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DEPARTMENT OF BUSINESS STUDIES

**MANAGEMENT OF OCCUPATIONAL HEALTH AND
SAFETY IN SELECTED ORGANISATIONS OF THE
SOUTH WEST REGION OF CAMEROON**

A Thesis Submitted to the Department of Business Studies, in
Partial Fulfilment of the Requirements for the Award of a Master of
Science (M.Sc) degree in Strategic Human Resource Management

By

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DEDICATION

I dedicate this piece of work to my late beloved sister LISETTE BAWAH N. MASSOK.

ADIEU BABY LISE.

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ACRONYMS AND ABBREVIATIONS

CNPS:	Cameroon National Social Insurance Fund
ILO:	International Labour Organization
IMT:	Labour Medical Inspector
HSC:	Health and Safety Committees
MLSS/MTPS:	Ministry of Labour and Social Security
OSHC:	Occupational Safety and Health Convention 1981
WHO:	World Health Organization
PCC:	Presbyterian Church in Cameroon
PLC:	Public Limited Company
OHADA:	Organization for the Harmonization of Business Law in Africa
GCSA:	Guinness Cameroon Public Limited
PPE:	Personal Protective Equipment
OSHAS:	Occupational Safety and Health Administrative Standard
NHSC:	National Health and Safety Commission
MHSWR:	Management of Health and Safety at Work Regulations
OHSO:	Occupational Health and Safety Office

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ABSTRACT

Recent accidents occurring in most companies in Cameroon should be a source of worry to everyone. Most employers fail to put in place adequate health and safety measures at their workplace to safeguard not only the employees and management but also clients/customers and other stakeholders who might have some interest in the company or organization. Ineffective occupational health and safety policy have a negative effect on the organization as well as the workforce. Some of these include, cost of wages paid for time lost, the cost of damage to material or equipment, a cost of overtime work required as a result of accidents, it is against this background that the researcher decided to research into the area management of occupational health and safety in selected organizations of the South West Region of Cameroon. Data were collected through questionnaires, interview, participant observation and review of relevant literature from books, articles, website, Three hundred (300) respondents formed the sample size as fifty (50) was drawn from each organization using simple random sampling. The data generated was analyzed using the statistical package for social sciences (SPSS) version 21.0. It was found out that the current occupational health and safety practices in organizations of the South West Region of Cameroon are inadequate. Employee's commitment and compliance to health and safety rules were also low. It is recommended that management of these organizations should seat up as far as the management of occupational health and safety is concerned.

KEY WORDS: Management, Occupational Health, Occupational Safety, Health Hazard, Safety Hazard and Occupational Health and Safety.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

There are three fundamental reasons for organisations to manage health and safety risk. Firstly, the need to maintain a moral code within our society. Without it, employers may be tempted to treat the health and safety of the workforce as being of less importance than financial profit. Moral reasons are based on the concept of an employer owing a duty of reasonable care to his employees (<http://www.myneshosh.com/>). A person does not expect to risk life and limb, or physical health, as a condition of employment. Society expects every employer to demonstrate a correct attitude to health and safety to his workforce. It is unacceptable to place employees in situations where their health and safety is at risk. Statistics relating to accidents /incidents and ill health help to reinforce the message that health and safety should be effectively managed. These statistics also demonstrate that proportionately those who work for small business are at significantly greater risk than those who work for large organizations. This is clearly morally wrong.

Secondly, the legal imperative for organizations to self-regulate or self-police, themselves by enforcing the appropriate health and safety standards for their activities. This ensures that the organization regulate its activities and avoids the hammer of an external and often more costly regulator. Unfortunately, not all organizations are sufficiently motivated or enlightened.

Over the years, many moral obligations have been turned into health and safety law. For example, the International Labour Organization's (ILO) **Occupational Safety and Health Convention 1981, C155**, identifies some basic general legal duties of employers towards their employees in Article 16:

"1. Employers shall be required to ensure that, so far as is reasonably practicable, the workplaces, machinery, equipment and processes under their control are safe and without risk to health.

2. Employers shall be required to ensure that, so far as is reasonably practicable, the chemical, physical and biological substances and agents under their control are without risk to health when the appropriate measures of protection are been taken.

3. *Employers shall be required to provide, where necessary, adequate protective clothing and protective equipment to prevent, so far as reasonably practicable, the risk of accidents or adverse effects on health.* (<http://www.ilo.org>)

Other legal reasons why employers should manage risk include:

- **Preventive** – enforcement notices (improvement or prohibition) can be issued by enforcement inspectors.
- **Punitive** – Where the criminal courts impose fines and imprisonment for breaches of legal duties. These punishments can be given to the company or individuals within the company.
- **Compensatory** – where employees can sue in the civil courts for compensation. (Benjamin 2008)

Thirdly are the economic reasons for managing health risks.

Accidents and ill-health are costly. These costs may be calculable arising directly from the accident, such as sick pay, repairs to damaged equipment, fines and legal fees, or more difficult to assign monetary values to such as lost orders and business interruption. In practice, the costs that are more difficult to calculate are often substantially more than those that are easier to assess.

All employers are required to have certain types of insurance against accidents, ill-health or other problems, such as:

- Employers' liability insurance
- Public liability insurance
- Motor vehicle insurance

This insurance will cover some of the costs of accidents and ill-health e.g. compensation claims from employees and damage to motor vehicles. However many of the costs cannot be insured against, such as:

- Product and material damage
- Lost production time
- Legal costs in defending civil claims, prosecutions or enforcement action.
- Overtime and other temporary labour cost to replace the injured worker.

- Time spent investigating the accident and other administration costs (including supervisor's time).
- Fines from criminal prosecutions.
- Loss of highly trained and experienced staff.
- Effects on employee morale and the resulting reduction in productivity.
- Bad publicity leading to loss of contracts and orders.
- In a study by the UK's Health and safety Executives, it was shown that uninsured (hidden) costs can be eight to 36 times that known insured costs. This would illustrate as an "iceberg" model-where much of the costs (the uninsured ones) lay hidden beneath the water (Benjamin 2008).

Some of these costs are of indeterminate value. This underlines the difficulty an organization may have in attempting to find out the true cost of accidents to the business. The company may not have enough people with the correct level of expertise and time of performing the analysis. They may not even appreciate that some costs exist and so miss them entirely. The culture of the organization might mean that many incidents are not reported and so never find their way into statistics used as the basis for costing. Some costs may not be known accurately for a long time, e.g. where a civil case is on-going, and there may be a substantial compensation award. Obtaining realistic cost estimates of the impact of more subtle items such as loss of morale (leading to lower productivity) and loss of goodwill/ public image (resulting in lower sales) may be next to impossible.

There are clearly financial benefits gained from positive health and safety Management. Employers with good health and safety management system in place are likely to save substantial sums on the costs of accidents that would otherwise have happened.

1.1.1. History of Occupational Safety and Health

Karen McDonnell, RoSPA's (1989) occupational safety and health policy adviser, said: contrary to what some might believe, the management of safety and health at work is not a 21st -century phenomenon. With roots stretching all the way back to the turn of the 19th century, this is an area at the heart of the UK's industrial history (www.birmingham-chamber.com). Workplace safety and health slowly became an issue as the United States rapidly industrialized. Unions and reforms first promoted the

need for safe working conditions. Workers had few options if they become injured or ill on the job until state governments created regulations for industries like coal mining and manufacturing. Many viewed the system of workplace safety at the beginning of the 1970s. Concern over workers safety and health on the job arose in late 1900 as the United States became an industrial power. The increasing use of heavy machinery in areas like mining, railroad freight and manufacturing resulted in accidents that crippled or even killed workers. Workers and their families during the late 1800s had little recourse except to sue employers who could afford more talented lawyers. States took tentative steps towards regulating industries like coal mining and manufacturing as early as 1869, but until the early 1900s did the actions of states force industries to reduce the possibility of work- related accidents or illness (<http://www.ehow.com>).

Moving to the contemporary issues of workplace safety and health, we will discover that this period is pre-dominated by social problems like family obligations, violence, racial inequality, gender inequality, mental illness, drugs abuse, workplace injuries and disease. Under conflict with family obligations are issues such as burnouts, prolonged stress, and fatigue are mostly the cause of family problems. On the other hand, common workplace injuries have plagued the contemporary period such as back injuries as a result of uncomfortable seating positions for too long, hand injuries as a result of picking up heavy objects and other parts of the body. Also disease such as HIV/AIDS, food poisoning, lung cancer caused by coke oven emissions, asbestos which is as a result of building materials in very cold places or environments, passive cigarette smoking, sterility/reproductive problems caused by radiation, deteriorating eyesight's caused by chemical fumes, hearing loss caused by high noise levels or for reasons not related to the workplace, computer screen, and other office equipment and workplace- related materials that affects the health and safety of workers. (Bureau of labour statistics 2011)

As we have seen, work and family life are related in complex ways. So are work, family life and individual health. At the extremes, however, the issue is probably quite simple. People who love their work and love their families will probably enjoy good health, while those who hate their work and hate their families will not. Very few situations are that simplistic, of course, and thus, the evidence regarding to work, family, and health is unclear.

One study, for example, found that married women were in poorer mental health than married men. Married employed women had more demands on them than their husbands did but fewer demands than unemployed wives (Gove and Geerken, 1977). Another study found that working married women had improved mental health because of objective changes that had occurred in their life situations – most notably, increased income. The husbands of working women, in contrast, experienced more psychological distress, because of the contradiction of traditional sex-role orientations, greater housework pressures, and greater child-care demand (Kessler and McRae, 1982).

These discrepant kinds of findings can be partially reconciled when a broader set of considerations is brought into the analysis. This broader consideration involves the notion of preferences for work and preferences for traditional roles. When a wife is working, but both she and her husband believe that he should be the sole breadwinner, there is a great deal of depression. Depression is least in cases in which both husband and wife work and both are responsible for the house work (Ross, Mirowsky, and Huber, 1983).

In any event, work expectations interact with family expectations and have consequences for both physical and mental health. Both work and family carry a heavy emotional content with them, and each can spill over into the other sphere.

Work by itself, independent of family considerations, also has some significant effects on health. The relationships between work and health take many forms, ranging from matters of life and death to the rather mundane finding that a sense of well-being at work is related to a sense of well-being away from work (Bergermaier, Bork, and Champoux, 1984). The importance of the work-health relationship was recognized in the 1973 publication of work in America (O' Toole et al., 1973; also see O'Toole, 1984). The authors noted that relationships existed between the quality of work and longevity, heart disease and other cardiovascular problems, ulcers, arthritis, and various forms of mental illness. In addition to these problems, researchers have identified linkages between work and alcohol abuse (Fennel, Rodin, and Kantor, 1981), drug abuse, and suicide.

Work in American was valuable because it helped to focus national attention on problems in the workplace. Unfortunately, it viewed most problems of work from a social psychological standpoint, with possible improvements seen as coming from

improving the quality of working life and thus level of job satisfaction. Such an approach overlooks more immediate and more radical linkages between work and health. For example, some jobs are very dangerous physically, such as coal mining (Wallace, 1987) and off shore oil-rig work (Carson, 1982).

Some sociologists see the issue of truly dangerous work from the standpoint of class conflict, with workers assuming the risks and owners reaping the benefits (Gersuny, 1981). The more physically dangerous jobs clearly involve manual work, which is usually among the lowest-paid work. There are legitimate questions regarding who should pay how much to whom for the performance of hazardous work. There are legitimate questions regarding who should pay how much to whom for the performance of hazardous work. Even though premium wages paid for recognizably hazardous work, owners still make profits without themselves undergoing risks. The problem with this sort of analysis, of course, is that the same risk is present in non-capitalist systems. In every society, some workers always assume the riskier jobs, and they always tend to be lower-status workers.

Work that presents an immediate physical danger is easy to identify. More difficult is the identification of health risks that do not show up immediately. More difficult is the identification of health risks that do not show up immediately. For instance, what is the long-term effect of staring at a computer monitor all day? Another concern is the health risks that operate more subtly through social psychological processes. For example, considerable effort has been devoted to exploring the relationship between health and perceived role conflict, role ambiguity, and role overload (Kahn, Wolfe, Quinn, Snoek, and Rosenthal, 1964). The assumption is that the inability to fulfill work obligations because of a lack of clear understanding or because of conflicting or overwhelming demands creates stress that in turn leads to disease. However, it seems that although role conflict, ambiguity, and load associated with negative emotional reactions at work, links to other aspects of mental and physical health have yet to be firmly established (Jackson and Schuler, 1985).

It is also difficult to determine if certain aspects of work yield more risk than others. For example, does a working long hour create a dangerous health hazard? According to a 1990 New York Times articles:

Among 88 million people with full-time jobs last year, nearly 24 percent – largely executives, professionals, self-employed people, journalists, bureaucrats and the secretaries and clerks who toil alongside them – spent 49 or more hours a week on the job, according to the Bureau of Labor our Statistics. Ten years ago only 18 percent worked so much. (Cited in Kilborn, 1990) (www.nytimes.com).

The implication of this particular article was that long hours of work related to physical and mental health problems. But not working is also bad for your health. People who have personal experience with unemployment are much more likely than the average citizen to fall ill or suffer any injury (Leigh, 1987) apparently, work; too much work and not enough work can all be hazardous to health.

The sharp rise in accident costs that resulted from compensation laws and tighter employers' liability initiated the modern concern with work safety and initiated the long- term decline in work accidents and injuries. Large firms in railroading, mining, manufacturing and elsewhere suddenly became interested in safety. Companies began to guard machines and power sources while machinery makers developed safer designs. Managers began to look for hidden dangers at work and to require that workers wear hard hats and safety glasses. They also set up safety departments run by engineers and safety Council to pool information. Government agencies such as the Bureau of Mines and National Bureau of Standards provided scientific support while universities also researched safety problems for firms and industries. (en.net/encyclopedia/history-of-workplace-safety).

The history of occupational health is a constant struggle between workers fighting for protection and preventative measures and employers seeking to deny or reduce their liability for work-related diseases and injuries. People everywhere are been exposed to almost limitless risk to their health, including both communicable and non-communicable diseases. In the United Kingdom, it is estimated by the Royal Society for the Prevention of Accidents (2008) that employers face the challenge of reducing about 350 fatalities at work, and over 360 million work/days are lost due to work-related accidents and ill-health. It is estimated by the Health and Safety Executive

(2008) that, apart from the pain and misery caused to those directly or indirectly concerned, the total cost to British employers of work-related injury and illness is £6.5 billion a year. There are still over 640,000 workplace injuries every year and 1.8 million cases of ill health caused or made more serious by work. According to the US local Health and Safety Information Centre, in 2012 millions of working days were lost due to work-related illness and workplace injury (www.health/safety.usa.org).

In Cameroon, The Cameroon National Social Insurance Fund (*Caisse Nationale de prévoyance Sociale* (CNPS)) statistics indicate that the expenditure of the occupational hazards branch remains at a very high level from one year to the next. The average amount spent yearly for occupational hazards in Cameroon is approximately 4 billion francs CFA. (CNPS, 2015). Additionally, a Report of the Ministry of Labour and Social Security (MLSS, 2014), shows a loss of 1559 man-days due to industry accident. This loss is most probably at the field operation level that leads to a loss of 23.7 percent in labour capacity. The high cost of workplace injuries to organizations has serious direct or indirect effects on the workers, their families and the organization as a whole.

The achievement of a healthy and safe place of work and the elimination to the maximum extent possible of hazards to health and safety is the responsibility of everyone employed in an organization, as well as those working there under contract. But the onus is on management to achieve and indeed go beyond the high standard in health and safety matters required by the legislation- the Health and Safety at Work, Act, 1974 and the various regulations laid down in the Code of Practice (Rapa 2010).

Table 1.1 laws governing the management of occupational health and safety:

1. -Ordinance no 59-100 du 31/12/1959	Related to the prevention and treatment of cases industrial accident and occupational disease in Cameroon.
2. -Law no 68-LF-18 du Nov 1968	Related to the organisation of prevention of industrial accident and occupational disease
3. -Law no 77-11 du 13 July 1977	Related to the prevention and treatment of occupational disease and industrial accident modified by the law no 80-05 du 14 July 1980
4. -Decree no 61-159 du 13 Sept 1961	Related to the modalities of calculation and reimbursement of the funeral dues after a dead cause by an industrial accident
5. - Decree no 69-DF-179 du 14 May 1969	Related to the application of the law no 68-LF – 18 du 18Nov 1968
6. -Decree no 76-332 du 2 August 1976	Empowering the management of professional risk to the National Social Insurance Fund in Cameroon
7. -Decree no 78- 480 du 8Nov 1978	Related to the medical control and the expert medical procedure
8. -Decree no 78- 545 du 28 Dec 1978	Related to the calculation of the daily dues
9. -Decree no 78-546 of 28/12/ 1978	Related to the declaration and the enquiries in industrial accident and occupational disease cases
10. -Decree no 78-547 of 28/12/ 1978	Related to the treatment of victims of industrial accident and occupational disease excluding payment
11. -Decree no 84-1541 of 1/12/ 1984	Related to the determination of the permanent, partial or total rate of incapacity at work
12. Order no 039/MTPS/IMT of 26/11/ 1984	Related to the determination of general major in Hygiene and Safety at workplaces.

The importance of health and safety policies and practices is sadly, often underestimated by those concerned with managing businesses and by individual managers within those businesses. But it cannot be emphasized too strongly that the prevention of accidents and elimination of health and safety hazards is a prime responsibility of management and managers to minimize suffering and loss Health and safety practitioner (2004).

Achieving the highest standards of health and safety in the workplace is a moral as well as the legal responsibility of employers. This explains why close and continuous attention to health and safety is important. Paying attention to health and safety is important because ill-health and injuries caused during work or by the working conditions can lead to lose of lives and increase in the number of dependants (Repa, 2010).

As the machine age dawned with James Watt and Eli Whiterly during the late 1700s, employers accepted industrial injuries and deaths as part of the working conditions without considering human right ramifications. Employees were seen as volunteers, and were plentiful and replaceable (Leigh, 1998). Although the conditions in the early factories were horrendous, with two-thirds of employees being women and children working 12- hour's days, people would risk diseases, dismemberment and death for employment and other means of providing food for their families. Even if an employee suffered an illness or injury, they would seldom report the sickness because reported illnesses could attract instant dismissal (Heinrich, 1959; Weindling, 1985).

In 1950, the International Labour Organization (ILO) and the World Health Organization (WHO) defined occupational health as the promotion and maintenance of the highest degree of the physical, mental and social well-being of workers in all occupations. This is achieved by preventing ill-health, controlling risks, and adapting work to people and people to their jobs (H. Jackson 2000).

Globally, efforts to improve workplace conditions were put in place as early as 1945, but it was only in 1979 that WHO and ILO intensified their efforts. Notably, Resolution WHA 32.14 on the comprehensive workers health program further developed occupational health, and Resolution WHA 33.31 encouraged countries to integrate occupational health into primary health care services and to cover underserved populations. More recently, in 1996, the global strategy on occupational

health for all was adopted. The strategy seeks improvement in occupational health and safety through the application of health measures in some countries and encourages others to take positive steps to make such trends possible. (Glendo A. I and Mckenna 1995).

Various WHO documents, the Alma-Ata Declaration and the health-for-all policy for the 21st century in the African Region: Agenda 2020 stipulates the fundamental rights of all people to the highest attainable standard of health, and it specifies the prevention of accidental injuries and the promotion of improved working conditions. Additionally, Occupational health practice constitutes a set of key activities for the health and social dimensions of sustainable development that are likely to contribute to the achievement of the Millennium Development Goals.

Since 2000, WHO and ILO have pursued collaboration and cooperation in occupational health with various institutions in the African Region. In 2002, Health and Environment; A strategy for the African Region (.AFR/RC52/10) was adopted to enable countries to develop their policies on health and environment, including occupational health and safety. In 2003, the regional directors of WHO and ILO signed a statement of intent for the collaboration of occupational health and safety in Africa. The two organizations agreed to collaborate and cooperate with governments, workers and employers to identify and address the health and safety needs of workers.

In another development, Since 1750 following the beginning of the industrial revolution, there has been a growing rate of work- related injuries, illness and deaths due to the introduction of different machines, and chemicals to facilitate production. As a result of this civilization, government, as ...unions has been taking serious measures on issues related to health and safety at workplace (Chad K. T 2000)

In Cameroon, the key legislation on health and safety is Order no 039/MTPS/IMT du 26 Nov 1984 which focuses on implementation of hygiene and work safety norms at the work place, such as to register and carry out enquires on industrial accidents and occupational disease, control of health services within enterprises, promotion of health and work safety amongst workers, organizing sensitization campaigns for social partners on the prevention of industrial accidents and occupational diseases, and to studying the working posts in relation to safety norms. It should be noted that the

implementation of the above law rests solely with employers and other owners of businesses. This order has four titles,

- The first one related to general provision talks about employers obligations, employees obligations, hygiene and safety committees at workplaces
- The second talks about general conditions of hygiene and safety at workplaces such as construction norms, installation of employees' equipment (canteens, toilets and dressing room).
- The third is safety at the workplace and the protection measures in the dangerous areas, the use of dangerous machines, dangerous products (petroleum products), electricity, prevention and fight against fire at workplaces.
- The last is base on control measures and sanctions

This law is implemented by authorities. Article 129 gives the power to the labour inspector, the medical labour inspector and the National Social Insurance Fund agents in charge of hygiene and safety to carry out an inspection in order to follow up the respect of this law by employers. When the employer is found guilty of not respecting the law, the authority (MUST) notify him or her to operate in conformity with the law. A notice will be dated, and sign by the authority must mention the irregularities discovered and presses the date line after which it should be considered a violation of the law. The employer who does not at all implement this law or who does not respect the notice giving to him will now be sanction by article R.370 (12th) of the Cameroon criminal code.

In the global economy of today, we have come to see the need for health and safety that most organizations in the past have neglected. Several decades back, much attention was giving to financial and material resources as which are the main source of energy for progress in organizations. Today, however, management has come to see that human resources particularly they are workers and their environments are the most valuable inputs in an organization. The hygienic condition, work space, worker's health and safety in every aspect, be it in office, field, hazard control or security, are all aspects taken into consideration as this have become the going concern for organizations success for the future. Organizations such as Cameroon Development Corporation (CDC), University of Buea (UB), Presbyterian Printing Press (PPP),

Guinness Cameroon (GCSA), National Oil Refinery (SONARA) and DATA ELECTRICITY (DATA), are expected to should have specific rules and regulations relating to such laws as per the corporate policy of occupational health and safety of its employees. This health and safety corporate policies ought to be presented and written in three dimensions, such as; the general policy statement, the description of the organization's for health and safety guidelines, and details of how the policy is arrange for implementing the policy (Repa 2010).

Health and Safety standards are important because Employees are the most valuable assets owned by an organization. For this reason, every organization should adopt good sound policies to manage better human resources to enhance their effectiveness and efficiency on the job. And for them to be effective and efficient they need to feel safe, protected and most of all being healthy. In fact, organization should endeavour they send their workers home the same way they came into the organization.

1.1.2 Background Information for the Selected Organisations

1.1.2.1 CDC

Cameroon Development Corporation(CDC) as we know it today was created in 1947,as a public establishment to acquire, develop and operate extensive plantation of tropical crops of Banana, Palm Oil and Rubber. By the 31st of December 2012, CDC was the second largest, employer after the state in Cameroon, with a work force of about 22192 persons. The Share capital of CDC is XAF 15626 billion. The corporation is solely owned by the state of Cameroon.

CDC functions as a reformed and organized institution with self-accounting croup groups (Rubber, Oil palms and Banana), produced in semi-finished forms. The Corporation also provides environmental and social amenities to workers and their dependents, government officials and neighbouring villages. The key departments/units of CDC include the General Manager's Office, Human Resource Department, Finance Department, Marketing and Sales Services, Supplies Department, Head Office Management Control Services, Inspection and Control Department, Information System Department, Plan and Development Department, Department of Operations Research and Industrial Safety.

CDC has a functional medical and health services that provide health care to CDC workers, their children under 20 years of age and to non-planters using its services for

a free. The corporation's medical service worked with 396 members of staff which include a chief medical officer, medical doctor, pharmacist, and medical laboratory, technologist nursing officer, nurses, midwives and lab technician, various facilities that the corporation have been 2 hospital, 16 clinics and 68 aid posts. Tiko cottage hospital acts as the reference hospital of the corporation with 134 beds, a theatre and a blood bank. Five doctors work there permanently and are often assisted by those assigned to other units.

CDC- Hygiene, Health and Safety Policy

It is the policy of CDC to ensure a consistent healthy status of its work force and a Good Hygiene and Safety conditions while performing their functions at all times and even during off -duty hours. This is attained by:-

- Educating all project workers on the need of neatness and appearance at work covering an aspect of low fingernails, clean dresses, hair covering and low cuts, and the use of self -cleaning facilities provided in the job sites.
- Training and education of all personnel before assigning them to their various operations to reduce risk.
- Conducting a risk analysis in all the aligned operations and implementing necessary accident prevention measures.
- Provision of suitable Protective Equipment based on the risk identified during the risk assessment.
- Training of First Aiders to Carter for injuries on the spot before proceeding for detailed medical services.

Have a ready Medical unit to handle all illnesses of the workers at all times.

1.1.2.2 The University Of Buea

The University of Buea was born in 1993 following wide-ranging university reforms in Cameroon. Conceived in the English-speaking tradition, the University of Buea seeks to foster the essence of that system, while situating itself within the larger bilingual and multicultural context of Cameroon. It is located in the historic town of Buea, the former capital of German Kamerun, a former capital of the Federated State of West Cameroon and now the provincial capital of the South West Region of Cameroon. Although the University draws its students mainly from the English-speaking part of Cameroon, it also serves the other provinces of the country.

The mission of the University of Buea is to provide opportunities for quality education through teaching and research in an environment that is conducive to such pursuits and in ways that respond to market forces. The University is dedicated to the continuous quest for excellence, the promotion of moral and human values, and service to the community. Its teaching and research programmes emphasize relevance, encourage tolerance and promote creative, critical and independent thinking.

The University of Buea is dedicated to the provision of programmes of study and research of the highest standards. It also produces high- quality graduates with skills to satisfy the ever increasing demand of the Cameroonian, African and international job markets. The academic staff hold advanced qualifications and several possess international reputations.

The student population is over 12,000, including over fifty who are physically and visually disabled. Adequate welfare provision for this latter category of students remains both a challenge and a priority for the university administration.

The University of Buea is made up of five faculties (Arts; Education; Health Sciences; Science; and Social and Management Sciences) and one professional school, the Advanced School of Translators and Interpreters, (ASTI).

As in most English speaking institutions, the governance system of the University is based on concentration and devolution of management, with structures such as Council, Senate, Congregation and Committees on which staff and students are represented. This has enabled the University to make considerable strides and be recognized as a progressive African University of choice.

A highly qualified and diversified staff (about 300 permanent and 200 part-time) cater for the over 12,000 students, together with our partners in more than 40 universities in Africa, Europe and North America. In addition to teaching, the staffs undertake research in diverse fields that are relevant to national development. In addition to the academic staff, UB also has about 473 support staff.

Training at the University of Buea supported by modest infrastructure including lecture halls, teaching and research laboratories, amongst others. For effective implementation of the New Policy on University Governance, which lays emphasis on effectiveness, efficiency and management principles based on rigor, transparency and results, the

University is connected to the outside world via a fibre optic link to Camtel, a major local telecommunications company. The main campus also has a fibre optic network that interconnects most of the buildings on campus.

In keeping with the New University, Governance Policy of Cameroon, the outreach activities of the University is increasingly involving the private sector in funding and training so as to ensure that the graduates are relevant to the labour market. The University of Buea provides mentorship and plays a supervisory role to several tertiary educational institutions all over Cameroon. In given its vision and aspiration of becoming a leading university in the quality and relevance of its teaching, research and services by 2015, the University of Buea is emphasizing sports, entrepreneurship and civics and ethics in its training programmes; and providing a healthy competitive atmosphere devoid of sex, racial and religious discrimination.

Health and Safety Policy of the University of Buea

It should be noted that the University of Buea has no written document as Health and Safety policy. The safety of every worker is the sole responsibility of each worker. This is because; the institution operates a health unit that takes care of both the workers and the students.

1.1.2.3 Presbyterian Printing Press Limbe

Presbyterian printing press was founded in 1991 as a modern company owned by the Presbyterian Church in Cameroon (PCC). This company is located at down Beach Limbe, and it's a public limited company (PLC) that operates under the "Organization for the Harmonization of Business law in Africa". (OHADA UNIFORM ACT sign on October 17th, 1993 in Port Louis Mauritius Law Island). Its main objective is to create jobs to young Cameroonians as it provides high-quality jobs in Cameroon and overseas. Presbyterian printing press renders services to the general public such as book printing for local and international publishers and other paper works and office equipment. This company is sponsored mostly by international donors and the Presbyterian Church as a whole with a working population of 200 employees excluding temporal workers.

Presbyterian printing press has four operational departments that are interconnected to each other. These departments are:

- A) Type certain and colour painting/procedure (pre- press department)
- B) Mounting/metal plate making department
- C) Printing Department
- D) Finishing Department

Each of these departments is very vital to each other.

Health and Safety Policy of Presbyterian Printing Press

Presbyterian printing press Limbe does not have a health and safety policy as per say, but as far as their protection of workers is a concern, safety equipment are giving to workers especially those at the printing unit such as overalls, safety shoes, goggles, nose mask, and gloves. Protection of workers is extended through hygiene and sanitation.

1.1.2.4 Guinness Cameroon

It all started when trading ties developed between Africa and Europe at the start of the last century; merchants arrived in Cameroon with bottles of Guinness on board their ships. Cameroonian consumers immediately fell in love with the black stuff. Responding to demand, Guinness Ltd (London) started exporting to Cameroon.

In 1967, Guinness Cameroun S.A (GCSA) was incorporated, and our first depot was opened in the South West Region (Limbe). In 1969, the decision was taken to build a brewery in Bassa, Douala. One year later, in 1970, the first bottle of Guinness was brewed.

Guinness Cameroun S.A inherits of Guinness London tradition, which, in 1997, merged with Diageo and thus became a subsidiary of Diageo plc. Diageo is the worldwide leader of premium drinks, and its wide range collection covers prestigious wines, lagers and spirits brands. 29 of these premium spirits brands apportionment a top 100 des Marques de prestige Dans le monde.

In July 2009, another landmark was achieved in Guinness Cameroun S.A: we started the distribution of spirits brands and became a Total Beverage Alcohol company in Cameroon with the responsibility of 22markets in Central and Western Africa. In addition to the production of beer, Guinness Cameroun S.A started the distribution of spirits in Cameroon. GCSA initiated the strip stamp operation as a measure to ensure brand quality and protect consumers from illicit products. This leadership initiative has

significantly and sustainably contributed to the government efforts in fighting against contraband and counterfeit spirits in Cameroon.

Today Cameroon is the 4th largest Guinness market in the world. Guinness Cameroun counts about 455 passionate and talented employees who are proud to work for the company. We have 21 distributors and partners covering the national territory. We strive to become the most trusted and respected consumer products company in Cameroon.

Occupational Health and Safety Policy of Guinness SA

Concern for well-being, health and safety of our colleagues and ourselves is an important statement of our mission. We believe that it is in the best interest of our team members and ourselves to swear a zero tolerance policy regarding our health, safety and environment behaviour.

General Statement of Intent

The Diageo Occupational Health and Safety policy statement provide clear intent of the expectations placed upon all of us in managing risks within the business.

Effective management of these risks will secure appropriate standards of occupational health and safety for our employees, neighbours and visitors to our locations whilst complying with all relevant local health and safety legislation.

The Diageo Occupational Health and Safety policy also clearly outlines the framework under which specific occupational health and safety policy will be developed to support particular areas of the business and how they will be judged in their delivery and effectiveness.

Our goal is to operate in a manner that is incident free, and our intent is to develop operating procedures and practices that will control risks and mitigate the possibility of injury, illness and damage to our business equity.

Our management team has the primary responsibility to ensure safe working practices and prevention of incidents. Each is responsible for safety and wellbeing of themselves and their fellow colleagues.

To achieve our goal, we will endeavour to work in a way, which will develop and continuously improve capabilities, processes and systems in order that we can carry out our duties in the safest and most efficient way.

Key Objectives

Guinness Cameroun S.A is COMMITTED to ensuring, as far as is reasonably practicable, the occupational health and safety of all EMPLOYEES, CONTRACTORS, VISITORS and NEIGHBOURS of its workplaces.

Guinness Cameroun SA will aim to achieve STANDARDS that always meet the highest statutory requirements, principally Cameroon laws, and DIAGEO Global Risk Managements Standards.

Guinness Cameroon S.A will develop a MANAGEMENT PLAN with specific occupational health and safety objectives ensuring that adequate RESOURCES are made available to deliver these objectives within a reasonable timescale. This plan will encourage the active co-operation of all employees and contractors in developing a safe system of work through COMMUNICATION, training and COMPETENCY ASSESSMENT. Guinness Cameroun will seek, so far as is reasonably practicable, to prevent recurring ACCIDENTS, by investigating all accidents, root causes and taking appropriate actions.

The aim of GCSA is to create a proactive safety culture in which all Diageo employees believe that all injuries and incidents are foreseeable and preventable and act in a manner that demonstrates their personal commitment to this aim.

Guinness Cameroun SA will ensure all that Health and Safety systems are MONITORED regularly, audited annually and the results REVIEWED with actions points. This include an annual review of this Health and Safety policy document for intent, scope, adequacy and application and to amend as appropriate (A copy of this will be displayed and is available)

1.1.2.5 National Oil Refinery (SONARA)

The National Refining Company (SONARA) was created on the 23rd of March 1973 after the Cameroonian government noticed the great loss of currency that the country was facing to the advantage of foreign refineries. Thus, between 1976 and 1981, the government decided to construct her refinery to supply the general public of Cameroon

with petroleum products. It is due to this willingness to emancipate nationally and to assure the fabrication of finished petroleum products necessary for current consumption that SONARA owes her existence. Officially incorporated on the 7th of December, 1976 under the umbrella of SARL (An anonymous company with limited responsibilities), equipped with the status of an enterprise by the Cameroon government on 11th January 1978, then inaugurated on the 16th of May 1981 by President Amadou Ahidjo, SONARA, whose base is found at Limbe, in Fako Division, the South West Region, is an industrial complex. She transforms crude petroleum products to finished petroleum products.

At her incorporation, SONARA's initial share capital was 400 million CFA F, then later moved up gradually to 4 billion in November 1977, 14 billion in January 1990, 17.8 billion in January 1992 and from June 2006 till date, the share capital has gone up to 23 billion CFA F. The construction of the fabrication unit was built by PROCOFRANCE Company.

Four General Managers, have headed SONARA so far since her inauguration and they are

Alain Pezner 1981-1984

Bernard Eding 1984-2002

Charles Metouck 2002-2013

Ibrahim Talba Malla 2013- Till Date

The National Refining Company (SONARA) is a hydro – skimming or topping (simple) refinery with a production capacity of 2,100,000 tons per year. It is the sole refining company in Cameroon and operates only in Cameroon. SONARA IS rightly a parastatal company and its operations management is directed by a General Manager and governed by a Board of Directors. Currently, SONARA covers a surface area of 54 hectares of land that spreads out to the sea. This company constitutes a workforce of 713 employees as well as many temporal workers who execute specific tasks under the umbrella of private companies like Foster Wheeler, Honeywell, and Satom on a contract basis depending on the duration of the contract.

SONARA has twelve departments namely: Management, Finance, Administration and Human Resources, Production, Maintenance, Technical controls, Risk Management, Social Affairs and Communication, Commercial, Audit and Internal control and General Affairs departments.

Commercial Activities

SONARA produces finished petroleum products from crude oil by refining the crude oil. These finished products are marketed throughout Cameroon, CEMAC regions, West African Coast and the Western countries.

The commercial department operates basically into departments that are the buying of crude oil and management of crude oil finished products.

A) The buying of crude oil and management of crude finished products

This department has two services that are:

- a) Management of crude oil stock
- b) Management of products stock

B) The commercialization of petroleum products

This department has three services that are:

- a) National unit that is in charge of products sold in Cameroon
- b) Exportation unit that is in charge of products sold out of Cameroon or products that are been exported out of Cameroon
- c) Administration of sells by internal enterprises that is in charge of administrative procedures for sales.

SONARA refines crude petroleum products such as butane, gas oil, jet fuel, distillate, fuel oil 1500g, fuel oil 3000g, kerosene and super for both national and international market.

Health and Safety Policy of SONARA

SONARA's Management is committed to a policy of:

- Health protection
- Safety of installations and persons
- Protection and preservation of the environment

Health

Protecting the health of SONARA workers and that of all others working in the refinery is fundamental.

Safety

Safety in SONARA is based on three principles:

- Safety is priority
No reason whatsoever can justify an accident
- Safety is everyone's concern
Each person must be conscious not only of their safety but that of others.
Each person must feel concerned by any dangerous action that they notice
- Safety is based on prevention
A good safety spirit anchors on the notion that prevention is better than cure.

1.1.2.6 Data Electrical CO.PLC

DATA ELECTRICAL CO.PLC is a Private limited company registered with the courts in Limbe, South-West Region in Cameroon. Our headquarters are in DATA Building Rhoom Street, Gardens, with branches in Buea, Kumba and Mamfe. The company was founded in January 1972 by Sir. D.M. Takor the current Managing Director and is part of the DATA Group of companies that include a hotel in Mamfe and a cyber company in Limbe.

Main Activities

1. Sales of electrical materials (domestic, industrial, MT/BT)
2. Electrical installations (domestic, industrial, MT/BT and substations)

Registered with SONEC the national electricity production and distribution Company, and then AES SONEC as a sub contractor since 1985.

Registered with the National refining company (SONARA. RA) as a supplier of electrical materials (all types) and execution of electrical works.

Some Major Projects Executed

1. Constructed a 13km long MT/BT three phase line and 100 kva transformer substation from Tombel to Nyassoso in 1987 for SONEC.

2. Constructed a 21km three phase MT line and two (2) 100 kva transformers substation from Alou to Menji town and constructed a BT network of 9km in the town of Menji in the year 2000 for SONEC.
3. Transformed a 19km MT mono line to a three phase MT network and constructed a 160kva transformer substation from Mbouda to Bamenjim for AES SONEC.
4. Constructed a three phase 18km long MT line, equipment room and installation of four (4) 630kva transformers and cellulose for CDC pump station in the banana expansion project of the CDC in 2010.
5. Constructed a 13km long three phase MT and 100kva transformer substation to CDC pack houses in the banana expansion project for the CDC in the year 2010.
6. Constructed a three phase MT and a 100kva transformer substation to reinforce electricity supply to the Kumba district hospital (State Budget)
7. Constructed a substation with a 400kva transformer to reinforce electricity supply to guest house and club (for AES SONEC)

Corporate Health and Safety Policy Statement of Data Electrical Company

The management of DATA Electrical Company is committed to preventing the accidental loss of any of its resources, including employees and physical assets.

In fulfilling this commitment to protect both people and property, management will provide and maintain a safe and healthy work environment, by industry standards and compliance with legislative requirements, and will strive to eliminate any foreseeable hazards that may result in property damage, accidents, or personal injury/illness.

We recognize that the responsibility for health and safety are shared. All employees will be equally responsible for minimizing accidents with our facilities and on our work sites. Safe work practice and job procedures will be clearly defined in the company's Health and Safety Manual for all employees to follow.

Accidental loss can be controlled through good management in combination with active employee involvement. Safety is the direct responsibility of all managers, supervisors, employees and neighbouring personnel.

All management activities will comply with company safety requirements as they relate to planning, operation and maintenance of facilities and equipment. All employees will perform their jobs properly by established procedures and safe work practices. All employees should be familiar with the Occupational Health and Safety Policy and the Regulations for Construction Projects. (<http://oshesafety.com/>)

1.2 Statement of the Problem

A safe work environment impacts an organization bottom line both directly and indirectly. The cost associated with accidents including lost cost, insurance costs and legal fee are minimized in a safe work environment. Equally, a clean environment that is free from hazards, good hygienic and sanitary conditions will allow workers to perform their tasks conveniently. The worker's morale will be booted, fewer staff absences, less staff turnover and an improved quality work.

The workplace should be healthy and safe for all workers. Employers should get rid of any hazardous material that may cause harm to the health and safety of staff. When workplaces are not hazard-free-zones, employees experience different forms of unhealthy exposure to viruses, bacteria, parasites, influenza, chemical pollutants, and fire. It is based on this that research on health and safety on some major companies is being under taken to breach the gap.

1.3 Objective of the Study

The purpose of the study is to investigate the management of occupational health and safety in selected organisations of the South West Region of Cameroon.

Specific objectives

- To investigate the different workplace hazards that workers are exposed to and their ramifications to employees and the organization.
- To identify the organisations' occupational health and safety preparedness.
- To analyse the workers' perception of how the organizations' health and safety preparedness affect their workplace productivity.

1.4 Research Questions

1. What are the different workplace hazards that workers are exposed to and their impact on the employees and the organization?

2. What is the impact of the organisations' occupational health and safety preparedness on workers' productivity?
3. What is the relationship between workers perception of organisations health and safety preparedness on their workplace productivity?

1.5 Significance of the Study

The importance of this study can be seen in diverse ways. First, the information gathered can support the formulation of sound occupational health and safety policies in government and non-government organizations in Cameroon and elsewhere. Such policies would clearly define the roles of the employees and employers in achieving a safe and healthy working environment. Secondly, the work can serve as a reference material for researchers and other professionals working on safety and health.

1.6 Organization of the Study

The research work is divided into five (5) chapters. Chapter one concerns itself with the general introduction grouped under the following headings; Fundamental reasons for organizations to manage health and safety, Background to the study, Statement of the problem, Objectives of the study, Research questions, Significance of the Study, Scope of the study, Organization of the study and Definition of terms. Chapter two involves the review of various related literature on the relevant subject under the study, Theoretical framework, Empirical framework and Gaps identified in the literature.

Chapter three is the Methodology of the study that includes the Model specification, Description of variables in the model, Study design, Analytical approach and the Validation of results. Chapter four presents results, discussions and provides analysis of the data gathered for the study, Implication of results and limitations of the study.

Finally, the fifth chapter provides Summary of findings, conclusion, recommendations, and suggested areas for further research.

1.7 Scope of the Study

This section gives the range that this study will cover. This study is delimited geographically in that it covers only the South West Region of Cameroon with six (6) selected organizations because of time limitation and financial constrain. These organizations are Cameroon Development Corporation (CDC), University of Buea (UB), Presbyterian Printing Press (PPP), Guinness Cameroon (GCSA), National

Refinery Company (SO NA RA), and Data Electrical co.plc (DATA). These organizations are grouped under agriculture, service and production. Also, the content is delimited in that the study examines only one aspect of Human Resource practiced i.e. the management of occupational health and safety in these organizations and how health and safety can be a factor that affects organizational performance and employees productivity.

1.8 Definition of Terms

Management

The term management according to Henri Fayol (1925) refers to the process of forecasting, planning, organizing, commanding, coordinating and controlling an organization to accomplish its goals.

Occupational Health

The term health according to Robert L. Mathis and John H. Jackson (2000) refers to a general state of physical, mental and social welfare of an employee. A healthy person is one who is free of illness, injuries or mental and social problems that impair normal human activities. This is the core that determines a person's productivity level more especially in the long run or regarding the future of that organization.

Occupational Safety

The term safety according to Glendo, AL and Mckenna EF, (1995) refers to protecting the physical wellbeing of employees. The main purpose of effective safety programs in an organization is to prevent work- related injuries and accidents. This is another core determinant to an employee's productive capacity which if not properly taken care of will lead to or may cause an adverse situation.

Health Hazard

According to Carol J (1997) a health hazard is an aspect of the work environment that slowly and accumulatively (often, irreversibly) leads to deterioration of an employee's health. Thus, hazard is any source of potential damage, harm adverse health effect on someone under certain conditions at work.

Safety Hazard

Safety hazard involves an aspect of the work environment that has the potentials of immediate and sometimes violent harm to the employee.

Occupational Health and Safety

According to the International Labour Organization (ILO) and the World Health Organization (W H O), occupational health and safety are the promotion and maintenance of the highest degree of the physical, mental and social well-being of workers in all occupations.

CHAPTER TWO

2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Literature Review

In this section, the extant literature will be reviewed, beginning with the meaning of occupational health and safety, theoretical framework, empirical framework and gaps identified in the literature and how the work shall attempt to fill them.

2.1.1 What is Occupational Health and Safety

The Cambridge Advanced Learner's Dictionary defines "welfare" as "well-being". Therefore, health and safety are strictly aspects of employee welfare, which have been separately identified as being significant areas of welfare provision for sometimes.

Cascio, Wayne (1986) in Sikpa (2011) defines safety hazards as those aspects of the work environment that have the potential of immediate and sometimes violent harm to an employee; for example, loss of hearing, eye sight, or body parts, cuts, sprains, bruises, broken bones, burns and electric shock.

Health hazards as those aspects of work environment that slowly and cumulatively (and often irreversibly) lead to deterioration of an employee's health; for example cancer, poisoning and respiratory diseases.

Typical causes include physical and biological hazards, toxic and carcinogenic dust and chemicals and stressful working conditions (Cole, 1991).

2.1.2. Evolution of Occupational Health and Safety

In the late 19th and early 20th centuries, employers ran their businesses as they saw fit to make a profit. Employee safety and health were not their concern. In the US injured employees had to litigate to obtain compensation for their injuries (workmen's compensation Act 2010). The cost of doing so effectively prevented employees from going to court. Besides, employees were rarely successful since, under common law, if the employee knew of the hazards the job entailed or if the injuries were brought about as a result of the negligence of the employee or a co-worker, the employer was not liable.

From these origins, there emerged an approach and practice concerning health, safety and welfare issues. The national safety council had been established in 1913 in the US after safety conscious managers and engineers spearheaded its founding (major disasters led to changes in thinking). Significantly the International Labour Organization (ILO) 1959 provided that occupational health services should be established in or near a place of employment for the employee welfare (ILO 1959). The human, social and economic cost of occupational accidents, injuries and diseases and major industrial disasters have long causes for concern at all levels from the individual workplace to the national and international. Measures and strategies designed to prevent, control, reduce or eliminate occupational hazards and risks have been developed and applied continuously over the years to keep pace with technological and economic changes. Despite continuous if slow improvements, occupational accidents and disease are still too frequent, and their cost regarding human suffering and economic burden continues to be significant (Saarela 2006).

The work place is a potentially hazardous environment where millions of employees pass at least one-third of their life time. This fact has been recognized for a long time, although developed very slowly until 1900. There has been an awareness of industrial hygiene since antiquity. The environment and its relation to worker health were recognized as early as the fourth century BC when Hippocrates noted lead toxicity in the mining industry. In the first century AD, Pliny the Elder, a Roman scholar, perceived health risks to those working with zinc and sulphur (<http://www.oshatrain.com>). He devised a face mask made from an animal bladder to protect workers from exposure to dust and lead fumes. In the second century AD, the Greek physician, Galen, accurately described the pathology of lead poisoning and also recognized the hazardous exposures of copper miners to acid mists. (Mengesha, 2006)

In the middle Ages, guilds worked at assisting sick workers and their families. In 1556, the German scholar, Agricola, advanced the science of industrial hygiene even further when, in his book *De Re Metallica*, he described the diseases of miners and prescribed preventive measures. The book included suggestions for mine ventilation and worker protection, discussed mining accidents, and described diseases associated with mining occupations such as silicosis (home.earthlink.net). In the early 20th century in the U.S., Dr. Alice Hamilton led efforts to improve industrial hygiene. She observed industrial conditions first hand and startled mine owners, factory managers, and state officials

with evidence that there was a correlation between worker illness and exposure to toxins. She also presented definitive proposals for eliminating unhealthful working conditions. (Tekele, 2006).

2.1.3 Societal Factors Influencing Health and Safety Standards and Priorities

a. Economic Climate

The wealthiest countries of the world, where individuals have access to the necessities for life such as food, clean water and shelter, have the funding to create and enforce good occupational health and safety (OHS) standards. In countries where individuals do not have these resources, it is inevitable that (OHS) is given a relatively lower priority.

b. Government Policy and initiatives

The government has a major influence on OHS policy through its ability to create legislation. In 2008, the UK government published a document entitled *Working for a Healthier Tomorrow*, that made the following points.

- Life expectancy in the UK is higher than ever, yet millions of working days are lost to work-related illness.
- Evidence suggests that the working population is healthier than those who do not work. Families without a working member are likely to suffer persistent low income and poverty.
- Improving the health of the working age population is critically important for everyone to secure higher economic growth and its associated benefits.

c. Level of Sickness Absence

In the UK sickness absence is lower than it was in the 1990s, but it still substantial with 175 million days lost to sickness absence each year. Incapacity benefits are paid to those who are unable to work because of ill-health or disability (<http://www.rrc.co.uk>).

d. Societal Expectations of Equality

Health and safety standards and priorities can be determined by changes in society's expectations of equality. In the UK, the Equality Act 2010 aims to protect disabled people and prevent disability discrimination. The Equality Act provides legal rights for disabled people in reasonable adjustments to the workplace to accommodate workers with disabilities. Consequently acceptable access and egress to a workplace may need

to include the provision of ramps and lifts to comply with these expectations of equality and the legal obligations associated with them (<http://www.cardiff.ac.uk>).

In Cameroon, law no 2010/002 of April 2010, relating to the protection and welfare of persons with disabilities came as a revolution with three sections of chapter 3, dedicated to the education of persons with disabilities. The chapter 6 title penal provision, states in section 45 that officials of schools, vocational and university institutions, employers or corporate managers guilty of discrimination in the admission, recruitment or pay of person with disabilities should be punished with imprisonment from three (3) to six (6) months and fine from 100,000 (one hundred thousand) to 1000,000 (one million) CFA francs. NB it should be noted that this law is still pending decree of the application. Ministry of social welfare (2015).

e. Industry/Business Risk Profile

Not surprising, highly risk work activities require higher standards of control than those that create lower risks. For example, nuclear power stations each operate under a site license and demand very rigorous OHS standards.

f. Globalization of Business

Many businesses of all sizes operate both nationally and internationally and resolving differences in cultures and communication may create different expectations and standards.

g. Migrant Workers

As a result, of more flexible immigration policies the proportion of migrant workers in workforces is increasing, and cultural and communication issues may influence OHS standards.

h. Corporate Social Responsibility

Corporate social responsibility is the term used to describe the voluntary actions that business can take, over and above compliance with minimum legal requirements, to address both its competitive interest and the interest of the wider society. Business should take account of the economic, social and environmental impacts, and act to address the key sustainable development challenges based on their core competencies wherever they operate-locally, regionally and internationally (<http://toolkit.smallbiz>).

2.1.4 The Role of the Health and Safety Policy Document

a. In Relation to a Health and Safety Management System

The policy sets the whole framework of the safety management system (SMS). From an SMS point of view, the policy is just a statement of intent-a demonstration of commitment. It frames the company vision on health and safety. The policy should state the overall health and safety objectives of the organization and express commitment to improving health and safety performance, to demonstrate that commitment; it should be authorized by top management. It should commit the organization of continual improvement and compliance with legislation, and should be communicated to all employees and other interested parties and kept up to date by periodic review.

b. As a Vehicle for the Communication of Health and Safety information

A health and Safety policy:

- Tells people about a company's approach to managing health and safety.
- Communicates the organization commitment to health and safety to existing employees (preferably using of their copy)
- Can be used:
 - In the induction of new employees (to stress the importance of safety)
 - To involve workforce representatives in writing and amending the policy, when necessary
 - At regular briefing sessions to communicate information relating to different sections of the policy.

c. Requirements for a Written Health and Safety Policy and Recording Arrangements

- A health and safety policy may be a requirement of national legislation in some regions. Even if it is not a legal requirement, it is required by ILO-OSH 2001 (which supports ILO conventions) and OHSAS 18001.
- The policy should be documented (paper or electronic) and authorized by top management (e.g. chief executive officer). The policy is meaningless on its own; it needs to be implemented through "organization" and "arrangements" within a safety management system.

d. General Principles and Objectives of a Health and Safety Policy Document

The health and safety policy is usually made up of

- A statement of intent that sets out the aims and objectives of the organization regarding health and safety.
- An organizational structure that details the people with health and safety responsibilities and their duties.
- The systems and procedures in place to manage risks.

Effective health and safety policies contributing to business performance by:

- Supporting human resource development
- Minimizing the financial losses that arise from avoidable unplanned events.
- Recognizing that accidents, ill health and incidents result from failings in management control and are not necessarily the fault of individual employees.
- Recognizing that the development of a culture supportive of health and safety is necessary to achieve adequate control over risk.
- Ensuring a systematic approach to the identification of risks and the allocation of resources to control them.
- Supporting quality initiatives aimed at continuous improvement (<http://www.emeraldinsight.com>).

2.1.5 Responsibilities and Rights of Employees and Employers in Health and Safety Issues.

Gany, et al. (1942) in Sikpa (2011) state that employers are responsible for taking every reasonable precaution to ensure the health and safety of their workers. This is called the “due diligence” requirement.

Specific duties of the employer include:

- Filing government accident reports
- Maintaining records
- Posting safety notices and legislative information
- Education and training on health and safety precautionary measures

Employees also have responsibilities that include taking reasonable care to protect their health and safety and, in most cases, that of their co-workers.

These specific requirements include:

- Wearing protective clothing and equipment
- Reporting any contravention of the law of reputation.
- Downey, D. M. et al. (1995) identifies the following as employees' basic rights under the joint responsibility model:
 - The rights to know about workplace safety hazards.
 - The right to participate in the occupational health and safety process.
 - The right to refuse unsafe work if they have "reasonable cause" to believe that the work is dangerous.

"Reasonable cause" usually means that a complaint about a workplace hazard has not been satisfactorily resolved, or a safety problem places employees in immediate danger. If the performance of a task would adversely affect health and safety, a worker cannot be disciplined for refusing to do the job.

2.1.6 Occupational Health, Safety and the Law

The Government of Cameroon has established an institutional framework and introduced national legislation to ensure decent working conditions for all workers, based on the ILO (International Labour Office) recommendations. The Cameroon legislation on occupational health and safety includes general provisions and special measures.

a. General provisions

Act 92/07 dated 14 August 1992 concerning the Labour Code: Article VI of this Act includes regulations on the following: General conditions concerning health and safety at the workplace.

Employers are responsible for the implementation of all health and safety measures designed to protect their workers. It is their duty to provide workers with a safe and healthy working environment.

Workers must cooperate with their employers and the authorities to obtain and maintain a safe and healthy working environment. The Health and Safety Committees (HSCs) provide a framework for joint action under the regulations.

The Labour or Medical Labour Inspector may serve formal notice if employees are found working under dangerous conditions. If the employer contests it, the dispute may be submitted to the National Health and Safety Commission for a ruling (NHSC).

The organization of occupational health medical care and decision-making on the provision of occupational health services

Enterprises and establishments of all kinds are under an obligation to organize medical and health services for their salaried employees.

The role of this service is to:

- Monitor conditions of hygiene at the workplace, risks of contagion, the state of health of workers, their spouses and children housed by the employer;
- Take appropriate preventive measures; and
- Provide medical care.

This service is provided by medical doctors; priority is given to the recruitment of qualified occupational health practitioners who may be assisted by trained paramedical personnel.

As a result of these measures, occupational health practitioners are an essential link in the prevention and diagnosis of occupational diseases and the updating of their tables.

Act N° 77/11 dated 13 July 1977 concerning prevention and compensation for occupational accidents and diseases .This Act defines occupational accidents and diseases and lists the beneficiaries of this branch of social security. It defines the resources and financial organization of the sector as well as the procedures for compensation for AT/MPs. Decree 039/MTPS/IMT dated 26 November 1984 contains general provisions for health and safety at the workplace.

a. Special measures

This concern:

- The protection of women and children;

- The protection of agricultural workers.

b. Compensation for occupational diseases

C.1. The definition and principle of compensation

An occupational disease is defined as any disease caused by certain occupational activities. The cause and effect relationship between a disease and occupational activity is based on the assumptions included in the occupational disease tables. Cases accepted as such by the CNHS are also considered as occupational diseases. Compensation rights are based on criteria involving medical and technical probabilities and administrative presumptions. Any disease that meets the medical, occupational and administrative conditions laid down in the tables is systematically considered to be of occupational origin (<http://www.dol.gov>). Cameroon has 99 occupational disease tables.

C.2. The limits of compensation

All diseases which are not included in one of the tables or that fail to meet the medico-judicial conditions laid down in the tables are excluded from the occupational diseases compensation scheme. The procedures for reviewing the occupational disease tables are cumbersome. The tables may only be updated with the approval of the CNHST (which has not met for more than five years). The most recent review of the Cameroon occupational disease tables dates back to 1984. It enabled two new tables to be included: Deafness as a result of noise and rhinoentomophthoromycosis. This revision led to the acceptance of three cases of deafness.

There is no provision for post-occupational medical follow-up: Certain occupational diseases may appear a very long time after the worker has ceased to carry out the tasks incriminated. Compensation for medical expenses is based on rates laid down in special texts. These texts have not been revised for over twenty years and are therefore outdated since they do not take inflation into account. Finally, compensation is based on a flat rate, which means that not all the damage is taken into account.

2.1.7 Overcoming Occupational Health and Hygiene Problems

Turner and Lawrence (1965) identify some measures to overcome occupational health and hygiene problems. These are:

- Dominating the hazard at source through design and process engineering.

- Isolating hazardous processes and substances so that workers do not come into contact with them.
- Changing the processes or substances used, to promote better protection or eliminate the risk.
- Providing protective equipment but only if changes to the design, process or specification cannot completely remove the hazard.
- Training workers to avoid risk.
- Good housekeeping to keep premises and machinery clean and free from toxic substances.
- Pre-employment medical examinations and regular checks on those exposed to risk.
- Ensuring that ergonomic considerations (thus, those concerning the design and use of equipment, machines, processes and workstations) are taken into account in design specifications, establishing work routines and training.
- Maintaining and preventing medicine programmes that develop health standards for each job and involve regular audits of potential health hazards and regular examinations for anyone at risk.
- Maintaining plant and equipment to eliminate the possibility of harmful emissions, controlling the use of toxic substances and eliminating radiation hazards.

Holt and Andrews. (1993) suggest the following steps to be taken to increase the effectiveness of safety:

- Avoid negatives – successful safety propaganda should contain positive messages not warnings of the unpleasant consequences of actions.
- Expose correctly – address the message to the right people at the point of danger.
- Maximize comprehension – message should be simple and specific

2.1.8 Safety Management Committees

Regulations relating to safety representatives also include obligations regarding the establishment and operation of safety committees at the workplace. The overall objective of a safety committee is the promotion of co-operation between employers and employees in investigating, developing and carrying out measures to ensure the health and safety of the employees at work (<http://www.grin.com>).

Cole (2002) identifies key functions of safety committees. These include:

- Studying trends in accidents, etc. With the view to making suggestions for corrective actions.
- Examining safety reports and making proposals for avoiding accidents, etc.
- Examining and discussing reports from safety representatives.
- Making proposals for new or revised safety procedures
- Acting as a link between the organization and the enforcement agency (the health and safety inspectorate).
- Monitoring and evaluating the organization's safety policies, and making proposals for changes, if necessary.

Michael (2006) also states that employees frequently participate in safety planning through safety committees, often composed of workers from a variety of levels and departments. A safety committee meets at regularly scheduled times and has specific responsibilities for conducting safety reviews, and makes recommendations for changes necessary to avoid future accidents. A management safety committee is a committee made up of high intellectuals selected by the labour inspector to help oversee the wellbeing of employees in an organisation (voice of the voiceless). This committee is usually made up of a Human Resources Officer, Labour Inspector, Management Representative and a Representative of all units or department of the organisation.

a. Barrier expectations

- Developing a safety culture will face a variety of barrier influences, which is normal and should be expected, for example:
 - Working processes (unclear working instructions)
 - Technical issues (equipment safety and reliability)
 - People (task competence and HESQ responsibilities)
 - Management systems (over/under preparation time for elevated risk activities)
 - Materials (corrosion prone materials)
 - Environments (high noise levels)
 - Remember – it is good to know the barriers as they can then be addressed.
We like to have problems!

b. Problem- solving process

- Key steps to problem- solving:
 1. Identifying what is the problem: what is the problem?
 2. Problem causes analysis
 3. Determining potential solutions and deciding what actions to take
 4. Implementation and tracking action
 5. Measuring improvement and ‘problem reduction.’
 6. Reviewing secondary improvement opportunities

c. Problem- solving team

- Local Safety Committee shall determine the problem-solving team(s) of relevant people
 - Consider organisation positions, relevant experience and inexperience (open minded questions)

- A mixture of personalities to prompt debate and solution options
- Ensure the team is non-biased towards the barrier but are aware of the impact and situations
- Team members should be open, trained and competent to recognise root causes and solutions (which may be challenging)
- Good teams need the right people
- Individual barrier removal teams are to be formed based on the specific barrier i.e.,
 - Contracted transport is always in a poor condition = involve logistics and contract owner
 - Teams should include people with:
 - Problem knowledge
 - Represent the organisation
 - Represent appropriate departments / shifts
 - Problem-solving competencies

d. Problem-solving team & communication

- The barrier removal team(s) shall be sponsored and supported by the applicable safety committee to achieve the desired aim
- Work undertaken by the problem-solving team shall be formalised and communicated to the owning safety committee to ensure coordinated progress and development status is known.

They are typically composed of 5 to 12 employees from the same department who meet for a few hours each week to discuss ways of improving quality, efficiency, and the work environment. Organizations are relying more and more on problem-solving teams to help solve organizational problems, as shown in Figure 2.1. In problem-solving teams, members share ideas or offer suggestions on how work process and methods can be improved. Rarely, however, are these teams given the authority to

unilaterally implement any of their suggested actions, rather they are channel back to the safety committee (<http://pathways.cu.edu.eg>).

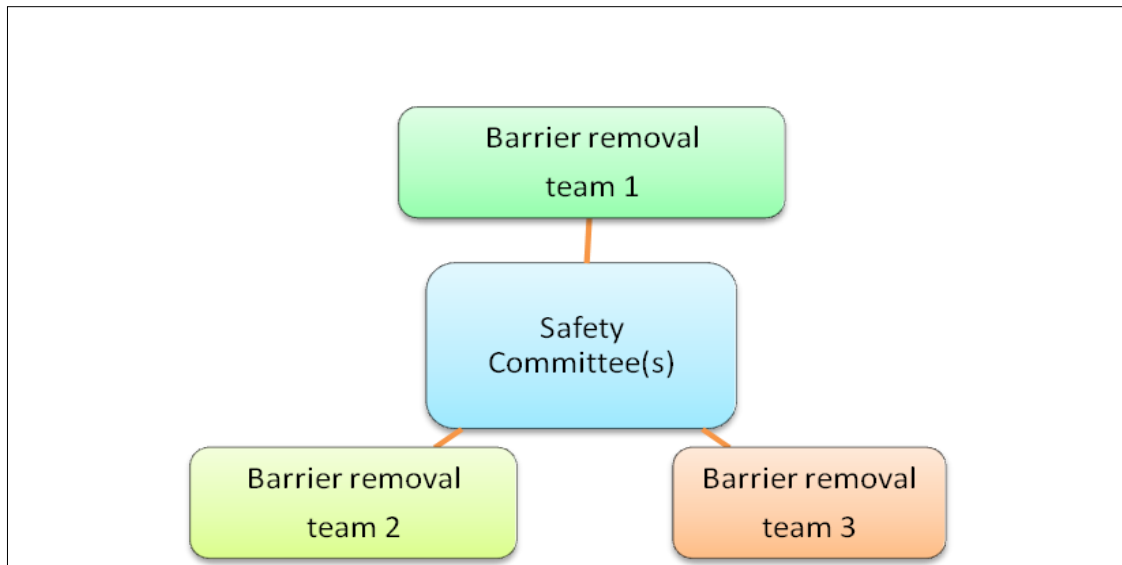


Figure 2.1: problem solving team and communication

Source: adopted from Bradley curves (Bradley 1995).

2.1.9 Health, Safety and Security

Health refers to a general state of physical, mental and emotional well-being (Robert and John, 2004). A healthy person is free of illness, injury or mental and emotional problems that impair normal human activity. Health management practices in organizations strive to maintain the overall well-being of individuals.

Safety, on the other hand, refers to protecting the physical well-being of people (Robert and John, 2004). The main purpose of effective safety programmes in organizations is to prevent work-related injuries and accidents. The purpose of security is to protect employees and organizational facilities.

The general goal of providing a safe, secure and healthy workplace is reached when there is cooperation between managers and HR staff members. An HR manager or safety specialist can help coordinate health and safety programmes, investigate accidents, produce safety programme materials and conduct formal safety training. However, department supervisors and managers play key roles in maintaining safe working conditions and a healthy workplace. For example, a supervisor in a warehouse has several health and safety responsibilities: reminding employees to wear safety hats; checking on the cleanliness of the work area; observing employees for any alcohol, drug or emotional problems that may affect their work behaviour; and recommending

equipment changes (such as screens, railings or other safety devices) to engineering specialists in the organization. A position becoming more common in many companies is that of safety/environmental officer. This combination may make sense in situations where danger results from chemical or other sources of pollution that may be hazardous to both employees and the public or the environment.

Regarding security, HR managers and specialists can coordinate their efforts with those in other operating areas to develop access restrictions and employee identification procedures, contract or manage organizational security services such as guards and train all managers and supervisors to handle potentially volatile situations. (Robert and John, 2004)

2.1.10 Ergonomics

Ergonomics is the study and design of the work environment to address physiological and physical demands on individuals. In a work setting, ergonomic studies look at such factors as fatigue, lighting, tools, equipment layout, manual handling, psychosocial factors and placement of control (Robert and John, 2004).

2.1.11 Safety Management Principle

Effective safety management requires an organizational commitment to safe working conditions. But more importantly, well designed and managed safety programmes can pay dividends for associated costs such as worker's compensation and possible fines. Furthermore, accidents and other safety concerns usually decline as a result of management efforts emphasizing safety (Salon, 2001).

2.1.12 Organisational Commitment and Safety Culture

Robert and John. (2004) State that at the heart of safety management is an organizational commitment to a comprehensive safety effort. This effort should be coordinated from the top level of management to include all members of the organization. It should also be reflected in managerial actions.

Employers can prevent some accidents by having machines, equipment and work areas so that workers who daydream periodically or who perform potentially dangerous jobs cannot injure themselves or others. Providing safety equipment and guards on machinery, installing emergency switches, installing adequate ventilation, installing

emergency switches, installing safety rails, keeping aisles clear, lighting, heating and air conditioning can all help make work environment safer. Designing jobs properly require consideration of physical setting of a job. The way the work space surrounding a job is utilized can influence the worker's performance of the job itself. Several factors that affect safety have been identified; including the size of work area, kinds of materials used, sensory conditions, the distance between work areas, and interference from noise and traffic flow. Designing safety policies and rules and disciplining violators are important components of safety efforts. Frequently reinforcing the need for safe behaviour and supplying feedback on positive safety practices also are effective in improving worker safety. Such efforts must involve employees, supervisors and managers.

2.1.13 Safety by Choice Program Overview

According to Tumental (2008), safety by choice is a framework to develop our Safety Culture that reduces exposure to injury. The framework has to deliver a sustainable improvement and reduce safety deviations that lead towards injury.

Safe by Choice is the common framework being worked through by all segments to improve further safety performance associated with the business. Safety performance improvements shall be recognised through a sustainable reduction in occupational and safety process deviations that lead to a loss (injury, damage, contamination or uncontrolled release). Existing tools, procedures and policies within the organisation system are both applicable and appropriate towards the business. Through consistent application and adherence, we can expect a reduction in exposure to risk and, therefore, a resulting reduction in incidents. Each incident that is investigated identifies a lack of compliance, a lack of system quality and often common known risks inadequately recognised or controlled. Our ambition is to achieve a business with zero incidents. This will take time, and the improvements we make must be sustainable, for them to remain in place and providing levels of control. Safe by Choice framework will be used for the journey, and we all have responsibilities and opportunities to contribute.

2.1.14 Safety by Choice Action Frame

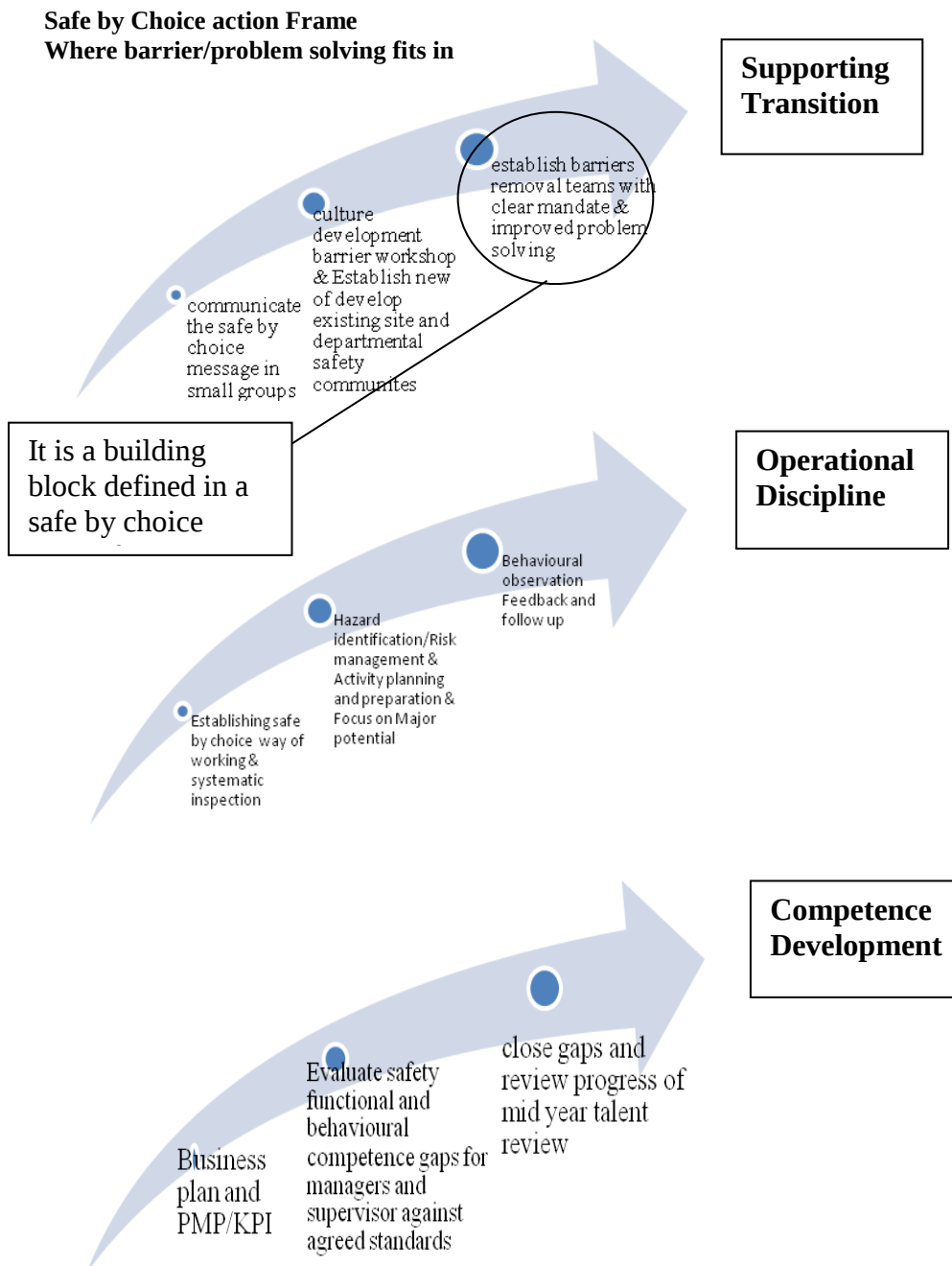


Figure 2.2: safety by choice action frame (Bradley 1995).

Initial communication to the organisation should now be completed – everyone in the organisation is expected to know what Safe by Choice represents.

Barrier identification workshops have been organised by local coordinators – primarily HESQ Managers/Co-ordinators. The sessions have redelivered the Safe by Choice message and allowed further discussion and understanding of the programme.

Following the visualisation of current safety culture position, regarding the Bradley Curve, the workshops have identified the perceived barriers that are considered to be preventing/delaying/hampering the unit from making positive cultural developments – towards the ultimate goal of Inter-dependency.

The barrier identification workshops shall be performed many times in the course of developing the safety culture of all units. They are not a one-off exercise. As the culture progresses, new varied or alternative barriers shall need to be managed. It is a long journey, and there will be many obstacles to navigate and negotiate to move forward.

A culture of safety can be defined as the collective values, beliefs, attitudes and norms that shape individual safety-related perceptions and behaviors in an organization. In a company with a strong culture of safety, everyone looks out for one another and encourages self-reporting of an injury without judgment or consequence.

Establishing a positive safety culture begins with a senior management team committed to improving safety, establishing a successful safety program, and empowering everyone within the organization to be part of a safety solution. (Grana 2015)

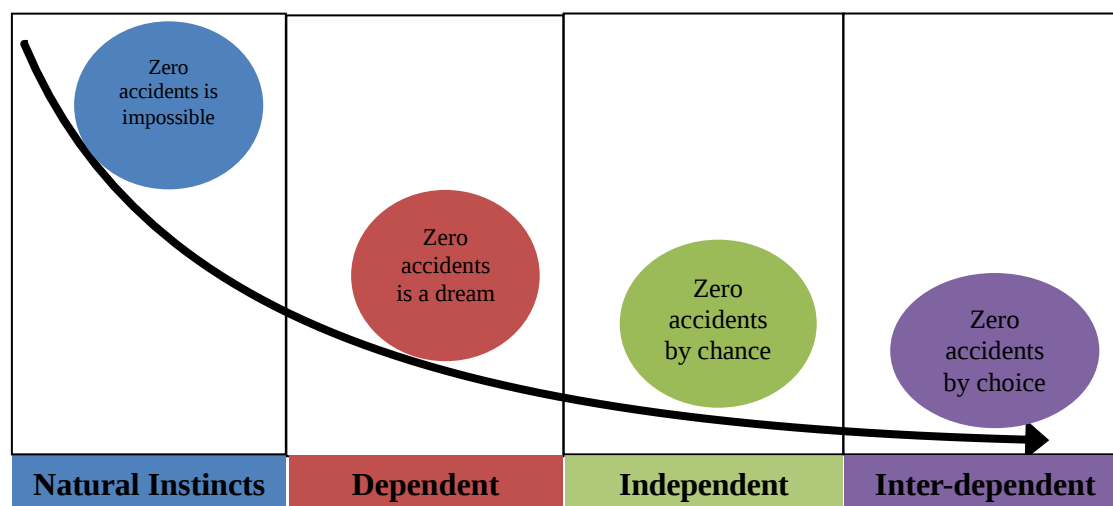


Figure 2.3: safety culture development

Safety culture development (Bradley 1995)

Today, all units in Yara are not at the same level and certainly no unit is at the interdependent stage. Our Safe by Choice journey is aimed at achieving this. It is not possible to go from Natural Instincts to Inter-Dependent in one step, a transition has to be made step by step.

Cultural development is about moving forwards one step at a time. Trying to move forward too fast will fail and waste energy, time and resource. Cultural development is a long process and should not be underestimated – we will still be on this journey in years to come. As each unit progresses to the next level, developments have to be accumulative, and previous steps that we have gained must not be dropped or allowed to deteriorate.

For example, when we achieve greater personal knowledge (Independent) we shall not disregard the need for management/rules and discipline, etc. That has been gained previously (Dependent). All elements of the existing culture must remain in place and cannot be removed, allowed to deteriorate or become outdated. Like foundations of a new building, they must remain strong for the building to grow higher. Consider them as layers of control that prevent an incident from occurring. The layers of control have to be of sufficient quantity and quality and in place at all times as we move forward.

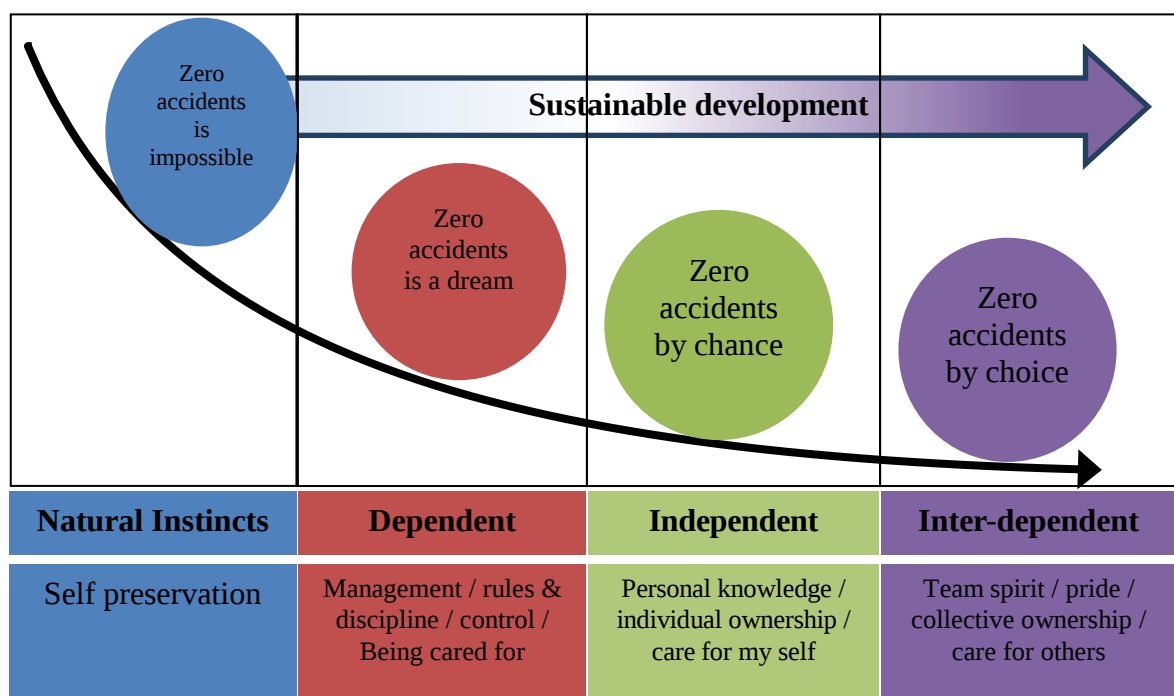


Figure 2.4: sustainable development

Safety culture development (Bradley 1995)

The diagram above shows a trend that leads to sustainable development provided organisations move by the concept of safety by choice.

Once a culture of safety has been established, companies must constantly reinforce safety messages, stress the importance of it being a team effort, and regularly evaluate progress to ensure the overall strength of the culture. Check in with employees and management to get their feedback and suggestions for what's working and what's not. This demonstrates a commitment to safety and generates conversations that can help gauge how well people fully understand their role in making the workplace safer. Develop policies for recognition, rewards and incentives. This helps motivate everyone on an ongoing basis. Host an annual company-wide meeting or workshop to give everyone an opportunity to share their thoughts on safety and introduce any new processes or procedures. It is also important to take the time to celebrate successes along the way to maintain enthusiasm. An OSHA guide states that developing a strong safety culture has the "single greatest impact on accident reduction of any process" and results in "low accident rates, low turnover, low absenteeism and high productivity." Establishing a culture of safety involves a fundamental shift in thinking and behavior and organization-wide commitment. It takes the time to create and foster but is an investment well worth making. (Grana 2015)

2.1.15 Safety Training and Communication

Tsui and Gomez-Mejia. (1988) State that one way to encourage employee safety is to involve all employees at various times in safety training. Safety training can be done in various ways. This includes; Regular sessions with supervisors, managers, and employees often are coordinated by HR staff members. Showing videos, television broadcasts and internet-based resources all are means used to conduct safety training. To reinforce safety training, continuous communication to develop safety consciousness is necessary. Merely sending safety memos is not enough. Producing newsletters, changing safety posters, continually updating bulletin boards and posting information in visible areas also are recommended (Tsui and Gomez-Mejia.1988).

2.1.16 Inspection, Accidents Investigation and Evaluation

It is not necessary to wait to inspect the work area for safety hazards. Inspections may be done by a safety committee or by a safety coordinator. They must be done on a regular basis. Eva and Oswald (1981) emphasize that when accidents occur, they should be investigated by the employer's safety committee. Investigation at the scene should be done as soon as possible after an accident to ensure that the conditions under

which the accident occurred have not changed significantly. The second phase of the investigation is the interview of the injured employee, his or her supervisor and witnesses to the accident. This is followed by recommendations. Organization should monitor and evaluate their safety efforts. Just as organizational accounting records are audited, a firm's safety efforts and records should be audited periodically as well.

2.1.17 The Costs and Benefits of Occupational Health and Safety Programmes

Wayne (1992) states that employers frequently complain that there is no systematic method of quantifying costs and benefits when dealing with employees' safety and health conditions. Technically that is true, but there is a behaviour costing model that may provide a useful start. It is important to distinguish nondiscretionary from discretionary safety and health expenditures. Some states and local agencies require firms to comply with safety and health regulations. To comply, firms may have to purchase and install special equipment, such as machine guards, safety switch interlocks, and non-slip flooring. These costs are nondiscretionary. To do otherwise is to risk heavy fines and losses from liability and damage suits. Cacio (1992) again emphasized that, beyond mere compliance, however, companies have some of options regarding the degree to which they invest in employee safety and health. A motivational poster programme (e.g. "think safety") is a token effort that requires minimal expenses. Creation of a safety committee to encourage active employee complaints is more expensive. The highest-cost option includes regular safety training for all employees. The training may involve films, lectures by safety experts or hands-on drills and demonstrations with safety and emergency apparatus.

Boyd. (2003) States that for each of these levels of safety and health programmes, investment costs are measurable. They include the salaries and wages of employees participating in the programme, the costs of outside services used and the costs to implement the programmes. Unfortunately, the benefits to be derived from such programmes cannot be traced as easily to the bottom line. Certainly, the most quantifiable benefit resulting from the successful introduction of a safety and health programme is a reduction in casualty and workers' compensation insurance rates. Less measurable benefits involve the avoidance of the "indirect "cost of an accident, including;

Table 2.1. Cost and benefits of occupational health and safety programs

Costs	Benefits
•The Cost of wages paid for time lost	Reduction in an accident.
•The Cost of damage to material or equipment	Reduction in accident
•The Cost of overtime work required by the accident	Improvement in job tenure, improvement in productivity.
•The Cost of wages paid to supervisors while time is required for activities resulting from the accident	Elimination of absenteeism due to occupational accidents and ill health, improve productivity.
•The Costs of decreased output of the injured worker after she or he returns to work	Improved productivity due to enhanced protection and ergonomics of new personal protective equipment (PPE)
• Unsure medical costs borne by the company	Reduction in accident risks and physical strain, improvement in productivity.
• Cost of time spent by higher management and clerical workers to investigate or to process worker's compensation forms.	Reduction in delivery accidents
• Costs associated with the time it takes for a new worker to learn the job.	Reduction of related accidents, improvement in the quality of work.
• Cost of labour spent on the employee engaged to replace the injured	Productivity will rise by 30percent, improvement in the quality of work and working conditions (noise, dust), reduction in sick leave.

Prediction of these costs and identification of trends in them is very difficult. It must be done by historical information (to gauge trend) and judgment by managers (to assess the seriousness of the accidents avoided). This makes economic sense for firms to ensure that there should be no limit to efforts to eliminate accidents and health hazards.

2.1.18 Organisational Safety and Health Programmes

Pirani and Reynolds. (1976) indicate that accidents result from two broad causes: unsafe work condition (physical and environmental) and unsafe work behaviour. Unsafe physical conditions include defective equipment, inadequate machine guards, and lack of protective equipment. Examples of unsafe environmental conditions are noise, radiation, dust, fumes, and stress. Accidents often result from an interaction of unsafe acts. Thus, if a particular operation forces a worker to lift a heavy part and twist to set it on a bench, then the operation itself forces the worker to perform the unsafe

act. Telling the worker not to lift and twist at the same time will not solve the problem. The unsafe condition itself must be corrected, either by redesigning the flow of material or by providing the worker with a mechanical device for lifting. Engineering controls attempt to eliminate unsafe work conditions and to neutralize unsafe worker behaviours. Management controls attempt to increase safe behaviours. Engineering controls involve some modification of the work environment; for example, installing a metal cover over the blades of a lawnmower to make it almost impossible for a member of a grounds crew to catch his or her foot in the blade.

2.1.19 Employee Assistance Programme

Mills, 1983) state that until recently, organizations attempted to avoid employees' problems that were not job-related. Although aware of the existence of these problems, most managers did not believe they should interfere with employees' personal lives. In the past, organizations tended to get rid of troubled employees. In recent years, however, cost considerations, unions and government legislation altered this approach. The accepted viewpoint now is that employees' personal problems are private until they begin affecting the job performance. When and if that happens, personal problems become a matter of concern for the organization. As a result of this, many large organizations and a growing number of smaller ones are attempting to help employees with personal problems. These problems include not only alcohol and drug abuse but depression, anxiety, domestic trauma, financial problems, and other psychiatric/medical problems. This help is not purely altruistic; it is largely based on cost savings.

2.1.20 Maintaining a Healthy Work Environment

David and Stephen (1999) indicate that unhealthy work environment is a concern to us all. If workers cannot function properly at their jobs because of constant headaches, watering eyes, breathing difficulties, or fear of exposure to materials that may cause long-term health problems, productivity will decrease. Consequently, creating a healthy work environment not only is the proper thing to do, but it also benefits the employer. Often referred to as sick buildings, office environments that contain harmful airborne chemicals, asbestos, or indoor pollution (possibly caused by smoking) have forced employers to take drastic steps. For many, it has meant the removal of asbestos from their buildings.

Palmer.(1989) makes suggestions for keeping the workplace healthy. These include:

- Making sure workers get enough fresh air. The cost of providing it is peanuts compared with the expense of cleaning up a problem.
- Avoiding suspected building materials and furnishing. A general rule is that if it stinks, it is going to emit an odour.
- Testing new buildings for toxins before occupancy. Failure to do so may lead to potential health problems.
- Providing a smoke-free environment. If you do not want to ban smoking entirely, then establish an area for a smoker that has its ventilation.
- Keeping air ducts clean and dry. Water in air ducts is a fertile breeding ground for fungi. Servicing the air ducts periodically can help eliminate the fungi before they cause harm.
- Paying attention to workers' complaints. Dates and particulars should be recorded by a designated employee. Because employees are often closest to the problems, they are a valuable source of information.

2.1.21 Aims and Functions of Occupational Health Services

The primary concerns of occupational health services remain those specified by the International Labour Organisation/World Health Organisation in 1950, although work-related diseases are now considered as well as purely occupational diseases. The actual services offered are essentially preventive in nature and are summarized below:

A) Job placement-People with certain pre-existing medical conditions may be at a disadvantage in some jobs. A pre-employment health questionnaire or medical examination can be of great value in such cases by determining job unsuitability before training time and expense have been incurred. Job suitability may also need to be regularly monitored to assure employee health and ability. Airline pilots, for example, undergo regular medical checkups because a pilot with failing vision or one who suffers from an undetected heart condition that can lead to a heart attack could endanger many lives. The health service can also give valuable advice concerning alternative employment when a worker is found to be unfit for a particular job.

B) Safety training-An occupational health service has a responsibility to keep all employees informed about hazards in the workplace. The measures taken to protect employee health should be thoroughly explained so that workers understand the necessity of complying with such unpleasant restrictions as the wearing of protective clothing and face masks. First aid facilities should be organized, and employees instructed about first aid procedures in case of accidental injuries or other emergencies.

C) Supervision of high-risk groups-Exposure levels considered safe for a young male worker may be hazardous for a pregnant woman (the foetus, especially during the first three months of development, is particularly sensitive to toxic environmental agents). Pregnant women, as well as such other vulnerable groups as the very young, the elderly, and the disabled, therefore, require appropriate medical surveillance and advice about specific precautionary measures they can take.

D) Control of recognized hazards-A complex system of environmental and biological monitoring has been developed for the control of known hazards at work. Occupational health practice is concerned with monitoring the concentration of toxic substances in the environment, determining safe exposure levels, suggesting procedures to limit worker exposure, and monitoring workers for signs of overexposure. Occupational health specialists can also contribute to the prevention of health risks by assisting in the planning and design of new equipment and factories.

E) Identification of unrecognized hazards-Occupational health services can play a major role in the detection of new health hazards of all types. Clinical observation and study may reveal a causal relationship between patterns of sickness or mortality in groups of workers and their occupational exposure. Examples of hazards identified in this manner include lung and nasal cancer among nickel workers, lung cancer in asbestos workers, and coronary heart disease among workers exposed to carbon disulfide (used in the manufacture of rayon).

2.2 Theoretical Framework

2.2.1. Maslow's *Hierarchy of Needs*

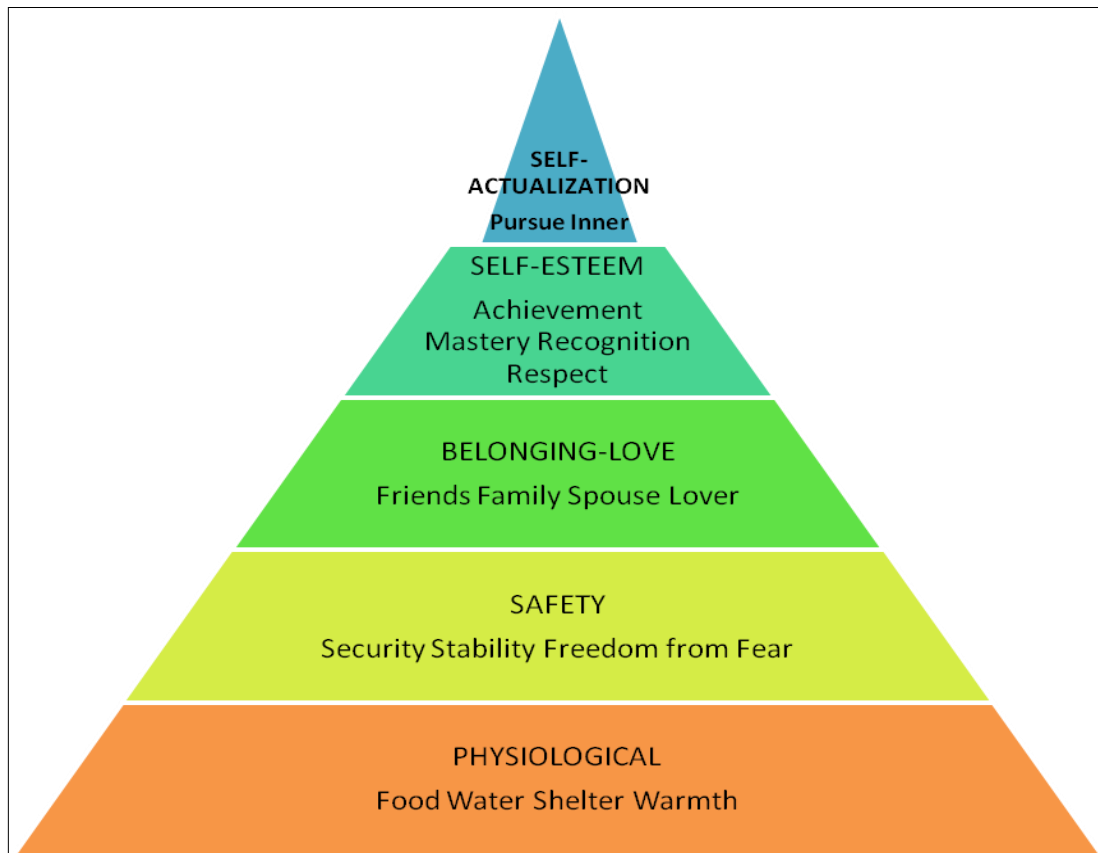


Figure 2.5: Maslow hierarchy of needs (1966)

Maslow's hierarchy of needs is a theory of motivation in psychology developed by Abraham Maslow. Maslow believed people move through different stages of five needs that motivate our behaviour. He called these needs physiological, safety, love and belonging (social), esteem, and self-actualization. Maslow believed each stage of need had to be met before progression to the next stage of need could occur. For example, before health and financial security becomes a priority, physiological needs for food and water must be met first.

Safety needs in Maslow's hierarchy refer to the need for security and protection. When we have our physiological needs for food and water met, our safety needs dominate our behaviour. These needs have to do with our natural desire for a predictable, orderly world that is somewhat within our control. Safety needs in today's world can manifest themselves as job security, savings accounts, insurance policies, financial security, and health and well-being. Maslow's needs hierarchy demonstrates that human beings carry out different activities to achieve self-fulfilment that is the highest need. When a

worker's health is at risk, that is the environment or the workplace is not safe, the worker's competent at his or her job slows down thus leading to low productivity and poor performance. Thus, health and safety give the worker an opportunity to meet this need thereby achieving both individual and organizational goals.

2.2.2. Erg Theory (Alderfer)

Clayton Alderfer extended and simplified Maslow's Hierarchy into a shorter set of three needs: Existence, Relatedness and Growth (hence 'ERG').

Existence

At the lowest level is the need to stay alive and safe, now and in the foreseeable future. When we have satisfied existence needs, we feel safe and physically comfortable.

Relatedness

At the next level, once we are safe and secure, we consider our social needs. We are now interested in relationships with other people and what they think of us. When we are related, we feel a sense of identity and position within our immediate society.

Growth

At the highest level, we seek to grow, be creative for ourselves and our environment. When we are successfully growing, we feel a sense of wholeness, achievement and fulfilment.

The implication of Alderfer (1972) ERG theory to the management of occupational health and safety is that organisations need to design the working environment to be free from hazards so as to keep their employees safe and alive in order for them to be able to attain the goals of the organisation as well as their goals. Workers perform well when they are safe and satisfied. The physical environment must be free from hazards. Working conditions also have to be favourable so as to boost employee's morale.

2.2.3. The Theory of Planned Behaviour (TPB)

According to the TPB, the most immediate and important predictor of behaviour is the person's decision to act or behavioural intention (e.g., "I intend to attend workplace health and safety courses"). Intentions, in turn, are determined by three constructs attitudes People's motivation to attend to safety issues can vary over time as illustrated

by the two longitudinal studies of project completion by Humphrey (2004). He found that concerns with safety were most in evidence at the start and completion of projects and that there was a noticeable decline in resources dedicated to safety in the middle of projects. There is a focus on task completion during the middle stages and more risk adverse behaviour is in evidence as a project nears completion (Humphrey et al. 2004, 17). . Hammer (1985), on the other hand, adopts an engineering approach to safety management with a greater focus on describing specific hazards (such as acceleration, falls, falling objects, pressure hazards, heat and temperature, electrical hazards, fires, explosions, vibration, noise, radiation and toxic hazards) and the technical means for their control. For their part, Grimaldi and Simonds (1989) organize their treatment of safety management in five parts: the advancement of safety, managing and safety management, hazard control technology, human factors and professional areas.

2.2.4. Theory of Behaviour-Base Safety

Behaviour-based safety (BBS) is an approach used to reduce workplace accidents and fatalities. It is set on the premise that safety in the workplace is a combination of three measurable components: personality, environment, and behaviour. Only when these three elements are combined can the workplace be “accident-free.” BBS argues that by observing and analyzing the interactions between people's behaviour and the work environment, it is possible to identify factors that support safe or unsafe behaviour. BBS also maintains that by changing the environment to support safe behaviour and implementing proven behavioural safety processes, a business can dramatically reduce the number of lost-time and minor injuries. Advocacy for behaviour-based safety has also stimulated controversy, with some arguing that a behavioural focus puts the excessive responsibility on the workers and that BBS is too limiting and should aim for a more holistic or culture-focused approach. In any case, behavioural safety has provided a platform for constructive debate, and the conflicting opinions have provided the opportunity to learn more about the psychology of injury prevention (Cooper 2007; Geller 2004). To be successful, the BBS program must include all employees from the CEO to the most basic job position since the changes needed cannot be accomplished without buy-in and support from all involved in making those decisions. Central elements of a BBS program include (a) common goals for the employees and the managers, (b) behavioural observation and feedback processes, (c) formal review of observation data, (d) improvement goals, and (e) reinforcement for improvement and

goal attainment. Other aspects that can contribute to a BBS program's success include (a) multilevel teams for the assessment phase, the observation and the review phases, or for all three phases; (b) placing the focus on site observation; and (c) recognizing that BBS is not a quick fix, but rather a commitment to a safer environment and injury reduction.

2.2.5. Heinrich's Domino Theory – Corrective Action Sequence (The Three "E"S) 1932.

Heinrich (1932) devised a theory of corrective action sequence (the three "E"S) that presented three primary categories:

- **Engineering**

- Control hazards through product design or process change

- **Education**

- Train workers regarding all facets of safety
- Impose on management that attention to safety pays off

- **Enforcement**

- Insure that internal and external rules, regulations, and standard operating

Procedures are followed by workers as well as management.

2.2.6 Relevance of the Theories to the Present Work

(A) Maslow's Hierarchy of Needs (1966)

Safety needs in Maslow's hierarchy refer to the need for security and protection. When we have our physiological needs for food and water met, our safety needs dominate our behaviour. These needs have to do with our natural desire for a predictable, orderly world that is somewhat within our control. Safety needs in today's world can manifest themselves as job security, savings accounts, insurance policies, financial security, and health and well-being. Maslow's needs hierarchy demonstrates that human beings carry out different activities to achieve self-fulfilment that is the highest need. When a worker's health is at risk, that is the environment or the workplace is not safe, the worker's competent at his or her job slows down thus leading to low productivity and

poor performance. Thus, health and safety give the worker an opportunity to meet this need thereby achieving both individual and organizational goals.

Maslow's theory is relevant to the present work because it demonstrates the importance of safety in every organization and the society at large. For an organization to succeed, safety must be the priority.

(B) Erg Theory (Alderfer)

The fact that Clayton Alderfer (1972) stresses on the issue of existence as the priority, it's to show the significant importance of safety in every organisation. An employee needs to be alive and safe so as to execute their daily activities in a very comfortable zone. When employees are safe, they feel intrinsically motivated and creative thus facilitate the achievement of organisations goals as well as individual goals.

The relevant of Alderfer (1972) ERG theory to the present work is that organisations need to design the working environment to be free from hazards so as to keep their employees safe and alive in other for them to be able to attain the goals of the organisation as well as their goals. Workers perform well when they are safe and satisfied. The physical environment must be free from hazards. Working conditions also have to be favourable so as to boost employee's morale.

(C) Theory of Behaviour-Base Safety

The theory of Behaviour-based safety (BBS) emphasise the need to reduce workplace accidents and fatalities. It is set on the premise that safety in the workplace is a combination of three measurable components: personality, environment, and behaviour. Only when these three elements are combined can the workplace be "accident-free." Looking at the three fundamental reasons why organisations have to manage health and safety risk, it's a moral as well as a legal obligation for employers to design the working environment to be hazard free zones. The personality of an individual is very important no matter the state of that individual. The environment plays an important role in the personality of an employee because it helps to shape employees behaviour.

Behaviour-base safety is relevant to the present work because it demonstrate the importance of safety within an organisation. The environment needs to be free from any form of hazard so as to facilitate the execution of the different task assign to

employees. When employees are involved in decisions that concern their wellbeing, they turn to be more productive. Intrinsically they feel satisfied because they have not been left out. They became more conscious and careful about their working environment.

2.3 Empirical Framework

Sikpa, (2011) in a study investigating an assessment of occupational health and safety practices on job performance at the Tetteh Quarshie Memorial Hospital, Mampong-Akuapem. Where medical doctors/officers, administrators, technicians, cooks, nurses in the departments and units of the hospital formed the population of the study. Eighty respondents formed the sample size of the study. Data was collected through questionnaire, interviews and review of relevant literature from books, articles, website, etc. It was found out that the current occupational health and safety practices at the hospital were inadequate. Staff commitment and compliance to health and safety rules was also low. It were recommended that management of the hospital constitute a safety committee and maintain regular monitoring, inspection and evaluation and conduct reviews for improvement.

Phoya, (2012) in the study health and safety risk management on building construction sites in Tanzania: The Practice of Risk Assessment, Communication and Control. This study, therefore, aims to find out the current practice of health and safety risk assessment, risk communication and risk control in Tanzanian context. In pursuing this objective, the case study strategy was adopted whereby two construction sites in Dares Salaam were selected through convenience sampling. The findings of the study show that all responsibility on risk management is with the contractor, and it is carried out only during the construction phase. The study also shows that no systematic method is used for risk assessment, but rather risks are assessed based on individual judgments guided by experience, educational background and existing regulations. Meanwhile, risk information is communicated through toolbox meetings, informal discussions, and controlled by using personal protective equipment (PPE). The study also reveals that the regulatory system, the organization/company system, the individual system and the work environment have an impact on health and safety risk management. Further findings of this study show that site location, site configuration, procurement system and complexity of design are the main challenges hampering health and safety risk

management. The study recommends the necessity of incorporating of key project stakeholders such as client and design team and other consultants in managing health and safety risk.

Bhattacharya (2009) conducted a research on the Impact of the ISM Code on the Management of Occupational Health and Safety in the Maritime Industry. A case study approach is used in this study to examine the operation of the Code in two shipping organizations involving ethnographic fieldwork onboard ships and at company offices using semi-structured interview, observation and documentary analysis as the research techniques. The study specifically looked into the factors that influenced the perceptions of the managers and seafarers on the operation of three central elements of the ISM Code: risk assessment, incident reporting and audit and review. My findings showed significant differences in the experiences of operation of the Code of the managers and seafarers in the organizations studied and revealed that although the two organizations implemented the ISM Code in theory, there was a considerable gap between its purpose and what it achieved in practice. Significantly it indicated that seafarers' fear of job security; low-trust work environment and lack of organizational support were some of the main impeding factors for seafarers' participation in the management of occupational health and safety. Further analysis revealed that the organizational context and the employment relations affecting seafarers, as well as their social relations onboard ships and between the managers and seafarers in the companies studied were not conducive to a participatory style of management of occupational health and safety. The thesis argues that to be effective self-regulation of occupational health and safety management – such as envisaged by the ISM Code – requires a participatory approach. However, the thesis demonstrates that the preconditions that have been shown to be necessary to achieve this in land-based workplaces are much reduced or absent from the maritime situation that undermines the potential for the effective operation of the ISM Code.

Nagy (2014) in his study the purpose of this thesis is to identify the roles and responsibilities of an effective EHS Manager, and those roles and responsibilities that support an organization achieving environmental stewardship and workplace safety. The sample method use in this study is the Salient elements, actions, and characteristics identified as a role or responsibility of the EHS Manager within the initial literature review were researched using a three step approach: attendance and participation at

EHS conferences and expositions, review of professional literature, and in-depth analysis of Chief Executive Officer (CEO) full interviews conducted by the National Safety Council (NSC) for their annual article “CEOs who Get It. The findings of the study show that an organization’s commitment towards environmental stewardship and workplace safety requires the EHS Manager not only to ensure compliance with laws and regulations, but to provide effective leadership with voluntary EHS management systems and programs. The depth of this voluntary commitment to EHS is based on the organization’s top manager/ executive, and the organization’s vision and mission.

Kleiner et al, (2014) in their study the Emerging Strategies for Construction Safety & Health Hazard Recognition To address this issue, promising site-based construction hazard identification strategies were identified in a wide body of literature and potentially breakthrough strategies were developed by an expert panel of construction safety professionals in brainstorming sessions. The strategies were then prioritized based on their potential and applicability to construction using the nominal group technique, facilitated by a group-decision support system. Consensus analysis was conducted to verify consistency within the expert panel. A pre-job safety-meeting-quality measurement tool to provide active feedback regarding hazard identification capability and communication emerged as being the most relevant strategy. The results of this study can be used by construction practitioners to strategically identify potential hazard recognition programs to complement existing methods. Future studies will focus on validating findings through field-based empirical tests on active construction projects.

Al-kilani AL (2011) in his research improving safety performance in construction projects in Libya (case study: in Tripoli city) the objectives of this research are to investigate the safety performance in the construction sites. The data were collected from the contractors, consultant, and owners by using a questionnaire to evaluate the safety performance in the construction sites. In total, there were 40 questionnaires that were distributed to respondents, with a response rate of 75%. The results show that there was still a lack of commitment from the government, the insurance company, the labor ministry, the owners, consultants, and also the contractors to improving safety performance on the construction sites. The suggestion is to improve the safety performance on the construction sites. The government should follow up the safety performance by visiting the construction sites. The insurance company should be more

active in visiting the construction sites. The owners should be more active towards the safety by controlling, visiting the process in the construction sites. The contractors have to train the workers and promote the safety culture and follow up the safety performance. The consultants should control all the tools in the construction sites to insure that those tools are safe.

According to PHOYA, (2012) in her study health and safety risk management in building construction sites in Tanzania aims to find out the current practice of health and safety risk assessment, risk communication and risk control in Tanzanian context. In pursuing this objective, the case study strategy was adopted whereby two construction sites in Dares Salaam were selected through convenience sampling. The findings of the study show that all responsibility on risk management is with the contractor, and it is carried out only during the construction phase. The study also shows that no systematic method is used for risk assessment, but rather risks are assessed based on individual judgments guided by experience, educational background and existing regulations. Meanwhile, risk information is communicated through toolbox meetings, informal discussions, and controlled by using personal protective equipment (PPE). The study also reveals that the regulatory system, the organization/company system, the individual system and the work environment have impact on health and safety risk management. Further findings of this study show that, site location, site configuration, procurement system and complexity of design are the main challenges hampering health and safety risk management. The study recommends the necessity of incorporating of key project stakeholders such as client and design team and other consultants in managing health and safety risk.

Saarel and Takala (2009) in their Global study trend according to an estimated number of occupational accidents and fatal work-related diseases at region and country level. Method was base on Occupational accident data of selected countries and of World Health Organization regional divisions together with the global burden of disease were used in estimating global occupational accidents and fatal work-related diseases. The trend of global occupational accidents and work-related diseases is presented at region and country levels. The years 1998, 2001, and 2003 are compared in the case of occupational accidents and the years 2000 and 2002 in the case of work-related diseases. The results of the study show that the total number of occupational accidents and fatal work-related diseases has increased, but the fatality rates per 100,000 workers

have decreased. There were almost 360,000 fatal occupational accidents in 2003 and almost 2 million fatal work-related diseases in 2002. Every day more than 960,000 workers get hurt because of accidents. Each day 5,330 people die because of work-related diseases. Information on occupational accidents and work-related diseases is needed so that countries may understand better the importance of occupational health and safety at country and company level. Especially companies in developing countries are not familiar with occupational safety and health. Statistical data is essential for accident prevention; it is a starting point for the safety work.

The authors used essentially a descriptive survey design whereby data were collected through interviews and questionnaires. Workers were sampled conveniently because they are busy, and the researchers used this sampling technique because of its flexibility as the worker were involved in the study depending on how opportune they make themselves available for the researcher. This approach enabled the researchers to successfully collect data and came out with findings, reason why it will be adopted in this study as well. One of the researchers also used a longitudinal approach as to compare a change in indicators over years but in this study, because of the timeframe allocated for a master work, a longitudinal design cannot be employed.

2.3 Gaps Identified in the Literature and how the Work Shall Attempt to Fill Them

Even though there is a large body of empirical studies on the Management of Occupational Health and Safety, the existing evidence suggests the research in this area is promising. Most of the studies reviewed were carried outside Cameroon. Although the legal and institutional environment is satisfactory in Cameroon, the material environment is unlikely to encourage the development of prevention of occupational hazards.

This study is therefore out to fill the gaps identified which are:

There is no training centre for occupational health and safety

The study emphasizes the need to an occupational health and safety training centre. This may partly explain the lack of qualified human resources both in institutions responsible for promoting occupational health and safety and within enterprises. Most OHSOs in organisations cannot play a proper part because of their lack of training (only large organisations can afford to train abroad). A training centre would improve

the competencies of doctors, employers and workers and could lead to better diagnosis of occupational diseases and hazards.

The absence of a centre, specialized or otherwise, for the purchase of prevention equipment

The absence of prevention equipment on the local market is an obstacle for organisations that would like to invest in prevention but do not have sufficient means to import equipment. This is a real problem because most of our enterprises consist of small and medium-sized companies and industries. The same problem arises with equipment for monitoring the working environment, which makes surveillance of the workplace difficult.

The absence of coercive and supportive measures

Employers come under legal pressure only when the victim of an occupational accident suffers a disability of 66 per cent or more, as a result of negligence, carelessness or failure to observe the regulations.

CHAPTER THREE

3.0 METHODOLOGY OF THE STUDY

This chapter presents the procedures, methods and techniques the researcher will adopt in the research work. Research work most often than not is appraised based on the quality and accurateness of the analysis and information it provides at the end. However, this dependent on the nature of data collected during the research. As a result, this chapter looked at how data will be gathered for the research. The methodology enlightened on the tools or techniques for research design, data collection, the population and sampling techniques, and data sources, data collection instruments, ethical considerations and data analysis plan.

3.1 Model Specification

Given that the variables are essentially categorical dealing with a subjective appraisal of the system based on perception, Logistic Regression Model will be employed to derived parameters estimates for the equation that predict chance in productivity as a function of workers' safety and occupational health.

$$P=B_1X + B_2Y + e$$

$$P=Productivity$$

$$X= safety\ level$$

$$Y=health$$

$$E=error$$

$$B=Standardized\ coefficients.$$

In summary, this model indicates that if there is improvement on workers safety and health, they will be increase in productivity and organizational performance.

3.2. Description of Variables in the Model

A variable is either a result of some force or is itself the force that causes a change in another variable.

Table 3.1: Operationalisation of variable

Character	Variables/indicators	Factor variable	Approaches of measurement
Research question 1 What are the different workplace hazards that workers are exposed to and their impact on the employees and the organization?			
Characterization of workplace hazards	Have been affected by workplace hazard	Type of occupation (e.g. paper/desk work, indoor manutention, filed work), company, gender.	Quantitative Categories: 'Yes' and 'No'
	Type of hazards	Type of occupation (e.g. paper/desk work, indoor manutention, filed work), company	Qualitative (open-ended question)
Research question 2 What is the impact of the organisations' occupational health and safety preparedness on workers' productivity?			
	Effect of hazards		Quantitative Categories: 'Health', 'work' Qualitative: Open-ended question
Organizations' occupational health and safety preparedness	Safety preparedness measures put in place by the organization	Company	Quantitative Categories: 'yes'
	Availability of safety committee in the organization	Company	Quantitative Categories: 'yes', 'No' and 'not sure'
	Person most responsible for workers' safety and health	Company	Quantitative Categories: 'Management', 'Environmental health unit', 'Myself'
Research question 3 What is the relationship between workers perception of organisations health and safety preparedness on their workplace productivity?			
	Performance and workplace productivity	Company	Quantitative Categories: 'Yes', 'No', 'Not sure'

3.3 Study Design

A research design is the overall plan for collecting data in order to answer the research questions of a study. This study used the descriptive survey research design combining both qualitative and quantitative approaches for data gathering and analysis. This triangulation approach enables the researcher to effectively assess workplace hazards, corporate preparedness and the effect on workers and productivity using both close-ended questions (to assess the trend of already identified indicators) and open-ended questions to assess perceptions and opinions.

Data were collected using semi-structured questionnaire and in depth interview guide (appendix). The close ended questions were analyzed using the quantitative approach whereby responses are weighted as to appreciate the trend and rank in order the scores for statistical comparison. As for the open-ended questions, they were analyzed following the qualitative approach; in this context, what matters is not the weight of concept or idea but their significance though most often concepts are grounded (counting the number of occurrences) following the positivism principle (Nana, 2012).

3.3.1 Population of the Study

The target population for the collection of data is the selected organizations of the South West Region of Cameroon.

3.3.2 Sample Size and Sampling Techniques

The researcher adopted both stratified and simple random sampling techniques. With regard to stratified sampling technique, the researcher segmented top management and staff from the selected organizations. This segmentation is necessary based on the fact that the nature of work being performed and levels of exposure to risks in the organizations are different. With a sample size of three hundred (300) respondents; a simple random sampling method was adopted to select fifty (50) respondents from each of the stratum. With this method, a sample of the population was selected giving each member an equal chance of being selected. The basic concept underlying this method of sampling is that the elements or the individuals in the population are judged to be homogenous.

3.4 Analytical Approach

Data collection in a research is the stage where the necessary data useful according to the purposes and objectives of the research are gathered from the field. Two main sources of data were used for the study; primary sources and secondary sources. The methods used in collecting primary data include interview, questionnaire, and observations. Secondary source includes data from published and unpublished books, magazines, journals, websites etc.

3.4.1 Data Analysis Plan

Open-ended questions were analyzed using the process of thematic analysis whereby concepts or ideas were grouped under umbrella terms or key words. As for the quantitative data, a pre-designed EpiData Version 3.1 (EpiData Association, Odense Denmark, 2008) database which had in-built consistency and validation checks were used to enter the data. Further consistency, data range and validation checks were also performed in SPSS version 21.0 (IBM Inc., 2012) to identify invalid codes. Data were made essentially of categorical variables and they were analyzed using frequency and proportions and Multiple Responses Analysis for the grounding of concepts that merged from open-ended questions. Reliability test was performed to assess the internal consistency of responses using Cronbach Alpha reliability analysis coupled with inter-item correlation test. Cramer'V test was used to measure the association between the categorical variables, for instance the association between experience of workplace hazard and type of occupation. Data was presented using frequency table, charts and code-quotation table. All statistics was presented at the 95% Confidence Level (CL), Alpha =0.05 (Nana, 2012).

3.5 Validation of Results

This research is on the management of occupational health and safety in selected organisations of the south west region of Cameroon, in which the researcher used well-structured questionnaire to gather the necessary information on their view of occupational health and safety on their performance. Therefore the result is valid in that these organisations, being big corporations can allow researchers who want to carry out the same study, will have a similar result. Thus the result can be generalized since it can be applied to other corporations.

CHAPTER FOUR

4.0 PRESENTATION AND ANALYSIS OF DATA

This chapter covers the presentation of responses, analysis and findings of data collected from diverse sources, i.e. questionnaire, interview, personal observation and documentary evidence.

4.1. Presentation of Data

4.1.1. Companies

Table 4. 1: Sample flow table

Companies	Category of service	Frequency	Percent	Expected	Return rate (%)
CDC	Agriculture	41	19.2	50	82%
University of Buea	Service	36	16.9	50	72%
Presbyterian printing press	Service	37	17.4	50	74%
Guinness Cameroon	Production	40	18.8	50	80%
SONARA	Production	40	18.8	50	80%
DATA Electricity	Production	19	8.9	50	38%
Total	6	213	100.0	300	71%

All together, 6 companies were sampled for the study namely CDC with a weight of 41 (19.2%), University of Buea 36 (16.9%), Presbyterian Printing Press 37 (17.4%), Guinness Cameroon 40 (18.8%), SONARA 40 (18.8%) and Data Electricity 19 (8.9%).

As per the companies, the coverage was 100% because six companies were to be sampled and all the three main categories of services namely agriculture, service and production were represented as expected. As for the participants, 213 of them effectively answered the questionnaire and considering the expected 300 this gives a return rate of 71% that is above 70% indicating that it is statistically acceptable according to Nana (2012). The reasons accounting for the 30% missing is explained in under limitations of the study.

4.1.2 Gender

Table 4.2: Distribution of gender

Gender	Frequency	Percent
Male	131	61.5
Female	82	38.5
Total	213	100.0

Male and female were represented in the sample though the male 131 (61.5%) were more represented than the female 82 (38.5%).

4.1.3Age

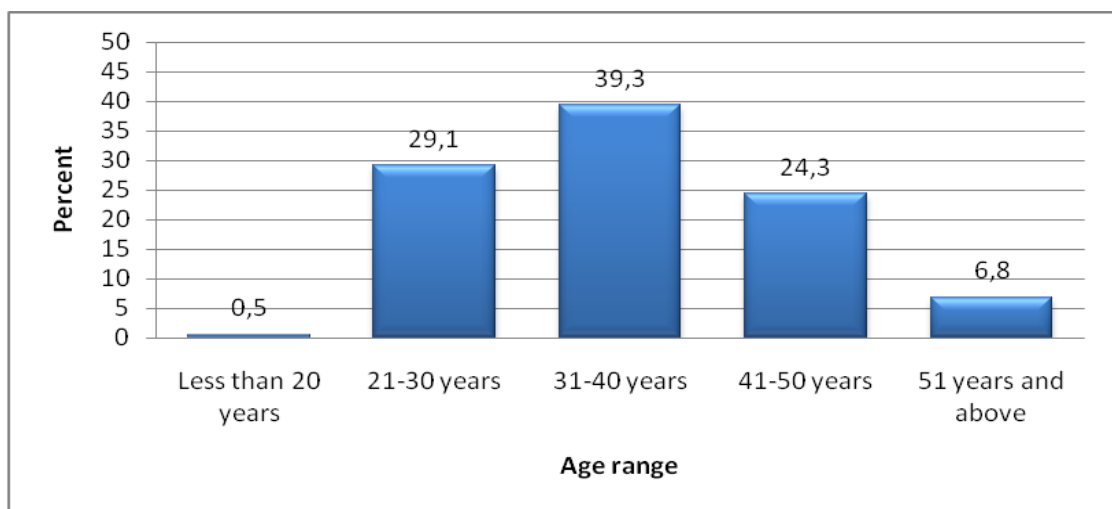


Figure 4. 1: Distribution of respondents' ages

The ages of the participants were distributed as follows: 1 (0.5%) was aged less or equal to 20 years, 60 (29.1%) 21-30 years, 81 (39.3%) 31-40 years, 50 (24.3%) 41-50 years and 14 (6.8%), 51 years and above. Seven making a proportion of 6.8%) refused to give their age. The mode age was 31-40 years. Cumulatively, 93.2% were aged up to 50 years.

4.1.4 Marital status

Table 4.3: Distribution of marital status

	Marital status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	81	38.0	39.7	39.7
	Married	118	55.4	57.8	97.5
	Separated	2	.9	1.0	98.5
	Widow/Widower	3	1.4	1.5	100.0
	Total	204	95.8	100.0	
Missing	Refusal	9	4.2		
Total		213	100.0		

As for the marital status, the majority 118 (57.8%) were married, 81 (39.7%) were still single, 3 (1.5%) were widow/widower while 2 (1.0%) were separated. Nine making a proportion of 4.2% refused to answer the question (Table 6). It was realized that the number of those that were married increased with age and for the single, it was the reverse (Table 7) and this association was significant (Cramer's V: $V=0.382$; $P=0.000$). The findings equally indicated that more male for a percentage of 82 (66.1%) were married as against a significantly (Cramer's V: $V=0.237$; $P=0.010$) lower proportion for the female 36 (45.0%).

Table 4.4: Distribution of marital status by age

Age	Stats	Marital Status				Total
		Single	Married	Separated	Widow/Widower	
Lower through 30 years	n	51	8	0	0	59
	%	86.4%	13.6%	.0%	.0%	100.0%
31-40 years	n	20	56	1	0	77
	%	26.0%	72.7%	1.3%	.0%	100.0%
41-50 years	n	6	38	1	2	47
	%	12.8%	80.9%	2.1%	4.3%	100.0%
51 years and above	n	1	12	0	1	14
	%	7.1%	85.7%	.0%	7.1%	100.0%
Total	n	78	114	2	3	197
	%	39.6%	57.9%	1.0%	1.5%	100.0%

Cramer's V: V=0.382; P<0.001.

Table 4.5: Distribution of marital status by gender

Gender	Stats	Marital Status				Total
		Single	Married	Separated	Widow/Widower	
Male	N	39	82	2	1	124
	%	31.5%	66.1%	1.6%	.8%	100.0%
Female	N	42	36	0	2	80
	%	52.5%	45.0%	.0%	2.5%	100.0%
Total	N	81	118	2	3	204
	%	39.7%	57.8%	1.0%	1.5%	100.0%

Cramer's V: V=0.237; P=0.010.

4.1.5 School attainment

Table 4.6: Distribution by highest level of school attainment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary	7	3.3	3.4	3.4
	Secondary	67	31.5	32.2	35.6
	University	99	46.5	47.6	83.2
	Others	35	16.4	16.8	100.0
	Total	208	97.7	100.0	
Missing	Refusal	5	2.3		
Total		213	100.0		

Table 4.6 indicates that 7 (3.4%) of the workers had attained primary education, 67 (32.2%) secondary, 99 (47.6%) university level, 35 (16.8%) had attained of the training while 5 (2.3%) refused to answer the question. It was obvious that workers who had attained primary education were found more in CDC 3 (42.9%) and Presbyterian Printing Press with the same weight. Those who had attained university were found more in the University of Buea, SONARA and Guinness Cameroon and most of those who had attained other training were from Data Electricity.

Table 4.7: Distribution of workers by school attainment and company

Company	Stats	School attainment				Total
		Primary	Secondary	University	Others	
CDC	N	3	23	11	3	40
	%	42.9%	34.3%	11.1%	8.6%	19.2%
University of Buea	N	0	8	25	3	36
	%	.0%	11.9%	25.3%	8.6%	17.3%
Presbyterian printing press	n	3	17	8	8	36
	%	42.9%	25.4%	8.1%	22.9%	17.3%
Guinness Cameroon	n	0	8	23	7	38
	%	.0%	11.9%	23.2%	20.0%	18.3%
SONARA	n	0	5	26	8	39
	%	.0%	7.5%	26.3%	22.9%	18.8%
DATA Electricity	n	1	6	6	6	19
	%	14.3%	9.0%	6.1%	17.1%	9.1%
Total	n	7	67	99	35	208
	%	100.0%	100.0%	100.0%	100.0%	100.0%

Cramer's V: V=50.554; P=0.000.

4.1.6 Employment Status

Table 4.8: Distribution of workers by employment status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed	181	85.0	89.6	89.6
	Unemployed	21	9.9	10.4	100.0
	Total	202	94.8	100.0	
Missing	System	11	5.2		
Total		213	100.0		

Most of the workers were formally employed with a percentage of 181 (89.6%), 21 (10.4%) were not formally employed while 11 (5.2%) did not disclose their employment status.

The workers that were not formally employed were mostly found in the Presbyterian Printing Press 9 (27.3%), followed by University of Buea 5 (14.3%) then Data Electricity 3 (15.8%) and this discrepancy was significant (Cramer's V: $V=17.403$; $P=0.004$), table 12. It was obvious that more female 16 (21.1%) were not formerly employed as compared to 5 (4.0%) for the male (Cramer's V: $V=0.294$; $P=0.004$).

Table 4.9: Distribution of employment status by company

Company	Stats	Employment Status		Total
		Employed	Unemployed	
CDC	n	38	1	39
	%	97.4%	2.6%	100.0%
University of Buea	n	30	5	35
	%	85.7%	14.3%	100.0%
Presbyterian printing press	n	24	9	33
	%	72.7%	27.3%	100.0%
Guinness Cameroon	n	34	2	36
	%	94.4%	5.6%	100.0%
SONARA	n	39	1	40
	%	97.5%	2.5%	100.0%
DATA Electricity	n	16	3	19
	%	84.2%	15.8%	100.0%
Total	n	181	21	202
	%	89.6%	10.4%	100.0%

Cramer's V: $V=17.403$; $P=0.004$.

Table 4.10: Distribution of employment status by gender

Gender	Stats	Employment Status		Total
		Employed	Unemployed	
Male	N	121	5	126
	%	96.0%	4.0%	100.0%
Female	N	60	16	76
	%	78.9%	21.1%	100.0%
Total	N	181	21	202
	%	89.6%	10.4%	100.0%

Cramer's V: V=0.294; P=0.004.

Table 4.11: Distribution of longevity of service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than two years	28	13.1	14.0	14.0
	2-5 years	60	28.2	30.0	44.0
	6-9 years	33	15.5	16.5	60.5
	10 years and above	79	37.1	39.5	100.0
	Total	200	93.9	100.0	
Missing	Refusal	13	6.1		
	Total	213	100.0		

As for the longevity of service, 28 (14.0%) of the workers had worked less than 2 years, 60 (30.0%) 2-5 years, 33 (16.5%) 6-9 years and 79 (39.5%) 10 years and above while 13 (6.1%) refused to disclose their longevity of service. Cumulatively, 60.5% of the workers had worked up to 9 years.

4.1.7 Income level

Only one worker accepted to disclose the income level or salary.

4.1.8 Occupation

Table 4.12: Occupation of workers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Paper/desk work	66	31.0	37.7	37.7
	Indoor manutension	48	22.5	27.4	65.1
	Field worker	61	28.6	34.9	100.0
	Total	175	82.2	100.0	
Missing	System	38	17.8		
Total		213	100.0		

The occupations of workers were grouped into three categories namely paper/desk work 66 (37.7%), indoor manutension 48 (27.4%) and field workers 61 (34.9%), table 15.

4.2.1 Research question one: What are the different workplace hazards that workers are exposed to and their impact on the employees and the organization?

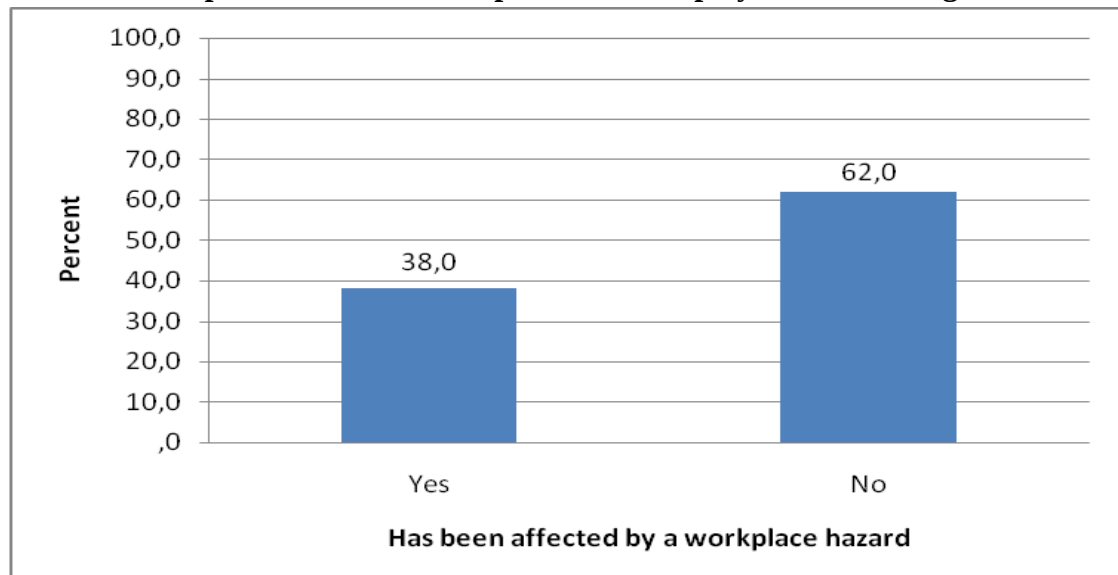


Figure 4.2: Distribution of workers as affected by a workplace hazard

Eighty-one workers making a percentage of 38.0% had ever been affected by a workplace hazard and 123 (62.0%) not.

Table 4.13: Distribution of exposure to workplace hazards by company

Company	Stats	Have you ever been affected by any workplace hazard?		Total
		Yes	No	
CDC	n	25	16	41
	%	61.0%	39.0%	100.0%
University of Buea	n	11	25	36
	%	30.6%	69.4%	100.0%
Presbyterian printing press	n	22	15	37
	%	59.5%	40.5%	100.0%
Guinness Cameroon	n	10	30	40
	%	25.0%	75.0%	100.0%
SONARA	n	10	30	40
	%	25.0%	75.0%	100.0%
DATA Electricity	n	3	16	19
	%	15.8%	84.2%	100.0%
Total	n	81	132	213
	%	38.0%	62.0%	100.0%

Cramer's V: V=0.356; P=0.000.

Workplace hazards were the most frequent in CDC 25 (61.0%), followed by Presbyterian printing press 22 (59.5%), University of Buea 11 (30.6%), Guinness Cameroon and SONARA 10 (25.0%), and at last Data Electricity 3 (15.8%) and this differences were significant (Cramer's V: V=0.356; P=0.000).

There was, however, no major difference between the male and the female (Cramer's V: V=0.063; P=0.356) though the male 53 (40.5%) were relatively more affected than the female 28 (34.1%).

It was evident (Cramer's V: V=0.207; P=0.023) that field workers were the most exposed with a proportion of 26 (42.6%), followed by indoor manutension workers 19 (39.6%) then paper/desk workers with the least weight of 14 (21.2%).

Table 4.14: Distribution of exposure to workplace hazards by company

Occupation	Stats	Have you ever been affected by any workplace hazard?		Total
		Yes	No	
Paper disk work or low-risk workers	n	14	52	66
	%	21.2%	78.8%	100.0%
Indoor manutension or medium risk workers	n	19	29	48
	%	39.6%	60.4%	100.0%
Field workers or high risks workers	n	26	35	61
	%	42.6%	57.4%	100.0%
Total	n	59	116	175
	%	33.7%	66.3%	100.0%

Cramer's V: V=0.207; P=0.023.

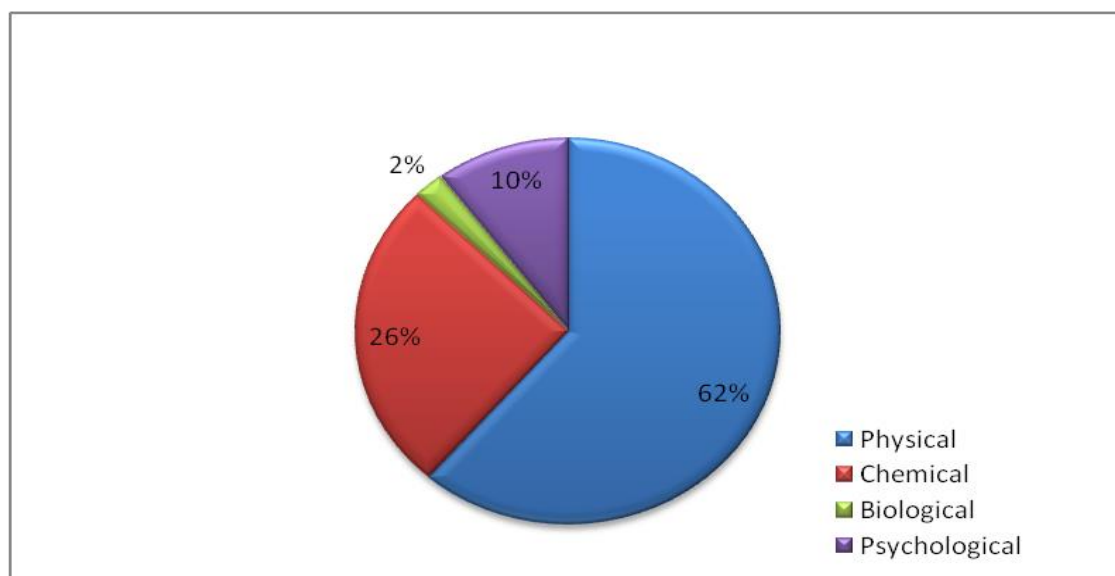


Figure 4.3: Hazard types

The most prominent hazard type was physical (62%), followed by chemical (26%), psychological (10%) and them biological (2%).

Physical hazards were the most common in all the companies except SONARA where workers complained more of chemical hazards. However, chemical hazard and

psychological were mostly frequent at Presbyterian printing press with a weight of 9 (42.9%) and 6 (28.6%) respectively.

Table 4.15: Distribution of hazards type by company

Company		Hazard type				Total
		Physical	Chemical	Biological	Psychological	
CDC	N	14	9	1	1	23
	%	60.9%	39.1%	4.3%	4.3%	
University of Buea	N	9	1	1	1	12
	%	75.0%	8.3%	8.3%	8.3%	
Presbyterian printing press	N	13	9	0	6	21
	%	61.9%	42.9%	.0%	28.6%	
Guinness Cameroon	N	7	3	0	0	10
	%	70.0%	30.0%	.0%	.0%	
SONARA	N	1	8	0	1	10
	%	10.0%	80.0%	.0%	10.0%	
DATA Electricity	N	3	0	0	0	3
	%	100.0%	.0%	.0%	.0%	
N		54	23	2	9	79

Table 4.16: Causes of incidents

Hazard type	Description
Physical	Wounds
	Motor accidents
	Electrical shocks
	Factory accident
	Influenza
	Poor sitting position
	Congested offices
	Latex
	Fatigue
Chemical	Chemical pollution
	Gas explosion
	Hot glue
Psychological	Strike action
	Misunderstanding
	Work stress
	Work pressure
	Sexual harassments
Biological	Fungi

4.1.9 Threat posed by workplace hazards

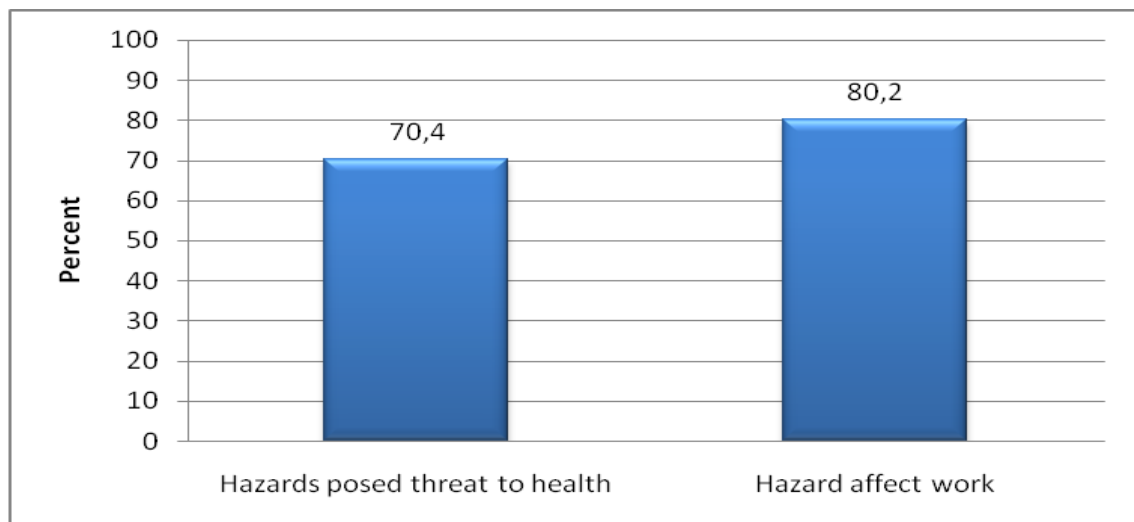


Figure4.4: Threat posed by workplace hazards

Out of the 81 workers that have been affected by a work hazard, 57 (70.4%) said that this posed a threat to their health and 65 (80.2%), that this affected their work and the impact was generally perceived as negative.

4.2.2 Research question two: What is the impact of the organizations occupational health and safety preparedness on workers' productivity?

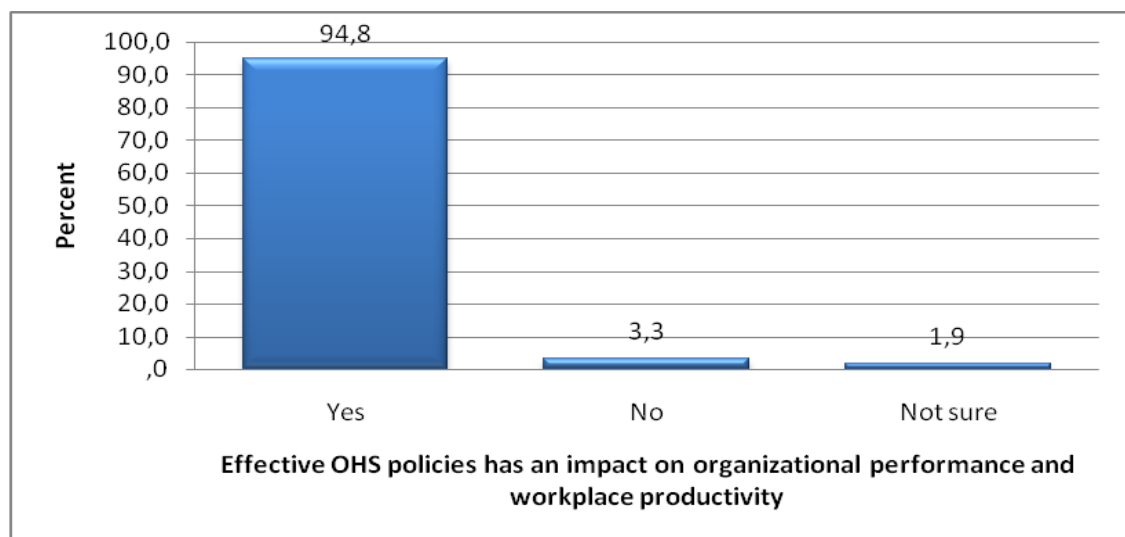


Figure4.5: Perceived effect of effective OHS policies on organizational performance and workplace productivity.

Workers believed that effective OHS policies have an impact on organizational performance and workplace productivity as attested by 201 (94.8%).

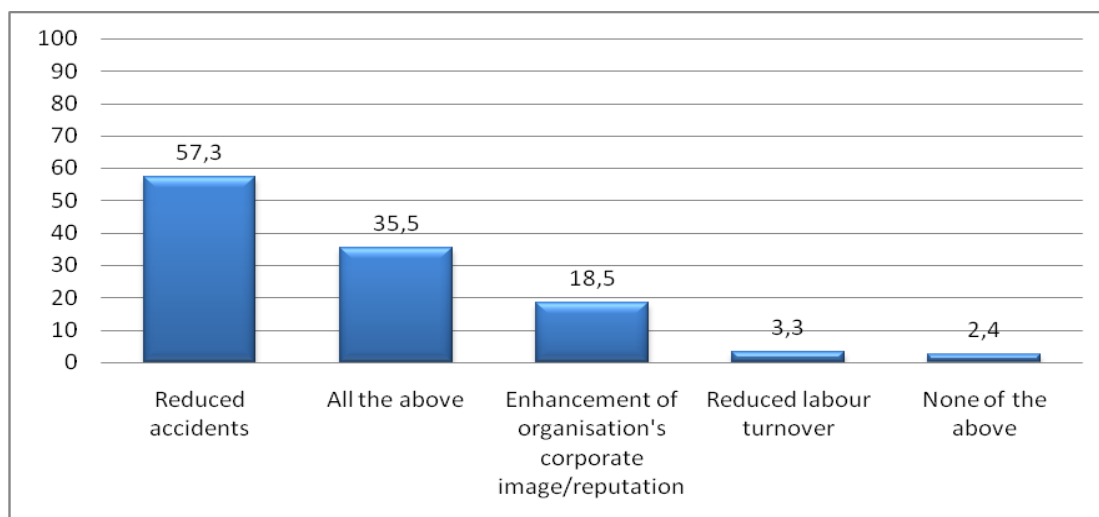


Figure4.6: Benefits of effective management of OHS policies

Workers enumerated a number of benefits associated with the effective management of OHS policies and the most emphasized one was the fact that this reduces accident 121 (57.3%) and enhances the organization or corporate image/reputation 39 (18.5%) and this trend cut across the companies under study.

Table4.17: Distribution of perceived benefit of effective management of OHS policies by companies

Company	Stats	benefit of effective management of OHS policy					Total
		Reduced accidents	Reduced labor turnover	Enhancement of organization's corporate image/reputation	All the above	None of the above	
CDC	N	24	1	8	12	1	40
	%	60.0%	2.5%	20.0%	30.0%	2.5%	
University of Buea	N	21	3	6	11	0	35
	%	60.0%	8.6%	17.1%	31.4%	.0%	
Presbyterian printing press	N	25	1	12	10	1	37
	%	67.6%	2.7%	32.4%	27.0%	2.7%	
Guinness Cameroon	N	21	2	4	17	1	40
	%	52.5%	5.0%	10.0%	42.5%	2.5%	
SONARA	N	22	0	6	16	0	40
	%	55.0%	.0%	15.0%	40.0%	.0%	
DATA Electricity	N	8	0	3	9	2	19
	%	42.1%	.0%	15.8%	47.4%	10.5%	
N		121	7	39	75	5	211

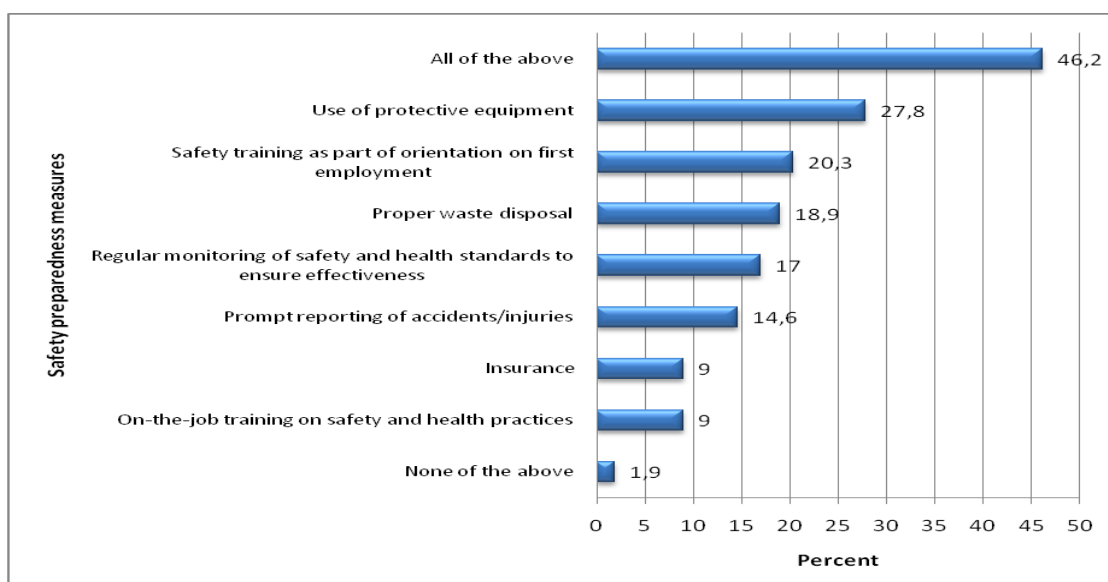


Figure4.7: Safety preparedness measures put in place by organization

Almost all the workers 212 (99.5%) attested that their company had put in place at least a safety measure among which used of protective equipment 59 (27.8%), Safety training as part of orientation on first employment 43 (20.3%), Proper waste disposal 40 (18.9%), Regular monitoring of safety and health standards to ensure effectiveness 36 (17.0%), Prompt reporting of accidents/injuries 31 (14.6%), On-the-job training on safety and health practices 19 (9.0%). Very few 19 (9.0%) had an insurance scheme. Other safety measures mentioned included 24 hours surveillance camera and fire extinguisher at all floors. Safety preparedness measures put in place differ among the various companies in term of priority.

Table4.18: Distribution of safety preparedness measures by companies

		Company						Total
Safety preparedness measures	Stats	CDC	University of Buea	Presbyterian printing press	Guinness Cameroon	SONARA	DATA Electricity	
Safety training as part of orientation on first employment	n	9	4	10	7	4	9	43
	%	22.0%	11.1%	27.0%	17.5%	10.0%	47.4%	
Proper waste disposal	n	7	14	10	5	2	2	40
	%	17.1%	38.9%	27.0%	12.5%	5.0%	10.5%	
Regular monitoring of safety and health standards to ensure effectiveness	n	5	6	6	5	1	13	36
	%	12.2%	16.7%	16.2%	12.5%	2.5%	68.4%	

Use of protective equipment	n	15	9	8	14	7	6	59
	%	36.6%	25.0%	21.6%	35.0%	17.5%	31.6%	
Prompt reporting of accidents/injuries	n	8	7	5	3	2	6	31
	%	19.5%	19.4%	13.5%	7.5%	5.0%	31.6%	
On-the-job training on safety and health practices	n	6	0	1	1	1	10	19
	%	14.6%	.0%	2.7%	2.5%	2.5%	52.6%	
INSURANCE	n	3	2	6	7	0	1	19
	%	7.3%	5.6%	16.2%	17.5%	.0%	5.3%	
All of the above	n	22	6	16	21	28	5	98
	%	53.7%	16.7%	43.2%	52.5%	70.0%	26.3%	
None of the above	n	0	4	0	0	0	1	5
	%	.0%	11.1%	.0%	.0%	.0%	5.3%	
N		41	36	37	40	40	19	213

If in Data Electric workers emphasized the most on regular monitoring of safety and health standards to ensure effectiveness 13 (68.4%), in the University of Buea, proper waste disposal was the most acknowledged 14 (38.9%), in CDC it was the use of protective devices 15 (36.6%), in Presbyterian Printing Press safety training as part of orientation on first employment and proper waste disposal with the same weights of 10 (27.0%), while in Guinness Cameroon it was the use of protective equipment 14 (35.0%) and the same with SONARA with weight of 7 (17.0%).

4.1.12 Impact safety preparedness measures put in place by organization

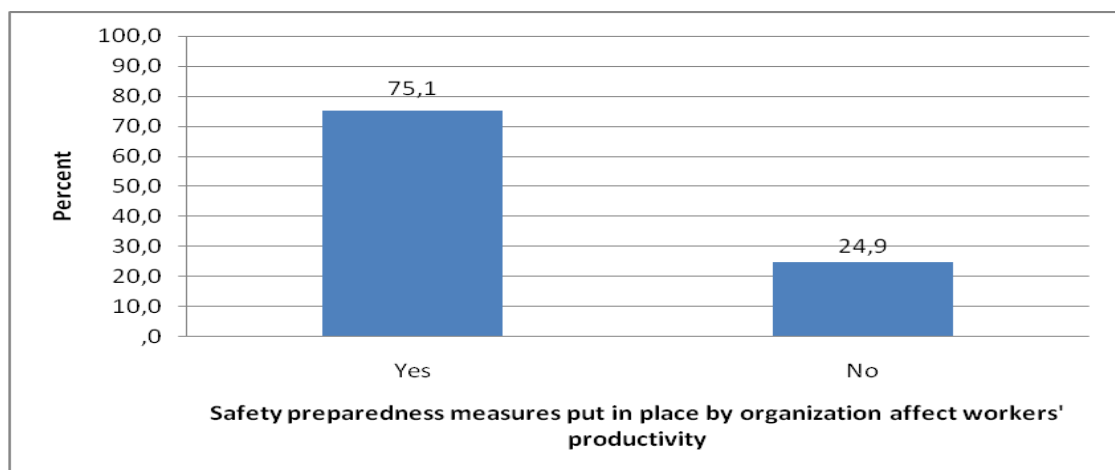


Figure 4.8: Effect of safety preparedness measures put in place by organization on workers' productivity

Workers were for the greater majority 160 (75.1%) of the opinion that safety preparedness measures put in place by organization affect their productivity though roughly half perceived the level of OHS preparedness of their organization as high 108 (50.7%).

Table 4.19: workers perception of the effect of the availability of safety preparedness measures put in place by the organization or company on productivity at the workplace: code-grounding-quotation table

Code		Code Description	Grounding	Descriptions
Yes	Reduces hazards	Reduces workplace accidents and injuries	23	‘Yes, if we apply all measures we will be free from accidents, injuries and expenditures as workers will not always go to for treatment’.
	Reduces absence	Reduces workplace accidents and injuries and so far make workers be present at work	12	“Reduces workplace accidents and injuries and so far make workers be present at work”.
	Reduces expenditure	Reduces workplace accidents, injuries and expenditures as workers will not always go to for treatment	13	“Accident’s cost is reduce”.
	Increase productivity	Boost productivity	18	‘When all the above is put in place, the organization easily attain it set goals’ (Male adult worker).
	Good relation	Good working atmosphere	4	“ It encourages better working atmosphere through good employee relationship”.(female adult worker)
No	Insufficient	Preparedness measures perceived as insufficient	11	‘No because the measures are not visible, and they only end at providing PPE (Person Protective Equipment’ (female adult worker) ‘You cannot achieve your goal as far as productivity is a concern if you are not well equipped to do so.’(Male adult worker)

Table 4.19: above presents the respondents’ opinions of the effects of the availability of safety preparedness measures put in place by the organization or company on productivity at the workplace. For those who answered favorably, they were of the

opinion that if these measures were available and implemented, this will go a long way to reduce hazard (23), to curb absenteeism as many use to stop working because of injuries (12), meanwhile (13) pointed out that the expenditure would be reduced, (18) said the productivity would increase, and the organization easily attain it set goals, and only (4) pointed out that it encourages better working atmosphere through good employee relationship.

As for those who said no, a good number (11), raised concern that the measures are not visible, and they only end at providing PPE (Personal Protective Equipment), and they went further saying that one cannot achieve one's goal as far as productivity is concerned if one is not well equipped to do so.

Satisfaction with the current occupational health and safety measure



Figure 4.9: Workers' satisfaction with the current occupational health and safety measures put in place by the organization.

Workers were satisfied with the occupational health and safety measures put in place by the organization though just 72 (33.8%) expressed satisfaction. Collapsing satisfied and very satisfied, 177 (83.1%) were satisfied.

Satisfaction with the current occupational health and safety measures put in place differed significantly among companies (Cramer's V: $V=0.398$; $P=0.000$); workers were the most very satisfied at Guinness Cameroon 27 (67.5%), followed by Data Electric 8 (42.1%) and the rest had level of satisfaction less than 30%.

Table4.20: Comparing satisfaction with the current occupational health and safety measures put in place among companies

Company	Stats	How satisfied are you with the current occupational health and safety measure				Total
		Very satisfied	Satisfied	Dissatisfied	Very dissatisfied	
CDC	N	11	23	5	2	41
	%	26.8%	56.1%	12.2%	4.9%	100.0%
University of Buea	N	7	14	8	7	36
	%	19.4%	38.9%	22.2%	19.4%	100.0%
Presbyterian printing press	n	9	17	10	1	37
	%	24.3%	45.9%	27.0%	2.7%	100.0%
Guinness Cameroon	n	27	12	1	0	40
	%	67.5%	30.0%	2.5%	.0%	100.0%
SONARA	n	10	29	1	0	40
	%	25.0%	72.5%	2.5%	.0%	100.0%
DATA Electricity	n	8	10	1	0	19
	%	42.1%	52.6%	5.3%	.0%	100.0%
Total	n	72	105	26	10	213
	%	33.8%	49.3%	12.2%	4.7%	100.0%

Cramer's V: V=0.398; P=0.000.

4.1.10 Availability of safety committee in the organization

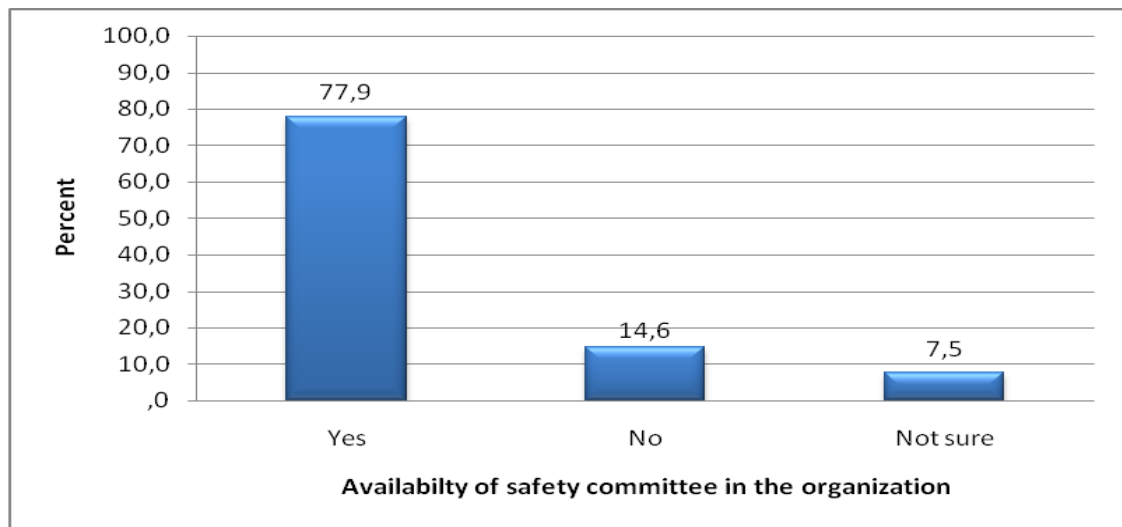


Figure 4.10: Availability of safety committee in the organization

Workers for the greater majority acknowledged the availability of a safety committee in the organization 166 (77.9%). However, this trend differed significantly among companies, whereby it was the lowest in the University of Buea 13 (36.1%) and the highest in Data Electric 18 (94.7%) and this gap was significant (Cramer's V: $V=0.547$; $P=0.000$)

Table 4.21: Comparing availability of safety committee in organization

Company	Stats	Does the organization have a safety committee?			Total
		Yes	No	Not sure	
CDC	n	33	4	4	41
	%	80.5%	9.8%	9.8%	100.0%
University of Buea	n	13	15	8	36
	%	36.1%	41.7%	22.2%	100.0%
Presbyterian printing press	n	24	10	3	37
	%	64.9%	27.0%	8.1%	100.0%
Guinness Cameroon	n	39	0	1	40
	%	97.5%	.0%	2.5%	100.0%
SONARA	n	39	1	0	40
	%	97.5%	2.5%	.0%	100.0%
DATA Electricity	n	18	1	0	19
	%	94.7%	5.3%	.0%	100.0%
Total	n	166	31	16	213
	%	77.9%	14.6%	7.5%	100.0%

Cramer's V: $V=0.547$; $P=0.000$.

4.1.11 Person most responsible for workers' safety and health

Table 4.22: Comparing person most responsible for workers' safety and health among organizations

Company	Stats	Person most responsible for workers' safety and health			Total
		Management	Environmental health unit	Myself	
CDC	n	19	15	5	33
	%	57.6%	45.5%	15.2%	
University of Buea	n	12	4	0	16
	%	75.0%	25.0%	.0%	
Presbyterian printing press	n	17	4	3	23
	%	73.9%	17.4%	13.0%	
Guinness Cameroon	n	24	6	17	39
	%	61.5%	15.4%	43.6%	
SONARA	n	32	7	4	38
	%	84.2%	18.4%	10.5%	
DATA Electricity	n	10	3	8	18
	%	55.6%	16.7%	44.4%	
N		114 (68.3%)	39 (23.4%)	37 (22.2%)	167

It was generally perceived that workers' safety and health was mostly the responsibility of the management 114 (68.3%). However, a discrepancy was observed among companies because if in SONARA 32 (84.2%) said it was the management, in Guinness Cameroon, it was mostly the workers 17 (43.6%).

4.2.3 Research Question three: What is the relationship between workers perception of organizations health and safety preparedness on their workplace productivity?

Table4.23: Workers' perceived effect of organizational health and safety preparedness on workplace productivity

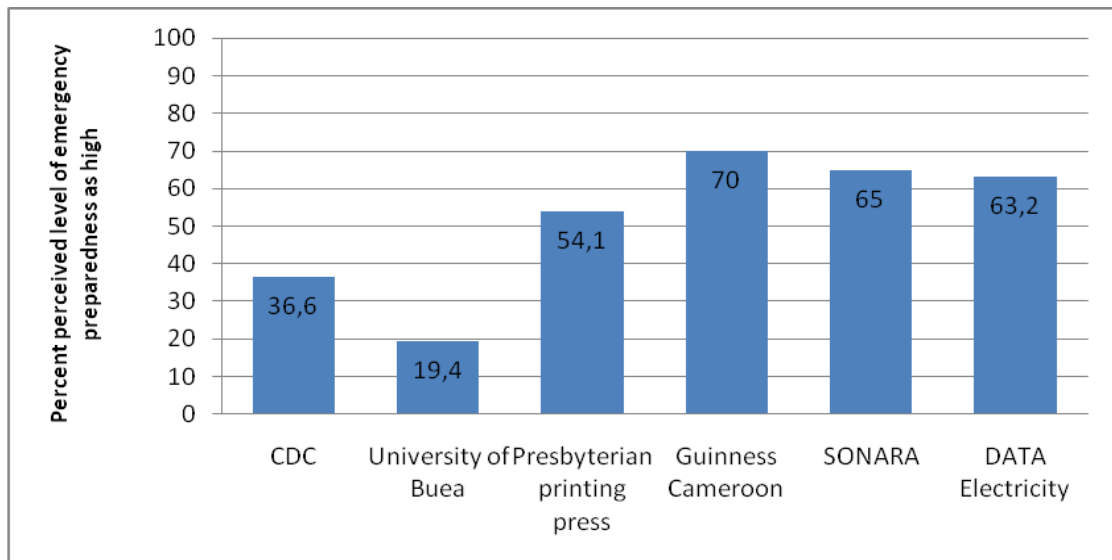
Scale	Frequency	Percent	Cumulative Percent
Strongly agree	72	33.8	33.8
Agree	121	56.8	90.6
Disagree	17	8.0	98.6
Strongly disagree	3	1.4	100.0
Total	213	100.0	

Workers were of the opinion that organizational health and safety preparedness has an effect on workplace productivity as the greater majority of them 193 (90.6%) agreed.

Table4.24: level of emergency preparedness of the organization

Scale	Frequency	Percent	Cumulative Percent
High	108	50.7	50.7
Low	34	16.0	66.7
Medium	67	31.5	98.1
None of the above	4	1.9	100.0
Total	213	100.0	

Roughly half of the employee 108(50.7%) believed that the level of emergency preparedness of their organization was high.



X²-test: $\chi^2=48.513$; $df=15$; $P<0.001$.

Figure 4.11: Perceived level of emergency preparedness compared by organizations

The level of emergency preparedness significantly differed among organizations ($P<0.001$) with Guinness Cameroon having the highest proportion of workers that believed that level of emergency preparedness was high 28 (70.0%) and University of Buea the least 7 (19.4%).

Table 4.25: Workers' perception of how the level of emergency preparedness of the organization or company impact on productivity at the workplace: code-grounding-quotation table

	Code	Code Description	Grounding	Descriptions
Safety preparedness measures perceived as high	Effective	Can help control the hazards	10	'If there is a fire breakout, it will be easy to stop the fire since the preparedness put in place high'.
	Increase productivity	Boost productivity	16	'The awareness of OHS will enable the workers to work with confidence thereby increase productivity'.(Male adult worker). 'The more healthy the workers, the more active they will perform their duty assigned to them.' (Female adult worker).
	Respect for corporate policy	Boost employees morale	8	'" Respect for the company's norms leads to high commitment and optimum productivity"'.(adult male worker),
	Communication	Good employee	4	'" good flow of

	flows	relation		communication which leads to increase in productivity.”
Safety preparedness measures perceived as low	Lesser commitment	Reduces level of commitment	7	‘It reduces the level of commitment’ (female adult worker)
	Low level of emergency preparedness	Lack of efficiency	8	‘Low production since the worker may be sick of malaria cause by mosquitoes.’ “Due to the low preparedness on an emergency, it reduces the output because workers feel they are not well taken care of”.
	Financial constrain	Lack of commitment	2	‘Financial constraints is limited thus leading to a lack of full implementation of safety procedures which leads to low productivity’.(Male adult worker).

Table4.25: Above presents workers’ perception of how the level of emergency preparedness of the organization or company impact on productivity at the workplace. For those who responded favorably (10) were for the fact that safety preparedness will help the organization gain its goals and objective. Workers believed that if there is fire breakout, it can be easily controlled if the preparedness level of the organization is high.

More so, good measures will help to increase productivity (16) workers pointed out that the awareness of OHS will enable the workers to work with confidence thereby increasing productivity. The more healthy the workers, the more active they will perform the duties assigned to them.

When employees are safe, they turn to respect the company’s corporate policy. Respect for the company’s norms leads to high commitment and optimum productivity (8). Communication became easy which leads to increase in productivity (4) and good employee relationship.

On the other hand, without effective safety preparedness measures, employees commitment will reduce (7), lack of efficiency as a result of workers been exposed to various contaminations that may make them sick (8). Financial constrain was also seen

as a problem (2) that lead to a lack of commitment and poor implementation of safety procedures which leads to low productivity.

4.1.13 Workers' suggestions to improve upon OHS in the workplace

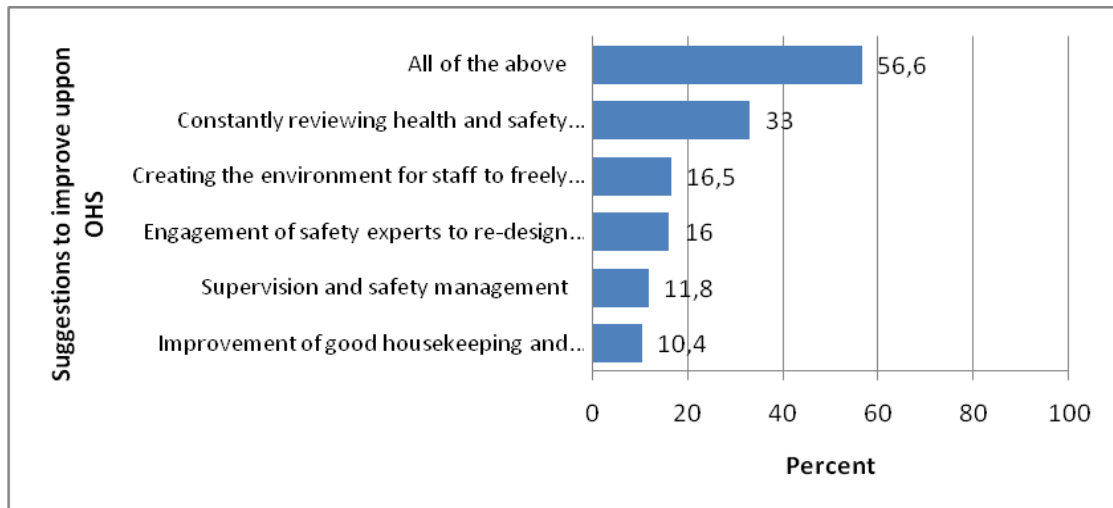


Figure 4.12: Workers' suggestions to improve upon OHS

Workers highlighted number of measures that they believed if implemented could improve upon OHS in their organization among which the need to constantly reviewing health and safety practices 70 (33.0%), create an environment for staff to freely report on OHS 35 (26.5%), Engagement of safety experts to re-design OHS policies for the organization 34 (16.0%), supervision and safety management 25 (11.8%) and Improvement of good housekeeping and sanitation 22 (10.4%). The majority believed that all these measures are complementary and are all necessary 120 (56.6%).

In addition to this, workers were generally of the opinion that the organization should implement effective programs for controlling occupational hazards 207 (97.2%).

Table4.26: workers perception of the necessity for the organization to implement effective program for controlling occupational hazards: code-grounding-quotation table

Code		Code Description	Grounding	Descriptions
Agree	Productivity	Will increase workers' productivity	16	'It will increase workers productivity' (Male adult worker). 'Improve workers personal health and sanitation as well as productivity not only in the workplace but also at home.'(Male adult worker). 'This will help to reduce the ill health of workers which means every employee will be regular at the job side'.(Male adult worker).
	Commitment	Will increase workers' commitment	14	'I strongly agree because this will enable me to be free from the hazard at my job side.'(female adult worker). 'The organization should not only implement but should also ensure the proper functioning of the programs.'(Male adult worker). 'Constant lectures will keep the workers aware.'(Male adult worker).
	Advancement in technology	Increment in production	3	'OHS goes with the changing trends and the advance in technology'.(Male adult worker).
	Negligent		5	'Because there's a lot of negligent especially in the environment where people are not educated'.(adult male worker)
	Organize seminars'	Educate workers	2	'They should organize seminars and talks to educate the workers on how to guard against occupational hazards''. (adult male worker)
Disagree	Inefficient	Inefficient	5	'The safety department is there but is ineffective''. (male adult worker)

Table 4.26: above present's workers perception of the necessity for the organization to implement effective programs for controlling occupational hazards. Most of the Workers perceived that it will be of great significant if an organization implement effective program for controlling occupational hazards because this will increase workers productivity and improve workers personal health and sanitation not only in the workplace but also at home (16). This will further help to reduce the ill health of workers that means every employee will be regular at the job side.

Furthermore, the implementation of these programs will go a long way in increasing workers commitment as this will enable every worker to be free from the hazard at the workplace (14). The organization should not only implement but should also ensure the proper functioning of these programs.

To combat flexibility, OHS goes with the changing trends and the advance in technology which helps to increase productivity (3), to curb negligent especially in an environment where people are not educated (5) and to educate workers they should organize seminars and talks to educate the workers on how to guard against occupational hazards.

On the other hand (5) respondents disagree on the opinion that inefficient does exist in the organization because the safety department is ineffective or it does not exist at all thus reduce workers commitment and reduce productivity.

4.1.14 Employees' rights and responsibility with regard to OHS management

Almost all the workers 211 (99.1%) believed that the employees have certain rights and responsibility concerning OHS management. They highlighted the right to refuse unsafe work 62 (29.7%), the right to safety equipment 42 (20.1%), to reporting any contravention of the law by management to higher authorities 22 (10.5%).



Figure4.13: Employees' responsibilities and rights concerning OHS management

4.1.19 Analysis and Findings from Interview/Personal Observation

The researcher engaged the supervisors and heads of departments/units in an interview on one on one basis, and the following came to bear:

The administration of the different organizations comprises of all the various sections of the different organizations or companies under study.

To secure the safety of employees, the different organizations or companies have put in place good ventilation and good lightening systems as well as workable and well-tested fire extinguishers ready to fight in case of fire outbreaks. They also provide the workers with protective equipment (PPE).

The second is group under field workers of the different organizations. They are exposed to hazards of different types that pose a risk to their health and safety. The organizations provide gloves, safety shoes, noise mask, eye goggles and protective coats (PPE) for them; to protect their bodies from the different hazards. Safety boxes are also provided (first aid boxes). Health's units are also made available, emergency ambulance, and waste bins. Also, organizations like SONARA and GUINNESS had safety alarms.

The kitchens and the canteen are another department the researcher examined to ascertain the health and safety measures that have been put in place to protect the workers. The staffs in the kitchen face the problem of fire outbreaks, and this is a major threat to their safety. Again, bruises, burns, and lacerations arising from hot water spillage are also threats to their health. An important safety precaution put in place by the organizations authorities is the fixing of cylinders outside the kitchen to minimize the risk of fire outbreaks. Again, heavy duty fire extinguishers are provided in the kitchen to fight fire in the event of a fire outbreak. Also, there are shelves provided to keep knives and other cutting tools in the kitchen to prevent accidental cuts and bruises to staff. Cooking utensils and others are thoroughly washed and kept neat to provide workers with healthy food e.g. GUINNESS, and SONARA has a well-organized canteen and kitchen that helps to facilitate employee's health and safety.

The last section interviewed was the environmental health unit that is responsible for the disposal of the organizations waste. Here, staffs are charged with the responsibility of collecting all waste bins from the various departments to their final disposal point. Also, they are charge with the cleaning of the offices as well as the surroundings of the organizations. Staffs in this department are also exposed to a lot of risks as such they are also provided with protective equipment (PPE).

4.3 Implication of the Results

Table4. 27: Depicting the effect of Organization's occupational health safety and emergency preparedness on the general performance of an organization and employees productivity

Research question	Effect of Organization's occupational health safety and emergency preparedness on the general performance of an organization and employees productivity measured using Spearman's Rho correlation test The table present the correlation coefficient ® and the level of significance (P)						
	CDC	University of Buea	Presbyterian Printing Press	Guinness Cameroon	SONARA	Data Electricity	Overall
1) What are the different workplace hazards that workers are exposed to, and their ramification to employees and the organization	Physical hazards like injuries or wounds were the most highlighted in CDC followed by chemical hazards due to the spread of pesticide which is magnified by the lack of safety equipment indicating and inadequate worker safety policy.	Physical hazards were the most highlighted and these were related to sitting position, congested office and dust implying that the institution has not done sufficient effort for an adequate working environment for the workers.	Workers complained more of physical, chemical and psychological hazards due to long standing hours, carrying heavy loads that are books, back pain, waist pain, ink that stain, and psychological problems due to work pressure and harassment from the boss and quarreling among staff. The company therefore still has to check the working condition of workers and the inter-personnel relationship	Workers pointed out mostly physical hazards. They complained mostly of tiredness due to a long time in work without resting.	Workers pointed out mostly chemical hazards due to pollution by hydrocarbon that affect their health indicating that safety measures for workers' health are not adequate.	Workers essentially highlighted physical hazards due to sitting positions, fall from the poll, electrical shock and inadequate working equipment that predisposes to these hazards implying that the company safety preparedness measures is not adequate.	Physical, chemical and psychological hazards were highlighted
2) What are the the organization	CDC emphasized more on Safety	Emphasis was placed on proper waste disposal, and a weak	The company placed importance on Safety training as part of	In Guinness Cameroon, Safety training as part of orientation on first	In SONARA emphasis was placed on the use of	Regular monitoring of safety and health standards to ensure	Safety training as part of orientation on

occupational health and safety preparedness and their impact on workers' productivity?	training as part of orientation on first employment, Use of protective equipment and Prompt reporting of accidents/injuries. Workers for their majority 34 (82.9%) were satisfied with safety measures taken by the company.	majority 21 (58.3%) were satisfied with the preparedness of the institution.	orientation on first employment, proper waste disposal and insurance scheme for workers. The majority 26 (70.1%) were satisfied with the safety preparedness measures.	employment and the used of protective equipment were more highlighted, and workers were almost all satisfied with safety preparedness measures in the company 39 (97.5%).	protective equipment and workers were generally satisfied with the safety preparedness measures 39 (97.5%)	effectiveness and On-the-job training on safety and health practices were given priority and almost all the workers were satisfied with the safety measures in the company 18 (94.7%).	first employment was the most employed safety preparedness measure by the organization.
3) What is the relationship between workers perception of organizations health and safety preparedness on their workplace productivity?	Workers in CDC perceived the effect of occupational health safety and emergency preparedness on the general performance of an organization and employees productivity though not significantly (R=0.147 P=0.359)	Workers in the University of Buea perceived the effect of occupational health safety and emergency preparedness on the general performance of an organization and employees productivity though not significantly (R=0.359 P=0.081)	Workers in Presbyterian Printing Press significantly perceived the effect of occupational health safety and emergency preparedness on the general performance of an organization and employees productivity (R=0.472**P=0.003)	Workers in Guinness Cameroon significantly perceived the effect of occupational health safety and emergency preparedness on the general performance of an organization and employees productivity (R=0.339*; P=0.032)	Workers in SONARA perceived the effect of occupational health safety and emergency preparedness on the general performance of an organization and employees productivity though not significantly (R=0.260 P=0.105)	Workers in Data Electric perceived the effect of occupational health safety and emergency preparedness on the general performance of an organization and employees productivity though not significantly (R=0.436 P=0.062)	In general, workers significantly perceived the effect of occupational health safety and emergency preparedness on the general performance of an organization and employees productivity (R=0.323*** P<0.001)

*. Correlation is significant at the 0.05 level (2-tailed); **. Correlation is significant at the 0.05 level (2-tailed); ***. Correlation is significant at the 0.01 level (2-tailed).

The analysis conducted above revealed that the management of occupational health and safety play a significant role in the general performance of an organization and employees productivity ($R=0.323$; <0.001) as further explained by the model below. The workers perceived this effect significantly in Presbyterian Printing Press ($R=0.472$; $P=0.003$) and Guinness Cameroon ($R=0.339$; $P=0.032$). In other companies, the correlations were positive though not significant implying that the workers have acknowledged the effect of Organization's occupational health safety and emergency preparedness on the general performance of an organization and employees productivity. This is so because when employees are in good health, they turned to perform high thus facilitating the attainment of organizations goals as well as employee's goals. The respondents have overwhelmingly stated that increasing the health and safety of employees will put them in an intrinsic motivational position to deliver more on their duties. In a nutshell, the implication of these results makes the management of occupational health and safety imperative for organization performance and employees productivity in the selected organizations of the South West Region of Cameroon.

4.3.1 Modeling

Binary Logistic Regression Model was used to appraise the effect of organization's occupational health safety and the emergency preparedness on the productivity of the organization. The variability explained by the model was significant (Omnibus Tests of Model Coefficient: Likelihood Ratio Tests: Chi-Square=13.027; $df =2$; $P=0.001$; $N=213$). The validity of the model is also confirmed by the Hosmer-Lemeshow Test. This test evaluates the observed frequencies versus expected frequencies agree over the entire range of probability values. This test is a chi-square test that compares the difference between observed and expected frequencies for each of the $2 * 2$ matrix. With this test, a non-significant chi-square is desired as to confirm the assumption that the model being tested is not different from the perfect model, therefore, supporting the inference that the variability explained by the model is good. In the context of this model, this assumption is verified (Hosmer-Lemeshow test: Chi-Square=6.251; $df =6$; $P=0.406$; $N=123$).

The effect of the individual model indicator was equally computed as presented below. From the table, we can realize organization's occupational health safety and the

emergency preparedness on the productivity of the organization significantly predict organizational productivity ($P < 0.05$). Their ODDS Ratio (Exp(B)) are greater than 1 and the lower bound of the confidence interval (95% C.I. for EXP(B)) does not go below 1 indicating that these two indicators are significant risk factors of productivity, in the other sense, they can significantly affect the trend of productivity and organization performance.

Table4.28: Likelihood ratio tests predicting the effect of activities/routines adolescents engage in one sense of purpose as resilience identity

Predictors	Score	Df	Sig.
Organization's occupational health safety	9.496	1	.002
Emergency preparedness	8.526	1	.004
Overall Statistics	13.142	2	.001

Table4.29: ODDs Ratio statistic depicting the risk factors of productivity and parameter estimates for the model equation notably the standardized coefficient Beta (B)

	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Organization's occupational health safety	.450	.210	4.607	1	.032	1.569	1.040	2.366
Emergency preparedness	.362	.184	3.875	1	.049	1.436	1.002	2.058
Constant	-2.696	.503	28.788	1	.000	.067		

Model equation

$$Y = -2.696 + 0.450 * X_1 + 0.362 * X_2 + E$$

Y=Productivity

Constant or intercept=-2.969.

X₁= Organization's occupational health safety

X₂= Emergency Preparedness

E=Error of the estimate to be considered for each parameter.

4.4 Limitations of the Study

This piece of work like any other work in life encountered some of challenges that are worth noting. Although the management of occupational health and safety plays a very vital role on organisation performance and employees productivity, there is, however, other determinants that support organizations performance and employee's productivity which are not focused in this piece of work such as Motivation and Promotion.

The first limitation witnessed during this research work was the language barrier. 90% of the workers of SONARA, DATA and GUINNESS, are French speaking that made it difficult during data collection, as some of the respondents could not understand the questions thus made it difficult for them to express their opinions where needed. Also, most of the CDC banana workers are not literate thus reading and writing was a problem to them.

Another limitation was the reluctance of the respondents in disclosing information with the view that the information will be disclosed to the outside world, and it could be used against the company or the organisation.

Furthermore, there was the lack of secondary data at the researcher's disposal. The organizations were not willing to give out information concerning health and safety e.g. the pass statistics of the different workplace accidents that had occurred and amount spend on injuries and accidents yearly.

Time limitation- In a research work like this, time is essential. Every section of this research was given a timeframe within which it was to be presented. The researcher had limited time base on the program given by the different organisations and the school. Again, because the period for the research is short to allow for adequate data collection on the subject, the researcher was force to sample (6) companies with just (50) respondents from each given a study population of (300) which the researcher use to generalized the result.

CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

This chapter deals with the summary of findings, conclusions, and recommendations. In addition, the chapter offers directions for future research.

5.1 Summary Of Findings

It came out clearly that to have a comprehensive management of occupational health and safety in an organization; it extends beyond the security for employees and employers to third parties or other stakeholders.

Research question one: What are the different workplace hazards that workers are exposed to and their ramification to employees and the organization

CDC

In CDC, a majority of 25 (61.0%) workers said to had ever been affected by a workplace hazard and the most reported hazard was physical 14 (60.9%), followed by chemical hazards 9 (39.1%).

University of Buea

In the University of Buea, less than the majority 11 (30.6%) workers said to had ever been affected by a workplace hazard and the most reported hazard was physical 9 (75.0%).

Presbyterian Printing Press

In Presbyterian Printing Press, a majority 22 (59.5%) of sampled workers had been affected by a workplace hazard and the most reported hazard was physical 13 (61.9%), followed by chemical hazards 9 (42.9%).

Guinness Cameroon

In Guinness Cameroon, less than the majority 10 (25.0%) of sampled workers had been affected by a workplace hazard and the most reported hazard was physical 7 (70.0%) followed by chemical hazards 3 (30.0%).

SONARA

In SONARA, less than the majority 10 (25.0%) of sampled workers had been affected by a workplace hazard and the most reported hazard was physical 8 (80.0%) followed by chemical hazards 1 (10.0%).

Data Electricity

In Data Electricity, a few 3 (15.8%) of sampled workers said to have ever been affected by a workplace hazard and the hazard reported were essentially physical 3 (100.0%).

From the findings based on research question one above; it was clear that physical hazard was the most common in all the companies. Followed by chemical hazard and psychological were mostly frequent at Presbyterian printing press respectively. Meanwhile out of the 81 workers who had been affected by a work hazard, 57 admitted that this posed a threat to their health and 65 affirmed that this affected their productivity, and it was perceived as negative.

Research question two: What are the organization occupational health and safety preparedness measures and their impact on workers' productivity?

CDC

The use of protective devices stands as the highest OHS preparedness measure of the corporation with a weight of (36.6%).

University Of Buea

The use of proper waste disposal was acknowledged as the highest OHS preparedness measure of the institution with a weight of (38.9%).

Presbyterian Printing Press

Meanwhile, the aspect of safety training as part of orientation on first employment and proper waste disposal with the same weights of (27.0%) was acknowledged as the organization's OHS preparedness measure.

Guinness Cameroon

In Guinness Cameroon, the use of protective equipment was seen as the most OHS preparedness measure with a weight of (35.0%).

SONARA

In SONARA use of protective equipment was seen as the most OHS preparedness measure with weight (17.5%).

Data Electricity

In Data Electrical (68.4%) emphasizes was placed on regular monitoring of safety and health standards to ensure effectiveness as the most OHS preparedness measure.

Findings of research question two shows that workers attested to the fact that effective OHS policy has a greater advantage on organization performance and employees' productivity. Also, one remarkable general safety and health precaution that has been put in place by the organizations is the fact that almost all the workers 212 (99.5%) attested that their organization had put in place at least a safety measure e.g. (PPE).

Research Question three: What is the workers' perception of the effect of organizations' health and safety preparedness on their workplace productivity?

CDC

In CDC, the level of OHS preparedness on productivity was perceived as low with a weight of (36.6%).

University of Buea

In UB, the level of OHS preparedness on productivity was also perceived as very low with a weight of (19.4%).

Presbyterian Printing Press

In PPP, the level of OHS preparedness on productivity was seen as a medium with a weight of (54.1%).

Guinness Cameroon

In Guinness Cameroon, the level of OHS preparedness on productivity was perceived as high with a weight of (70.0%).

SONARA

In SONARA (65.0%) also perceived OHS preparedness as high.

Data Electricity

In Data electricity (62.2%) perceived the level of OHS preparedness on productivity as high.

Findings based on research question three indicates that the level of OHS preparedness on productivity significantly differed among organizations ($P < 0.001$) with Guinness Cameroon having the highest proportion with (70.0%) and University of Buea the least with (19.4%) respectively.

5.2 Conclusion

There cannot be any effective management of occupational health and safety policies if both employers and employees fail to perform their respective responsibilities. The employer is supposed to file government accident reports, maintain records on health and safety issues, posting safety notices and legislative information, providing education and training on health and safety. The employer is required to institute a safety committee to be in charge of all health and safety related issues. The safety committee is responsible for studying trends in accidents with the view to making suggestions for corrective actions, examining safety reports and making proposals for avoiding accidents, examining and discussing reports from safety representatives, making proposals for new or revised safety procedures.

It also acts as a link between the organization and the enforcement agency (the health and safety inspectorate), monitoring and evaluating the organization's safety policies, and making proposals for changes, if necessary.

The employee, on the other hand, is required to comply with all health and safety rules, knowing that the person ultimately responsible for his/her health and safety is himself/herself. Staffs are required to wear protective clothing, use equipment and tools provided for their work, and report any contravention of the law by management.

Also, the employee has the right to refuse unsafe work.

Accidents are costly both to the affected worker and the organization. Therefore, every effort should be made to avoid them from happening at the work place.

5.3 Recommendations

The following recommendations were made based on the findings of the study:

CDC

Education and Training: The Management of CDC should organize regular training, workshops on health and safety, seminars on health and safety for staff publish materials on safety and many other steps to inculcate safety consciousness in the minds of workers. Employees should be made to understand that safety and health practices are the responsibility of both management and staffs, and this will go a long way to making the work area safe.

Safe working system: Management should provide and maintain at the workplace, adequate plant and system of work that are safe and without risk to health. There should be regular servicing of machines, plants, and equipment to make them safe for use at the work place. Management should display warning notices on faulty machines and equipment or other potential hazard places to make workers aware of potential danger.

Effective Supervision: Management should provide the necessary information, instruction, training, and supervision having regard to the age literacy level and other circumstances of the worker to ensure, so far as reasonably practicable, the health and safety at work of those other workers engaged on the particular work. Some industrial accidents that happen could have been avoided if effective supervision were carried out during the execution of duties at the work place.

Protective equipment: The provision of protective clothing and putting in place safety and health measures is not enough. Management should put in place a regular monitoring team who will go round to check whether the employees do put on their protective materials given to them before doing their duties and also observe in strict terms safety measures put in place to avoid any mishaps and accidents.

University Of Buea

Safety Training: Management should organize safety training regularly to give workers enough insight of the risk and dangers inherent in their work at the work places. Through education some of these accidents could be minimized if not eradicated entirely. Jobs can also be designed in such a way as to remove all inherent potential dangers to make the work safe for employees.

Protective Equipment: The management of the university should make provision for protective equipment like nose mask especially for library workers, good seating position to avoid back and neck pain, office space to avoid congestion as was the cause of most physical hazards.

Safety Guide book: The management of the university should endeavor to come up with a safety rules and regulation document that is in line with the corporate safety law of Cameroon. Each worker of the institution should be given a copy of this document so as to make safety more meaningful to everyone.

Hygiene and Sanitation: The management should endeavour to make allocations of toilets to the various departments so as to avoid the inconveniences of workers during working hours.

Presbyterian Printing Press

Education and Training: The Management of the organization should organize regular training, workshops on health and safety, seminars on health and safety for staff publish materials on safety and many other steps to inculcate safety consciousness in the minds of workers. Employees should be made to understand that safety and health practices are the responsibility of both management and staffs, and this will go a long way to making the work area safe.

Safe working system: Management should provide and maintain at the workplace, adequate plant and system of work that are safe and without risk to health. There should be regular servicing of machines, plants, and equipment to make them safe for use at the work place. Management should display warning notices on faulty machines and equipment or other potential hazard places to make workers aware of potential danger.

Effective Supervision: Provide the necessary information, instruction, training and supervision having regard to the age literacy level and other circumstances of the worker to ensure, so far as reasonably practicable, the health and safety at work of those other workers engaged on the particular work. Some industrial accidents that happen could have been avoided if effective supervision were carried out during the execution of duties at the work place.

The provision of fire extinguishers in itself is good but not enough. It is recommended that management should take it a point to train staff in the effective and efficient use of fire extinguishers. This may call in the regular conduction of fire drills to ensure that employees are ready to deal with any fire outbreak. Also, emergency alarms should be made available so as to make safety flexible.

The provision of protective equipment: management should endeavor to provide PPE like nose mask and noise protector. Also good seating positions should be provided to avoid long hours of standing that causes waist, leg, back pains and fatigue especially to those at the finishing unit. Office space is also needed to decongest the over crowded finishing room so as to avoid the constant misunderstanding among the temporal workers. Putting in place safety and health measures is not enough. Management should put in place a regular monitoring team who will go round to check whether the employees do put on their protective materials given to them before doing their duties and also observe in strict terms safety measures put in place to avoid any mishaps and accidents.

Safety Guide book: The management of Presbyterian printing press should endeavour to come up with a safety rules and regulation document that is in line with the corporate safety law of Cameroon. Each worker of the institution should be giving a copy of this document so as to make safety more meaningful to everyone.

Guinness Cameroon

A framework on health and safety is recommended based on the five (5s).

- SEIRI- Organisation/ Sort out
- SEITON- Orderliness/ Systemize
- SEISO – Cleaning/ Shine
- SEIKETSU- Standardize
- SHITSUKE – Sustain/ Discipline

SONARA

A framework on health and safety is recommended based on the five (5s).

- SEIRI- Organisation/ Sort out
- SEITON- Orderliness/ Systemize
- SEISO – Cleaning/ Shine

- SEIKETSU- Standardize
- SHITSUKE – Sustain/ Discipline

Data Electricity

A framework on health and safety is recommended based on the five (5s).

- SEIRI- Organisation/ Sort out
- SEITON- Orderliness/ Systemize
- SEISO – Cleaning/ Shine
- SEIKETSU- Standardize
- SHITSUKE – Sustain/ Discipline

To the Government of Cameroon: The Government in collaboration with the factory inspectorate of Cameroon should come up with a blue print to be used as a guide for the design of health and safety policies for industries, companies, and other institutions as this will help in paving the way for sustainable development.

5.4 Suggested Areas for Further Research

The researcher proposes further research to be conducted on other human resource practices that impact positively on organization performances and employees productivity.

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APPENDICES

Appendix A: Questionnaire



PAN AFRICAN INSTITUTE FOR DEVELOPMENT – WEST AFRICA (PAID-WA), BUEA

I am **Agnes NchengAbunaw**, a final year Masters student from the Department of Development Studies, specializing in Strategic Human Resource Management at the Pan African Institute for Development – West Africa (PAID-WA) Buea. As part of the requirements for the completion of my programme, I am carrying out a research on the topic: **Management of Occupational Health and Safety in Selected Organisations of the South West Region of Cameroon.**

Your responses will be anonymous and will not be linked to you personally. Mind you of the fact that, any information provided will be treated with tact and confidentiality.

Kindly provide a tick (✓) where necessary and write out your response as required.

Demographic data

Name: (not compulsory)

Gender: Male () Female ()

Age: 10-20 () 21-30 () 31-40 () 41-50 () 51+ ()

Marital Status: Single () Married () Divorced () Separated ()
Widow/er ()

Level of education: Primary () Secondary () University () Other ()

Employment status: Employed () Unemployed ()

Occupation:

Longevity of service: 3-12 months () 2-5years () 6-9years () 10≥ ()

Income level: (if applicable)

Effects of workplace hazards on employees

1. Have you ever been affected by any workplace hazard? Yes () No ()

2. If YES, which hazard?

a) Physical ()

b) Chemical ()

c) Biological ()

d) Others

3. What was the cause of this incident?

.....
.....

4. Did it pose any threats to your health?

a) Yes ()

b) No ()

5. If YES, in what way?

.....

6. Did it have any impact on your work?

a) Yes ()

b) No ()

7. How was the impact?

a) Positive ()

b) Negative ()

8. List any other 3 common workplace hazards that you know

.....
.....

Impact of occupational health safety on workers' productivity

1. a) Do you think effective OHS policies have any impact on organisational performance and workplace productivity?

a) Yes ()

b) No ()

c) Not sure ()

d) Others (specify)

2. b) If YES, what benefits will employees derive from the effective management of OHS policies?

a) Reduced accidents ()

b) Reduced labour turnover ()

c) Enhancement of organisation's corporate image/reputation ()

d) All the above ()

e) None of the above ()

f) Others, please state.....

3. What are some of the safety preparedness measures put in place by your organisation or company?

a) Safety training as part of orientation on first employment ()

b) Proper waste disposal ()

c) Regular monitoring of safety and health standards to ensure effectiveness ()

d) Use of protective equipment ()

e) Prompt reporting of accidents/injuries ()

f) On-the-job training on safety and health practices ()

g) Insurance ()

h) Others, please specify

i) All of the above ()

j) None of the above ()

4.(a) Does these affect your level of productivity in the workplace? a) Yes () b) No ()

(b) If YES, explain how

.....
.....

5.How satisfied are you with the current occupational health and safety measures put in place by management?

a) Very satisfied ()

b) Satisfied ()

c) Dissatisfied ()

d) Very dissatisfied ()

6.a) Does the organisation have a safety committee? Yes () b) No () c) not sure

6.b) If YES, who is most responsible for your safety and health in the performance of your duties?

a) Management ()

b) Environmental health unit ()

c) Myself ()

d) Others (specify)

Relationship between workers' perception of OHS preparedness and productivity

1. Do you agree that there is a relationship between workers' perception and organisational health and safety preparedness on workplace productivity?

- a) Strongly agree ()
- b) Agree ()
- c) Disagree ()
- d) Strongly disagree

2. What then is the level of emergency preparedness of the organisation?

- a) High ()
- b) Low ()
- c) Medium ()
- d) None of the above ()
- e) Others (specify)

3. How does your answer above, influence your productivity? (Please explain)

.....
.....

4. Indicate some of the things you think management should do to improve upon OHS in the workplace.

- a) Engagement of safety experts to re-design OHS policies for the organisation ()
- b) Constantly reviewing health and safety practices ()
- c) Improvement of good housekeeping and sanitation ()
- d) Creating the environment for staff to freely report on OHS ()
- e) Supervision and safety management ()

- f) All the above ()
- g) None of the above ()
- h) Others, please indicate

5. a) Apart from the above, do you agree that the organisation should implement effective programmes for controlling occupational hazards?

- a) Strongly agree ()
- b) Agree ()
- c) Disagree ()
- d) Strongly disagree ()

5. (b) Please explain your opinion:

6. a) Do you think employees have certain rights and responsibilities with regard to OHS management?

- a) Yes ()
- b) No ()

b) If YES, what are some of the responsibilities and rights?

- a) Provision of safety equipment ()
- b) Reporting any contravention of the law by management to higher authorities ()
- c) The right to refuse unsafe work ()
- d) All of the above ()
- e) None of the above ()
- f) Others, please state.....

Thanks

Appendix B: Interview guide



PAN AFRICAN INSTITUTE FOR DEVELOPMENT – WEST AFRICA (PAID-WA), BUEA

I am **Agnes NchengAbunaw**, a final year Masters student from the Department of Development Studies, specializing in Strategic Human Resource Management at the Pan African Institute for Development – West Africa (PAID-WA) Buea. As part of the requirements for the completion of my programme, I am carrying out a research on the topic: **Management of Occupational Health and Safety in Selected Organisations of the South West Region of Cameroon.**

Your responses will be anonymous and will not be linked to you personally. Mind you of the fact that, any information provided will be treated with tact and confidentiality.

INTERVIEW GUIDE

1. What benefits will management derive from an effective management of OHS policy?
2. Do you agree that there is a relationship between management's perception and OHS preparedness on workplace productivity?
3. What are the OHS challenges faced by the selected organisation?
4. What is management level of OHS preparedness?
5. What are some of the indicators of OHS preparedness in your organisation?

OBSERVATION GUIDE

- Clinic
- Ambulance
- First aid box
- Fire extinguishers
- Safety sign post
- Protective clothing's and shoes (Safety equipments)
- Safety alarms
- Physical environment

Appendix C: Pictures of the different organizations.



i: CDC



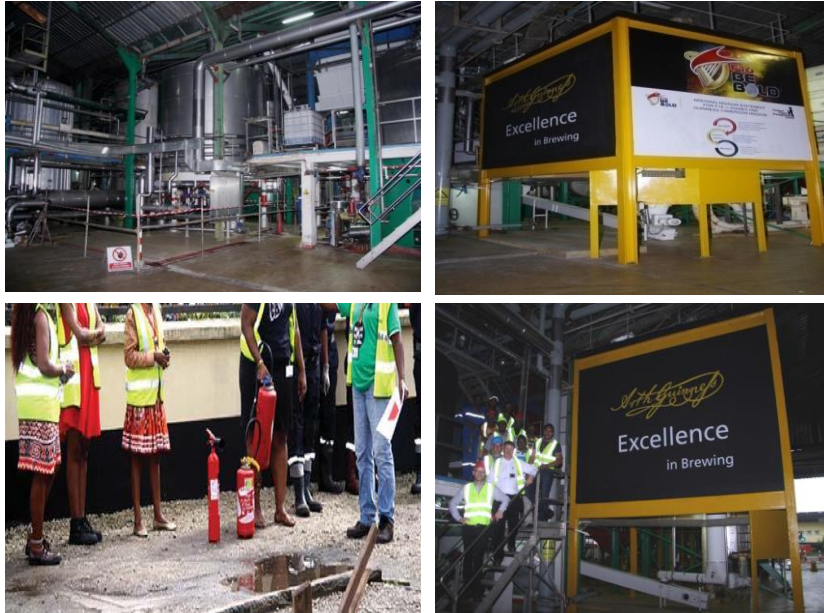
ii: University of Buea/Central administration



iii: Presbyterian Printing Press, Limbe



iv: Guinness Cameroon SA



v: SONARA



vi: Data Electrical Co. PLC