132. The study also found that slips, trips and falls also occurs about 4.241 on average per week with severity average of 1.436. The least occurrence of hazard among employees of CMC was fire related hazard with an average of 1.101 per week. This implied that fire related hazard was not common and severe in the CMC.

Table 4.4: Risks Associated with Occupational Health and Safety Hazards

Hazard	Frequency (1 – 10)	Severity (1=low, 2=medium, 3=high)
Stacking hazards (Fall from heights)	6.534	2.562
Slips, trips and falls	4.241	1.436
Manual Operations	5.531	2.132
Vehicle related Hazards	3.524	1.192
Fire related hazards	1.101	1.004

*Source: Field survey, 2018 (*Frequency of occurrence is per week)*

4.5 The Key Health and Safety Management Practices Adopted by CMC at Kumasi to Control the Risks of Hazards.

Table 4.5 gives data on the leading health and safety management practices. The results show a Cronbach's Alpha of 0.849 indicating that the scale was reliable for analysis.

Table 4.5: Reliability Statistic for leading health and safety management practices

Cronbach's Alpha	Cronbach's Alpha based on Standardized Items	Number of Items
0.813	0.849	9

The descriptive statistical analysis of key health and safety management practices is given in Table 4.6. The results presented in Table 4.6 showed that the most common HSMP adopted by CMC was that supervisors take employees health and safety very seriously in the company. This placed first with the highest mean score of 4.78 which implied that majority of the employees in CMC agreed that their supervisors take employees' safety seriously.

The second factor considered as the common HSMP at CMC was that the supervisors perform risk assessment on a regular basis. The study recorded a mean score of 4.67 which implied that most of the respondents agreed that supervisors performed risk assessment on a regular basis at CMC. According to respondents, it was found that some HSMP at CMC included; supervisors encourage employees to adhere to the OHSA (mean = 4.53); supervisors listen to employee's safety concerns at CMC (mean = 4.51); there is a formal health and safety reporting mechanism at CMC (mean = 4.35); employees are encouraged to report accidents that occur on site (mean = 4.49) and that safety signs are visible for everyone to see at CMC inland port (mean = 4.11).

It was also noted by employees who disagreed that safety inspections take place regularly at CMC Kumasi Inland port and that risk assessment is regularly carried out on CMC premises by health and safety representatives (mean = 2.46).

Table 4.6: Key Health and Safety Management Practices

Health & safety management practices adopted by CMC to control the risks of hazards on site	Respondent's response		Mean	SD
	Yes	No		
Supervisor takes employees health and safety very seriously	160 (94.12)	10 (5.88)	4.78	0.622
Supervisors perform risk assessment on a regular basis	149 (87.65)	21 (12.35)	4.67	0.341
Supervisors encourage employees to adhere to the OHSA	136 (80.00)	34 (20.00)	4.53	0.425
Supervisors listens to employee's safety concerns at CMC	133 (78.24)	37 (21.76)	4.51	0.722
There is a formal health and safety reporting mechanism at CMC	124 (72.94)	46 (27.06)	4.35	0.841
Employees are encouraged to report accidents that occur on site	129 (75.88)	41 (24.12)	4.49	0.925
Safety inspections take place regularly at CMC inland port	65 (38.24)	105 (61.76)	1.26	0.534
Safety signs are visible for everyone to see at CMC inland port	110 (64.71)	60 (35.29)	4.11	0.621
Risk assessment is regularly carried out on CMC premises by health and safety representatives.	55 (32.35)	115 (67.65)	2.46	0.42

Numbers in the parentheses are percentages and those outside the parenthesis are absolute counts

NB: SD = Standard Deviation

Source: Field survey, 2018

4.6 Strategies to Prevent and Mitigate the Effects of the Health and Safety Hazards on the Health and Well-being of the Workers

The results of the reliability test using the Cronbach's Alpha coefficient on the 12 items is given in Table 4.7. The Cronbach's Alpha recorded was 0.813. The results indicate that the scale was reliable for the analysis.

Table 4.7: Reliability Statistic for Strategies to prevent and mitigate the effects of the health and safety hazards

Cronbach's Alpha	Cronbach's Alpha based on Standardized Items	Number of items
0.819	0.813	12

The descriptive statistical analysis of strategies to prevent and mitigate the effects of the health and safety hazards is presented in Table 4.8. Investigating on the strategies to mitigate the effects of health and safety hazards (HSH) on employees at CMC, the study found that the provision of Personal Protective Equipment (PPE) to employees placed first with mean score of 4.75. The second most common strategy majority of the respondents agreed to, was the presence of first aid boxes at employees' work-station which also recorded mean score of 4.74. The study also found that majority of the respondents agreed that the company implement health and safety policies seriously with mean of 4.71 and also majority of the respondents agreed that CMC management was completely committed to the health and well-being of their workers as strategy to prevent effects of HSH (mean = 4.68). The study found that majority of the respondents disagreed that strategies to prevent and mitigate HSH at the CMC include, a very functional and active Occupational Health Safety System in place at CMC Kumasi (mean=1.35), a regular monitoring of safety and health standards (mean = 1.49) are compiled by the employees, records on health and safety issues are always maintained

(mean = 2.78) and management of CMC is constantly reviewing health and safety practices (mean = 1.51).

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Table 4.8: Strategies to Prevent and Mitigate the Effects of the Health and Safety Hazards

Strategies in preventing and mitigating the effects of HSH on your health and well-being	Respondent's response		Mean	SD
	Yes	No		
Personal Protective Equipment (PPE) provided by management is adequate and appropriate for my activities	158 (92.94)	12 (7.06)	4.75	0.84
There is a First Aid Box at my work-station	156 (91.76)	14 (8.24)	4.74	0.34
Implementation of the health and safety policies are taken seriously by CMC management	151 (88.82)	19 (11.18)	4.71	0.43
CMC management is completely committed to the health and well-being of their workers	148 (87.06)	22 (12.94)	4.68	0.72
There is a very functional and active Occupational Health Safety System in place at CMC Kumasi	50 (29.41)	120 (70.59)	1.35	0.84
There is a regular monitoring on safety and health standards to ensure they are complied with	43 (25.29)	127 (74.71)	1.49	0.93
Records on health and safety issues are always maintained	33 (19.41)	137 (80.59)	2.78	0.62
I am very satisfied with what management is doing currently to improve on occupational health and safety on site	142 (83.53)	28 (16.47)	4.63	0.43
Management of CMC is constantly reviewing health and safety practices	40 (23.53)	130 (76.47)	1.51	0.72
We use all the tools and machines as instructed, including their safety devices	135 (79.41)	35 (20.59)	4.55	0.84
Works in the sheds are organized so that operatives can avoid manual lifting.	112 (65.88)	58 (34.12)	3.49	0.93
We obey both fire and safety instructions around our work-stations	128 (75.29)	42 (24.71)	4.26	0.53

Numbers in the parentheses are percentages and those outside the parenthesis are absolute counts

NB: SD = Standard Deviation

Source: Field survey, 2018

A Cronbach's alpha above 0.75 shows that the results obtained are valid and consistent. Other scholars such as Mayer (2015) stated that, a Cronbach's Alpha above 0.75 shows that the results obtained are significant. Therefore, stacking hazards, slipping, tripping, falling, carrying out manual operations and being involved in vehicle and fire related hazards are all potential and significant hazards which need to be addressed by management in charge of health and safety in CMC.

Table 4.9: Occupational health and safety hazards at CMC Kumasi inland Port

Occupational safety hazard	Cronbach's Alpha	Cronbach's Alpha based on Standardized Items	Number of Items
Stacking hazards	0.846	0.899	5
(Fall from heights), Slips, trips and falls,	0.896	0.942	6
Manual Operations,	0.875	0.875	5
Vehicle related	0.853	0.845	4
Hazards and Fire related hazards	0.852	0.852	4

CHAPTER FIVE

DISCUSSION OF RESULTS

5.1 Identification of Occupational Health and Safety Hazards at CMC Kumasi

Inland Port

The study results showed that, the number of males in the working environment at CMC were more than the females in the same environment. This was similar to findings of Cudjoe (2011) as he asserted that, the working class in corporate and manufacturing settings have more males than females. In view of this, the nation has failed in its quest to ensure equity for all irrespective of gender. Frokok *et al.* (2014) also confirmed that, more men are employed in the job sector considering the fact that, they are the largest gender group that are educated in every part of the world. According to them, men have the capacity to work in every environment since they can easily adapt to change unlike women.

Considering the nature of the job carried out at CMC, not much qualification is needed to get employed in the firm. It was therefore identified that, most of the workers only had senior high school certificates while a few had Masters Degrees. However, those working with Bachelor and Master Degrees occupy senior level positions while Senior High School Certificate holders and HND holders occupied junior level positions.

It was identified that, among the hazards obtained due to stacking, 'cocoa bags falling from height' was considered as the major hazard experienced frequently by workers in the warehouse. Similarly, 'workers falling from cocoa stacks' was also identified to be dangerous as was confirmed by respondents. This is because, in many instances such falls render the employee bedridden for a number of days or months without him rendering any form of productivity to the company. This ultimately results in decrease in production and eventually influences the profits derived from the crop (*i.e.cocoa*) by the

cocoa sector (Conceição et al.,(2016) and- Kuranchie et al. (2019) made it clear that, falls from cocoa stacks can even result in death of employees who experience such occupational hazards. These were followed by ‘carriers colliding with stacks’, ‘partial or total failure of stacks’ and finally, ‘materials falling through the back of stacks’.

For slips, trips and falls, it was identified that spills of wet substances in the warehouse create a dangerous working environment at the warehouse, exposing workers to trips and slips on wet surfaces. With respect to vehicle and fire related hazards, the conditions were identified to be deadly by workers in the warehouse unit of CMC when workers are pinned between loading pier and truck or trailer and when there is poor housekeeping. The latter was agreed on by Moatari-Kazerouni et al. (2015) in his WHO healthy workplace framework. In general, the study results were similar to the view of Marcatto et al. (2016) and Richards (2017) who stated that different occupational settings have different OSH depending on the work environment.

5.2 Awareness Level of the Workers on OSH at CMC Kumasi

In actual fact, those who work in dangerous environments are admonished to take care of their own health and safety (Cudjoe, 2011). This was confirmed by Ward et al. (2008) as they asserted that, in some parts of the world, management of companies do not make enough provisions to ensure that their workers are safe and healthy. They went on to say that, such employers are only concerned with the profits they earn from their business venture and not the workers who help them get the profits. Hence, it is mandatory for workers in CMC to have basic knowledge in health and safety as well as how to prevent being exposed to possible hazards at their place of work (Cudjoe, 2011). It was identified that, as part of the awareness of employees at CMC, there is the existence of a health and safety representative at the company. In this case, he is the health and safety officer who

oversees the health and safety conditions of every worker at the company. It is the job of the health and safety officer to provide enough information on occupational health and safety to his co-workers and other members of staff to prevent injuries and ultimately, death. According to employees at CMC, the health and safety officer ensures that they follow every safety rule and procedure when carrying out their daily activities at work.

The fourth fact about respondents' awareness of OHS was that CMC employees were aware of OHS which leads to a reduction of accidents in the company. They stated that awareness of OHS among employees at CMC help them to reduce accidents at work. In the view of Lamm *et al.* (2007), employees are aware of any OHS as they are made to go through such policies and procedures right after employment. There is therefore the recording of all accidents, injuries, hazards and near misses as they occur in CMC.

As part of their adaptation strategies at their workplace, employees stated clearly that, they are provided with the necessary skills to perform their work safely. They also agreed that, they are very much aware of their rights when it comes to issues of health and safety. On the contrary, safety meetings are not periodically held at CMC to make workers abreast with evolving and new forms of safety techniques to prevent injuries and death at the workplace. Campaigns on safety are not held on a regular basis by management, particularly, by the health and safety officer at CMC.

The study findings confirmed the view of Bindu and Seema (2012) that occupational diseases include various diseases which are associated with humans and their work. The signs and symptoms are not different from those of non-occupational origin which most employees are aware of. Employees are usually aware of being exposed to risk factors resulting from work activities (Kvorning *et al.*, 2015).

5.3 Risk Associated with Occupational Health and Safety Hazards

From the results presented in Table 4.6, it was found that OHS hazards such as stacking hazards (fall from heights) was the most frequent and resulted in high severity in the CMC. It was identified that, stacking hazards (fall from heights) occur 6.534 times within a week and is very severe followed by manual operations. The study also found that slips, trips and falls occurred frequently in the week and was also very severe. The least occurred hazards among employees of CMC was fire related hazard which was less severe. This implied that fire related hazard was not common and severe in the CMC. The study finding was consistent with the view of Ametepah (2011) when he stated that, the careful management of occupational health hazards reduced the incidence of work-related injuries and accidents. It also improves the health of the workers as most work settings expose employees to risk of OHS hazards. Most leading risks in organizational settings include reduction in operations and injuries on the part of workers (Frokok *et al.*, 2014).

5.4 The Leading Health and Safety Management Practices Adopted by CMC at Kumasi to Control the Risks of Hazards on site

It was identified that the most common HSMP adopted by CMC was health and safety issues are strictly adhered to by supervisors. The second factor considered as the common HSMP at CMC was that the ‘supervisors perform risk assessment on a regular basis’. According to respondents, supervisors encourage employees to adhere to the OHSA while listening to employee’s safety concerns at CMC. There is also a formal health and safety reporting mechanism at CMC with employees being encouraged to report accidents that occur on site. Similarly, it is identified that safety signs are visible for everyone to see at CMC Kumasi Inland port.

According to Andersen et al. (2019), organisational measurements identified with output measures which is likely to reduce occupational health, and safety, and also the quantity and quality of work performance, accomplished. Okae Adow et al. (2016) noted that occupational health and safety management is essential in organizations. Senthil et al. (2015) stated that, to ensure more productivity and profits in the cocoa sector, safety of employees in the cocoa manufacturing firms in Ghana was very essential. According to Laschinger and Read (2017), there are not many strategies to reduce occupational health and safety, however, the best method of prevention is for employees to be their own safety and health managers in order to prevent them from being victims of trips, falls and other OHS hazards at the workplace.

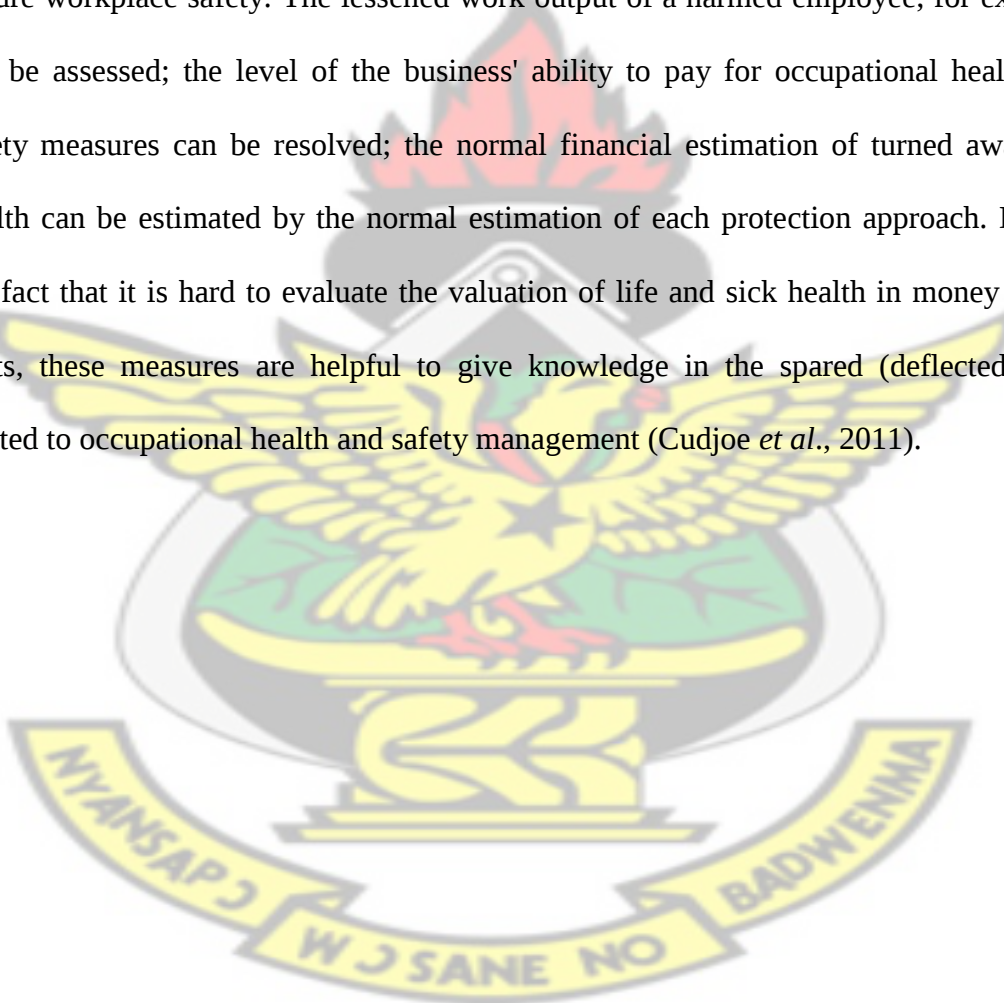
5.5 Strategies to Prevent and Mitigate the Effects of the Health and Safety Hazards on the Health and Well-being of the Workers

While investigating the strategies to prevent and mitigate the effects of HSH on employees at CMC, it was identified that Personal Protective Equipment (PPE) provided to employees were of major concern to staff, as such clothing are the best physical methods to help prevent occupational hazards (Ward *et al.*, 2008). The second most common strategy in preventing health and safety hazards in CMC was that there are first aid boxes at employee worker stations which provide first aid relief to employees who get exposed to hazards at the workplace before taking them to the hospital for further treatment.

It was identified that; CMC implements health and safety policies seriously while completely committing to the health and well-being of their workers as a strategy to prevent effects of HSH. However, there is no functional and active Occupational Health Safety System in place at CMC Kumasi. Similarly, no regular monitoring on safety and

health standards is carried out to ensure that employees comply with laid down rules and regulations.

The study findings confirmed the views of Ward *et al.* (2008) that reduction in OHS hazards is connected to augment the arrival from a particular spending plan and is estimated in physical units, for example, wounds deflected and life years picked up. The finding also confirmed the views of Lim (2012) that it is difficult to gauge the future of occupational health and safety reserve funds. There are some approaches to endeavour to ensure workplace safety. The lessened work output of a harmed employee, for example, can be assessed; the level of the business' ability to pay for occupational health, and safety measures can be resolved; the normal financial estimation of turned away sick health can be estimated by the normal estimation of each protection approach. Despite the fact that it is hard to evaluate the valuation of life and sick health in money related costs, these measures are helpful to give knowledge in the spared (deflected) costs related to occupational health and safety management (Cudjoe *et al.*, 2011).



CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 Summary of Findings

Based on the findings of the current study, respondents agreed that cocoa bags falling from height, trips, slips and falls, vehicle hazards and fire related hazards were common OHS in the CMC. Majority of the employees were aware that the company had health representative who follow procedures when working and that the awareness of OHS help the employees to reduce accidents at the company.

The results showed that, stacking hazards (fall from heights) was the most frequent and result in high severity in the CMC. This was followed by manual operations; then slips, trips and falls and fire related hazard was not common and severe in the CMC. The study also showed that the key health and safety management practices adopted by CMC at Kumasi inland port to control the risks of hazards on site were that; the supervisor takes employees health and safety very seriously in the company, the supervisors perform risk assessment on a regular basis, supervisors encourage employees to adhere to the OHS, supervisors listens to employee's safety concerns at CMC, and there was formal health and safety reporting mechanism at CMC.

The study also showed that strategies to prevent and mitigate the effects of the health and safety hazards on the health and well-being of the workers included; Personal Protective Equipment (PPE) provided to employees, first aid box at employees' work-station, the company implement health and safety policies.

6.2 Recommendations

Based on the study results, the following recommendations were made by the researcher:

The study recommended that the CMC should provide adequate Personal Protective Equipment (PPE) to all employees and Service personnel to help prevent risk and to reduce employees exposure to hazards. About three hundred and fifty (352) safety boots will be adequate for all workers in the company including service persons. PPE should be used by employees at all time in every work activity.

There should be records on health and safety issues such as injuries and accidents, these records will help management to know the trends of accidents and injuries in the company and to prevent accidents in the future.

CMC management should completely be committed to the health and well-being of their workers. Since most respondents agreed that there was some level of risk factors associated at their work setting, management should be committed to the employees' safety.

CMC needs to ensure work place safety for its employees. There should be a very functional and active Occupational Health Safety policy for employees at the CMC, this will help provide guidelines for establishing and implementing programs that will reduce workplace hazards, protect lives and promote employee health.

There should be regular monitoring on safety and health standards at all times to ensure that all employees complied with safety policies in the company.

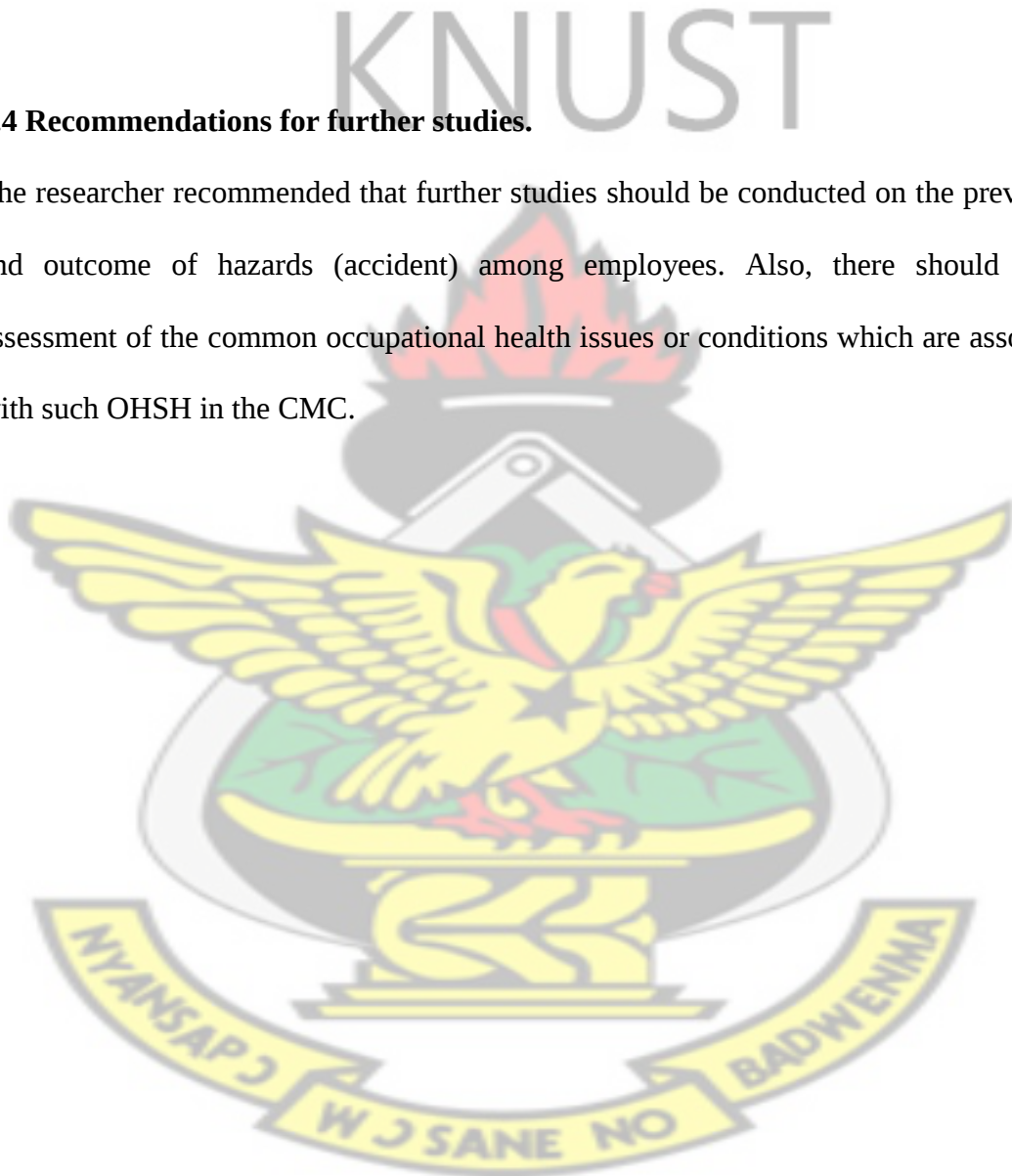
6.3 Conclusion

Based on the findings of the study, it was concluded that, workers in the company are aware of the presence of health and safety representatives as well as the roles they play. However, workers do not take the call to report cases of incidents despite the fact that,

supervisors take the health of their subordinates seriously. In effect, there is slow pace of productivity at the warehouse. It is also concluded that, there are more strategies and mitigation procedures needed to ensure that, workers at the warehouse do not encounter hazardous conditions at the workplace since they do not make efforts to report as and when its needed.

6.4 Recommendations for further studies.

The researcher recommended that further studies should be conducted on the prevalence and outcome of hazards (accident) among employees. Also, there should be an assessment of the common occupational health issues or conditions which are associated with such OHS in the CMC.



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APPENDIX: A
QUESTIONNAIRES FOR WORKERS

PURPOSE

This questionnaire is designed to collect relevant information about your views on occupational health and safety hazards at CMC Kumasi Take-Over Centre. Your response to the items of this questionnaire will remain confidential, and the results will be used for academic purposes only. I hope you will be able to take time and carefully complete this questionnaire. You can use a [✓] mark to indicate your responses for items with alternative responses. Please briefly state your responses to the open-ended items.

Thank you for your time

Section A: Demographics

Department

Answer the questions by ticking [✓] the appropriate box.

1. Gender: Male [☐] Female [☐]
2. Age: 20-29 years [☐] 30-39 [☐] 40-49 [☐] 50 and above [☐]
3. Status: Senior Staff [☐] Junior Staff [☐]
4. Academic and professional qualification: <SHS [☐], SHS [☐]
HND [☐] Bachelor's degree [☐] (d) Master's degree [☐] PhD. [☐] Others [☐]

Section B: Identification of occupational health and safety hazards at CMC Kumasi

inland Port

<i>To what extent do you agree with the following relative to storage and racking systems in your shed?</i>	<i>Strongly Agree</i> 5	<i>Agree</i> 4	<i>Not sure</i> 3	<i>Disagree</i> 2	<i>Strongly Disagree</i> 1
Stacking hazards (Fall from heights)					
Partial or total failure/collapse of stacks					
Carriers colliding with stacks					
Material falling through the back of stacks					
Cocoa bags falling from height					
Worker falling from cocoa stacks					
Slips, trips and falls					
Slippery surfaces					
Spills of wet substances					
Changes in walkway levels and slopes					
Poor lighting					
Debris and items stored in pedestrian walkways					
Wider gaps between gratings or pallets					
Manual Operations					
Muscular strains from lifting and moving heavy or bulky items of stock					
Risk of back injury					
Poor work postures and movements					
Warehouse gate crushing of hands					
Workers legs caught in between pallets or gratings					
Vehicle related Hazards					
Vehicle to vehicle collision at the yard					
Pinned between loading pier and the truck or trailer					
Clasped between truck and trailer					
Hit by or run over by a truck					
Fire related hazards					
Poor wiring systems sparking fire outbreak					
Fogging blower sparking fire					
Smoking in the shed					
Poor housekeeping					

Section C: Awareness level of the workers on occupational health and health hazards at CMC Kumasi TOC

<i>Please indicate the extent to which you agree with the following in terms of your level awareness of OHS at CMC</i>	<i>Strongly Agree 5</i>	<i>Agree 4</i>	<i>Not sure 3</i>	<i>Disagree 2</i>	<i>Strongly Disagree 1</i>
I have sufficient knowledge of the Occupational Health & Safety Act.					
We have a copy of the OHSA on CMC premises					
I know my rights as an employee when it comes to health & safety issues					
We are provided with the necessary skills as employees in the organisation to perform our work safely					
I usually follow safety procedures when working					
We have a health and safety representative at CMC					
All employees at CMC are involved in the planning of health and safety at work					
CMC employee awareness to OHS will lead to a reduction of accidents					
Safety meetings are held regularly with CMC employees					
Safety awareness campaigns are held on a regular basis					

Section D: Risk associated with occupational health and safety hazards.

Rate the following hazards on the scales provided under frequency and severity of the risks should the incidents occur.

Hazard	Frequency (1 – 10)	Severity (L=low, M=medium, H=high)
Stacking hazards (Fall from heights)		
Slips, trips and falls		
Manual Operations		
Vehicle related Hazards		
Fire related hazards		

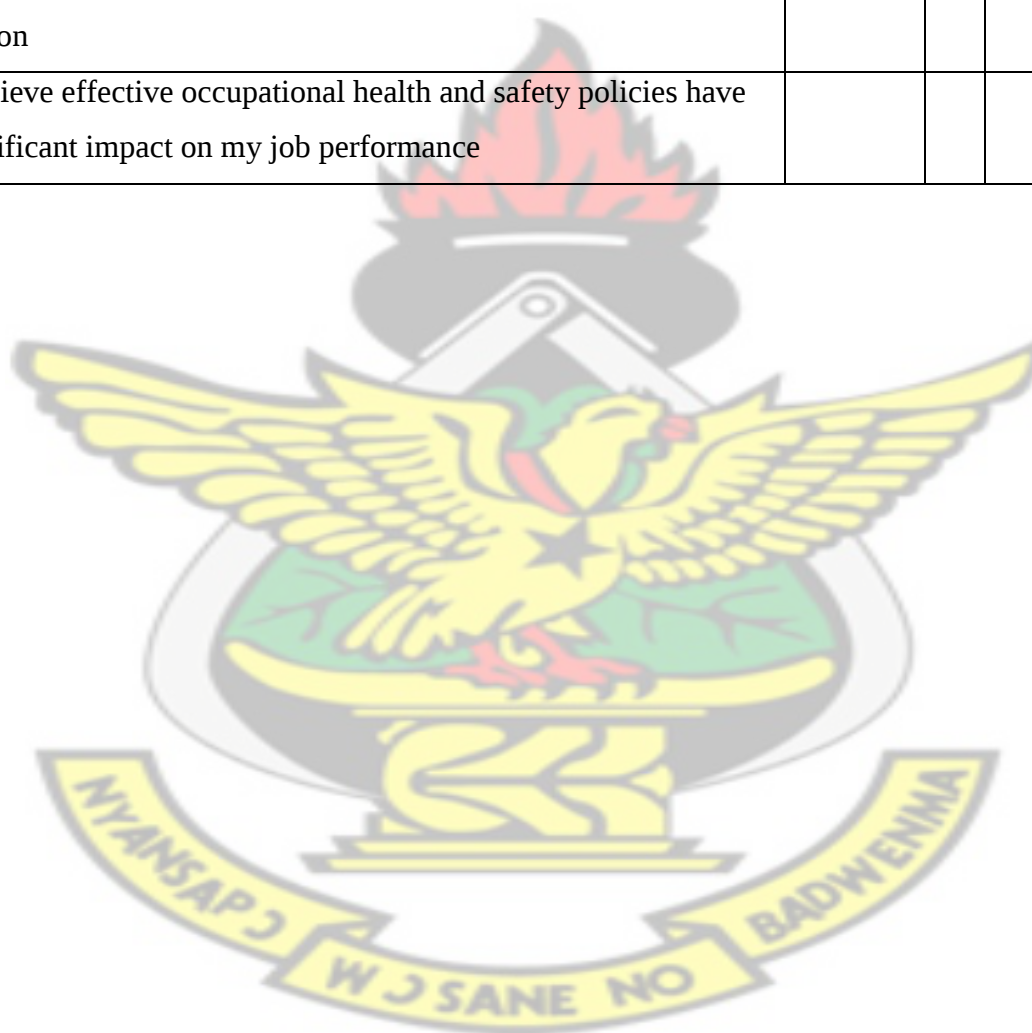
***Frequency of occurrence is per week**

Section E: The leading health and safety management practices adopted by CMC at Kumasi TOC to control the risks of hazards on site.

<i>Please indicate the extent to which you agree with the health & safety management practices adopted by CMC to control the risks of hazards on site</i>	<i>Strongly Agree</i> 5	4	3	2	<i>Strongly Disagree</i> 1
Supervisor takes employees health and safety very seriously					
Supervisors perform risk assessment on a regular basis					
Supervisors encourage employees to adhere to the OHSA					
Supervisors listens to employee's safety concerns at CMC					
There is a formal health and safety reporting mechanism at CMC					
Reported health and safety issues are attended to promptly					
Employees are encouraged to report accidents that occur on site					
Safety inspections take place regularly at CMC inland port					
Regular inspections encourage the employer to comply with OHSS					
Labour inspectors are allowed access to the depots at the TOC site always					
Safety signs are visible for everyone to see at CMC inland port					
Inspectors impose fines and penalties when our employers are non-compliant					
Risk assessment is regularly carried out on CMC premises by health and safety representatives.					
There are mechanisms that determine a hazard or potential hazards on site					

An overview of workplace environment at CMC inland port

<i>Please indicate the extent to which you agree with the workplace environment at CMC inland port</i>	Strongly Agree 5	4	3	2	Strongly Disagree 1
There is enough ventilation at my work-station					
I am comfortable with the room temperature at my work-station					
I am satisfied with the level of hygiene at my work-station					
There is sufficient lighting at my work-station					
Chemical and other substances are clearly marked at my work-station					
I believe effective occupational health and safety policies have significant impact on my job performance					



Section E: Strategies to prevent and mitigate the effects of the health and safety hazards on the health and well-being of the workers

<i>Please indicate the extent to which you agree with the following strategies in preventing and mitigating the effects of HSH on your health and well-being</i>	<i>Strongly agree 5</i>	<i>4</i>	<i>3</i>	<i>2</i>	<i>Strongly disagree 1</i>
Attempts are made to minimize the occurrence of the effects of hazards and risks					
There is the need for training when newly employed					
There is the need for a health examination when newly employed					
There must be calls for a health screening surveillance on employees					
Personal Protective Equipment (PPE) provided by management is adequate and appropriate for my activities					
Management must periodically send employees for training to update and upgrade our efficiency and effectiveness					
There is a First Aid Box at my work-station					
Implementation of the health and safety policies are taken seriously by CMC management					
CMC management is completely committed to the health and well-being of their workers					
There is a very functional and active Occupational Health Safety System in place at CMC Kumasi					
There is a regular monitoring on safety and health standards to ensure they are complied with					
Employees are re-trained on safety and health practices regularly					
Records on health and safety issues are always maintained					
Safety notices and legislative information are always posted on site					
I am very satisfied with what management is doing currently to improve on occupational health and safety on site					
Management of CMC is constantly reviewing health and safety practices					
We use all the tools and machines as instructed, including their safety devices					
Work in the sheds are organized so that operatives can avoid manual lifting.					
We obey both fire and safety instructions around our work-stations					

Thank you for your time