

**EFFICACY OF DISASTER MANAGEMENT PRACTICES IN THE KENYA  
NATIONAL ASSEMBLY AND THE SENATE**

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## DECLARATION

This project is my original work and has not been submitted for examination to any other university or institution.

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## **DEDICATION**

I would like to dedicate this research project to my family members, colleagues and friends who have been very supportive during my time of study. This research project is dedicated to all those who believe in the richness of learning.

## **ABSTRACT**

Disaster management involves education and training of officials, population and all intervention teams as well as establishment of policies, guidance, standards, organizational arrangements and operational plans to be applied following the disaster. The aim of the study was to assess efficacy of disaster management practices in the Kenya National Assembly and the Senate. Objectives of the study were to assess the effectiveness of disaster management facilities, to determine the level of disaster management training, to evaluate the level of compliance to disaster management policies and to find out the nature of disaster response mechanisms put in place. The nature of the study was a cross-sectional descriptive study. The study examined the respondents who were selected using random sampling drawn from the possible population of 220 staff working in the National Assembly and the Senate in Kenya. The population of the study consisted of the staff working in both the Parliament and the Senate. The data was collected and gathered from both primary and secondary sources of information. Data collected was mainly quantitative and analyzed by descriptive analysis techniques using Statistical Package for the Social Sciences. The data was presented in form of pie charts, histograms and bar graphs. The study found that disaster occurred around parliament buildings and that available facilities within were effective in disaster management. The study also established that disaster management training was offered to the staffs in both the chambers. Further, the study established that, to a great extent occurrence of various disasters in the parliament and the country in general affect the level of disaster management equipment in parliament buildings. In addition, Parliament complies with the disaster policies to a very great extent and that parliament considers development of rules and regulations to reduce disaster occurrences and policies in order to strengthen disaster management institutions. Finally, the study revealed that the nature of disaster response mechanisms in the parliament buildings was moderate and stakeholders of disaster response mechanisms in parliament buildings are Parliament Staff and Government Agencies.

## TABLE OF CONTENTS

DECLARATION .....	ii
DEDICATION .....	iii
ABSTRACT.....	iv
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
LIST OF ABBREVIATIONS AND ACRONYMS .....	xi
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 Background to the Study.....	1
1.2.1 The Kenya National Assembly and the Senate.....	3
1.3 Statement of the Problem.....	4
1.4 Purpose of the Study .....	5
1.4.1 Objectives of the Study .....	5
1.5 Research Questions.....	5
1.6 Significance of the Study .....	6
1.7 Assumption of the study .....	7
1.8 Scope of the Study .....	7
1.9 Limitations and Delimitation of the Study.....	7
1.10 Operational Defination of Terms .....	7
1.11 Summary .....	9
<b>CHAPTER TWO .....</b>	<b>10</b>
<b>LITERATURE REVIEW .....</b>	<b>10</b>
2.1 Introduction.....	10
2.2 Disaster Management in Organizations .....	10
2.3 Disaster Management Process .....	11
2.4 Disaster Preparedness Strategies and Approaches.....	14

2.5 Disaster Management Practices .....	15
2.5.1 Disaster Management Training and Advocacy .....	15
2.5.2 Disaster Management Policies .....	17
2.5.3 Disaster Response Mechanism .....	19
2.5.4 Disaster Management Facilities .....	22
2.6 Conceptual Framework .....	24
2.7 Summary .....	26
<b>CHAPTER THREE .....</b>	<b>28</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>28</b>
3.1 Introduction .....	28
3.2 Research Design .....	28
3.3 Area of study .....	28
3.4 Target Population .....	28
3.5 Sample and Sampling Techniques .....	29
3.5.1 Sample Size .....	29
3.5.2 Sampling Techniques .....	29
3.6 Data Collection Methods .....	30
3.6.1 Questionnaires .....	30
3.7 Research Instruments .....	30
3.7.1 Pilot Study .....	30
3.7.2 Validity and Reliability .....	31
3.7.3 Ethical Considerations .....	31
3.8 Data Collection Procedures .....	32
3.9 Data Analysis and Presentation .....	32
3.10 Summary .....	33
<b>CHAPTER FOUR.....</b>	<b>35</b>
<b>DATA ANALYSIS, PRESENTATION AND INTERPRETATION .....</b>	<b>35</b>
4.1 Introduction .....	35

4.2 Background Information of Respondents .....	35
4.2.1 Educational Level or Qualifications .....	37
4.3 Disaster Management in Practices .....	37
4.3.1 Disaster occurrence .....	37
4.3.2 Respondents Opinion on Disaster Experience in Parliament Buildings .....	38
4.3.3 Extent of Disaster Preparedness in the Parliament Buildings .....	38
4.4 Disaster Management Facilities .....	39
4.4.1 Availability of Disaster Management Equipment in the Parliament Buildings .....	39
4.4.2 Factors Affecting Disaster Management Facilities in Parliament Buildings .....	40
4.4.3 Extent of Aspects of Disaster Management Facilities and Level of Disaster Preparedness in Parliament Buildings .....	41
4.5 Disaster Management Training .....	42
4.5.1 Level of Disaster Management Training Available in Parliament Buildings .....	42
4.5.2 Disaster Management Through Education in Parliament .....	43
4.5.3 Disaster Management and Level of Disaster Preparedness in Parliament .....	44
4.6 Compliance to Disaster Management Policies .....	45
4.6.1 Extent Which Parliament Comply with Disaster Management Policies .....	45
4.6.2 Disaster Management Policies .....	45
4.6.3 Disaster Management Policies and Level of Disaster Preparedness in Parliament Buildings .....	46
4.7 Disaster Response Mechanisms .....	47
4.7.1 Nature of Disaster Response Mechanisms in the Parliament Buildings .....	47
4.7.2 Stakeholders of Disaster Response Mechanisms in Parliament Buildings .....	48
4.7.3 Aspects of Disaster Response Mechanisms and Disaster Management .....	48
4.8 Summary .....	49
<b>CHAPTER FIVE .....</b>	<b>50</b>
<b>SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS</b>	<b>50</b>
5.1 Introduction .....	50
5.2 Summary of the Findings .....	50

5.2.1 Disaster Management Practices .....	50
5.2.2 Disaster Management Facilities .....	51
5.2.3 Disaster Management Training.....	52
5.2.4 Compliance to Disaster Management Policies .....	53
5.2.5 Disaster Response Mechanisms.....	54
5.3 Conclusion .....	55
5.4 Recommendations .....	56
5.4.1 Measures to Curb Disaster .....	56
5.4.2 Adequate Facilities.....	56
5.4.3 Employment of High Qualified Staff .....	56
5.4.4 Disaster Management Policies .....	57
5.4.5 Response Mechanisms .....	57
5.5 Suggestions for Further Research .....	57
5.5.1 Strategies for Management Distribution in Parliament.....	57
5.6 Summary .....	57
<b>REFERENCES.....</b>	<b>58</b>
APPENDIX I .....	63
LETTER OF INTRODUCTION .....	63
APPENDIX II.....	64
QUESTIONNAIRE FOR DATA COLLECTION .....	64



## LIST OF TABLES

Table 3.1: Target Population.....	29
Table 3.2: Sample Size .....	29
Table 4.1: Nature of Job.....	35
Table 4.2: Working Experience .....	36
Table 4.3: Disaster Experience In Parliament.....	38
Table 4.4: Factors Affecting Disaster Management Facilities in Parliament .....	41
Table 4.5: Aspects of Disaster Management and the Level of Disaster Preparedness in Parliament.....	42
Table 4.6: Disaster Management Facilities.....	43
Table 4.7: Disaster Management Educational Training Approaches .....	43
Table 4.8: The Level of Disaster Preparedness in Parliament .....	44
Table 4.9: Aspects of Disaster Management Policies.....	46
Table 4.10: Disaster Management Policies and Level of Disaster Preparedness .....	47
Table 4.11: Stakeholders of Disaster Response Mechanisms in Parliament .....	48
Table 4.12: Aspects of Disaster Response Mechanisms and Disaster Management.....	49

## LIST OF FIGURES

Figure 2.1: Disaster Management Cycle (Warfield, 2005).....	12
Figure 4.1: Gender Distribution.....	36
Figure 4.2: Educational Level or Qualifications.....	37
Figure 4.3: Disaster Occurrence .....	38
Figure 4.4: Disaster Preparedness Practices In Parliament.....	39
Figure 4.5: Availability of Disaster Management Facilities in the Parliament.....	40
Figure 4.6: Extent of Compliance in Relation to Disaster Management Policies .....	45

## **LIST OF ABBREVIATIONS AND ACRONYMS**

DM	:	Disaster Management
EIA	:	Environmental Impact Assessment
GoK	:	Government of Kenya
KNDPDM	:	Kenya National Draft Policy on Disaster Management
KRCS	:	Kenya Red Cross Society
TMC	:	Thika Municipal Council
UNDP	:	United Nations Development Programme
UNEP	:	United Nations Environmental Programme
AMISOM	:	African Union Mission in Somalia
PLO	:	
PSC	:	Parliamentary Service Commission
SPSS	:	Statistical Package for the Social Sciences
USA	:	United States of America

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Introduction**

This chapter presents the background information to the study, statement of the problem, objectives of the study and the research questions. In addition, it gives the justification for the study together with the scope and limitations, and definition of the terms used.

### **1.2 Background to the Study**

Disasters are severe disruptions, psychological and psychosocial, which greatly exceed the coping capacity of the affected communities. Disaster could be an event or series of events, which give rise to casualties and/or damage or loss of property, infrastructure, essential services or means of livelihoods on a scale which is beyond the normal capacity of the affected community to cope with unaided. This disruption may create more difficulties than the physical consequences (Quarantelli, 1980:73). Disaster management involves forecasting and taking precautionary measures prior to an imminent threat when advance warnings are possible. Effective plans also consider securing resources, possibly including stockpiling supplies and earmarking funds. The magnitude of a disaster depends on the characteristics, the probability and intensity of the hazard and the susceptibility of exposed elements based on the prevailing physical, social and environmental conditions (Paul, 2002: 44).

Studies in Europe, storms, floods and heat waves are major disastrous threats. In the past 20 years, 953 disasters killed nearly 88,671 people in Europe, affected more than 29 million others and caused a total of 269 US\$ billion economic losses. Italy and Germany have recorded major economic damages mainly due to floods and storms. The number and impacts of disasters increased in Europe in the period 1998-2009. The increase in losses can be explained to a large extent by higher levels of human activity and accumulation of economic assets in hazard-prone areas, but also, to a smaller extent, by better reporting (Boin & Rhinard, 2008: 83). In the last two decades, Spain had the highest number of victims among all European countries and Russia, the highest numbers of disasters.

Africa suffers 60% of all disaster-related deaths in the world. This is probably due to the type of hazards that affect this continent, to under-reporting, and to the fact that under the circumstances prevailing in Africa, it is easy for any disaster to escalate and multiply its impact. Africa's natural hazards are mainly epidemics, endemic diseases, drought, floods, agricultural pests and bush fires, but some areas are also susceptible to earthquakes, cyclones and volcanic eruptions. The natural hazards interact with manmade ones, such as armed conflicts, air, road and railway accidents, other industrial hazards such as mining accidents, chemical spills, etc., and with widespread vulnerability (Buchanan, 2000: 79). The Nigerian Institute of Policy and Strategic Studies Library experienced electrical failure resulting in fire that destroyed many books, artefacts, and other monuments in 1987. Floods in Mozambique in 2000 sparked major emergency relief as hundreds of people lost lives and thousands were displaced from homes (Brickett et al., 2007: 85).

Kenya's disaster profile is dominated by droughts, fire, floods, terrorism, technological accidents, diseases and epidemics that disrupt people's livelihoods, destroy the infrastructure, divert planned use of resources, and interrupt economic activities and retard development (Ministry of State for Special Programmes, 2009: 11). In the recent past fires, floods and collapsing of buildings have been the most rampant in urban centers in Kenya (Khan, Himayatullah & Abuturab, 2011: 89). Majority of these disasters could have been prevented or losses mitigated if proper disaster preparedness measures were in place. In 2009, fire broke out at the Nakumatt Supermarket Downtown branch in Nairobi's Central Business District, where some 56 people were confirmed dead, although their lives could have been saved if there were adequate escape routes, and staff trained on fire disaster management (Kenya Red Cross Annual Report, 2009: 12).

In 2009 along Nakuru- Eldoret highway a long haul trailer ferrying petroleum products towards Eldoret overturned at Sachangwan in Molo district, and 144 people died (Government of Kenya, 2009). Most of these deaths occurred due to the slow and uncoordinated response by those who turned out to respond to the disaster. The cause of the fire was largely said to have been ignorance of the members of the public concerning

the effects of smoking near highly inflammable substances such as petrol. The most recent cases of disaster include the Sinai fire tragedy of 12<sup>th</sup> September 2011 which claimed over 100 lives and left hundreds homeless and scores injured. Others include the; Kimathi house fire which razed down property as the fire fighters helplessly watched on and the Kibera fire tragedy which engulfed property without salvage because roads were impassable due to encroachment of buildings on the road reserves.

For the last two decades, Kenya has been the scene of various attacks attributed to terrorist elements. In 1980, the Jewish-owned Norfolk hotel was attacked by the PLO. The 1998 United States of American (USA) embassy attack in Nairobi made both the United States and Kenya more aware of the threats posed by foreign terrorists. In the incident, people were killed and thousands injured, prompted Kenya to begin – albeit slowly – more concerted counterterrorism strategy (Krause & Otenyo, 2005: 123).

### **1.2.1 The Kenya National Assembly and the Senate**

The New Kenya Constitution created a two-chamber Parliament; the National Assembly (Lower House) and the Senate (Upper House). The National Assembly have 290 members elected from all constituencies, 47 women each elected from the counties and 12 members nominated by parliamentary political parties according to their strength in the National Assembly (Article 90) to represent special interests: the youth, people with disabilities and workers. The other member of the National Assembly, in ex officio capacity, is the Speaker.

The Senate has 47 members each elected from a county, 16 women members nominated by political parties according to their strength in the senate (Article 90), two members (a man and a woman) representing the youth, two members (a man and a woman) representing people with disabilities), and the Speaker who is an ex officio member. The Senate is the backbone of the counties, and its actions is determine the effectiveness of the devolved units in delivering services to Kenyans. The second function of the bicameral parliament is to create an appellate hierarchy in the enactment of Laws, i.e. giving an opportunity to one chamber to review Laws and decisions of the other chamber.

The Senate is supposed to be both reactive and proactive. Article 109 allows a Bill concerning a county to originate from the Senate (but it must be considered by the National Assembly from which it did not originate (Articles 111 and 112). If a Bill relates to election of members of county assemblies or a county executive (also called a ‘Special Bill’ under Article 111), it may be vetted by the National Assembly through a resolution supported by two-thirds of its members.

The role of the National Assembly is to enact legislation, determine the allocation of revenue between the levels of Government, oversee national revenue, expenditure and State organs and approve declaration of war and extensions of states of emergency. The Senate represents the counties and protects their interests. It participates in lawmaking, debates and approves Bills concerning counties (Articles 109-113). It determines the allocation of national revenue among counties (Article 217), and exercises oversight over national revenue allocated to the county governments. The Senate participates in the oversight of State officers by determining resolutions to remove the President or Deputy President from office (Article 45).

### **1.3 Statement of the Problem**

In the last two decades, Kenya has continued to face rising degree of vulnerability to disaster risk. This risk is the probability of hazard turning into disaster, with households or communities being affected in such manner that lives and livelihoods are seriously disrupted beyond the capacity to cope or withstand using own resources, with the result that affected populations suffer serious widespread human, material, economic or environmental losses. Communities are predisposed to disasters by combination of factors such as poverty, aridity, settlement in areas prone to perennial flooding or areas with poor infrastructure and services such as the informal urban settlements or even living in poorly constructed buildings. The Kenya Government has in the face of increasing disasters taken several steps towards disaster mitigation and reduction. The government also formulated the National Disaster Management Policy in which disaster preparedness, mitigation, prevention measures and response mechanisms have been identified as important elements in effective disaster management (Republic of Kenya,

2004: 13). It would be expected that the community that has lived through disaster would learn from the experience and thus be better prepared if faced with similar situation. Central to this preparedness is the community's perception relating to the disaster that may be influenced by its socio-cultural-religion-economic status.

#### **1.4 Purpose of the Study**

The aim of the study was to assess efficacy of disaster management practices in the Kenya National Assembly and the Senate.

##### **1.4.1 Objectives of the Study**

The objectives of the study were to:

- i. Observe the effectiveness of disaster preparedness facilities in the Kenya National Assembly and the Senate.
- ii. Survey the level of disaster management training offered in the Kenya National Assembly and the Senate.
- iii. Establish the level of compliance to disaster management policies in the Kenya National Assembly and the Senate.
- iv. Examine the nature of disaster response mechanisms available in the Kenya National Assembly and the Senate.
- v. Establish major challenges facing disaster management in the Kenya National Assembly and the Senate.

#### **1.5 Research Questions**

The study was guided by the following research questions:

- i. Which disaster management facilities are available in the Kenya National Assembly and the Senate?
- ii. What is the level of disaster management training offered in the Kenya National Assembly and the Senate?
- iii. What is the level of compliance to disaster management policies in the Kenya National Assembly and the Senate?



- iv. What disaster response mechanisms that are put in place in the Kenya National Assembly and the Senate?
- v. What are the challenges experienced in disaster management practice in the Kenya National Assembly and the Senate?
- vi. What are the perceptions of parliamentary staff towards disaster management in the Kenyan National Assembly and the Senate?
- vii. What disaster management techniques are offered during disaster management training in the Kenya National Assembly and the Senate?

### **1.6 Significance of the Study**

Findings of the study will benefit various groups who are directly involved when losses occur due to disaster. Findings of the study should enable the management(s) to put in place mechanisms to mitigate losses in case of disaster occurrences. The safety measures put in place can also reduce the amount of premiums charged by insurance companies in the long run if their claims reduce significantly over the years.

Findings and recommendations of the study are hoped to arouse security and safety consciousness. This would help to avoid panic in the event disaster strikes and drastically reduce injuries and losses. In addition insurance companies would benefit from reduced cases of claims. This would then enable the authority and security personnel mandated to secure National Assembly and senate to invest the money collected in form of premiums. The insurance companies would also reduce premiums and attract more clients.

Policy makers within the municipalities may rely on the recommendations to come up with relevant policies for curbing and mitigating losses caused by disasters in the country and elsewhere. The government through the local government would get the actual picture and situation about the necessary equipment to check incidences of disaster.

Future studies would use the findings of the study as the basis for further research. This would reduce unnecessary duplications and improve the quality of research being carried out in the country. The study also provide ready data for reference to various scholars and policy makers.

### **1.7 Assumption of the study**

The staff are conversant with the disaster preparedness practices at the Kenya National Assembly and the Senate in case of any disaster occurrence. The disaster policies and training manuals are available for clients in relation to disaster management.

### **1.8 Scope of the Study**

The study was carried out in the parliament buildings where it focused more on disaster management in Kenyan National Assembly and the Senate. Study involved collecting information from the security officers and other mandated authority to secure National Assembly and Senate. The information was important in collecting the data required to gain more knowledge on disaster management. The study focused on the available literature on disaster management.

### **1.9 Limitations and Delimitation of the Study**

Some respondents were not willing to divulge much information for fear of the researcher being a government officer because of the nature of questions that will be asked. This was from the staff of the various departments. The researcher overcome this through constant assurances to the respondents that all information gathered was to be purely for research and academic purposes only. The researcher overcame this through convincing the management(s) that they stand a chance to benefit if this research will be carried out successfully as the findings would be shared with them.

### **1.10 Operational Definition of Terms**

#### **Disaster**

Disaster can be defined as a serious disruption of the functioning of the society causing widespread human, material or environmental damage and losses which exceed the ability of the affected community to cope using their own resources.

#### **Disaster Risk Management**

Systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

### **Disaster Prevention**

Refers to steps that can be taken within an organization to protect property and lives before a disaster occurs. These may include; establishment of security routines; follow local and state fire codes such as the presence of fire alarms, smoke detectors, fire extinguishers, and sprinkler systems.

### **Risk Assessment**

Methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.

### **Disaster Recovery**

Disaster Recovery refers to the response and actions organizations take after a disaster occurs. These include: always place human safety first: in the event of an emergency, prevent staff and volunteers from entering the building until disaster officials (fire or police department), or a building inspector certifies the building is safe to enter; allow only authorized staff and volunteers into the damaged area, use check-in/out sheets to monitor access; contact insurance carriers

### **Risk**

Risk is the probability of harmful consequences or loss resulting from the interaction between natural hazards and vulnerable conditions of property and people.

### **Hazard**

Potentially damaging physical event, human activity or phenomenon with a potential to cause loss of life or injury, property damage, social and economic disruption of life, environmental degradation among other effects

### **Mitigation**

Mitigation embraces measures taken to reduce both the effect of the hazard and the vulnerable conditions to it in order to reduce the scale of a future disaster. Therefore

mitigation activities can be focused on the hazard itself or the elements exposed to the threat. Examples of mitigation measures which are hazard specific include water management in drought prone areas, relocating people away from the hazard prone areas and by strengthening structures to reduce damage when a hazard occurs.

### **1.11 Summary**

Kenya has continued to face rising degree of vulnerability to disaster risk. This risk is the probability of hazard turning into disaster, with households or communities being affected in such manner that lives and livelihoods are seriously disrupted beyond the capacity to cope or withstand using own resources, with the result that affected populations suffer serious widespread human, material, economic or environmental losses. The level and nature of skills and knowledge in disaster management in any institution serves to complement the existence of disaster management equipments and facilities. Institutions with high level of skills and knowledge in disaster management are more likely to cope better in case of a disaster as compared to one with low levels of skills and knowledge.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section analyses existing literature on disaster management. It explores concepts and strategies employed in disaster management and preparedness whereby it gives emphasis to the disaster cycle management concept and its components. It ends with a theoretical framework.

#### **2.2 Disaster Management in Organizations**

World Disaster Report (2010: 49), indicates escalation of disastrous events across the global has attracted increased focus on the issue of disaster management. At present, many countries spend significant percentage of budget allocations to mitigate and prepare for disasters in order to minimize losses arising from such events. Over the years, Kenya like other countries of the world has been exposed to variety of disasters such as droughts, fires, floods, HIV/AIDS, industrial accidents, and terrorism instigated incidents, among others. Just like in many other countries in Africa and elsewhere in the world, the frequency of disasters increases daily. In many cases the disasters have resulted into increase in the number of people affected, property damaged and other economic opportunity losses.

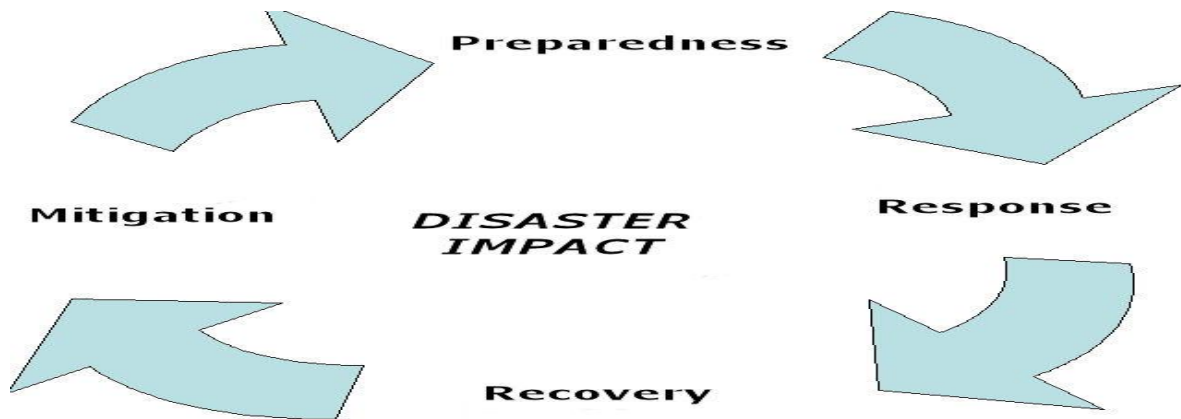
Disaster impacts have become impediment to sustainable development in Kenya (GOK, 2009). Draft National Policy for Disaster management in Kenya (2009: 12), indicated that the 1999 – 2001 droughts was the worst in the last 100 years. Where most parts of the country including some high potential areas were affected. In late 2000, four and half million people across most parts of the country had lost the source of livelihood. The 1998 bomb blast at the United States embassy in Nairobi, destroyed several properties, killed people, and various economic opportunities lost. In addressing disaster issues in this country, the government has always relied on pieces of legislations and other national documents which include the Environmental Management and Coordination Act No.8 of 1999, Kenya Red Cross Society Act (Cap 256), Water Act (Cap 372), Grass Fire Act (Cap327), Petroleum Act (Cap 116), 4.2.6, Explosives Act (Cap 115), St. Johns

Ambulance of Kenya Act (Cap 259), Factories Act (Cap 514), Local Authority Act (Cap 265), Chief's Act (Cap 128), Children's Act (Cap 141), Police Act (Cap 84), Prison's Act (Cap 90) , Sessional Paper No.10 of 1965 on African Socialism and application.

### **2.3 Disaster Management Process**

With advancements of science and technology, including early warning and forecasting, together with innovative approaches and strategies for enhancing national and international capacities, the impact of disasters is predicted, mitigated and detrimental effects reduced. Carr (1998: 209) noted that, “so long as the ship rides out the storm, so long as the city resists the earth-shocks, so long as the levees hold, there is no disaster. It is the collapse of the cultural protections that constitutes the disaster proper”. The study is alluding that the disaster only occurs if society fails to prepare and put measures in place, thus exposing itself to vulnerability. The reason of the argument is that society has the capacity to recognize the risks and factors that could lead to or cause disasters and invoke appropriate interventions to control or manage the effects. The arguments may be true, although it remains uncertain as to what society could do to avert natural event with no history to facilitate predictability. It additionally fails to recognize the inadequate resource endowments to some communities. Indeed, lack of resource empowerment pushes some communities to be exposed to disasters. Rural communities may have no other alternative but venture into caves to fetch water only to be buried alive by the collapsing walls of the affected place. Despite this argument, it is agreeable that the community cannot just sit and wait for the disaster to come, particularly if the event is predictable.

Wartfield (2005: 23) argues that, disaster management is a cyclical series of events involving activities which can be taken before, during and after a disaster. Disaster management cycle is the illustration of the ongoing process by which governments, businesses, and civil society plan for and reduce the impact of disasters, react during and immediately following a disaster, and take steps to recover after a disaster has occurred.



**Figure 2.1: Disaster Management Cycle (Warfield, 2005)**

The same author highlights that the primary focus of disaster management is to minimize disaster impacts through series of actions which include mitigation, preparedness, response and recovery. The process also aims at preventing disasters wherever possible or to mitigate those which are inevitable. The disaster management cycle starts with mitigation ending with recovery, which involves putting the society or the affected in a condition equal to or better than it was before the disaster took place. Over time the cycle has been improved to include other activities critical to disaster management. Unlike the initial Warfield’s disaster management cycle, the new cycle looks at disaster management as the process that is undertaken at three different stages: pre-disaster stage, during the disaster and post disaster stages. Each of the stages involves various disaster management activities, characterized by several activities all of which are aimed at reducing disaster impact.

Pre – disaster stage involve activities taken to reduce human and property losses caused by a potential hazard such as carrying out awareness campaigns, strengthening the existing weak structures, preparation of the disaster management plans at household and community level. The activities include mitigation and preparedness. The underlying assumption here is that disasters are inevitable and will strike at a time little known by anybody (Joshi, 2008: 111).

Generally, mitigation refers to those measures and policies put in place to reduce the impacts of a disaster (Quarantelli 1997: 44). Sutton and Tierney, (2006: 77) define

mitigation in terms of actions that are taken well in advance of disasters that are designed either to avoid or reduce disaster-related damage. The action include hazard assessment and identification, vulnerability analysis, putting in place the right infrastructure and ensuring up-to-date logistics, proper education and public awareness. In some cases, mitigation can also include moving neighborhoods and communities to other locations in order to avoid future losses. According to the National Research Council (NRC 2006: 86) report mitigation also consists of practices that are implemented before impact and provide passive protection at the time impact occurs.

The stage of disaster management deals with very critical times of disaster management. It involves activities which must be made to occur first and fast but with a high degree of detail and precision (IFRCRCS, 2005: 93). These include initiatives taken to ensure that the needs and provisions of victims are met and suffering is minimized. These can be referred to as disaster response activities. The aim of this stage is to provide immediate assistance to maintain life, improve health, and to support the morale of the affected population. This involves the inclusion of such assistance as provision of transportation to the injured, temporary shelter, and food, establishment semi-permanent settlement in camps and other locations. It also may involve initial repairs to damaged infrastructure.

Post disaster stage involves initiatives taken in response to a disaster with a purpose to achieve early recovery and rehabilitation of affected communities, immediately after a disaster strikes (UN, 1997: 77). The National Research Council (2006: 55) report emphasizes the importance of both emergency preparedness and disaster recovery preparedness as major activities of this stage. The report stresses that response and recovery preparedness involves distinct sets of activities. Emergency preparedness provides short-term solutions during an emergency response that will support the longer term efforts of disaster recovery. Disaster recovery preparedness practices involve participating in activities and gathering materials needed “to provide rapid and equitable disaster recovery after an incident no longer poses an imminent threat to health and safety” (NRC 2006: 86).



## **2.4 Disaster Preparedness Strategies and Approaches**

The literature gives universal support to community development approaches including the capacity building through mitigation, preparedness and recovery strategies including facilitating bonds between ‘like’ groups such as family and friends, bridges to other networks which provide new opportunities and links with government and other powerful institutions. Recent research demonstrates that a number of Commonwealth and Territory Government environmental and arts institutions are not necessarily prepared in relation to a major natural disaster (Commonwealth 2008: 97). There was a perception, for example, in the Canberra Bushfire Research (2007: 5) that some institutions regarded offers of help after the 2003 bushfires as obstructive while others slavishly adhered to policies and procedures which did not allow for creative ways of working in the face of large scale emergencies. Communities themselves are central to the recovery process and recovery is best achieved “when the affected community is able to exercise a high degree of self-determination” (EMA 2004: 3). This fundamental principle underpins the considerable efforts of recovery managers in recent Australian and international disasters to actively use community development strategies.

Literature in Europe and America context emphasizes that physical recovery of the built environment must be based on long-term strategies of sustainability such as adopting mitigation measures that prevent or reduce the effects of future hazard events. Critical part of achieving sustainable infrastructure, employment and business recovery is the identification of capacity and skills needed, the provision of information for re-building, special arrangements for handling insurance and prompt restoration of trading. The literature indicates a lack of attention in the Australian context to the opportunities that disaster mitigation, preparedness and recovery activities offer community capacity building (Emergency Management Australia, 2004: 133). This stands in contrast to some of the international literature, particularly in developing countries where the involvement of young people and other community members in mitigation, preparation and recovery activities plays a dual role of building social capital and preparing communities for the next disaster. There are various strategies and approaches that have been adapted by

organizations and institutions in disaster preparedness that include, making disaster risk reduction a priority, improving risk information and early warning, building a culture of safety and resilience, reducing the risks in key sectors, and strengthening preparedness for response.

## **2.5 Disaster Management Practices**

### **2.5.1 Disaster Management Training and Advocacy**

Disasters provide opportunity for governments to use emergency powers to acquire sites, assemble land and rationalize land use patterns. Such programmes are also used to improve the housing conditions of the poor by training in disaster resistant housing construction methods. In this way, the effects of the calamity are changed to the advantage and the disaster becomes the agent for change, leading eventually, to improved human settlements. Disaster management training through public education and other information is informative and helpful in disaster preparedness (Waugh, 2000: 39). This includes not simply help to get the job but training for the service, special service for the disabled and the young, special schemes for the unemployed, working conditions of the employed, income levels, distribution and maintenance, training and retraining for specific employment and industrial relations. Involves also the education and training of officials and population at risk, training of intervention teams, and establishment of policies, standards, organizational arrangements and operational plans to be applied following a disaster.

Training of the stakeholders or partners in disaster management is very crucial. The importance of personnel training in disaster response cannot be overemphasized. In this area, assessment of available courses is essential. The courses should be tailored to the needs of various disaster types and situations (Kanwar, 2008: 163). The rationale behind this is that different disasters need different types of health sector response and personnel requirement. Specialized courses in first aid, surgery, and health education should be mounted to the health care personnel involved in disaster work. In addition, the training of trainers should be revitalized to meet the needs and emerging challenges of disasters. This should be done to all the various cadres and specialties of the personnel involved in

disaster operations. The trainers should be well versed with knowledge of current treatment and medical disaster response mechanisms to impart it to the trainees. In fact, it is only through this that the involved personnel becomes effective and efficient in service delivery in emergency situations.

Effective plans consider securing resources, possibly including stockpiling supplies and earmarking funds (Randolph, 1998: 126). Development of disaster management strategies and disaster mitigation projects training of staff in specialized fields of disaster management, capacity strengthening of the committees and sectoral departments in disaster management and responding to disasters. The focus for training human service workers is on learning skills rather than knowledge. The author again adds that, one emphasis of a disaster preparedness plan should be to anticipate the requirements for the disaster relief operation and the most effective ways of meeting those requirements.

Training of implementors portions of the disaster preparedness plan is essential. Those responsible for issuing warnings must be trained as well responsible to offer direct relief functions (Haddowand, 2006: 78). Training cannot be a one-time event but includes refresher courses that are essential in imparting learning and knowledge skills. Haddowand, (2006: 44) specifically emphasizes, on the need for training for those responding to a disaster situation, arguing that such training should be able to differentiate between speed and timeliness. Haddowand, (2006: 66) & Nicholson, (2005: 69), note that “although many communities once had excellent knowledge about natural disasters,” new conditions and situations can rapidly make that information obsolete.

Recognizing the great importance of training in disaster preparedness, the Kenya Disaster Management Draft Policy (2009: 22) articulates that “there is clear evidence from all parts of the globe that advocacy is necessary to raise stakeholders’ awareness on the need to participate in disaster management and promote and embed a culture of disaster prevention. Training posits crucial feedback to communities, governments and partners at all levels. Advocacy also sensitizes the population and increases the general

understanding of disasters likely to face and precautions to be taken. The draft also opines that enhanced training on disaster management is crucial and should be undertaken continuously through the media, private sector and among other stakeholders (Kenya DM, 2009: 105). Appropriate baselines and monitoring information is vital component of disaster management. The information must be well linked to decision making and response system to ensure timely action. Population may be affected by disasters whose impacts may have been avoided or minimized with early risk information dissemination. Disaster management requires capacity building for undertaking relevant research using appropriate technology. The policy recognizes the need for research on disasters and their management in collaboration with local, regional and international learning institutions (Kenya, 2009: 46).

The draft policy notes that for effective disaster management and sustainability of development programmes, capacity building and training are essential. Although Currently no comprehensive training programme exists”. In addition, the Kenya Red Cross Society and other organizations do have varying levels of disaster management training programmes in place that can be drawn upon (Kenya, 2009: 29). Referring to the 1997-1998 El-Nino rains, UNDP observes that the floods affected populations that had just began the long process of recovery from the severe drought of 1995-1996. This was the disaster whose severity was intensified by the existence of a fragile and vulnerable society. The same report observes that inhabitants especially in the ASAL areas lost 80 % of goats, sheep and camels, and that the area suffered significant damage to roads, bridges, human settlements and other infrastructure (UNDP, 2003: 58).

### **2.5.2 Disaster Management Policies**

Disaster management is often used in general sense, covering the implementation of disaster preparedness, mitigation, emergency response and relief and recovery measures. More general term ‘disaster reduction or disaster risk reduction’ is often used to mean the broad development and application of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout the society, through prevention, mitigation, and preparedness (Twigg, 2004: 141). Public policy makers generally organize both

research and guidance around four phases of disaster loss reduction: mitigation, preparedness, response, and recovery.

Awareness of the need for integration between disaster preparedness and long term mitigation and acceptance of the need to address the wider social-economic dimensions of vulnerability, did not become widespread until the 1990s, and even to date such views are far from being fully accepted (Twigg, 2004: 13). The author adds that, numerous progress towards the goal of a 'culture of prevention' has been made in many countries as shown in the development of laws and policies, improved institutional frameworks and planning, and a growing number of risk reduction initiatives in developed and developing countries.

On policy responses with regard to disaster preparedness in Africa, there have been no concerted regional efforts to manage disasters. Most of disaster responses initiatives in Africa have tended to focus on national and small extend sub-regional levels. Most of the efforts in Africa have actually concentrated on responses rather than mitigation through improved environmental management, Agricultural practices and physical planning (UNEP, 2002: 77). Policies to strengthen the preparedness of the United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies by requiring a national domestic all-hazards preparedness goal, establishing mechanisms for improved delivery of Federal preparedness assistance to State and local governments, and outlining actions to strengthen preparedness capabilities of Federal, State, and local entities.

Workplace rules are elements such as policies, work processes, work behaviours, and employee attitudes that result in the actual outputs of the government work unit. Disaster management plans should include policies for personnel notification, staffing, and recall. Determination of who'll be responsible for continually assessing resources and capabilities should be made. Plan for how information is communicated to staff and public should also be included as well as central command or operating centre. More importantly the staff should review all plans and participate in drills periodically. If

indicators are to play an important role in the creation of better policies in societies, these problems must be avoided. Previous developmental policies and disaster planning, when applied to similar natural hazards in countries at various levels of development, produce variety of results when disasters occur. In Kenya, The National Policy on Disaster Management emphasizes preparedness on the part of the government, communities and other stakeholders in disaster risk reduction activities. Policy also aims to establish and strengthen disaster management institutions, partnerships, networking and mainstreaming of disaster risk reduction in the development process so as to improve the resilience of vulnerable groups to cope with potential disasters.

Kenya's failure to put in place comprehensive disaster preparedness policy means the response to high-risk events such as droughts, floods, epidemics and major accidents tends to be slow, poorly coordinated and unnecessarily expensive (Republic of Kenya, 2004: 33). As a result of the policy gap, most disaster response initiatives tended to be ad-hoc and short term, mainly comprising emergency relief. Disaster management policy would also help vulnerable communities by developing coping mechanisms and diversifying their livelihoods.

### **2.5.3 Disaster Response Mechanism**

Coordination in humanitarian responses to disasters is not simply specific set of actions rather approach to emergency response that attempts to maximize the benefits and minimize inefficiencies. This involves various stakeholders such as the government, international organizations, civil society and affected communities coming together to provide an appropriate, efficient and inclusive response to disasters (Gordon, 2004: 57). Process includes coordination and collaboration through different phases of the response including planning, operations, data collection, information management and resource mobilization. Indeed, common knowledge dictates that the immediate aftermath of disaster is characterized by highly complex (albeit chaotic) situation. The complexity is the result of sheer enormity of urgent as well as important tasks involved in disaster response - rescue and relief provision, issues of access to the affected populations, threat of secondary disasters, influx of stakeholders interested to assist the disaster affected

families, sectoral concerns, policy directives, long term sustainability issues and political dynamics.

All these factors have to be managed in a manner that is locally appropriate as well as timely. Coordination is critical success factor for organizing adequate disaster response and recovery as well as successful disaster risk reduction. This helps to ensure that resources are allocated properly; avoiding duplication, plugging gaps, response efforts as well as building collective focus on sustainable recovery and long-term risk reduction. Coordination can be used to ensure a response that is appropriate to the socio-cultural, economic and geographic context of the disaster situation. Emergency response facilities, communication systems and early warning networks are invaluable assets in preparing for and responding to disasters. Disaster management should include administrative decisions and operational activities that involve prevention, preparedness, response, recovery and rehabilitation at all levels. Disaster management does not only involve official bodies; businesses, people, non-governmental organizations and community based organizations but also play vital role. Awareness of disasters and one's vulnerability to such events, however, reduces the impacts of such events. Godshalk (1991: 46) equates preparedness to actions taken in advance of the emergency, to develop operational capabilities and to facilitate an effective response in the event an emergency of that nature occurs.

Through proper response, emergency assistance to victims of disaster is provided. The fire brigades and police are the usual primary responders. This is because response entails all the interventions taken immediately prior to and following the disaster impact (Office of the President 2001, Government of Kenya, 2001). Importantly, such actions are directed towards saving lives, providing basic necessities, protecting property and dealing with the immediate damage caused by disaster. The activities of the government, community and other partners in terms of directing resources during disasters to save lives, property and the environment constitute response. Despite the existence of different approaches to disaster management, disasters are often managed haphazardly.

People are unprepared, and when the event occurs (even slow-onset disasters) it usually triggers haphazard reactions, which often result in crisis management. Effective preparedness and response activities help save lives, reduce injuries, limit property damage, and minimize all sorts of disruptions that disasters cause (Mileti, 1991: 122). Preparedness measures such as the maintenance of inventories of resources and the training of personnel to manage disasters are other essential components of managing disaster. Furthermore, this should be ongoing, regular function of local government departments. These measures can be described as logistical readiness to deal with disasters and enhanced by having response mechanisms and procedures, rehearsals, developing long-term and short-term strategies, public education and building early warning systems.

If the disaster does occur then response and relief have to take place immediately; without any delays. Delays occurs if government departments and municipalities have no clear plans to manage the events. In particular it is therefore important to have contingency plans in place. Search and rescue plans need to be clear and all role players need to know individual functions in such activities. Basic needs such as shelter, water, food and medical care also have to be provided and a plan needs to be in place outlining who is responsible for such activities. Each of the disasters has own peculiarities in terms of occurrence, speed and type of response, logistics and the amount and type of resources needed to address the events (Maingi, 2009: 17). In terms of speed of occurrence, for instance, the El-Nino phenomenon was slow onset natural disaster that provided for opportunities to plan for its consequences, but this was missed partly due to lack of definite system of disaster mitigation, preparedness, response and recovery in the country. On the other hand, the Nairobi US Embassy Bombing and the Sachang'wan trailer tragedy were sudden types of disasters that could have been handled more effectively by higher state of preparedness and response mechanisms. These and other disasters have made it very clear that there are serious flaws in disaster management system.



Emergency preparedness and disaster recovery preparedness are two situations that need to be well in place although response and recovery involve distinct sets of activities. For organizations, multi-organizational response networks, and communities, preparedness activities center on the development and adoption of formal disaster plans, memoranda of understanding, mutual aid agreements, and other agreements that facilitate coordinated response activities. Technologies to assist with important crisis-relevant tasks such as public warning are also critical for effective response. Communications and warning systems are essential to any business operation or community emergency response. These are needed to report emergencies, warn personnel of the danger, keep families and off-duty employees informed about what is happening at a facility or within department, coordinate response actions, and keep in contact with customers and suppliers. Preparedness for communications and warning include the development of communications plan, establishment of a warning system including developing protocols and procedures, regular testing and support, and addressing the interoperability of multiple responding organizations and personnel.

From the foregoing, to empower the disaster practitioner appropriately in the society is needed for various emergency situations. This goes a long way in improving the disaster response and social service mitigation activities for efficient and effective disaster management within societies in the world. Paradoxically, the existing international tools and structures for disaster response and management are oriented toward large-scale disasters.

#### **2.5.4 Disaster Management Facilities**

Disaster preparedness practices involve the development of plans and procedures and the acquisition of facilities, equipment, and materials needed to provide active protection during emergency response (NRC, 2006: 45). For organizations, multi-organizational response networks, and communities, preparedness activities center on the development and adoption of formal disaster plans, memoranda of understanding, mutual aid agreements, and other agreements that facilitate coordinated response activities. The concept of mutual aid or sharing of personnel, equipment, and facilities which occurs

when local resources are inadequate to meet the needs of the disaster is applicable across a wide spectrum of groups, organizations, and jurisdictional levels (McEntire, 2006: 126).

Addressing the need for appropriate and sufficient resources is generic preparedness task, even though specific resources needed to deal with different types of disasters vary. In cases in which hazard agents require distinctly different responses, hazard-specific planning, training, and resources are required (Weldon, 2005: 205). Hurricane preparedness stresses evacuation over all other self-protective measures, preparedness for some types of hazardous materials releases may emphasize sheltering in place. Similarly, exotic disaster agents such as dirty bombs and blister agents, which are addressed in some planning scenarios, present challenges that are common to other extreme events but also require special training and equipment. Requirements to meet disaster needs depends upon the types of disasters the plan anticipates. Such needs should be made explicit, and should cover all aspects of disaster relief and recovery implementation. Specific arrangements should be established whereby each party has written agreements to secure goods and services as required (World Health Organization, 1990: 23). Critical issues include special internal arrangements for the acquisition and disbursement of funds; policies and agreements for the use of other's equipment and services; and emergency funding strategies. Management tends to insure only the equipment which is easy to value in terms of cash rather than the collection.

Disaster preparedness requires that the funds, materials, equipments, personnel, inputs and methods of delivery of assistance for responding to disasters, especially those required on emergency or short-term basis, are available or acquired quickly enough to be effective. In this case, national, regional and international agencies need to act immediately to ensure that resources are found and made available to meet the needs in the emergency situation (Perry & Lindell, 2006: 105). Importantly, the actions of these agencies should be closely coordinated for effective disaster management. For this to be attained the results of impact and needs identification and assessments should be quickly disseminated to enable the mobilization of national and international resources, including

the release of pre-positioned funds, food and non-food items. Appeals for assistance should be rationalized and harmonized and coordinated appeal is in fact the requirement of donors.

Across guidance for all hazard-types, life safety and property protection for businesses emphasize three activities, assembling disaster supplies kit; performing structural mitigation activities (retrofitting buildings, ensuring good roof condition, and clearing buildings of any flammable or combustible materials) and non-structural mitigation activities (bolting heavy objects to walls, moving stored items to lower shelves) and establishing preventive maintenance schedules for all systems and equipment (ECOSOC, 2005: 36). In Kenya, the National Disaster Management Policy draft encourages and empowers the culture of well-structured disaster management systems and tools, supported and delivered by carefully selected and trained human resources provided with appropriate, well sourced material and equipment (Republic of Kenya, 2004: 9). Institutional capacity building has to go hand in hand with investments in human capital. Institutional capacities may be strengthened by creating new structures, streamlining old ones and providing financial resources for essential facilities, equipment, supplies and personnel, among others.

## **2.6 Conceptual Framework**

This conceptual framework shows the relationship between the dependent variables with the independent variables. The independent variables in this study are disaster management preparedness, disaster management training, compliance to disaster management policies and disaster response mechanisms, while the dependent variable is disaster management. Availability of disaster management equipments and facilities in institution greatly reflect disaster preparedness levels in terms of fire extinguishers, hydrants, alarm bells, floaters, fire assembly points, and emergency exits. How well the institution is equipped in terms of disaster management is very strong indicator of that institution's disaster preparedness.

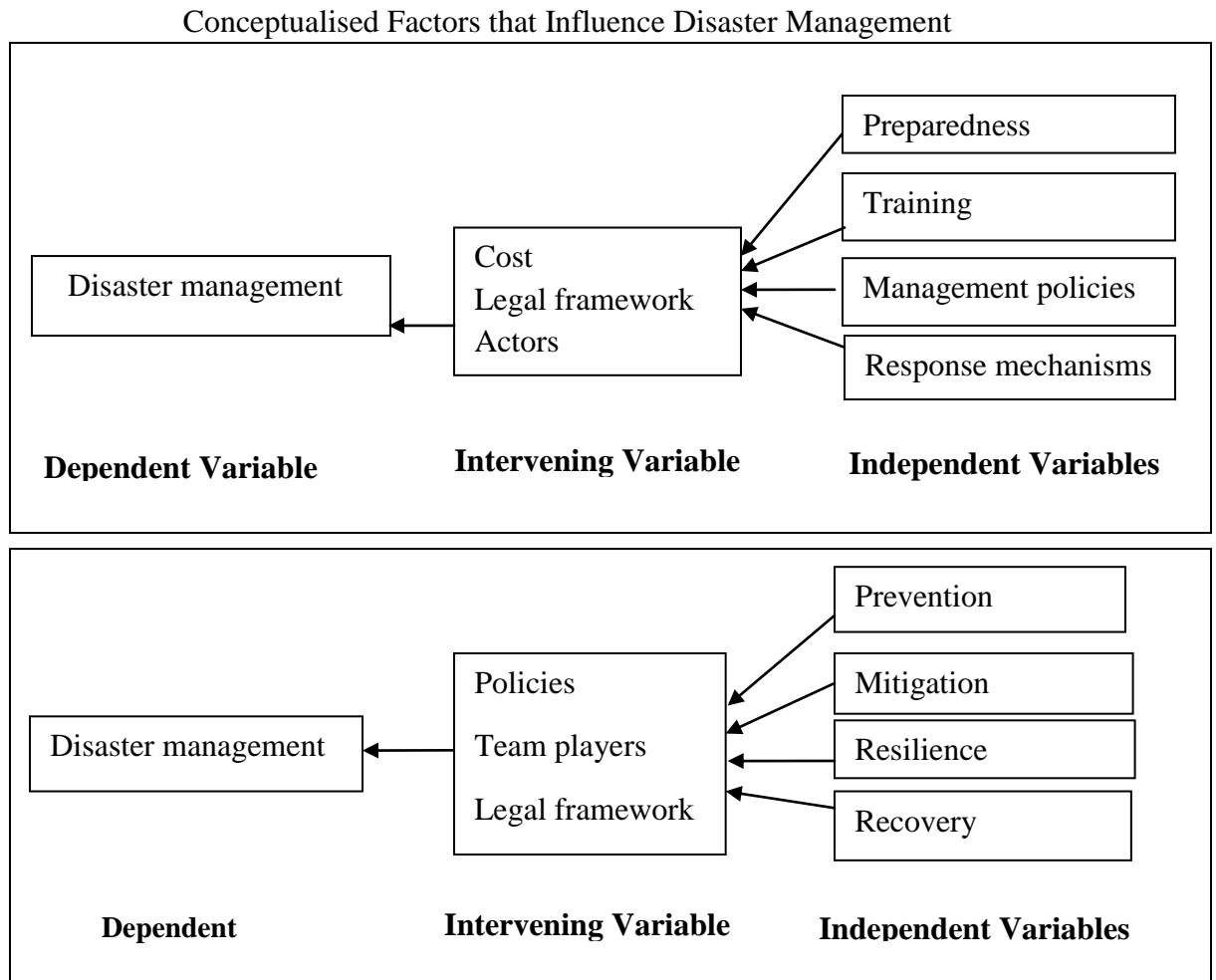
The level and nature of skills and knowledge in disaster management in any institution serves to complement the existence of disaster management equipments and facilities. Institutions with high level of skills and knowledge in disaster management is more likely to cope better in case of disaster as compared to one with low levels of skills and knowledge. Governments occasionally issue disaster management policies. The level of compliance with such policies can closely be studied to determine the levels of disaster preparedness. This conceptual framework is of the view that the more an institution complies with disaster management policies, the higher the level of its disaster preparedness. This therefore follows that institutions with lower levels of compliance to disaster management policies are more likely to exhibit lower levels of disaster preparedness.

Disaster response mechanism is about co-ordination and orderly approach to the disaster situation that serves to avoid instinctive and panicky reactions to event. Process also seeks to cushion disaster situation from chaotic and tumultuous response which leads to more casualties than initially registered. This conceptual framework therefore articulates the view that institutions with clear disaster response mechanisms are better prepared to deal with disasters than those with little or no known disaster response mechanisms. In this case when you vary the preparedness to disaster, training on how to cope with the disaster, varying the policies of disaster management and how you respond to disaster, disaster prevention, mitigation, resilience, and disaster recovery determines how well disaster is managed.

Disaster management is a cyclical series of events involving activities which can be taken before, during and after a disaster. Disaster management cycle is the illustration of the ongoing process by which governments, businesses, and civil society plan for and reduce the impact of disasters, react during and immediately following a disaster, and take steps to recover after a disaster has occurred.

Disaster preparedness community development approaches including the capacity building through mitigation, preparedness and recovery strategies including facilitating

bonds between ‘like’ groups such as family and friends, bridges to other networks which provide new opportunities and links with government and other powerful institutions.



**Figure 1.1 Conceptual Framework (William, 2000)**

## **2.7 Summary**

Disaster preparedness practices involve the development of plans and procedures and the acquisition of facilities, equipment, and materials needed to provide active protection during emergency response. Coordination in humanitarian responses to disasters is not simply specific set of actions rather approach to emergency response that attempts to maximize the benefits and minimize inefficiencies. This involves various stakeholders such as the government, international organizations, civil society and affected

communities coming together to provide an appropriate, efficient and inclusive response to disasters.

Disaster management plans should include policies for personnel notification, staffing, and recall. Determination of who will be responsible for continually assessing resources and capabilities to be made. Plan for how information is communicated to staff and public should also be included as well as central command or operating centre. Disaster management is often used in general sense, covering the implementation of disaster preparedness, mitigation, emergency response and relief, and recovery measures. Disasters provide opportunity for governments to use emergency powers to acquire sites, assemble land and rationalize land use patterns. The stage of disaster management deals with very critical times of disaster management. It involves activities which must be made to occur first and fast but with a high degree of detail and precision.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter sets out various stages and phases that was followed in carrying out the study. Specifically the following subsections will be included; research design, target population, sample design, data collection instruments, data collection procedures and finally data analysis techniques.

#### **3.2 Research Design**

Research design is the scheme, outline or plan that is used to generate answers to research problems. The research is designed as a cross sectional descriptive study. Cross-sectional studies, also known as surveys, are useful way to gather information on important health-related aspects of people's knowledge, attitudes, and practices. Data was collected using both quantitative and qualitative.

#### **3.3 Area of study**

The study was conducted in Kenya National Assembly and the Senate, The Senate is the upper house of the Parliament of Kenya, both houses have staffs in different fields these includes Clerks, Legal Services, Committee Services, Legislative and Procedural Services, Speaker's office, Serjeant-at-Arms and Hansard Editors and other Staff in the Parliamentary Services.

#### **3.4 Target Population**

The target population was the staff of both houses and the parliamentary service commission. The researcher examined a sample of respondents drawn from the possible population of 350 parliamentary staff and 40 members of the parliamentary service commission. The reason for picking this sample size is because it was cheap with regard to cost and it is easier to handle. The population was selected using stratified sampling where the population was placed into groups depending on their rank.

**Table 3.1: Target Population**

<b>Population</b>	<b>Frequency</b>	<b>Percentage %</b>
Parliamentary staff	350	89.7
PSC	40	10.3
<b>TOTAL</b>	<b>390</b>	<b>100</b>

### **3.5 Sample and Sampling Techniques**

#### **3.5.1 Sample Size**

Sample size is a finite part of a statistical population whose properties are studied to gain information about the whole. Sampling is selecting a given number of subjects from a defined population as representative of that population. The statements made about the sample should also be true of the population, although it is however agreed that the larger the sample the smaller the sampling error.

**Table 3.2: Sample Size**

<b>Population</b>	<b>Frequency</b>	<b>Sample Size</b>
Parliamentary staff	350	186
PSC	40	36
<b>TOTAL</b>	<b>390</b>	<b>222</b>

#### **3.5.2 Sampling Techniques**

The sampling procedure describes the list of all population units from which the sample were selected. Sample of responding staff was drawn from all the stakeholders in parliament and it was done using stratified random sampling. Stratified random sampling is a sampling method in which the population is first divided into strata. Then a simple random sample is taken from each stratum. The combined results constitute the sample (Cooper & Schindler, 2003: 124). The technique is applied so as to obtain a representative sample when the population does not constitute a homogeneous group. In this study a target population totaling to 390 respondents was examined. Of the total population 350 comprised of parliamentary staff while the remaining 40 comprised of parliamentary service commission members. Out of 350 parliamentary staff 186 were



sampled for the purpose of the study while out of 40 parliamentary service commission 36 were sampled. The population was made up of strata of different stakeholder categories.

### **3.6 Data Collection Methods**

#### **3.6.1 Questionnaires**

The study used a survey questionnaire administered to each member of the sample population. The questionnaire had both open and close-ended questions. The close-ended questions provided more structured responses to facilitate tangible recommendations. The closed ended questions were used to test the rating of various attributes and this helps in reducing the number of related responses in order to obtain more varied responses. The open-ended questions provided additional information that was not captured in the close-ended questions. The questionnaire was carefully designed and tested with a few members of the population for further improvements. This was done in order to enhance its validity and accuracy of data to be collected for the study.

### **3.7 Research Instruments**

Research instruments are used by researchers and practitioners to help in the assessment or evaluation of subjects, clients or patients. The instruments are used to measure or collect data on a variety of variables ranging from physical functioning to psychosocial wellbeing. Types of measurement tools include scales, indexes, surveys, interviews, questionnaires and informal observations. The researcher ensured that the instruments chosen for the study were valid and reliable. The validity and reliability of a research project depend largely on the type of the research instruments chosen. Before a research study is executed the researcher should ensure that the instruments chosen should give the desired results.

#### **3.7.1 Pilot Study**

The researcher carried out a pilot study in County Assembly of Nairobi to pretest the validity and reliability of data collected using the questionnaire. The researcher selected a pilot group of 5 individuals from a different group rather than the target sample to test the

validity and reliability of the research instrument. The pilot study was allowed for pre-testing of the research instrument. The clarity of the instrument items to the respondents is necessary so as to enhance the instrument's validity and reliability. The pilot study enabled the correction of inconsistencies arising from the instruments, which ensures that they measure what was intended.

### **3.7.2 Validity and Reliability**

Validity is the quality of a data gathering instrument that enables it to measure what it is supposed to measure. Creswell (2003: 55) notes that validity is about whether one can draw meaningful and useful inferences from scores on the instrument. Validity is therefore about the usefulness of the data and not the instrument. To ensure content validity, the instruments will be reviewed by the research supervisors and other research experts. Content validity yields a logical judgment as to whether the instrument covers what it is supposed to cover. Content validity ensures that all respondents understand the items on the questionnaire similarly to avoid misunderstanding. Response options will be provided for most of the questions to ensure that the answers given are in line with the research questions they are meant to measure. Reliability is concerned with the question of whether the results of a study are repeatable. A construct composite reliability coefficient (Cronbach alpha) of 0.6 or above, for all the constructs, will be considered to be adequate for this study. The acceptable reliability coefficient is 0.6 and above (Rousson, Gasser & Seifer, 2002: 95). Cronbach Alpha was used to test the reliability of the research instrument.

### **3.7.3 Ethical Considerations**

First permission for conducting this study was sought from University and a research permit from the National Council for Science and Technology, the local administration as well as the police. Then the study subjects were informed of their rights to participate or refuse to participate in the study and their right to remain anonymous as their names were not mentioned anywhere in this research. While conducting the study, the researcher ensured that research ethics were observed. Participation in the study was voluntary.

Privacy and confidentiality was observed. The objectives of the study were explained to the respondents with an assurance that the data provided was used for academic purpose only.

### **3.8 Data Collection Procedures**

The study collected primary data for the purpose of investigating the level of disaster management in parliament buildings. Primary data was collected using a questionnaire. The questionnaire designed in this study comprised of two sections. The first part was designed to determine fundamental issues including the demographic characteristics of the respondent, while the second part consisted of questions where the variables were focused.

The questionnaire was designed in line with the objectives of the study. To enhance quality of data to be obtained, Likert type questions were included whereby respondents indicated the extent to which the variables were practiced on a five point Likerts scale. The structured questions were used in an effort to conserve time and money as well as to facilitate in easier analysis as they are in immediate usable form; while the unstructured questions will be used so as to encourage the respondents to give an in-depth and felt response without feeling held back in revealing of any information.

Finally, the researcher dropped the pre-tested questionnaires physically at the respondents' place of work. The researcher left the questionnaires with the respondents and picked them up later. Each questionnaire was coded and only the researcher was in a position to know which person had responded. The coding technique was only used for the purpose of matching returned, completed questionnaires with those delivered to the respondents.

### **3.9 Data Analysis and Presentation**

Qualitative data was grouped into categories and analyzed thematically. The frequencies of the data obtained in relation to each objective of the study was recorded and

percentages worked out. According to Kerlinger, (1993: 67), organization descriptive statistics are used to analyze quantitative data. Before processing the responses, the completed questionnaires were edited for completeness and consistency. The data was then coded to enable the responses to be grouped into various categories. Data collected was mainly quantitative and it was analyzed by descriptive analysis techniques. Quantitative approach was used mainly where the researcher counts some aspects of performance of the subjects in the study. The quantitative approach included tables, pie charts graphs among others. Qualitative approach was also be used to collect and analyze data. Qualitative involves the use of theories; description and data collection where data collected is analyzed and presented through a description. The descriptive statistical tools such as Statistical Package for the Social Sciences (SPSS) helped the researcher to describe the data and determine the extent that it was used. The findings were presented using tables and charts, percentages, tabulations, means and other measures of central tendency. Tables were used to summarize responses for further analysis and facilitate comparison. For this study, the researcher was interested in investigating the level of disaster management in parliament buildings in Kenya. This generated quantitative reports through tabulations, percentages, and measures of central tendency.

### **3.10 Summary**

The study was conducted in Kenya National Assembly and the Senate, The target population was the staff of both houses and the parliamentary service commission. The researcher examined a sample of respondents drawn from the possible population of 350 parliamentary staff and 40 members of the parliamentary service commission. In this study a target population totaling to 390 respondents was examined. The researcher ensured that the instruments chosen for the study were valid and reliable. The validity and reliability of a research project depend largely on the type of the research instruments chosen. The researcher selected a pilot group of 5 individuals from a different group rather than the target sample to test the validity and reliability of the research instrument. To ensure content validity, the instruments will be reviewed by the research supervisors and other research experts. Content validity yields a logical judgment as to whether the

instrument covers what it is supposed to cover. While conducting the study, the researcher ensured that research ethics were observed. Participation in the study was voluntary. Primary data was collected using a questionnaire. Before processing the responses, the completed questionnaires were edited for completeness and consistency.

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter presents the data that was found on the efficacy of disaster management in the Kenya National Assembly and the Senate. The research was conducted on sample size of 222 respondents out of which 193 respondents completed and returned the questionnaires making a response rate of 87%. Mugenda and Mugenda (2008: 62) states that a response rate of 50% and above is a good for statistical reporting. The study made use of frequencies (absolute and relative) on single response questions. On multiple response questions, the study used Likert scale in collecting and analyzing the data whereby the scale of 5 points was used in computing the means and standard deviations. The results were then presented in tables, graphs and charts as appropriate with explanations being given in prose.

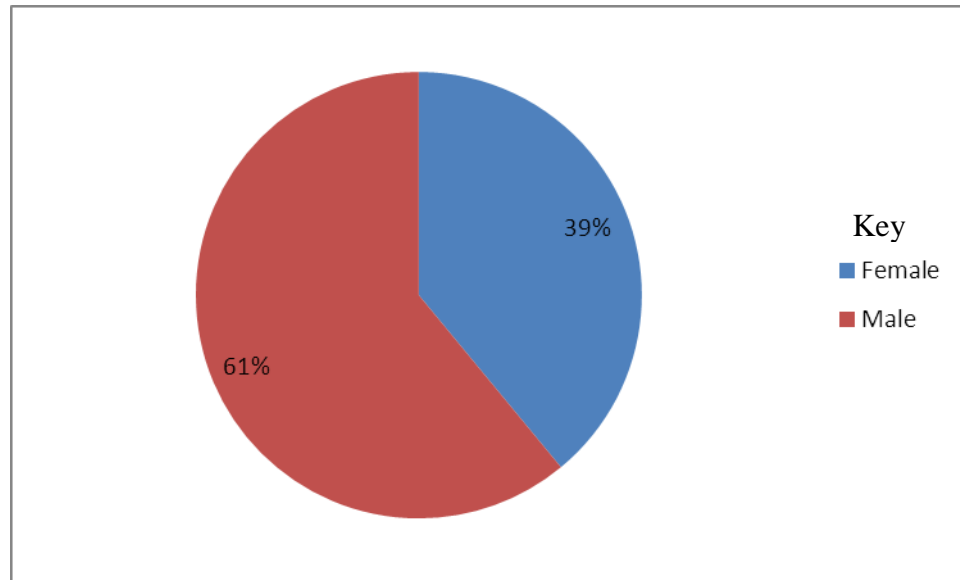
#### 4.2 Background Information of Respondents

The study initially sought to inquire information on various aspects of the respondents' background, in terms of age and academic qualifications. This information aimed at testing the appropriateness of the respondent in answering the questions regarding efficacy of disaster management in parliament buildings in the Kenya National Assembly and the Senate. In terms of the nature of the job, the results are as indicated in Table 4.1 pg.35. In the study, majority of the respondents 68% (n=131) were parliamentary staff, while 32% (n=32) indicated parliamentary service commission members. This implies that the job title with most members involves the parliamentary staff.

**Table 4.1: Nature of Job**

<b>Staff</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Parliamentary staff	131	68
PSC	62	32
<b>Total</b>	<b>193</b>	<b>100</b>

The study also established gender orientation of the respondents as explained in Figure 4.1 below. The findings, majority (61%) of the respondents were male and 39% of the respondents were female. This implies that most of the responses emanated from males. The findings are as illustrated below.



**Figure 4.1: Gender Distribution**

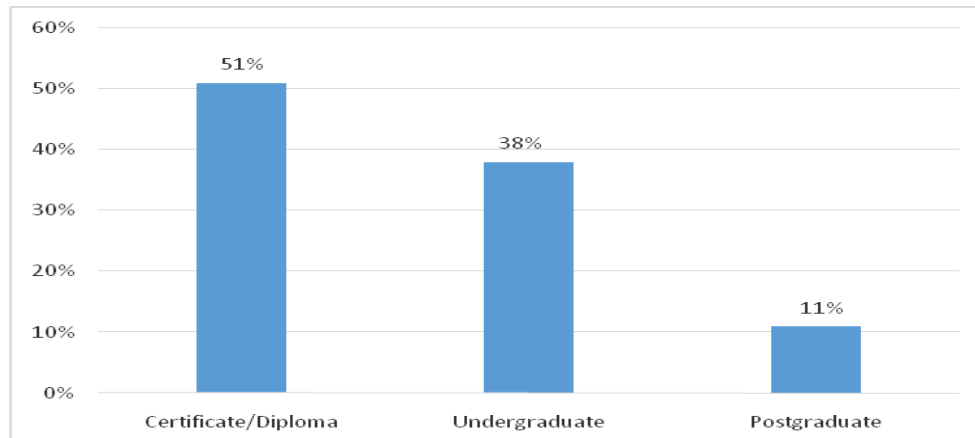
In the aspect of experience in the parliamentary buildings, the study established the following information as indicated in table 4.1 pg. 34. Majority of 39% of the respondents working experience were between 10-15 years, 29% said between 5-10 years', 21% noted above 15 years and 11% had between 0-5 years. This depicts that the category with a higher working length was between 10-15 years. The findings are as shown in Table 4.2 below.

**Table 4.2: Working Experience**

<b>Years</b>	<b>Frequency</b>	<b>Percentage</b>
0-5 years	21	11
5-10 years	56	29
10-15 years	75	39
15 years and above	41	21
<b>Total</b>	<b>193</b>	<b>100</b>

### 4.2.1 Educational Level or Qualifications

In terms of educational level, the results are as indicated in Figure 4.2 pg. 35. Based on the findings, majority of the respondents (51%) had certificate/diploma as the highest level of qualification, 38% noted undergraduate as the highest level of qualification and 11% depicted postgraduate as the highest level of qualification. This illustrates that the most of the respondents had certificate/diploma as the highest level of qualification. The findings are as shown in figure 4.2 below.



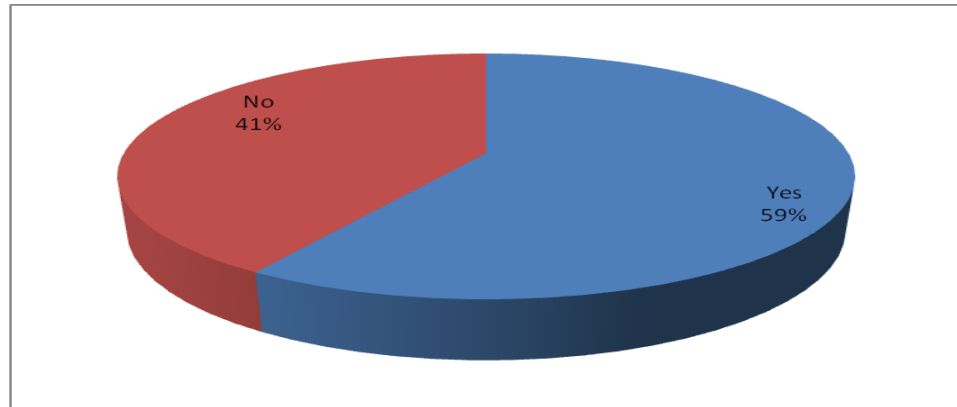
**Figure 4.2: Educational Level or Qualifications**

## 4.3 Disaster Management in Practices

### 4.3.1 Disaster occurrence

The study established whether the respondents knew of any disaster occurrence that had ever happened in or around parliament buildings. The purpose of this question was to know whether disaster had ever occurred in parliament buildings. From the findings, 59% of the respondents agreed that the disaster had occurred around parliament buildings while 41% were of the contrary opinion. This implies that disaster occurred around parliament buildings. as indicated in the figure pg. 38.





**Figure 4.3: Disaster Occurrence**

#### **4.3.2 Respondents Opinion on Disaster Experience in Parliament Buildings**

The respondents were asked to indicate the extent to which the various disasters have been experienced in the parliament buildings. The purpose of this question was to establish whether various disasters had occurred in parliament buildings. The results imply to a great extent that there were terrorist attacks in Nairobi (mean= 4.02). Respondents further implied that fire occurred at parliament buildings at a moderate extent (mean= 3.56), collapse of buildings was seen to occur at a little extent around the parliament buildings (mean=2.35). To very small extent disease and epidemics (mean=1.10) and floods (mean=1.02) were seen to occur around the parliament buildings. This implies that the disaster experienced at a great extent in Nairobi was terrorist attacks. The results are as in the Table 4.3 below

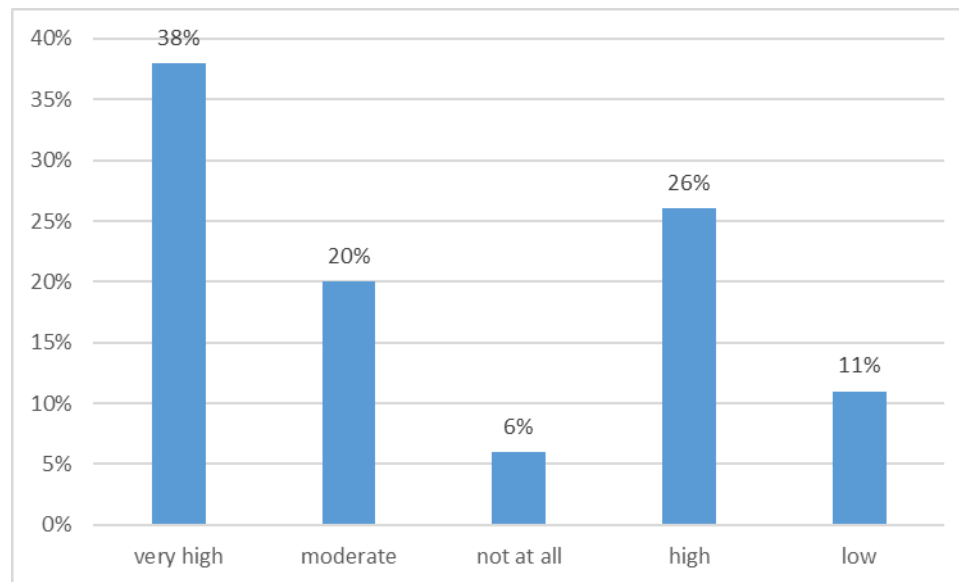
**Table 4.3: Disaster Experience In Parliament**

<b>Statements</b>	<b>Mean</b>	<b>Std Deviation</b>
Fires	3.56	0.142
Floods	1.02	0.185
Terrorism attacks in Nairobi	4.02	0.214
Collapse of buildings	2.35	0.247
Diseases and epidemics	1.10	0.366

#### **4.3.3 Extent of Disaster Preparedness in the Parliament Buildings**

Respondents were asked to indicate the level of disaster preparedness in parliament buildings. The purpose of this question was to establish the extent of disaster

preparedness in the parliament buildings. Based on the findings, 38% of the respondents mentioned that to a very high extent that parliament is prepared for disaster. 26% mentioned that to a high extent parliament is prepared for disaster, 20% of the respondents mentioned that to a very moderate extent parliament is prepared for disaster. 11% mentioned that to a low extent parliament is prepared for the disaster and, 6% mentioned that at no extent that parliament is prepared for disaster. This illustrates that the most of the respondents mentioned that to a very high extent, parliament is prepared for disaster. The findings are as shown in Figure 4.4 below.



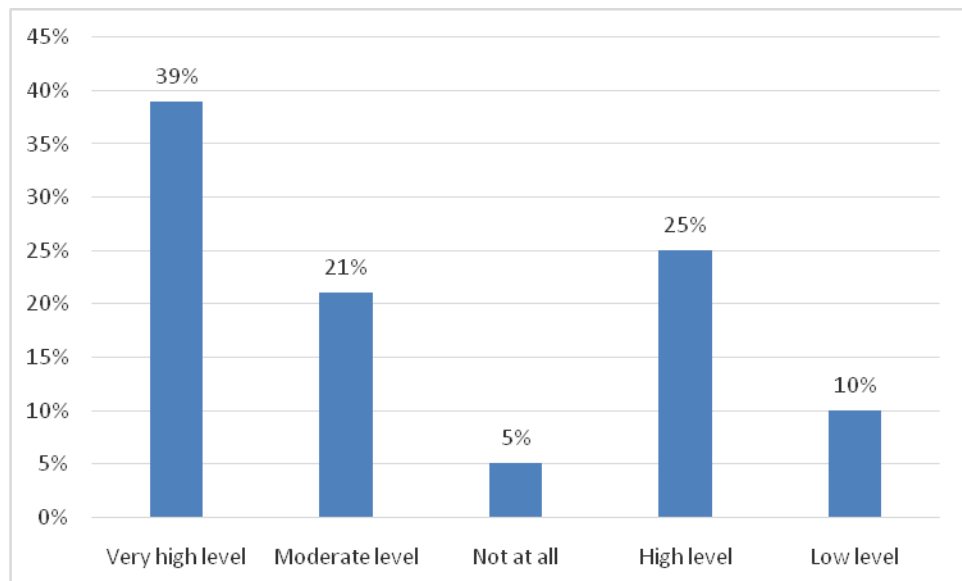
**Figure 4.4: Disaster Preparedness Practices in Parliament**

#### **4.4 Disaster Management Facilities**

##### **4.4.1 Availability of Disaster Management Equipment in the Parliament Buildings**

Respondents were asked to indicate the extent of disaster management equipments available in parliament buildings. The purpose of this question was to establish the extent of disaster management equipment available in parliament buildings for effective disaster management. The findings reveal that, 39% of the respondents stated that to a very high extent the equipment available in parliament building were effective in disaster management. 25% stated that to a high extent the equipment available in parliament building were efficient in disaster management, 21% of the respondents stated that to a

very moderate extent the equipment available in parliament building are effective in disaster management. 10% stated that to a low extent the equipment available in parliament building are effective in disaster management and, 5% stated that at no extent the equipment available in parliament building are effective in disaster management. This illustrates that most of the respondents stated that to a very high extent, the equipment available in parliament building are effective in disaster management. The findings are as shown in figure 4.5 below.



**Figure 4.5: Availability of Disaster Management Facilities in the Parliament**

#### **4.4.2 Factors Affecting Disaster Management Facilities in Parliament Buildings**

The respondents were asked to indicate various factors affecting disaster management equipment in parliament buildings. The purpose of this question was to establish the factors affecting the level of disaster management. The results imply to a great extent that, occurrence of various disasters in the parliament and the country in general affect the level of disaster management facilities in parliament buildings (mean= 4.41). Respondents further implied that availability of disaster management equipment affect the level of disaster management equipment in parliament buildings at moderate extent (mean= 3.61), Special internal arrangements for the acquisition and disbursement of funds affect the level of disaster management equipment in parliament buildings at little

extent (mean=2.72). At no extent policies and agreements for the use of other’s facilities and services (mean=1.15) and emergency funding strategies (mean=1.03) were seen to affect the level of disaster management equipment in parliament buildings. This implies that occurrence of various disasters in the parliament and the country in general affect the level of disaster management equipment in parliament buildings as indicated in the table below.

**Table 4.4: Factors Affecting Disaster Management Facilities in Parliament**

<b>Factors Affecting the Level of Disaster Management Facilities</b>	<b>Mean</b>	<b>Std Deviation</b>
Special internal arrangements for the acquisition and disbursement of funds	2.72	0.132
Policies and agreements for the use of other’s equipment and services	1.15	0.175
Emergency funding strategies	1.03	0.217
Availability of disaster management equipment	3.61	0.257
Occurrence of various disasters in the parliament and the country in general	4.41	0.385

#### **4.4.3 Extent of Aspects of Disaster Management Facilities and Level of Disaster Preparedness in Parliament Buildings**

The respondents were asked to indicate extent of aspects of disaster management equipment and the level of disaster preparedness in parliament buildings. The purpose of this question was to determine how various aspects of disaster affect the level of disaster preparedness. The results imply to a great extent that; equipment of alarm systems (fire alarms, fire extinguishers,) determine the level of disaster preparedness in parliament buildings (mean= 4.56). Respondents further implied that evacuation routes (exit stairs, emergency doors) determine the level of disaster preparedness in parliament buildings at moderate extent (mean= 3.80). Assembly points (fire assembly points) determine the level of disaster preparedness in parliament buildings at little extent (mean=2.36). At no extent lifesaving facilities (first aid kits) determine the level of disaster preparedness in parliament buildings (mean=1.05). This indicates that equipment of alarm systems (fire

alarms, fire extinguishers,) determine the level of disaster preparedness in parliament buildings as indicated in the table below.

**Table 4.5: Aspects of Disaster Management and the Level of Disaster Preparedness in Parliament**

<b>Aspects Of Disaster Management Facilities</b>	<b>Mean</b>	<b>Std Deviation</b>
Equipment of alarm systems (fire alarms, fire extinguishers,)	4.56	0.123
Lifesaving facilities (first aid kits)	1.05	0.160
Evacuation routes (exit stairs, emergency doors)	3.80	0.218
Assembly points (fire assembly points)	2.36	0.266

#### **4.5 Disaster Management Training**

##### **4.5.1 Level of Disaster Management Training Available in Parliament Buildings**

Respondents were asked to indicate the level of disaster management training. The purpose of the question was to determine the level of disaster management training available in parliament buildings for effective disaster management. The findings in Table 4.6 pg. 43 indicates that, 87 respondents mentioned that the level of disaster management training available in parliament buildings for effective disaster management is at moderate level, 54 indicated very high, 23 noted high, and 10 viewed the rate to be low. On the other hand, 19 of the respondents said there was no disaster management training available in parliament buildings. This implies that disaster management training is available in parliament buildings for effective disaster management though at a moderate rate.

**Table 4.6: Disaster Management Facilities**

<b>Level of Disaster Management</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Very high level	54	28
Moderate level	87	45
Not at all	19	10
High level	23	12
Low level	10	5
<b>Total</b>	<b>193</b>	<b>100</b>

#### **4.5.2 Disaster Management Through Education in Parliament**

The study established the extent to which the respondents agreed to disaster management through education in the parliament. The purpose of this question was to determine how education had affected disaster management. The results imply to the great extent that, there is informative forums on disaster management in parliament (mean= 4.54), and establishment of first aid brigades and red- cross associations (mean= 3.58). Respondents were neutral on whether there was evacuation drills within parliament buildings. On the other hand, the respondents disagreed that there were involvement of all stakeholders in disaster management training (mean= 2.77), and that there were courses in first aid offered within parliament buildings (mean=1.50). This implies there are informative forums on disaster management in parliament building. The results are as shown in table 4.7 below.

**Table 4.7: Disaster Management Educational Training Approaches**

<b>STATEMENTS</b>	<b>MEAN</b>	<b>STD DEVIATION</b>
Courses in first aid	1.50	0.122
Evacuation drills	3.15	0.165
Informative forums on disaster management	4.54	0.224
Establishment of First aid brigades and Red- Cross	3.58	0.251
Involvement of all stakeholders in disaster management	2.77	0.378

### 4.5.3 Disaster Management and Level of Disaster Preparedness in Parliament

The respondents were asked to indicate the extent to which various statements were in agreement to disaster management and level of disaster preparedness in parliament. The purpose of this question was to determine the level of disaster preparedness. The results imply to the great extent that, disaster responders should be conscious and sensitive to changes (mean= 4.45), advocacy is necessary to raise stakeholders' awareness on the need to participate in disaster management (mean= 4.20), and disaster responders should seek to work towards addressing the realities of an often changing environment (mean= 4.12). Further, the respondents agreed that disaster management training posits is crucial and provides feedback to communities, governments and partners at all levels (mean= 3.88), disaster management training should be undertaken continuously through the media, private sector and among other stakeholders (mean= 3.80), and disaster management training increases the general understanding of disasters likely to face and the precautions to be taken (mean= 3.30). This implies that disaster responders should be conscious and sensitive to changes. The results from the findings are as indicated in the table 4.8 pg. 44.

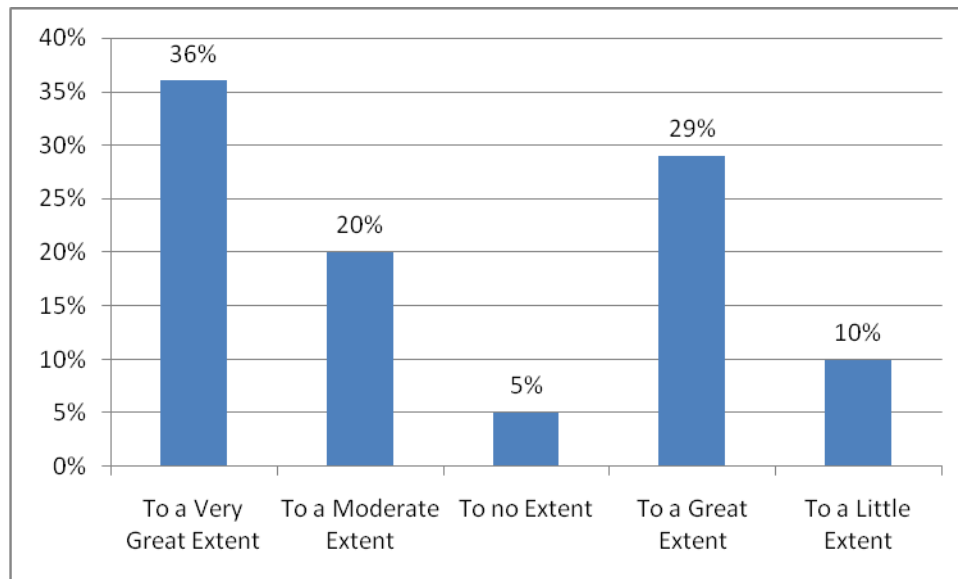
**Table 4.8: The Level of Disaster Preparedness in Parliament**

<b>Disaster Management Training</b>	<b>Mean</b>	<b>Standard Deviation</b>
Disaster responders should be conscious and sensitive to changes	4.45	0.162
Disaster responders should seek to work towards addressing the realities of an often changing environment	4.12	0.195
Advocacy is necessary to raise stakeholders' awareness on the need to participate in disaster management	4.20	0.213
Disaster management training it posits is crucial as it will provide a feedback to communities, governments and partners at all levels	3.88	0.259
Disaster management training increases the general understanding of disasters they are likely to face and the precautions to be taken	3.30	0.356
Disaster management training should be undertaken continuously through the media, private sector and among other stakeholders	3.8	0.215

## 4.6 Compliance to Disaster Management Policies

### 4.6.1 Extent to Which Parliament Comply with Disaster Management Policies

Respondents were asked to indicate the extent to which parliament comply with the disaster management policies. The purpose of this question was to establish the extent to which parliament comply with the disaster management policies. The findings in figure 4.6 pg.45 indicate that, 36% of the respondents mentioned that to a very great extent the parliament comply with the disaster management policies, 29% mentioned to a great extent the parliament comply with the disaster management policies, 20% viewed to a moderate extent the parliament comply with the disaster management policies, 10% said that the parliament comply with the disaster management policies to a little extent, while 5% said that the parliament does not comply with the disaster management policies to no extent. This implies that parliament comply with the disaster management policies to a very great extent.



**Figure 4.6: Extent of Compliance in Relation to Disaster Management Policies**

### 4.6.2 Disaster Management Policies

The respondents were asked to indicate the extent to which various statements were in agreement with aspects of disaster management policies. The purpose of this question was to determine the disaster management policies and its effect on disaster management.



The results imply to a great extent that parliament consider development of rules and regulations to reduce disaster occurrences (mean= 4.46), disaster risk reduction initiatives (mean= 4.15). Further, the respondents agree that parliament consider institutional frameworks and planning (mean= 3.15). On the other hand, the respondents disagreed that the parliament consider workplace rules and elements such as policies, processes, behaviours, and employee attitudes (mean= 2.58), and consider policies for personnel notification (mean= 2.30). This implies that to a great extent, parliament consider development of rules and regulations to reduce disaster occurrences. As tabulated in Table 4.9 pg.46.

**Table 4.9: Aspects of Disaster Management Policies**

<b>Aspects of Disaster Management Policies in Disaster Preparedness</b>	<b>Mean</b>	<b>Standard Deviation</b>
Development of rules and regulations to reduce disaster occurrences	4.46	0.152
Institutional frameworks and planning	3.15	0.175
Disaster risk reduction initiatives	4.15	0.224
Workplace rules are elements such as policies, processes, behaviors, and employee attitudes	2.58	0.267
Policies for personnel notification	2.30	0.166

#### **4.6.3 Disaster Management Policies and Level of Disaster Preparedness in Parliament Buildings**

The respondents were asked to indicate the extent to which various statements were related to disaster management policies and level of disaster preparedness in the parliament buildings. The purpose of this question was to determine how disaster policies influence disaster preparedness. The results imply to a great extent that, disaster management policies strengthen disaster management institutions (mean= 4.35) and improve the resilience of vulnerable groups to cope with potential disasters (mean= 3.88). Further, the respondents agreed that, disaster management policies create awareness of disaster preparedness and long term mitigation (mean= 3.55), helps vulnerable communities by developing coping mechanisms (mean= 3.40) and disaster management policies helps in mainstreaming of disaster risk reduction (mean= 3.02). This implies that to a great extent, disaster management policies strengthen disaster management institutions as shown in the Table 4.10 pg. 47.

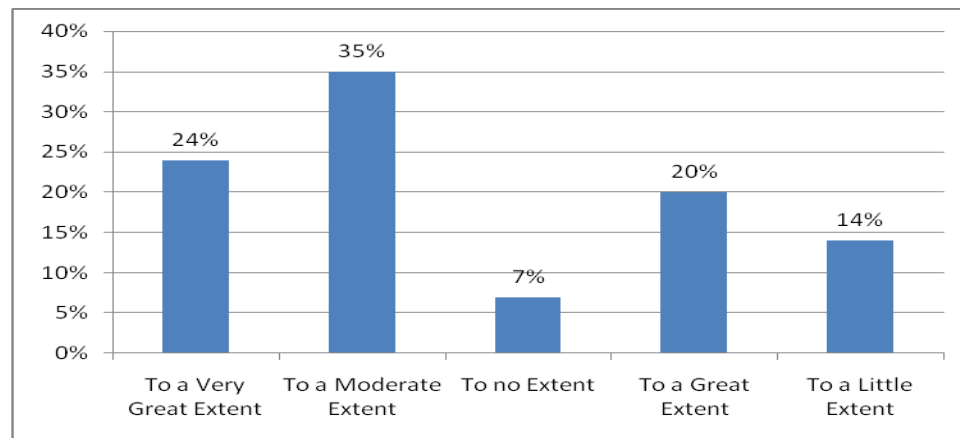
**Table 4.10: Disaster Management Policies and Level of Disaster Preparedness**

<b>Aspects of Disaster Management Policies in Disaster Preparedness</b>	<b>Mean</b>	<b>Standard Deviation</b>
Strengthen disaster management institutions	4.35	0.163
Mainstreaming of disaster risk reduction	3.02	0.197
Improve the resilience of vulnerable groups to cope with potential disasters	3.88	0.231
Help vulnerable communities by developing coping mechanisms	3.55	0.277
Create awareness of disaster preparedness and long term mitigation	3.40	0.214

**4.7 Disaster Response Mechanisms**

**4.7.1 Nature of Disaster Response Mechanisms in the Parliament Buildings**

Respondents were asked to indicate the nature of disaster response mechanisms in the parliament buildings. The purpose of this question was to establish the rating of the nature of disaster response mechanisms in the parliament buildings. The findings in figure 4.7 below indicates that 35% of the respondents rated the nature of disaster response mechanisms in the parliament buildings to be moderate, 24% said very great, 20% noted to a great extent, 14% depicted to be moderate, while 7% indicated zero. This illustrates that to a little extent the nature of disaster response mechanisms in the parliament buildings is moderate.



**Figure 4.7: Nature of Disaster Response Mechanisms in Parliament**

#### **4.7.2 Stakeholders of Disaster Response Mechanisms in Parliament Buildings**

The respondents were asked to indicate Stakeholders of disaster response mechanisms in parliament buildings. The purpose of this question is to determine the various stakeholders in disaster response mechanisms. The results imply to a great extent that; stakeholders of disaster response mechanisms in parliament buildings are parliament staff (mean= 4.25) and government agencies (police force, fire departments, ministries) (mean= 4.02). Further, the respondents agreed that; stakeholders of disaster response mechanisms in parliament buildings include civil society authorities (like the county council) (mean= 3.78) as well as private sector organizations (like G4S) (mean= 3.25). This implies that to a great extent, stakeholders of disaster response mechanisms in parliament buildings are parliament staff and government agencies (police force, fire departments, ministries) as highlighted in Table 4.11 pg. 48.

**Table 4.11: Stakeholders of Disaster Response Mechanisms in Parliament**

<b>Stakeholders of Disaster Response Mechanisms in Parliament Buildings</b>	<b>Mean</b>	<b>Standard Deviation</b>
Private sector organizations (like G4S)	3.25	0.132
Civil society authorities (like the County Council)	3.78	0.175
Government agencies (Police force, Fire departments, Ministries)	4.02	0.244
Parliament Staff	4.15	0.287

#### **4.7.3 Aspects of Disaster Response Mechanisms and Disaster Management**

The respondents were asked to indicate aspects of disaster response mechanisms and disaster management. The purpose of this question was to determine what aspects of disaster response mechanisms influence disaster management. The results imply to a great extent that; rescue and relief provision (mean= 4.35); mainstreaming of disaster risk reduction (mean= 4.11) and contingency planning (mean= 3.78) determine the level of disaster management in parliament buildings. Further, the respondents agreed that; coordination and collaboration through different phases of the response (mean= 3.69), community preparedness (mean= 3.57) and provision of basic necessities (mean= 3.01), determine the level of disaster management in parliament buildings. This implies that to a great extent, rescue and relief provision and mainstreaming of disaster risk reduction

determine the level of disaster management in parliament building as highlighted in Table 4.12 in page 49.

**Table 4.12: Aspects of Disaster Response Mechanisms and Disaster Management**

<b>Aspects of Disaster Response Mechanisms and Disaster Management</b>	<b>Mean</b>	<b>Standard Deviation</b>
Provision of basic necessities	3.01	0.162
Coordination and collaboration through different phases of the response	3.69	0.195
Rescue and relief provision	4.35	0.224
Mainstreaming of disaster risk reduction	4.11	0.267
Contingency planning	3.78	0.185
Community preparedness	3.57	0.135

#### **4.8 Summary**

The study established that the level of disaster management in parliament is in view of three variables of disaster occurrence, disaster experience and disaster preparedness. Numerous factors were identified as being crucial in disaster management such as facilities. From the study the equipment available in general affect the level of disaster management equipment in parliament buildings Disaster management training was available in parliament buildings for effective disaster management though at a moderate rate.Parliament complies with the disaster policies to a very great extent. In addition, parliament considers development of rules and regulations to reduce disaster occurrences and policies strengthen disaster management institutions. The nature of disaster response mechanisms in the parliament buildings was moderate.

## **CHAPTER FIVE**

### **SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents summary of the findings, conclusion and recommendations on the efficacy of disaster management in parliament buildings with reference to the Kenyan National Assembly and the Senate, Kenya. These are based on objectives and research questions of the study. The aim of the study was to assess efficacy of disaster management practices in The Kenya National Assembly and the Senate.

Objectives of the study included to:

- Observe the effectiveness of disaster preparedness facilities in the Kenya National Assembly and the Senate.
- Survey the level of disaster management training offered in the Kenya National Assembly and the Senate.
- Establish the level of compliance to disaster management policies in the Kenya National Assembly and the Senate.
- Examine the nature of disaster response mechanisms available in the Kenya National Assembly and the Senate.
- Establish major challenges facing disaster management in the Kenya National Assembly and the Senate.

#### **5.2 Summary of the Findings**

The study's findings are summarized as follows:

##### **5.2.1 Disaster Management Practices**

Objective one of the study was to establish major challenges facing disaster management in Kenyan National Assembly and the Senate. Findings revealed that disaster occurred around parliament buildings. The study also revealed that the disaster experienced at a great extent around the parliament buildings was terrorist attacks. The findings were contrary to Warfield (2008: 63) findings who argued that fires and earthquakes have been major threats to New Zealand's parliamentary buildings. Fire was the worst danger

because wood was used in the buildings for a good part of their history. Earthquakes have not substantially damaged the buildings, but Wellington's location on a fault line worried engineers, and several times recommendations were made to demolish parts of the parliamentary complex because of the earthquake risk.

The study illustrated that to a very high extent, parliament is prepared for disaster. The findings agrees with Weldon, (2005: 105) who found that, addressing the need for appropriate and sufficient resources is a generic preparedness task, even though specific resources needed to deal with different types of disasters vary. In cases in which hazard agents require distinctly different responses, hazard-specific planning, training, and resources are required. Hurricane preparedness stresses evacuation over all other self-protective measures, preparedness for some types of hazardous materials releases may emphasize sheltering in place. From the study the facilities available in parliament building are effective in disaster management to a very great extent. The findings were contrary to NRC (2006: 75) who found that disaster preparedness practices involve the development of plans and procedures and the acquisition of facilities, equipment, and materials needed to provide active protection during emergency response.

### **5.2.2 Disaster Management Facilities**

The second objective of the study was to examine the effectiveness of disaster preparedness facilities in the Kenyan National Assembly and the Senate. The study concluded that, to a great extent occurrence of various disasters in the parliament and the country in general affect the level of disaster management equipment in parliament buildings. The findings do not agree with the study by the National Disaster Management Policy draft that encourages and empowers the culture of well-structured disaster management systems and tools, supported and delivered by carefully selected and trained human resources provided with appropriate, well sourced material and equipment (Republic of Kenya, 2004). Institutional capacity building has to go hand in hand with investments in human capital. Institutional capacities may be strengthened by creating new structures, streamlining old ones and providing financial resources for essential facilities, equipment, supplies and personnel, among others.

The study also established that, to a great extent equipment of alarm systems (fire alarms, fire extinguishers,) determine the level of disaster preparedness in parliament buildings. Godshalk (1991: 77) equates preparedness to actions taken in advance of an emergency, develop operational capabilities and facilitate effective response in the event of an emergency of that nature occurs. Through proper response, emergency assistance to victims of disaster is provided. The fire brigades and police are the usual primary responders. This is because response entails all the interventions taken immediately prior to and following a disaster impact (Office of the President 2001, & Government of Kenya, 2001). Importantly, such actions are directed towards saving lives, providing basic necessities, protecting property and dealing with the immediate damage caused by disaster. The findings agree agree the parliament has adapted to various disaster preparedness mechanism.

### **5.2.3 Disaster Management Training**

One of the objective of the study was to determine the level of disaster management training offered in the Kenyan National Assembly and the Senate. The study revealed that disaster management training was available in parliament buildings for effective disaster management though at moderate rate. Majority of the respondents agreed to a great extent that there were informative forums on disaster management in parliament as means of educating disaster management. Further the study revealed that disaster responders should be conscious and sensitive to changes.

Disaster management training was available in parliament buildings though in a moderate rate. This agrees with Kanwar (2008: 55) findings who argued that training of the stakeholders or partners in disaster management is very crucial. The importance of personnel training in disaster response cannot be overemphasized. In this area, assessment of available courses is essential. The courses should be tailored to the needs of various disaster types and situations. The rationale behind this is that different disasters will need different types of health sector response and so is the personnel requirement. Specialized courses in first aid, and surgery, health education, should be mounted to the

health care personnel involved in disaster work. In addition, the training of trainers should be revitalized to meet the needs and emerging challenges of disasters. This should be done to all the various cadres and specialties of the personnel involved in disaster operations. The trainers should be well versed with knowledge of current treatment and medical disaster response mechanisms to impart it to the trainees. In fact, it is only through this that we will have personnel who are effective and efficient in service delivery in emergency situations.

The study findings were in agreement with Waugh (2000: 98) who argued that disaster management training (through public education and other information) is informative and helpful in disaster preparedness. This includes not simply help to get the job but training for the job, special service for the disabled and the young, special schemes for the unemployed, working conditions of the employed, income levels, distribution and maintenance, training and retraining for specific employment and industrial relations. In addition, involves the education and training of officials and the population at risk, training of intervention teams, and establishment of policies, standards, organizational arrangements and operational plans to be applied following a disaster.

#### **5.2.4 Compliance to Disaster Management Policies**

One of the objective of the study was to evaluate the level of compliance to disaster management policies in Kenyan National Assembly and the Senate. The study established that parliament comply with the disaster policies to a very great extent. The study also found that parliament considers development of rules and regulations to reduce disaster occurrences. From the study, it is evident that disaster management policies Strengthen disaster management institutions.

The findings agree with twigg (2004: 69) who argued that disaster management plans should include policies for personnel notification, staffing, and recall. A determination of who will be responsible for continually assessing resources and capabilities should be made. A plan for how information will be communicated to staff and public should also



be included. Central command or operating centre should be identified. It is essential that staff review all plans and participate in drills periodically. If indicators are to play an important role in the creation of better policies and societies, these problems must be avoided.

Waugh (2000: 107) argue that awareness of the need for integration between disaster preparedness, long term mitigation and acceptance of the need to address the wider social-economic dimensions of vulnerability, did not become widespread until the 1990s, and even to date such views are far from being fully accepted. Nonetheless, progress towards the goal of a 'culture of prevention' has been made in many countries as shown in the development of laws and policies, improved institutional frameworks and planning, and a growing number of risk reduction initiatives in developed and developing countries alike (Twigg, 2001: 46).

#### **5.2.5 Disaster Response Mechanisms**

Also, the objective of the study was to examine the nature of disaster response mechanisms available in the Kenyan National Assembly and the Senate. The study established that the nature of disaster response mechanisms in the parliament buildings was moderate. From the findings, stakeholders of disaster response mechanisms in parliament buildings are parliament staff and government agencies (police force, fire departments, ministries). The study further revealed that rescue and relief provision, mainstreaming of disaster risk reduction and contingency planning determine the level of disaster management in parliament buildings.

The findings goes contrary to Gordon (2004: 67) views who argued that coordination in humanitarian responses to disasters is not simply a specific set of actions rather an approach to emergency response that attempts to maximize its benefits and minimize inefficiencies. It involves various stakeholders such as the government, international organizations, civil society and affected communities coming together to provide an appropriate, efficient and inclusive response to disasters. This involves coordination and

collaboration through different phases of the response including planning, operations, data collection, information management and resource mobilization. It is common knowledge that the immediate aftermath of a disaster is characterized by a highly complex (albeit chaotic) situation. The complexity is the result of sheer enormity of urgent as well as important tasks involved in disaster response - rescue and relief provision, issues of access to the affected populations, threat of secondary disasters, influx of stakeholders interested to assist the disaster affected families, sectoral concerns, policy directives, long term sustainability issues and political dynamics. On the other hand, the findings agree with (office of the president 2001, Government of Kenya, 2001) views, who argued that through proper response, emergency assistance to victims of disaster is provided. The fire brigades and the police are the usual primary responders. This is because response entails all the interventions taken immediately prior to and following a disaster impact.

### **5.3 Conclusion**

Based on the findings and discussions presented in the preceding sections, this study makes the following conclusions:

- The study established that the level of disaster management in parliament in view of three variables of disaster occurrence, disaster experience and disaster preparedness. The outcome of the study shows that disaster occurred around parliament buildings.
- Numerous factors were identified as being crucial in disaster management such as facilities. From the study the equipment available in general affect the level of disaster management equipment in parliament buildings. From the study it was established that to a great extent equipment of alarm systems (fire alarms, fire extinguishers,) determine the level of disaster preparedness in parliament buildings.

- Disaster management training was available in parliament buildings for effective disaster management though at a moderate rate. There were informative forums on disaster management in parliament as means of educating disaster management. There is need for disaster responders to be conscious and sensitive to changes.
- Parliament complies with the disaster policies to a very great extent. In addition, parliament considers development of rules and regulations to reduce disaster occurrences and policies strengthen disaster management institutions.
- The nature of disaster response mechanisms in the parliament buildings was moderate. Also, stakeholders of disaster response mechanisms in parliament buildings are Parliament Staff and Government agencies

#### **5.4 Recommendations**

From the study findings and conclusions, the following recommendations are made:

##### **5.4.1 Measures to Curb Disaster**

Parliament should install strong and compatible measures to curb disaster occurrence. The Kenyan government should incorporate these measures in the constitution so that the relevant agencies will always be prepared in case of a disaster occurrence. This will be possible since it will serve as requirement for concerned agencies.

##### **5.4.2 Adequate Facilities**

Parliament should acquire and adapt the high level efficiency equipment which will be able to handle the disaster appropriately. This is important since the lethal effects that results from disasters will be minimized. The government should provide the necessary support in terms of finance to acquire the necessary equipments.

##### **5.4.3 Employment of High Qualified Staff**

The parliament should pass Bills which recommend the recruitment of qualified staff in the sector of disaster management. This will facilitate appropriate handling of disaster as the right personnel will be recommended for the right job.

#### **5.4.4 Disaster Management Policies**

The parliament should pass policies and regulation concerning disaster management so that the various parties will have a platform on how to handle various categories of disasters. This will also equip them with the necessary ideas on how to handle disasters.

#### **5.4.5 Response Mechanisms**

The parliament should device the various response mechanisms to handle disasters in case they occur or when they occur. The mechanisms adopted should be appropriate with regard to various categories of disasters.

#### **5.5 Suggestions for Further Research**

The following areas are suggested for further study.

##### **5.5.1 Strategies for Management Distribution in Parliament**

For clearer visions on how future projects can be handled, strategies of managing disaster in Parliament should be studied, where projects are able to proceed without unprecedented challenges that affect the positive outcome of the projects.

#### **5.6 Summary**

The chapter has highlighted key findings in the area of study including disaster management practices, disaster management facilities, disaster management training, compliance to disaster management policies, and disaster response mechanisms

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## APPENDIX I

### LETTER OF INTRODUCTION

Morogo Winnie Jelimo  
Department of Library and Information Science  
University of Nairobi  
P.O. Box 30917-00100

Nairobi.

Dear Respondent,

#### RE: INTRODUCTION LETTER FOR RESEARCH

I am a Master of Library and information Science student in the Department of Library and Information Science, University of Nairobi. At present, I am conducting a research titled; *Efficacy of Disaster Management in Kenya National Assembly and the Senate*. The purpose of this letter is to request you to assist me by responding to the questionnaire and returning them to me.

You have been selected to participate in this study. The information and opinions you provide are purely for academic purposes of the study and shall remain strictly confidential.

Thank you in advance for your cooperation.

Yours faithfully,

**MOROGO WINNIE JELIMO**  
**Registration Number: C54/65599/2013**

**APPENDIX II**  
**QUESTIONNAIRE FOR DATA COLLECTION**

**Introduction**

Please read each question carefully and follow the instructions. Kindly answer all the questions to the best of your ability. Indicate with a tick or filling in the space(s) provided. All answers will be kept confidential.

**BACKGROUND INFORMATION**

1. Gender

(a) Male  (b) Female

2. Personnel category:

(a) Parliamentary staff   
 (b) PSC   
 (c) Senate   
 (d) Other (Specify.....)

3. Years of work?

0-5 yrs  5-10 yrs   
 10-15  Over 15 yrs

4. Higher education level?

**DISASTER MANAGEMENT PRACTICE**

5. Do you know of any disastrous occurrence that has ever happened in the parliament or senate? In each case explain briefly.

6. Rate the extent to which the following types of disasters have been experienced in the parliament buildings? Rate on a scale of 1 to 5 where 1= No Extent, 2= Little Extent, 3= Moderate Extent, 4= Great Extent and 5=Very Great Extent.

NO	Types of disasters experienced in the Parliament buildings	1	2	3	4	5
1	Fires					

2	Floods					
3	Terrorism attacks					
4	Collapse of buildings					
5	Diseases and epidemics					

7. How would you rate the level of disaster preparedness in the parliament buildings?

- (a) Very high [ ]
- (b) Low [ ]
- (c) Not at all [ ]
- (d) High [ ]
- (e) Moderate [ ]

**DISASTER MANAGEMENT FACILITIES**

8. How would you rate the level of disaster management facilities available in parliament or senate?

- (a) Very high level [ ]
- (b) Moderate level [ ]
- (c) Not at all [ ]
- (d) High level [ ]
- (e) Low level [ ]

9. To what extent do the following factors affect the level of disaster management equipment in parliament and senate? Use a scale of 1 to 5 where 1= No Extent, 2= Little Extent, 3= Moderate Extent, 4= Great Extent and 5=Very Great Extent.

<b>No</b>	<b>Factors affecting the level of disaster management equipment</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	Special internal arrangements for the acquisition and disbursement of funds					
2	Policies and agreements for the use of other facilities and services					
3	Emergency funding strategies					
4	Availability of disaster management facilities					
5	Occurrence of various disasters in the parliament and senate and the country in general					

10. To what extent do the following aspects of disaster management facilities determine the level of disaster preparedness in parliament and senate? Use a scale of 1 to 5 where 1= No Extent, 2= Little Extent, 3= Moderate Extent, 4= Great Extent and 5=Very Great Extent.

No	Aspects of disaster management facilities	1	2	3	4	5
1	Equipment of alarm systems (fire alarms, fire extinguishers,)					
2	Lifesaving facilities (first aid kits)					
3	Evacuation routes (exit stairs, emergency doors)					
4	Assembly points (fire assembly points)					

### DISASTER MANAGEMENT TRAINING

11. How can you rate the level of training in relation to disaster preparedness in parliament and senate?

- (a) Very high level of training [ ]
- (b) Low level of training [ ]
- (c) Not trained at all [ ]
- (d) Highly trained [ ]
- (e) Moderately trained [ ]

12. Disaster management training through education and other information is informative and helpful in disaster preparedness. In the light of this statement, to what extent are the following areas of disaster management training emphasized in disaster preparedness in parliament and senate? Use a scale of 1 to 5 where 1= No Extent, 2= Little Extent, 3= Moderate Extent, 4= Great Extent and 5=Very Great Extent.

No	Disaster management preparedness	1	2	3	4	5
1	Courses in first aids					
2	Evacuation drills					
3	Informative forums on disaster management					

4	Establishment of first aid brigades and Red- Cross associations					
5	Involvement of all stakeholders in disaster management training					
6	Others (Specify.....)					

13. Rate the level of agreement with the following statements about disaster management training and disaster preparedness in parliament buildings and senate? Use a scale of 1-5 where 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

No	Statements About Disaster Management Training	1	2	3	4	5
1	Disaster responders should be conscious and sensitive to changes					
2	Disaster responders should seek to work towards addressing the realities of often changing environment					
3	Advocacy is necessary to raise stakeholders' awareness on the need to participate in disaster management					
4	Disaster management training posits crucial and provides feedback to communities, governments and partners at all levels					
5	Disaster management training increases the general understanding of disasters and precautions to be taken					
6	Disaster management training should be undertaken continuously through the media, private sector and among other stakeholders					

## COMPLIANCE TO DISASTER MANAGEMENT POLICIES

14. To what extent does the parliament and senate comply with the disaster management policies?

- (a) To a very great extent [ ]
- (b) To a moderate extent [ ]
- (c) To no extent [ ]
- (d) To a great extent [ ]
- (e) To a little extent [ ]

15. To what extent does the parliament consider the following aspects of disaster management policies in disaster preparedness approaches? Use a scale of 1 to 5 where 1= No Extent, 2= Little Extent, 3= Moderate Extent, 4= Great Extent and 5=Very Great Extent.

No	Aspects of Disaster Management Policies in Disaster Preparedness	1	2	3	4	5
1	Development of rules and regulations to reduce disaster occurrences					
2	Institutional frameworks and planning					
3	Disaster risk reduction initiatives					
4	Workplace rules are elements such as policies, processes, behaviours, and employee attitudes					
5	Policies for personnel notification					

16. To what extent do the disaster management policies serve the following functions in disaster preparedness in the Parliament and Senate? Use a scale of 1 to 5 where 1= No Extent, 2= Little Extent, 3= Moderate Extent, 4= Great Extent and 5=Very Great Extent.

No	Functions of disaster management policies in disaster preparedness	1	2	3	4	5
1	Strengthen disaster management institutions					

2	Mainstreaming of disaster risk reduction					
3	Improve the resilience of vulnerable groups to cope with potential disasters					
4	Help vulnerable communities by developing coping mechanisms					
5	Create awareness of disaster preparedness and long term mitigation					

### DISASTER RESPONSE MECHANISMS

17. In your own view, how would you rate the nature of disaster response mechanisms in the parliament and senate?

- (a) Very much sufficient [ ]
- (b) Sufficient [ ]
- (c) Not sufficient at all [ ]
- (d) Moderately sufficient [ ]
- (e) Less sufficient [ ]

18. To what extent do disaster response mechanisms in Parliament and Senate involve the following stakeholders? Use a scale of 1 to 5 where 1= No Extent, 2= Little Extent, 3= Moderate Extent, 4= Great Extent and 5=Very Great Extent.

<b>N</b>	<b>Stakeholders involved in disaster response mechanisms</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	Private sector organizations (such as G4S)					
2.	Civil society authorities (like the County Council)					
3.	Government agencies (Police force, Fire departments, Ministries)					
4.	Parliament Staff					



19. To what extent do the following aspects of disaster response mechanisms determine the level of disaster management in parliament and senate? Use a scale of 1 to 5 where 1= No Extent, 2= Little Extent, 3= Moderate Extent, 4= Great Extent and 5=Very Great Extent.

No	Aspects of disaster response mechanisms and disaster management	1	2	3	4	5
1	Provision of basic necessities					
2	Coordination and collaboration through different phases of the response					
3	Rescue and relief provision					
4	Mainstreaming of disaster risk reduction					
5	Contingency planning					
6	Community preparedness					

20. Provide suggestions on how disaster management in the Kenyan National Assembly and the Senate can be improved

.....  
 .....

**THANK YOU.**