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Delayed Disaster interventions: A study of mitigation opportunities in humanitarian response to drought and food insecurity in Kenya

A case study of Kenya Food Security Steering Group

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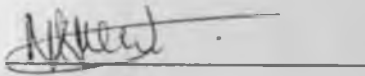
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JOMO KENYATTA MEMORIAL

DECLARATION

This project is my original work and has not been presented for any award for degree in any other university.



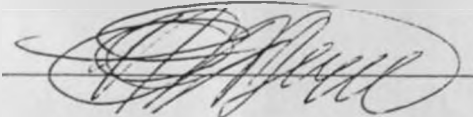
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Dedication

This work is dedicated to my sons Ian and Emmanuel who have had to bear with my activity packed schedule. Thank you for your understanding.

ACKNOWLEDGEMENT

First I want to thank God for enabling me to go through the course and His divine providence through the period of these studies.

I want in a very special way acknowledge my supervisors Prof. Enos Njeru and Dr. Mutie who gave me unlimited time and academic advice. Thanks for your support, patience and time.

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ABSTRACT

This study established the causes of delayed disaster interventions by exploring the works and processes of drought response and food insecurity management by KFSSG and determined the available opportunities in humanitarian response to the same.

The study was aimed at addressing delays in disaster response in Kenya, a situation that resulted to loss of lives and livelihood. The 2005-06 famine is estimated to have caused Kenya Ksh. 450 million that would have been otherwise used for development had proper mitigation and preparedness efforts put in place. The study focused on the activities of the Kenya Food Security Steering Group (KFSSG) based in Nairobi, and whose mandate involved drought and food security management.

The goal of the study was to establish causal factors underlying delayed intervention against drought related disasters in Kenya, as well recommend mitigation measures against loss of human lives and human suffering

The research reviewed the chaos and coping theory. Chaos theory attempts to explain how disaster occurs while coping theory explain how communities cope with disruptions in the system.

The study covered the work of 40 agencies, all members of KFSSG. To collect the desired data, the research utilized questionnaires observation and data review. A key informant guide was used to gather information from key officials in the group. This guide contained open ended questions that allowed further probing of relevant information.

Data gathered was coded according to commonality of themes and analyzed using percentages, frequencies and modes.

The research found out that over the last year, there has been increased funding towards drought management and food security projects. However, decision of funding was ad hoc and most organizations did not access funds for preparedness.

It was also revealed that there was policy gaps in the country as far as drought and food insecurity are concerned. Due to lack of policy in funding, the study revealed that there lacked substantial plans on the future of drought management and food security, a situation that threatened the sustainability of currently ongoing efforts.

There were no apparently proper contingency plans in the event that Kenya experienced a major drought and food insecurity. Deficiencies in programming and funding stated herein were attributed to the delays in humanitarian responses to drought and food insecurity.

In conclusion, the research find out that though there are improved efforts in the area of humanitarian response to food insecurity and drought management, there were still hindrances to the process that threatened lives and livelihoods.

As a result, the study highly recommends review of programming of drought and food security projects, increased funding and capacity building of the community living in drought prone zones. The study further recommends review of policy and research in viable livelihood options within the Arid and Semi Arid regions.

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ACRONYMS

ADPC -	Asian Disaster Preparedness Centre
ALRMP:	Arid Lands Resource Management Project
ASAL	Arid and Semi Arid Land
CDBMP:	Community Based Disaster Mitigation and Preparedness
DART:	Disaster Appraisal and Response Team
DMI	Drought Management Initiative
EC :	European Commission
EU:	European Union
EWS:	Early Warning System
FAO:	Food and Agriculture Organization
FEMA:	Federal Emergency Management Agency
FEWSNET:	Famine Early Warning Network
GIS:	Geographical Information Systems
GoK :	Government of Kenya
HA:	Humanitarian Assistance
HOAI	Horn of Africa Initiative
ICRC.	International
INGO:	International Non Governmental Organization
ISDR:	International Strategy of Disaster Reduction
JKUAT:	Jomo Kenyatta University of Agriculture and Technology
KFSM:	Kenya Food Security Meeting
KFSSG:	Kenya Food Security Steering Group
LNGO:	Local Non Governmental Organization
MoH:	Ministry of health
MoSP :	Ministry of Special Programmes
NDOC:	National Disaster Operation Centre
NGO:	Non Governmental Organization
ODA:	Official Development Aid
OFDA:	Office of Foreign Disaster Assistance
PAHO:	Pan American Health Organization
TOR:	Terms of Reference
UN:	United nations
US:	United states
USAid.	United States Aid
WWW:	World Wide Web

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND INFORMATION

The notion of Humanitarian assistance has its roots in ethical and religious foundations of universal brotherhood. It is based on timely disaster preventive and response interventions to reduce disaster impact on affected and vulnerable populations. Since ancient times, the society has had mechanisms to assist the needy (Kirkby et al, 2000:128). A web based article on the *History of Humanitarian assistance*¹ highlights the continued formalization of Humanitarian assistance with the emergence of new sets of disasters. According to this article, other than the earlier religious traditions, new 18th century secular ideas of compassion for human suffering set the pace for Humanitarian principle emphasizing the purposes of alleviating suffering, with main focus on relief for the poor, children and slaves as well as introduction of other labor laws as capitalism picked up. The 19th century industrialization produced problems in growing urban first international manifestation in the opposition to slavery and the slave trade. This came along with religious-based concern resulting to the formation of organized bodies that would eventually specialize in responding to humanitarian conditions of various nature.

With the emergence of Non Governmental Organizations (NGOs), Humanitarian Assistance (HA) took another form. It became instituted and guided by what is commonly referred to as the Humanitarian principle². Countries categorized themselves according to their economic status, developed countries assuming the role of donor states while the less developed were considered recipient nations. These terms have since then been used to refer to giver and receiver of humanitarian assistance. The Humanitarian Principle adopted by NGOs, Donor world and Government is build upon maximizing on opportunities in humanitarian response, that includes early preparedness and mitigation measures.

¹ <http://www.iupui.edu/~histwhs/h699.dir/HumanitChrono.htm>

² Humanitarian principle : protection of life and alleviation of human suffering(definition by usaid)

Among countries in the recipient category is Kenya. With 56% of its population living below a dollar per day, and an economy highly dependant on agriculture, and variety of development challenges, weather extremities have often triggered drought and flood related emergencies now and then hence high dependence on foreign aid.

Huge delays in the delivery of humanitarian assistance have contributed significantly to loss of life and psychological trauma that can not be reversed. This is despite the Humanitarian principle under which NGOs, Governments and Donor agencies operate: protection of lives and alleviation of human suffering. All actors in Humanitarian work, including governments, donor agencies and implementing agencies are bound to the humanitarian principle and are liable to the international law in the event of breach of this principle.

It is estimated that Kenya has slightly over 5000 registered NGOs. The country hosts the Eastern and central Charters of the World Bank, the European Commission, and the UN in addition to various donor country embassies serving the Eastern and Central region of Africa. This strategic positioning of Kenya has given it an advantage in terms of humanitarian assistance.

The Kenya government, in collaboration with the Famine Early Warning Systems Network (FEWSNET) and the Kenya Food Security Steering Group (KFSSG) has developed an elaborate and efficient Early warning system (EWS) rated one of the best in Africa³. The EWS was developed to enable the government, the people of Kenya and agencies operating in the country prepare, mitigate and respond to drought related disaster in a timely and cost effective manner. Through KFSSG, Kenya has taken wide steps to systematically gather and disseminate EWS information. EWS has been conceived and accepted as one major way of bridging the gap in humanitarian assistance and exposing available opportunities. To emphasize on the need for EWS, Salvano Braceno, the director of International Strategy for Disaster Reduction centre (ISDR) argues that...*"It is now more than clear that mitigation measures do not only achieve the objective of humanitarian principle but also reduce costs that would have otherwise been incurred in the process of responding to disasters"*.

³ Effects of drought in Kenya_ a rapid assessment report

The need to protect lives, alleviate human suffering and reduce costs incurred as results of natural and man made disasters is the basis of the formation of KFSSG. The mandate of KFSSG is:

1. Develop and implement mechanisms to coordinate the flow of drought management and food security information in the country, and develop procedures to ensure appropriate dissemination and access to the information.
2. Coordinate the effective management of information and reporting for the Kenya Food Security Meeting (KFSM) and the Inter Ministerial Committee on Drought and Food Security (the latter to be the responsibility of an appointed Government of Kenya (GoK) officer), such that when necessary the focus of such meetings can shift from information sharing to action planning and response coordination.
3. Develop coordinated response mechanisms to be adopted by all relevant stakeholders. Such guidelines should promote mitigation and early response activities.
4. Develop and manage a geographical targeting and distribution system for food and non-food responses to food insecurity and drought stress conditions that can be utilized by all stakeholders. A primary objective will be that of avoiding parallel structures and improving efficiency and impact.
5. Provide technical advice and guidance to all relevant bodies on matters of food security and drought management as appropriate.

The composition of KFSSG includes donor groups, the relevant government ministries, the UN, International and Local Non Governmental Organizations. The membership into this body⁴ is based on:

1. Having demonstrated clear commitment to the collaborative multi-agency approach to food security and drought management.
2. Possessing capabilities in the area of food security and drought management, be they technical, administrative, or policy related, in keeping with the TOR of the KFSSG.

⁴ <http://www.kenyafoodsecurity.org/inside.php?articleid=54>

3. The mix of bodies participating in the KFSSG has been drawn up with the view of maximizing the skill and knowledge base, the aim being to add value rather than duplicate existing capacity

The essence of these regulating requirements was to maximize the benefits expected in the response and prevention of the impact of drought related disaster. However, the dream of this team has not been achieved. The 2005-06 drought demonstrated the fact that Kenya and KFFSG for that matter still had a long way to go in the road to responding to disasters. In fact, it was evident that the country is still to take advantage of its strategic positioning and that KFSSG may not have been in contact with information on the ground.

To explicitly understand the gap between EWS and Humanitarian assistance, despite the underlying efforts to improve HA, there was need to carry out this study. This study was therefore to identify existing gaps that led to delayed interventions and provide useful information to humanitarian actors that would contribute to the development of appropriate disaster prevention and response policy.

The study focused on the activities of Kenya Food Security Steering Group (KFSSG) which was a representative of the Government, Donor groups (European Union, USAID, embassies of developed countries, the world Bank), the UN, International and local Non Governmental organizations(INGOs & LNGOs) .

1.2 PROBLEM STATEMENT

In the recent past, Kenya faced serious natural and manmade disasters. Within the last five years alone, the country experienced various disasters ranging from fire, building collapses, floods and droughts among others. In all the cases it was documented that help came in late. The country was estimated to have lost Ksh. 450 million to the drought⁵ in addition to human lives and livelihood. As much as various actors put up efforts to ensure assistance was at hand when needed, data to support and guide their efforts had been scanty. Mechanisms and personnel to respond to the same (if any) were unregulated and uncoordinated.

⁵ Kenya's position paper on Horn of Africa Initiative on drought magement

Various bodies such like the KFSSG, National Disaster operation centre (NDOC), the armed forces, the media, the church, humanitarian aid bodies and others had been actively involved in disaster response, yet, HA consistently arrived late in the event of catastrophes, major or minor.

The KFSSG effort to focus on drought related disaster and to respond on such in a timely manner proved fruitless. Food security still remained one of Kenya's major challenges even in the absence of drought. In the last major drought 2005-06, KFSSG experienced huge delays in aid delivery, resulting to serious loss of human and animal lives. So far, there are neither studies nor systematic information documented to explain the underlying causes for these delays.

A special report⁶ by Food Agriculture Organization (FAO) identified lack of budgetary allocation and high cost inputs for farmers as a major cause of food insecurity. Further, the report identified government's inability to scale up piloted food secure projects to the wider community as major challenge. This scenario further exacerbated the food insecurity crisis in Kenya. As a response measure, the ability of bodies like Kenya Agriculture Research Institute (KARI), Jomo Kenyatta University of Agriculture and technology (JKUAT) among others to find appropriate food crops that can be replicated in drought prone areas is essential. However, the findings of these bodies, for reasons to be established hardly ever reach neither community nor do they benefit much the Humanitarian agencies working in food security sector. In fact, there exists clear cut disconnection between Food related research institutions, the KFSSG and the Kenyan farmers. Such disconnection limits the opportunities available in responding to drought and food insecurity in the country.

Having the scenario highlighted above, there was need to study, understand and document the causes of delayed disaster interventions and explore the mitigation opportunities for humanitarian response to drought and food insecurity in Kenya. The research focused on analyzing the KFSSG activities, drought preparedness and mitigation measures with the ultimate aim of exploring available opportunities for humanitarian response to drought and food insecurity related disasters.

⁶ Special programme for food Security; <http://www.fao.org/docrep/005/ac828e/ac828e00.htm>

1.3 RESEARCH QUESTIONS

This study intended to answer the following questions:

1. What mechanisms of drought preparedness, response and mitigations measures have been put in place in Kenya?
2. What are the factors that affect humanitarian intervention against drought and food insecurity?

1.4 RESEARCH OBJECTIVES

The main objective of this research paper was to study the causal factors underlying delayed intervention against drought related disasters in Kenya, as well as mitigation measures against loss of human lives and human suffering.

The specific objectives were:

1. To establish and analyze drought preparedness measures in Kenya.
2. To establish the factors that affect the timeliness of response to drought related disasters.
3. To understand the measures put in place to prevent and mitigate the effects of drought related disasters.

1.5 JUSTIFICATION OF THE STUDY

The frequency of drought related disasters in Kenya and world all over was in the increase and is expected to increase with depletion of the environment and change of weather. Most often, any recorded disasters in the country had significant impact on the lives of common Kenyans. Stepping up Early Warning Systems without matching strides to prepare, prevent and mitigate effects of disasters were equally fatal as never taking any steps in the first place.

Disasters have retrogressive effects on the economy of nations. Further to this, disasters have the ability to reduce the achievements of years of development into rubbles in a wink of a second. Countries can not claim to progress without proper and timely disaster preparedness and preventive measures. Any development efforts must then be anchored on a properly developed disaster preparedness policy and plan, and disaster management seen as the other side of the development coin.

In view of the above, findings of this study will inform KFSSG, decision makers and humanitarian assistance actors in Kenya, whose interests is to reduce the impact of drought and food insecurity on Kenyans' lives, economy and development as a whole, and bridge the gap between Early Warning system and Humanitarian Assistance. Timely intervention not only saves lives but also saves money, hence can be used to revamp the economy of the country to great heights.

This study was therefore aimed at improving humanitarian assistance and provide a way forward in responding to drought and food insecurity. It forms a point of departure for disaster managers and scholars for future studies while carefully informing on policy issues relating to disaster management in the country.

1.6 SCOPE AND STUDY LIMITATIONS

The study analyzed KFSSG activities, drought preparedness, prevention and response measures put in place to establish the determinants of delayed Humanitarian Assistance (HA) and available opportunities for drought and food security interventions. The study focused on the last two calendar years (2005 to 2007) within which Kenya experienced a famine disaster to gauge disaster preparedness and responsiveness.

One major limitation of this study was limited and scanty literature to allow critical comparisons existing on this topic as most of the available literature is based on materials compiled for the purpose of news making across media channels, which is based on little if any scientific methods.

Another limitation to this study was the high staff turnover among the Humanitarian agencies, in particular the International Non Governmental organizations. Due to the contractual nature of terms of employment, staff turnover was high, and in most cases these may have had an effect on the institutional memory of these agencies. It also limited the sampling frame significantly.

1.7 OPERATIONAL DEFINITION OF KEY TERMS

Humanitarian Assistance – help either in services or goods given to a people in readiness or response to a disaster in order to prevent and/or alleviate human suffering.

Objectively Verifiable Indicators (OVI) include Cash, material donations, emergency relief projects implemented.

Official Development Aid (ODA) – it is money issued by the British Government to support developing countries, either as loan or relief aid. In this paper, ODA will be used synonymously to Humanitarian Assistance. OVI include cash donations towards disaster management.

Food insecurity - the state of having inadequate or having no food at all OVI in this case, affordability, accessibility and availability⁷.

Disasters –serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources. OVI include food insecurity, Malnutrition, widespread starvation

Drought related disasters - Disasters caused by or exacerbated by drought and indicated by cases of hunger/starvation, widespread Acute malnutrition etc.

Drought preparedness- refers to series of activities done in readiness for anticipated drought. Indicators include, disaster management policy formulation, reserve funding for disaster response, food reserves, community capacity building in disaster management, Existence of Disaster Appraisal and Response Teams (DART),

Mitigation Measures – these are the activities put in place to alleviate the impact of disaster on the population, economy and infrastructure. Indicators are community capacity building in disaster management, Government food reserves, increased importation of food, policy formulation, Early Warning on eminent drought,

Humanitarian intervention – It is any activity or policy put in place to prepare, prevent, or respond to a disaster. The indicators in the include any activity done in the way of preparing, preventing or responding to disasters.

⁷ Indicators provided by Sphere (Minimum Standards in Humanitarian standards)

CHAPTER TWO

2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 THE CONCEPT OF HUMANITARIAN ASSISTANCE

Montani and Majid (2002) define Humanitarian Assistance as a term used to refer to the protection of victims' lives and health, to ensure that the consequences of conflict – injury, hunger, disease or exposure to the elements of disaster – do not jeopardize their future. The two argue that to deliver aid properly, agencies need to embrace the principles of humanity, impartiality and neutrality. According to them, key of the principle of humanity is responding to immediate needs now, where possible, combined with aiding the maintenance or re-establishment of the population's own means of survival.

Montani et al single out ICRC's operation (2002: 8) whose major responsibility is to preserve the physical integrity and dignity of the affected population and to enable them to regain their autonomy as quickly as possible. In this regard, ICRC is able to reach the people on the ground and provide assistance as soon as the disasters occurs. ICRC is strategically placed in 50 countries throughout the world. This strategic positioning provides a window of opportunity to respond to disasters as soon as they occur, by commissioning the office nearby to respond.

2.1.1 Controversies in Humanitarian assistance

The donor world and humanitarian agencies have been seen as creating emergencies and contravening the Humanitarian principle arbitrary for their own selfish interests.

Graham Hancock (1989:189) analyses what he terms as the business of Official Development Aid (ODA) with the developed nations expected to contribute at least 0.7% of their annual GNP to the ODA for development initiatives in the third World countries. Indeed, Hancock follows the growth of ODA from 1.8 billion in the 1950's to 60 billion in 1989 , which is branded as good increment and synonymous to development achievements within the developing countries. Today, ODA stands at staggering 100 billion dollars. This is translated as great good in terms of achieving good of the recipient countries. With ODA further divided into Development and emergence/ disaster fund, it is expected that disaster fund will anchor the development initiatives and countries will achieve the millennium goals quicker.

Un surmountable criticisms of ODA have been advanced. Hancock sees ODA as a tool that has been used to;

“ create monstrous projects, that at vast expenses have devastated the environment and ruined lives,; it has sapped the initiative,, creativity and enterprise of the ordinary people and substituted the superficial and irrelevant glitz of imported advice; it has sucked potential entrepreneurs and intellectualism of the developing countries into non productive administrative activities; it has created a moral tone in the international affairs that denied the hard task of wealth creation and that substitutes easy handouts for the rigors of self help; in addition, though out the third world, it has allowed the dead grip of officialdom to suppress popular choice and individual freedom.”

(Hancock 1989:187)

A critical analysis of Hancock sentiments reveals the irrelevance of the ODA in the local context. It is no doubt that he sees aid getting into projects of no use to the supposed beneficiaries. The introduction of *mathenge*⁸ in Baringo and Eldama Ravine region through huge donor funds is such a project that he refers to. Other than greening the area, *mathenge* has only resulted to the diminishing livestock fodder, significantly threatening the community livelihood in the regions it has invested itself. In fact, *Mathenge* shrub has resulted to protracted court battles between members of the community, who find it an inappropriate project and the government, which facilitated its introduction.

Looking at ODA, what here we are calling Humanitarian Aid, in the eyes of Hancock, one can not miss to see the strings tied to official aid. While Hancock sees ODA as a business used to extend Western interests in third World the critical questions remains to what extend has the billion dollars of Western tax payers do actually achieve the intended purpose. He further enumerates the kind of exchanges happening in the ODA world, billions of dollars are repaid every year back in the form of loans with interests. Thus to Hancock, what is referred to as aid is not actually help but rather some sort of financial flow from north to south, then loan repayments from south to north (1989:188).

⁸ A drought resistant, quick spreading dry land shrub that is not edible and has a strong parasitic effect on other vegetation around it causing complete destruction and drying up of any other plant around it .

In such a case, the difficulties of countries to realize the real impact of "humanitarian Assistance" can be explained as all that is received is repaid back with interest. The economies of the South are insufficient to stand on its own, hence, any extra income so far being lost in the form of aid interest, explains why the south remain perpetual recipients of humanitarian assistance for many decades to come.

Anderson (2000:5) argues that Aid is a vehicle for providing resources to people who need them. She further sees Aid resources as representing both wealth and power and that whatever resources are provided, how they are distributed and to whom, and who decides about these matters and all affect the economy and social well being of the recipient community.

In this case, the implicit meaning of aid is dependant upon how such aid is handled. If the deserving people are given aid but at a time they do not need it, then the aid is useless. If Aid resources represent 'wealth and power', aid that wont change the status of the people or will impact negatively on them is also questionable in the sense that it ceases to serve the purpose for which is meant for.

Anderson provides an elaborate discussion of the *DO NO HARM* concept in humanitarian assistance. While aid delivery delays and inefficiencies emanate in Humanitarian Assistance programming, Anderson (2000:7) gives us what she terms as non prescriptive formula for ensuring that aid achieves the desired goal. Her formula entails programming challenges, capture lessons learned, provide a window into the analysis and suggest programming options.

Even with all this, the major question remains why has it been that humanitarian aid has had more challenges in delivering and is actually creating more harm as opposed to the *DO NO HARM* principle.

2.1.2 Role of early warning in drought management

Drought preparedness planning has become a widely accepted tool for governments and humanitarian agencies at all levels to apply to reduce the risks to future disasters. The need for a national drought early warning system has been acknowledged for some time in the literature as part of a more comprehensive approach to drought assessment and management (Wilhite and Svoboda, 1992: 47)

The focus on drought management as one major disaster frequently affecting Kenya and the world in general has been seen as manageable if Early Warning and proper mitigation plans would be put in place. However, even with elaborate and efficient Early Warning and weather prediction systems, Kenya has not been able to contain the menace of drought affecting it.

Wilhite et al propose that Drought plans should contain three basic components: monitoring and early warning, risk assessment, and mitigation and response. They further argue that because of drought's slow onset characteristics, monitoring and early warning systems provide the foundation for an effective drought mitigation plan. A plan must rely on accurate and timely assessments to trigger mitigation and emergency response programs. The monitoring committee's functions are discussed as an integral part of the drought planning process.

The fact that drought is described as being 'slow onset' means that it can be contained with proper risk assessment, mitigation and response measures in place. However, more often than not, this is not the case. The effects of not acting on time are tremendous as discussed below:

'The economic, social, and environmental costs and losses associated with drought in the United States are significant. In 1995, FEMA estimated annual losses attributable to drought at US\$6-8 billion. Drought in 1996 resulted in serious losses in crop and livestock production and increased the incidence of forest fires and wildfires. Decreases in surface and ground water supplies affected public water supplies and water-based tourism and recreational activities. These losses were estimated at nearly \$5 billion in Texas alone'

(Wilhite et al, 1992; 65)

In agreement with Wilhite, droughts and other disasters have cost nations billions and billions of dollars in many parts of the world. Major concerns have been raised over nations continued vulnerability to drought induced disasters, and the implication of the same to the economic and social development of affected nations. The after effects of drought are felt much due to the negative trickling effects of drought and high costs of responding to the same. Unlike other types of disasters that tend to be concentrated within limited areas of impact, drought is usually wide spread and needs major policy, money and infrastructural reconstruction to fully repair its damage. It tends to increase vulnerability to other disasters and in fact trigger them. The case highlighted by Wilhite above clearly mentions incidences of wild fires caused by drought.

Wilhite sentiments bring forth the value of disaster planning. For countries dependent of hydrothermal energy like Kenya, droughts can easily result to significant industrial losses. Early Warning will be key to averting such disasters. Disaster preparedness in this case will involve sourcing other forms of energy in good time as well having intensified production where possible to cover for the period of anticipated power interruptions. Early warning in Disaster preparedness and management is useful in resolving the intricacies of disaster itself, well in advance. This is why it is a valuable tool of disaster management, according to Wilhite and Svaboda.

A critical component of planning for drought is the provision of timely and reliable climate information, including seasonal forecasts, that aids decision makers at all levels in making critical management decisions. This information, if properly applied, can reduce the impacts of drought and other extreme climate events (ISDR report 2004).

In Kenya, primary concerns of drought are centered largely on issues of food security and meeting the nutritional needs of the population, environmental degradation, and a retardation of the development process. These issues cut across basic needs of the people within hierarchy of needs.

Though there is no proper documentation of losses or the costs of droughts in Kenya, certainly, huge chunk of shillings in the countries economy is lost in the event of drought.

The rapid emergence of drought in 1998 following the strong El Niño event resulted in drought- induced acute agricultural losses, Energy supply went down; substantial losses

occurred in the countries industrial production as workers were laid off in response to power rationing; Nairobi city council water supplies were reduced as water reserves diminished. This translated to huge economic losses for the country and hundreds of Kenyans lost their jobs.

This provision of timely and reliable climate information is packaged in the Early Warning system to inform drought preparedness and response. ISDR in essence relies on EWS for its drought programming. The Federal Emergency Management Agency (FEMA) has also heavily relied on EWS to reduce the impact to prepare, prevent and respond to climate related disasters. The results, according to both agencies have been significant protection of human lives.

A comprehensive, integrated national climate monitoring and drought early warning system has been under discussion for some time between the ministry of Agriculture's Arid Lands Resource Management Project (ALRMP), the meteorological department and NGO Famine Early Warning System Network (FEWSNET). The tripartite have regularly released news briefs into the Kenya Food Security Meeting (KFSM) every month informing of weather forecast patterns and the implications of changing weather in the region. Whether or not this information has been useful can only be told through the consequences of drought induced disasters and in particular the last 2005-06 drought in Eastern and North Eastern parts of the country.

Raheja and Ohja⁹ enumerate the following as the role of EWS:

- An assessment of the risk and vulnerability
- assist in designing disaster forecasting and warning systems
- identifying mitigation options,
- developing emergency response and communication plans,
- Support disaster investment planning.
- Operational disaster forecasting systems in the endangered area with the appropriate compatibility and agreed mechanisms for exchanging information
- Strengthen disaster responding institutions ,
- Conduct staff training and public awareness programs.
- Disaster warning, emergency preparedness and response plans at all levels

⁹ www.gisdevelopment.net/technology/gis/techgi0030a.htm

This being the role of EWS, a country like Kenya with such an elaborate EWS should be in a position to minimize the effects Disasters especially drought related ones. However, one key element for a functional EWS is ability of the warning to reach essential consumers. One of the purposes of this study is exploring how and if EWS does reach the targeted consumers.

2.1 2.1 The potential of Internet GIS for effective Disaster Management

Raheja and Ohja sees the use of EWS and Geographical Information System (GIS) in the World Wide Web (WWW) as perfectly able to bridge the gap between EWS and Humanitarian assistance. However, she is skeptical over the use of information stored in the WWW arguing that 'thousands of web sites provide images and maps of the earth, but this information remains underutilized for disaster management'.

The under utility of geospatial information which is highly required in disaster management has been a major determinant of widening gap between EWS and HA.

Raheja et al goes further to say that effective disaster management requires assimilation and dissemination of preplanned, historical and real-time information to many sources. This information must be relayed and understood in the shortest amount of time possible to carry out the required activities. Enter Internet GIS, which can be used to plan for, respond to and recover from emergency situations, providing personnel the most accurate information when its most needed - constantly. In other words, Internet GIS gives the emergency management professionals the ability to assemble large amounts of public information about their community, and analyze and use the information in an efficient, intelligent manner.

While the KFSM has a website¹⁰ and elaborate GIS packaged information on disaster prone areas of Kenya, where they can communicate all the necessary information on drought and disaster management, it is yet to be established if such information reaches the target consumer.

If the information does get to the consumer, further information on the actions triggered by such knowledge at the various cycle of the drought need to be established.

¹⁰ www.kfsg.com

A Pan American Health organization publication¹¹ acknowledges the role of internet and modern communications in highlighting a series of disasters hitting Latin America and the Caribbean countries between 1985 and the 1998. According to this report, word of these tragedies reached the international community within minutes, and in some cases, relief was mobilized in a matter of hours. This outpouring of assistance can greatly help a disaster-stricken country if it meets real needs thanks communication, EWS and GIS maps of disaster prone zones.

GIS data organization displays graphic data in a format, which is easy to understand. The system's database may show boundaries, topography, road network, utility and supply lines and other features vital to disaster planning. Linked with an extensive database that provides capabilities for real-time command and control, Internet GIS transforms disaster response into regular emergency management exercise. Public education and awareness and preparedness are fundamental factors in the success of any disaster prevention and mitigation plan¹².

With a well-defined disaster prevention and mitigation plan with clear action steps and precautionary measures in place, public confidence and victims ability to be part of the prevention and response to disasters affecting them is enhanced.

Despite the simplicity of such data, and its ability to save economies if well consumed, the establishment of the same and amongst our Humanitarian agencies and government departments is yet to be established.

Although the Kenyan public may benefit from traditional knowledge on EWS, that in itself is not enough to make people act in the direction of disaster impact reduction. This is evident as most farmers continue to plant even in limited rainfall, losing seeds worth millions of shillings to the ground.

¹¹ Pan American Health Organization (PAHO) (1999); Humanitarian Assistance in Disaster situation,

¹² <http://news.bbc.co.uk/2/hi/science/nature/4373333.stm>

2.1.3 Pre-humanitarian response eligibility conditions

Many donor countries and humanitarian agencies would not release funds neither intervene in a humanitarian crisis until the host governments declare the situation as disastrous and appeal for international help. Wilhite and Svaboda argue that:

the thresholds for declaring drought are arbitrary in most cases (i.e., they are not linked to specific impacts in key economic sectors). These types of problems are the result of a misunderstanding of the concept by those formulating definitions and the lack of consideration given to how other scientists or disciplines will eventually need to apply the definition in actual drought situations (e.g., assessments of impact in multiple economic sectors, drought declarations or revocations for eligibility to relief programs).....Third, drought impacts are nonstructural, in contrast to, the impacts of floods, hurricanes, and most other natural hazards. Its impacts are spread over a larger geographical area than are damages that result from other natural hazards”.

For these reasons, the quantification of impacts and the provision of disaster relief are far more difficult tasks for drought than they are for other natural hazards. Disaster managers, for example, are more accustomed to dealing with disaster impacts that are structural and localized, responding to these events by restoring communication and transportation channels, providing emergency medical supplies, ensuring safe drinking water, among other roles. On the contrary, these characteristics of drought have hindered the development of accurate, reliable, and timely estimates of severity and impacts and, ultimately, the formulation of drought contingency plans by most governments. The same has affected the declaration of disaster and as a result contributing greatly to delayed response to human suffering.

Within the United States Aid's Office of Foreign Disaster Assistance(USAID-OFDA) funding guidelines, the hosts government declaration of disaster is fundamental to any allocation of Humanitarian Assistance¹³. In other words, OFDA will not assist not unless the recipient nation has “begged” it to help.

¹³ www.usaid/ofda_funding_guidelines/gov.org

In that case, the humanitarian Assistance expected may not be forthcoming if for instance the government in question is at loggerheads with the US political system. The likes of Cuba have been such cases where millions of people would not receive aid following the protracted differences between the government of Fidel Castro and the US

In countries that lack governments such as Somalia, declaration of disaster still remains vital for any humanitarian help to start flowing. The US government will in such cases use the regional advisor and Disaster Appraisal and Response Team (DART)¹⁴ to evaluate the case and determine whether there is need to declare disaster or not. Such procedures serve to lengthen the period of suffering for those in need and sometimes may be full of biases as the evaluators are not well aware of local situation.

The essence of humanitarian response is to protect lives and alleviate human suffering. Most of the procedures required for the disaster to be declared especially in the case of 'slow onset disasters' are time consuming and logistics are usually a challenge. By the time the intervention comes, it is most often too late. In the case of the DART approach, the rapid assessment ceases to be really rapid as people continue to suffer as statistics taken increase by the day and challenges of delivery are overcome.

2.1.4 Standard measures in declaration of emergence and disasters

Various measures have been put forward to determine at what period in time an incidence can be declared a disaster. According to the Sphere project (Humanitarian Charter and Minimum Standards in Disaster response), food security includes access to food (including affordability) adequate food supply or availability and the stability of supply and access overtime. It also covers the quality, variety and safety of food, and consumption and biological utilization of the food. These standards of measurement of food security according to sphere project present a blanket picture that disguises vulnerability of sections of individuals in the society. This presents major weaknesses in responding to needs among pockets of individuals within the system. Secondly, sphere standards assume that food insecurity will always be spread over the bigger society and that if one of the characteristics presented are present in the society then there is not necessary cause for alarm.

¹⁴ The role of DART include disaster appraisal, declaration of emergency where there is no government and disaster response.

However, the 1984 drought in Kenya proved the opposite, which while the masses purchasing power was high, commodity circulation in the market was limited, causing major food insecurity in the country. Today, Zimbabwe experiences the same. Thus, the criteria of declaring disaster is ambiguous and often result in delayed disaster interventions and diminished opportunities for a timely response.

Key indicators¹⁵ in the Sphere project in with regard to primary response to food insecurity focus more on agricultural economy which has proved non resistant to drought. In such a case Kenya continue to become vulnerable to drought. Such inputs do not necessarily result to a food secure economy. The solution in this case is to find alternative sources of income that can increase the people's purchasing power.

2.1.5 Moving from improvised to planned disaster response

The Pan American Health organization (PAHO) issue of 1999 titled *Humanitarian assistance in Disaster Situation* reported that major advances have been made in the previous 20 years in the way Latin American , Caribbean countries and the international community responded to and prepared for disasters. The report goes on to say that many governments have well-established agencies charged with developing national capacity to respond to disasters.

¹⁵ Interventions to support primary production are based on a demonstrated understanding of the viability of production systems, including access to and availability of necessary inputs and services

New technologies are introduced only where their implications for local production systems, cultural practices and environment are understood and accepted by food producers .

Where possible, a range of inputs is provided in order to give producers more flexibility in managing production, processing and distribution and in reducing risks

Productive plant, animal or fisheries inputs are delivered in time, are locally acceptable and conform to appropriate quality norms

The introduction of inputs and services does not exacerbate vulnerability or increase risk, e.g. by increasing competition for scarce natural resources or by damaging existing social networks

Inputs and services are purchased locally whenever possible, unless this would adversely affect local producers, markets or

Food producers, processors and distributors receiving project inputs make appropriate use of them

Responses understand the need for complementary inputs and services and provide these where appropriate

These specialized bodies are geared towards developing and having an organized way of responding to cases of humanitarian concern.

The PAHO publication further reports that in 1986 countries adopted a regional policy to improve coordination of international humanitarian assistance, with coordination bodies who not only coordinate relief efforts in the event of a disaster, but continuously update emergency plans and conduct preparedness training. It is further states that in various countries, the Ministries of Foreign Affairs in several countries have established procedures on the role of diplomatic missions in both donor and recipient countries during the response phase of disasters. These arrangements have been said to have amounted to positive improvement in the way nations have been responding to disasters, eventually reducing the gap between EWS, occurrence of disaster and response to the disaster to significantly.

Kenya has equally made substantial steps in setting up the National Disaster Operation centre (NDOC) housed at Nyayo house. NDOC was established in 1998 following the advanced effects of El nino rains. It is directed by officer drawn from the military and consists of staff drawn from different government departments, who work on 24 hour surveillance basis. NDOC's main goal¹⁶ is to establish and maintain an efficient, effective and coordinated system for managing disasters in order to minimize losses and resulting disruptions on the population, economy and environment. The operations and existence of NDOC, unfortunately has not been known to many Kenyans, and the operations of this body have not been visible to the Kenyan public. Again, NDOC has been overshadowed by the military, who have been called upon to respond to sudden emergencies, in improvised manner as opposed to the expected role of NDOC, who are supposed to have well trained mix of professionals, on standby, that can be called upon, any time a need arises

The impact of disasters is usually bad. Delayed Humanitarian assistance is even worse than the disaster itself. It is under this view that Kenya must move to more planned response. In such case representatives from international agencies, donor countries, and NGOs need to examine ways to make relief assistance more compatible with the needs of affected communities.

¹⁶ Information sourced from the NDOC mandate

The PAHO report argues that in developing countries, the high costs of relief operations can drain, in a matter of days, the resources allocated for a country's long-term primary health care and development goals.

'The most vulnerable groups-children, pregnant and lactating mothers, the elderly, and low income groups, particularly the underprivileged in urban areas—are the ones whose survival and development are threatened most by the slow recovery of services. Because of the competition for dwindling resources at national and global levels, all governments, non governmental agencies and institutions must consider, before the next major disaster strikes, the most effective form of international humanitarian assistance. This will save nations incomes to meet the long term needs of these vulnerable groups.'

(PAHO 1999)

Women and children all over the world have been identified as the most vulnerable. However, the occurrence of disaster exacerbates an already precarious situation and especially if it occurs in the third world countries and poor neighborhood where the livelihood and basic rights of these two categories of societal members are already at an imbalance. With this knowledge, it is important to focus on a more planned response of disasters in Kenya. It must be noted that over 51% of the population in Kenya are women and girl children. Like most other nations, the women bear the brunt of living and survival for their families including the men. Getting them on the table to prepare is vital in the event of occurrence of disasters. Having 56% of the population living below a dollar per day, it is then vital to put measures in place to protect the same people who are at the highest risk in the event of disaster.

2.1.6 Community based disaster mitigation and preparedness

Kurt MacLeod (2002)¹⁷ documented a case study of Cambodia flood problem and how Cambodia tackled a problem that had frequently hit the nation leaving a trail of irreversible infrastructural damage, loss of lives and humanitarian crises. In his analysis, Macleod lists a few of the lessons learnt from the involvement of communities in developing solutions to flood preparedness.

¹⁷ Quoted in the Regional workshop on best practices in Disaster mitigation by the Asian Disaster Preparedness Centre (ADPC)

Among those lessons include

1. The involvement of communities in flood preparedness can enhance the success of flood mitigation and preparedness projects
2. It is important to develop relationships between communities, government's national disasters management departments and donors focusing on disaster preparedness to instill sustainability measures for continued activity support.
3. Communities best participate once they have the knowledge of what is expected and least harmful to them.
4. They appreciate that they are first victims in the event of disaster and hence want to be part of the solution, to protect their lives and their interests.

Flood problems have not been the reserve of Cambodia. Budalangi area of Western Kenya has been experiencing persistent flooding, year after another. The involvement of the local community has been minimal. The local community looks at the government as only solution provider and remove themselves from the process. This perception has been aggravated by leaders who take advantage of such disaster to score political points. In such event, the view of government as 'owner' of the disaster preparedness and mitigation process is hammered even further. It is important to note that until the local community realizes that the problem is theirs, it affects them more than the government and the government is composed of individuals like them, then that will be the beginning of finding sustainable solution to the flooding crises. ✓

Macleod notes that one of the major difficulties in the implementation Community based disaster mitigation and preparedness (CBDMP) projects was the low capacity of the local communities in Cambodia. Selected individuals were not able to participate fully; neither would they be able to give the needed support.

Part of the problem was because there had lacked extensive disaster preparedness training and secondly, agencies operating in the area had come with solutions, implemented on their own and left without considering the elements of sustainability.

Past experiences indicate that successful development projects have proved that community involvement and proper exit strategy are key elements of the interventions,

which ever it is. Key donors¹⁸ have adopted these experiences and made it a requirement for agencies to indicate the sustainability and exit strategy for development interventions. This also applies to the case of disaster mitigation and preparedness. Cambodia's case presents crucial thinking points on the way most countries, especially in the developing countries handle disaster prevention and response projects. As such, communities must have the all tools needed to bring about change at the local level and the added organizational support.

According to MacLeod, the CBDMP approach has shown that:

- If the people conceive development programs and activities as reflecting their interests, they are willing to become involved and commit their own resources
- Active participation of people aims to strengthen their confidence in their own capabilities and incite them to act on their own responsibility.
- Although it is huge time consuming and sometime lengthy, community participation is cost effective, self help and sustainable process in development
- Sometimes community teams realizes that participation is power sharing and voice gaining process
- Community coping mechanism and indigenous knowledge from the community were very useful in mitigation planning

Hammer and Champy (1993) reiterate the Macleod sentiment arguing that in the event of disaster, the affected communities are usually the first to respond to it. This means that capacity building them, and encouraging participation will add value to the reducing the impact and responding to the disaster.

Manu Gupta 2004 argues that the first 72 hours are most critical in the vent of disasters. He adds that depending on the scale and magnitude of the disasters, the individual and the neighbour are the only people who can help each other until external help finally arrives.

¹⁸ Mandatory USAID and EC proposal writing requirements

In this case, he argues, that a good mitigation and preparedness practice can make all the difference in closing the gap between disaster occurrence and arrival of external help.

2.2 THEORETICAL FRAMEWORK

2.2.1 The Chaos Theory

The word Chaos has been generally used to mean a state of confusion, lacking any order. Chaos, with reference to chaos theory, refers to an apparent lack of order in a system that nevertheless obeys particular laws or rules; this understanding of chaos is synonymous with dynamical instability, a condition discovered by the physicist Henri Poincare in the early 20th century that refers to an inherent lack of predictability in some physical systems. The name "chaos theory" comes from the fact that the systems that the theory describes are apparently disordered, but chaos theory is really about finding the underlying order in apparently random data. Chaos theory was first experimented by a meteorologist, named Edward Lorenz,¹⁹ In 1960, Lorenz, a meteorologist, was running computerized equations to theoretically model and predict weather conditions.

Chaos theory describes the behavior of certain nonlinear dynamical systems that under specific conditions exhibit dynamics that are sensitive to initial conditions (popularly referred to as the butterfly effect). As a result of this sensitivity, the behavior of chaotic systems appears to be random. Chaos theory attempts to explain the fact that complex and unpredictable results can and will occur in systems that are sensitive to their initial conditions. A common example of this is known as the Butterfly Effect. It states that, in theory, the flutter of a butterfly's wings in China could, in fact, actually effect weather patterns in New York City, thousands of miles away. In other words, it is possible that a very small occurrence can produce unpredictable and sometimes drastic results by triggering a series of increasingly significant events.

¹⁹ <http://www.imho.com/grae/chaos/chaos.html>

The two main components of chaos theory are the ideas that systems - no matter how complex they may be - rely upon an underlying order, and that very simple or small systems and events can cause very complex behaviors or events.

This latter idea is known as sensitive dependence on initial conditions, a circumstance discovered by Edward Lorenz (who is generally credited as the first experimenter in the area of chaos) in the early 1960s.

2.2.1.2 Application of Chaos theory in Disaster management

Disaster and emergency situations characterize the nonlinearity of human events. Douglas Kiel (1994) argues that these are events in which the relationships between relevant variables are churning. He adds that even in our desire to create order and control the situation, events often seem to intertwine and get confusing one step ahead of our best efforts. Pagels (1988, p.56) noted that, "life is.. nonlinear. And so is everything else of interest." Clearly, what makes disaster situations particularly interesting and challenging is the inherent nonlinearity in such events.

New thinking in response to the recognition of nonlinearity in human and organizational systems has focused on the functionality of disorder and instability (Kiel, 1994). Chaos widens the spectrum of options and forces the organization to seek new points of view. For an organization to renew itself, it must keep itself in a non-equilibrium state at all times, and this is only achievable by being a step ahead in planning and preparing for any eventuality. The formation of KFFSG is based on responding to "chaos" and the options it puts in place just like any other disaster management institutions are based on such expected states of non equilibrium and nonlinearity.

Most importantly, during times of high instability such as disasters and occasions when emergency services reach peak levels of activity it is essential to recognize that stability can only be regained by developing strategies that are themselves unstable. In short, we must match the instability of these environments with management practices and organizational strategies that are dynamic and fluid. This paper focuses on developing such instability in administrative systems.

Valan (2005) argue that overtime, there are rhythms of chaos which tend to move in a cyclical manner making the chaos predictable. Kiel goes ahead to discuss chaotic

behavior in disaster management. He argues that emergences can trigger chaos in organizational systems ranging from financial management data to data from production processes, decision making processes and implementation of activities. To him, chaos is typified by behavior that, over time, appears random and disorderly. This is what happens when organization are ill prepared for a chaotic scenario.

To Kiel, however, chaos occur within definable parameters or mathematical boundaries. This is the characteristic of chaos that make it predictable. Thus chaotic behavior remains within boundaries or within limits. It is not random behavior that can result in any outcome. Chaotic behavior looks wild and erratic, but does not jump out defined mathematical limits.

In a disaster situation according to the proponents of the chaos theory, one way of controlling this chaos is controlling the degrees of freedom. In other words, putting control on possible expected damage. The ability of control in some situations, however, are often beyond the control of human actors. The parameters of destruction may outstrip response system capacity. This certainly translates to certain gaps between the occurrence of the emergence and the response ability.

A most recent method for controlling chaos is aimed at altering the "orbit" of a chaotic to system to a more desirable orbit on its attractor (Ditto and Pecora, 1993). This approach uses continuous tracking and seeks to identify changes in system behavior that occur over time. By tracking such changes alteration of the parameters are expedited. This approach is similar to the first method noted above, but this particular approach represents a more adaptive move toward to controlling chaos. The approach is exemplified by the Use of GIS based EWS (discussed earlier). It is a more effective approach and now most relied upon in disaster prediction, especially weather based disasters. This approach has been adopted by KFSSG.

The second approach to controlling chaos based on identifying pressure points to alter system behavior is synchronous with emerging views of managing organizations and inter-organizational response. This new view argues that recognition of the nonlinearity of human systems demands that we examine methods that use minimal pushes to develop maximum results. This approach focuses more on open lines of communication (Comfort, 1994).

This approach advises on the information exchange between disasters managers and pressure points and that includes the communities who suffer most from the effect of disaster, and hence alteration of behavior in the community is essential in controlling the impact of the disaster. In the event of Weather forecast indicating above normal rainfall for instance, the community could prepare for the disaster by moving away from area expected to be affected. That is the essence of the approach above as advanced by Comfort.

2.2.2 Coping Theory

Coping is a dynamic process which involves a series of reciprocal responses between individuals and the environment. The theory argues that in the presence of stressors, people tend to develop skills to address problems. The coping skills literature provides excellent support for a focus on increasing positive resources and positive life experiences as a vital component of effective coping. Folkman (1991) argues that threatening situations or events automatically lead to the development of a coping mechanism.

The theory sees systems as adjusting to life stresses as a major component of their ability to lead a fulfilling life. If the stressor proves more threatening a further appraisal is made in which the systems assess what resources and potential coping strategies are at the moment and available to deal with the stressor. In this regards, the system tries to put the stressor under control.

In view of drought and food insecurity, the disaster planning and management are seen as a coping mechanism. However, even when the system fails, at individual level, people struck with food insecurity and famine try to cope in the manner they know best. The theory has its premise on psychology and sees the system as having to find ways to survive. Failure to cope could be equated to fail disaster plan that lead to human suffering and loss of lives.

The establishment and the mandate of KFSSG are seen as one way in which the country has tried to cope with the problem of drought and insecurity. In essence, delays in responding to disasters then will be seen as hindrances to the coping ability of the country, as a system.

2.3 CONCEPTUAL FRAMEWORK

Level 1 Disaster management cycle

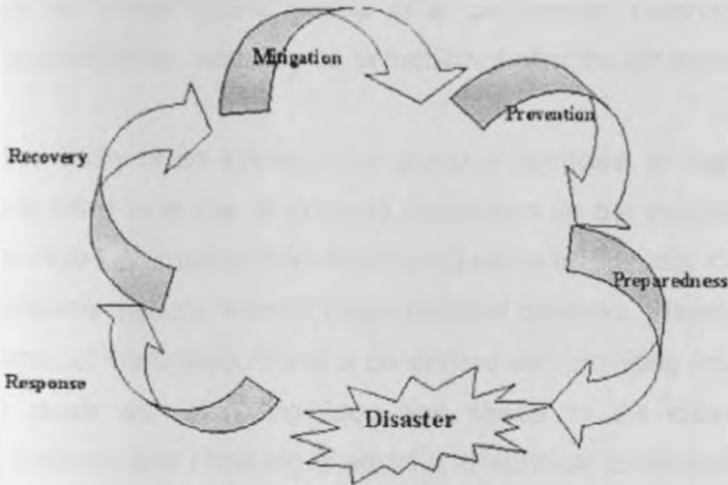


Fig. 1: Disaster Management Life Cycle

The disaster management life cycle has been widely used and accepted in disaster planning, mitigation and response. The model has been adopted by Federal Emergency and Management Agency (FEMA), the ISDR and other bodies in the Asian continent is seen as to have developed by a consortium of Asian Disaster Managers and Relief officers in Asia.

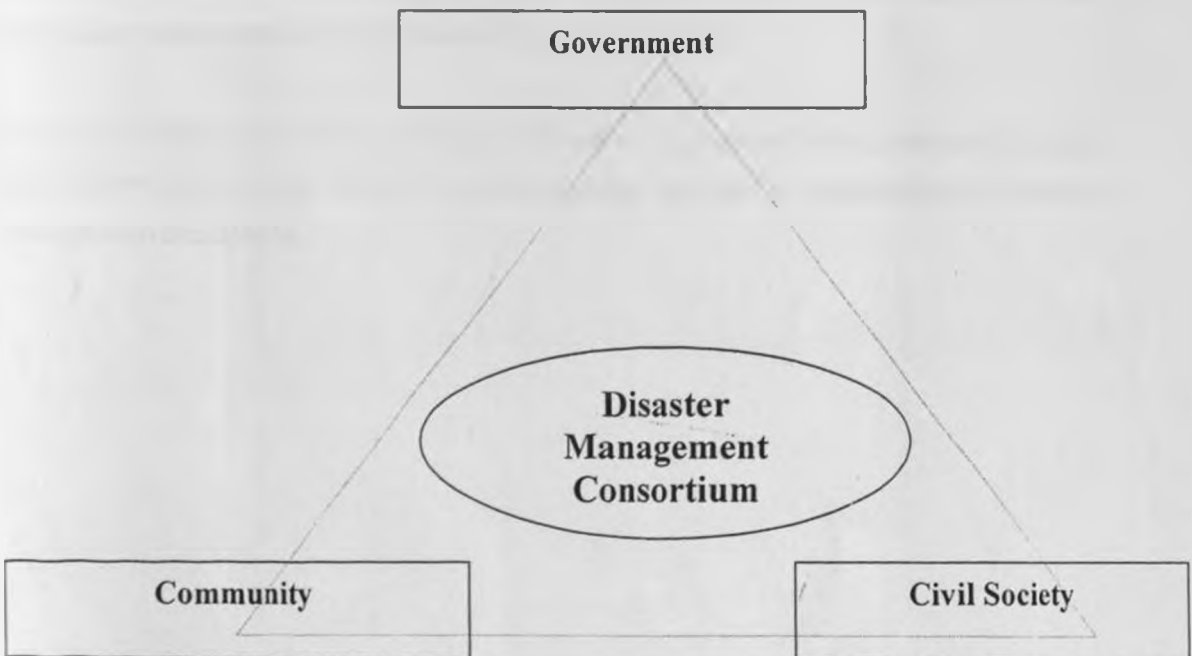
This model identifies five important phases of disaster management: disaster prevention, disaster mitigation, disaster preparedness, emergency management, and disaster recovery. Of these, disaster prevention, disaster mitigation, and disaster preparedness constitute the pre-disaster planning phase. Pre-disaster planning is the process of preparing in advance, to meet a future disaster. Disaster prevention is the action taken to eliminate or avoid harmful natural phenomena and their effects. Disaster mitigation is the action that deals with reducing human suffering and property loss. Disaster preparedness encompasses those actions, which are taken to limit the impact of natural phenomena by structuring response and establishing a mechanism for effecting a quick and orderly reaction.

Emergency management covers responding to disasters by various organizations, providing many services that need to be mobilized on a moment's notice, and functioning for an indeterminate period in a coordinated manner under stressful and difficult circumstances, and may be demobilized after the emergency has abated.

The ability of an agency, or a group of agencies, to manage emergencies, rather than just react to crises, is critically dependent on the availability and flow of real time and archived information from monitoring systems, thematic databases, and decision support systems that are linked through national networks. Disaster recovery is the last phase of disaster management and is concerned with providing relief after the disaster has struck. It deals with providing food and shelter to the disaster victims, restoring normal conditions and providing financial and technical assistance to rebuild.

This model breaks down disaster response into phases. While all steps are important, emphasis are laid on disaster prevention and preparedness to allow protect the population from the effects of delayed response. However, just like may models, this particular model is not disaster prove and depending on the nature of he disaster, some of the stages may not be useful.

Level two: Corporate involvement in Disaster management conceptual framework



This model was developed by B. R. Balachandran and Adrea Haer (2005) who viewed disaster management as collective responsibility. The model was developed in the wake of 2004 Indian tsunami, bringing together lessons learnt in the aftermath of the tsunami. The above model is built on disaster-resilient economic and social infrastructure, involving all important actors; the government, the civil society and the community, who are directly affected by disaster. According to this model, the three structures are essential in the disaster management process and must be involved at all stages of management process indicated in Model 1. The model is built on the premise that all the actors are able to establish effective systems for disaster response and integrate disaster management in to mainstream development.

The model sees the Community as the primary actors in disaster preparedness, prevention, mitigation and response. The civil society on the other hand is seen as important actors in informing and supporting the communities throughout the process, providing technical, material and psychosocial support. The civil society is also seen as the arm that intercedes for the community to the international community.

The role of the government according to this model is to provide conducive environment for disaster planning and management including an appropriate policy. The government is also seen as an umbrella organ whose role complements the civil and community action without necessarily duplicating efforts. The government has also been seen as a key vehicle to intervention in the event of massive disasters.

According to these model the dysfunction of one of the actors in the process of disaster management can seriously affect the entire process, leading to unprecedented delays in humanitarian assistance.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Site Selection and description

This study was carried out in Nairobi with focus on agencies implementing their humanitarian work within the area of drought disaster preparedness and response. The site selection was based on the fact that Nairobi city form the hub of government, donor and INGO administrative centre for humanitarian agencies operating with in the East, Central and horn of Africa. Agencies considered were only those whose mandate covers the political boundaries of Kenya, and whose head offices are situated within the city. This agencies were members of Kenya Food Security Steering Group, which is the main body responding to drought and food insecurity disasters in Kenya, whose sitting is based in Nairobi.

3.2 Sampling

This study was an investigative analysis of the operations of the Kenya food Security steering group, it was vital to sample individuals who are member of the group and involved in Disaster mitigation and preparedness in Kenya. The membership of KFSSG provided the total population from which samples were drawn. The sampling units drawn were based on the following characteristics;

1. Individuals representatives from agencies, donors or government and who are members of KFFSG
2. Persons above were working as Emergency Relief Officers(ERO), program officers or in charge of drought and food security operations within agencies for which they work for

A sampling frame developed from regular attendance sheet from the last two years was drawn. All lists of members who attended within the said period were listed both by name and contact, maintaining high correspondence between the sampling frame and sampling units. The sampling units were further categorized according to their position in the group with all officials earmarked for key informant interviews due to the role they played in the group.

The use of 2 years list helped to avoid problems of incomplete frames. Chava and Nachmias (1996:182) warn that incomplete lists could lead to erroneous sampling frames that exclude some certain units.

Further to errors related to incomplete lists, the research dealt with lists of names of individuals from various agencies with a record of consistent attendance of meetings other than the agencies themselves. This was to protect the sample frame from cluster elements error as a result of identifying units through agencies as a cluster (ibid) in a similar manner, the research omitted all names of units within the population who may have attended the meeting as visiting humanitarian workers or observers and those who have been attending but do not implement humanitarian projects under the guidance and directorship of KFSSG. Chava et al refer to such elements in the sampling frame as blank foreign elements.

3.2.1 Sampling design

Following the anticipated limited sampling frame, the research utilized non probability sampling designs. 100% of the population that fitted within the desired characteristics was sampled.

Judgmental samples were drawn from the total population and the chance of each unit sampled was be maximized. The sample units drew represented donors, UN agencies and NGOS.

3.3. Units of analysis

According to singleton (1995) a unit of analysis is what or who is to be described or analyzed. It is what the research seeks to explain or understand and can therefore be individuals, social roles, positions or even relationships. Chava and Nachmias (1996:53) describe unit of analysis as the most elementary part of the phenomenon to be studied. In this study, the unit of analysis was delayed disaster interventions in humanitarian response to food insecurity.

3.4 Units of observations

Mugenda and Mugenda (2003:15) describe unit of observation as the subject, object, item or entity from which we measure the characteristics of, or obtain the data required in the research study in this case, the unit of observation was agencies involved in disaster interventions in response to drought and food insecurity.

3.3 Data collection methods and analysis

This being a qualitative study will seek to collect descriptive data. Data collected was analyzed with simple frequencies, percentages and mode.

3.4 Sources of data

Primary sources: these included people involved in disaster management both at policy level and project implementation. These were people with first hand information such as Emergency Relief and Program officers of humanitarian agencies, desk officers of donor offices, government officials working with the Arid lands Resource management Project (ALRMP), the NDOC, Ministries of Health, Special Programmes and Water, Department of Meteorological services and KFSSG secretariat.

Secondary sources: these included second hand sources of information in drought and food insecurity in Kenya. This included government session papers, policy papers, Minutes of the KFSM, Organizations working mandates and policies and information drawn from the Kenya meteorological department and FEWSNET.

3.5 Data collection methods

Various data collection methods were triangulated in order to fully gather relevant details for the purposes of fulfilling the goals of this project paper. The research there fore utilized survey methods (personal interviews and questionnaires) and analyzed secondary data relevant to the research topic. The following methods and tools were employed:

i) Interviews

Interviews were used in obtaining information from the sampled population. A questionnaire designed for this purpose was administered. It contained both open ended and closed ended questions directed to meeting specific research questions and objectives in the study.

ii) Key informant interviews

This involved administration of oral questions through the interview guide to people involved in responding to disasters in Kenya, specifically food security. The key informant interviews provided in depth data that met specific objectives of this study. Among those interviewed include, key staff of KFSSG, National Disaster operation Centre(NDOC) and the Emergency relief Officer working under the Ministry of Special Programmes (MoSP) and desk officers in donor institutions.

iii) Observation

Observation was used to enable the researcher study behavior and also other information that may not come out through the interview such as the reports, photos and tools used in drought disaster response. A checklist was be used to guide the observation.

iv) Secondary Sources

Data was collected through information gathered in previous studies through desk research. Sources of information included organizational reports, policy documents, and KFSSG meeting minutes among other essential documents. A checklist developed for this purpose guided the review.

Table 1: Summary of Data collection Methods, tools and sources

Method	Tool	Sources
Interviews	Questionnaire Key informant guide	<ul style="list-style-type: none"> • Staff of KFSSG • Desk officer for donor offices • Emergency relief officers/ Program officers for NGOs, MoSP, ALRMP, NDOC
Observation	Observation checklist	<ul style="list-style-type: none"> • Emergency relief Policy manuals • Disaster management and reports • Pictures taken in disaster planning and management • Disaster response tools • Repositioned warehouses of Non Food Items (NFIs)
Review of Secondary Data	Checklists	<ul style="list-style-type: none"> • organizational reports • policy documents • KFSSG meeting minutes

3.8 Data analysis

This study was qualitative in nature. Data collected was reviewed repeatedly and organized in categories of similar themes. Data of similar themes was coded qualitative guided by similarity of responses. The research employed mean, mode, percentages and frequency distribution to facilitate data analysis and interpretation.

3.9 Challenges of this study

This study covered KFSSG. However, it occurred that members responding could not agree on who was a member or not, neither did they seem to understand the basis of their participation in KFSSG meetings. It also emerged that the core members of the KFSSG task force, all of them who are drawn from various ministries in the Government did not understand well the mandate of the KFSSG and, the special task force members were notably highly absent in the meetings between the periods 2005 to 2007. That resulted to members of the same task force reading from different scripts over their own role in the group.

CHAPTER FOUR

4.0 DATA PRESENTATION AND ANALYSIS

4.1 General information

The study was conducted in Nairobi with respondents drawn from various member of the KFSSG. Data gathered represents responses from the following agencies:

Type of Agency	Name of Agency
Donor agencies	ECHO, EC, USAID/OFDA, Swedish embassy, DFID, Italian Cooperation and JICA
UN Agencies	UNICEF, UNDP, UNOCHA, FAO, WFP
Government of Kenya	ALRMP, Ministry of Water, Ministry of Agriculture, Ministry of livestock development, Ministry of Health
NGOs	Cordaid, World vision, Concern Worldwide, International red cross and Crescent society, Kenya Red Cross Society, Comitato Collaborazione Medica (CCM), Cooperazione Internazionale (COOPI), World Wide relief, ADRA, Practical Action, Salvation Army Corps, International Medical Corps, FEWSNET, Oxfam UK, Oxfam novib, Save the Children UK, GTZ, Merlin, CARE, COSV, Terranuova, CAFOD
Total number of respondents	40

Those interviewed consisted officials working in the capacity of program officers, emergency relief officers and officers assigned duties that have to do with drought/ food security management and in whose docket involved responding to various elements of drought disaster relief and response.

Out of 40 respondents involved in direct implementation, it emerged that a substantial 21 respondents were non Kenyans, mainly expatriate staff. This figure represented 53% of those working in drought management in Kenya. This could be partially implying lack of Kenyan professionals in drought/ disaster or limited access to emergency relief jobs. In

essence, the limited capacity of Kenyans in this field does affect the future of drought preparedness in the country.

All the respondents picked had worked with KFSSG for at least two years and their agencies were involved in the affairs of KFSSG for over two years. They had a consistent record of meeting attendance.

4.2 ACTIVITIES OF INVOLVEMENT

All the agencies responding were involved in more than one type of intervention in drought and food insecurity management. It emerged that all donors were funding all elements of food security, drought and environmental management while the government had specialized departments in each area. However, the government departments worked closely with each other as the departments were interdependent of each other. The table below shows representation of NGOs and UN agencies in the various fields of activities listed:

ACTIVITY TYPE	FREQUENCY	PERCENTAGE
Food Security	17	74%
EWS info gathering and dissemination	3	13%
Health and nutrition	11	48%
Policy development	7	30%
Water provision	11	48%
Environmental management	16	70%
Livestock development and fodder preservation	3	13%
Animal marketing development and training	5	22%
All the above	0	0%

Cross cutting initiatives in HIV/AIDS and nutrition, gender mainstreaming and protection of women, vulnerable and children were also included in the activities mentioned above. At least all the agencies interviewed identified one or more of the cross cutting themes. Capacity building of communities was identified as a key area of interests for 58% the agencies. These activities were considered important as they have to do with the community coping ability in the event of disaster.

Though all the organizations represented in this study had already active participation in the meetings of KFSSG by the time of 2005/06 famine disaster in Kenya, only 69% of them participated in the famine response. Out of the 23 NGOs sampled only 5 of them

reported that they were involved in drought mitigation measures prior and during the period of famine.

FEWSNET was the only NGO with established Famine early Warning system working even before the disaster. Data reviewed indicated that the early warning information was disseminated via the web and regular monthly publications both by the FEWSNET and the KFSSG. The meteorological department falling under the Ministry of Transport was reported producing daily briefs disseminated through media channels and in particular the Kenya broadcasting corporation hence reaching all Kenyans with access to radio across the nation. The department also served the KFSSG with EWS information broadcasts every month.

Source of EWS Information	Number of responses per category
KFFSG website	12
FEWSNET web site	12
KFSSG monthly meetings	40
Media	38
FAO (UN)	14
ALRMP (GoK)	13
Other sources(Partners)	4

However, it was noted that certain sections of the country did not have access to any media channels nor electronic print and hence were not accessing early warning information. It emerged that these areas were most vulnerable to drought and food insecurity and included: sections of Moyale, Marsabit, Turkana, West Pokot, Wajir, Garisa and Mandera regions. It also emerged that a substantial number of Kenyans did not even own radios and even where they owned radios, majority of the rural poor could not afford batteries regularly to keep the radios informing them. These revelations indicated the gap existing in the involvement of the local communities in drought and food security management.

Data reviewed from 3 member organizations²⁰ reports did clearly indicate that the quality and credibility of early warning systems in Kenya was not in question. The progressive deterioration of pastoral livelihoods in the region was well documented both by the Kenya Early Warning System (EWS), Arid Lands Resource Management Project (ALRMP), as well as the international systems (FEWS NET). By November 2005, there were clear warnings of “pervasive pre-famine conditions with the potential for widespread famine in pastoral areas. Since then, considerable attention has focused on the lack of an appropriate response. This is particularly true regarding a lack of timely action to protect pastoralist livelihoods, and thereby to reduce the need for a massive and costly emergency response. Livelihoods interventions have been rare, and the response has focused overwhelmingly on food aid.

4.2.1 Drought and food Security preparedness

Various actors were involved in the dissemination of EWS information prior and after the 2005-06 famine. The table below shows agencies involved and method of dissemination.

Dissemination methods of EWS

AGENCY	METHOD OF EWS DISEMINATION
Meteorological Department	Media, KFSSG, MoSP
FEWSNET	Web, Newsletters
FAO	Web, Newsletters
ALRMP	District Steering group, KFSSG, Partners

All donors , NGOs and NGOs did report responding to Early Warning information in the way of allocating funds for new needs for the donors and while to the government and NGOs, EWS information helped to determine area of next intervention. However, 65% of respondents for the NGO sector did acknowledge that they did not carry out preparedness activities. Asked why they didn't engage in drought preparedness activities, these respondents attributed the lack of drought and food insecurity preparedness activities to lack of funds.

²⁰ USAID-Understanding nutrition data and causes of malnutrition in Kenya, September 2006; A publication of USAID, FEWSNET and KFSSG
GOK- Horn of Africa Drought management Initiatives
KFSSG Commissioned rapid assessment report on the 2005-06 Famine

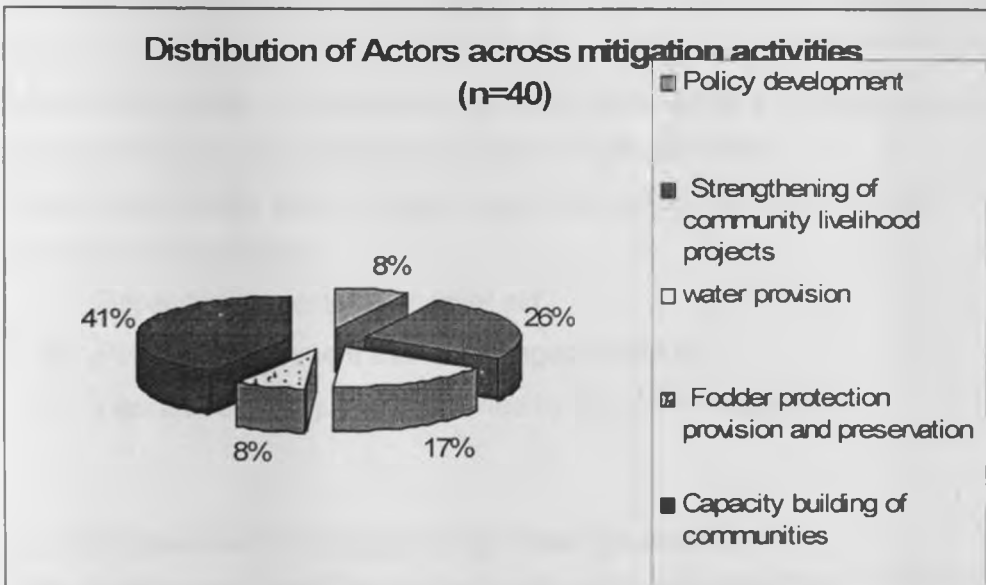
NGOs pointed out to the fact that donor agencies provided funds for specific programs and hence it was difficult to access preparedness funds not unless donors had made special allocation to preparedness funds. Only 2 agencies (5%) reported lack of competency in drought preparedness as hindrance and hence their lack of involvement in preparedness stage.

Collaboration with other partners in preparedness activities

All respondents that they were involved in collaboration with partners at the government, donor, peer and community levels. Collaboration with other partners was identified as a donor requirement and thus humanitarian agencies were keen to meet this requirement.

4.2.2 Drought/ food insecurity mitigation

As indicated earlier, only 5 agencies were involved in mitigation activities prior to 2005-06 famine. However, 23 out of the 40 agencies represented including UNICEF, WFP, FAO and various GOK ministries are involved in activities that qualify for mitigation cum response of drought and food insecurity in various parts of the countries. These activities are as shown below.



1. Policy development included the development of a national policy on food, nutrition, Use of Arid and Semi Arid lands and environmental Management. It also included KFSSG operational manual and drought management policies at agency levels. Strengthening of community livelihood projects; small scale

- irrigation projects, food preservation, drought resistant crop farming, livestock stocking restocking initiatives, product marketing and trade promotions
2. Water provision was done through digging of earth pans, Berkads²¹, dams and drilling of boreholes
 3. Fodder protection, provision and preservation for dry season in pastoralist regions
 4. Capacity building of communities- including training in mitigation activities, involvement of women and protection of the environment and Income Generating Activities (IGA).

However, various factors were highlighted as impacting on the mitigation activities. At least 84% of respondents indicated that there was cooperation and willingness on the part of community in putting up mitigation efforts against drought and food security. A substantial 16% noted lack of community cooperation making the sustainability of activities a major challenge.

Agencies reporting cooperation between them and local communities also reported the already existing community involvement in mitigation activities. The fact that a substantial number of community members were already involved was attributed to natural tendency by human beings to meet their basic needs.

Those respondents who reported that communities were not involved in mitigation activities attributed it to:

1. Dependence mentality on relief aid
2. Political environment that encouraged handouts
3. Laziness among people (reported by 5% of the respondents).

4.2.3 Response to drought and food insecurity

Data on response to food insecurity and drought was categorized according to the actor as indicated below:

Donors

Donors had developed a consolidated response initiative to drought and food insecurity through what they termed as the Horn Of Africa Initiative (HOAI) that is aimed at

²¹ An underground water tank constructed to catch and store surface water during the rain season

consolidating efforts across the interactive borders of Uganda, Kenya, Ethiopia and Somalia. This initiative was organized through a joint funding portfolio referred to the Multi Donor Trust Fund, where all donors pledge to a common kitty that then would be shared among actors (NGOS, UN and Government) responding to drought management across the targeted regions. The donors have already started releasing funds for the drought management with Kenyan government the only state so far responding to the Horn of Africa DMI.

In the response, 3 donors (ECHO, UFDA, DFID) openly admitted the existence of gap between emergence response and development. ECHO representative, in one of the donor stakeholders meeting is quoted to have said;

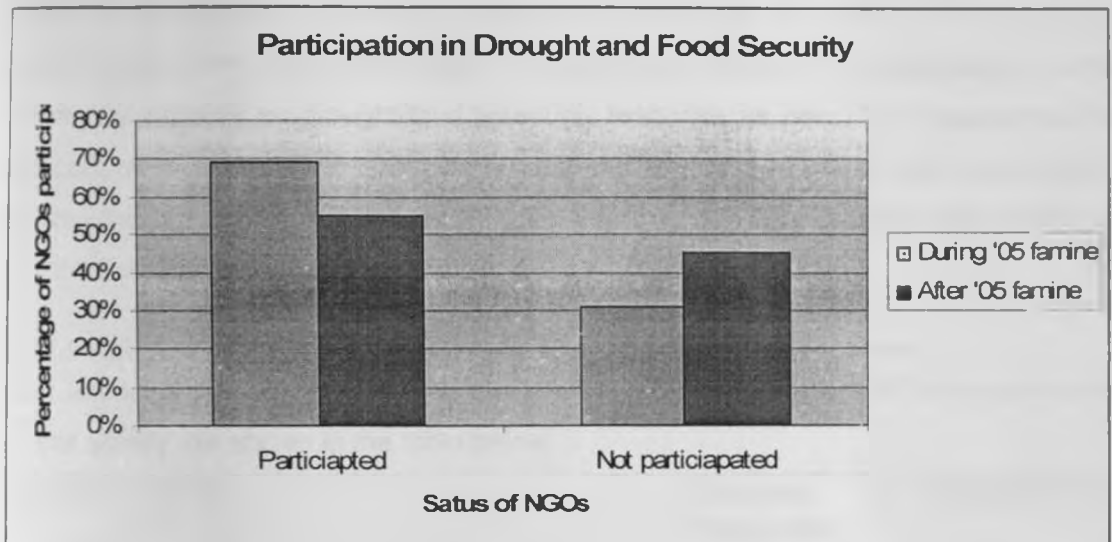
"ECHO has become increasingly flexible in its interpretation of the legal basis of its mandate and has thus ventured into the grey zone of Drought preparedness (DP) so as to attempt to lessen the gap between emergency responses and ultimate development²²."

The admission that drought preparedness is a grey zone to donors is indicative of the little efforts donors put in reducing the impact of drought on livelihood and food security. Further, ECHO does acknowledge the existence of a gap between emergency response and ultimate development. The less developed the people, the more vulnerable they are to drought shocks and the less the resources (capacity or material) they are likely to access to cope with the situation

NGOs

In overall, 69% of NGOS indicated that they had participated in drought relief and recovery from the 2005-06 famine disaster. The remaining 31% had not participated due to lack of funds. It was noted that not all agencies that are on the ground at the moment were involved in the famine response to the 2005-06 disaster.

²² Minutes of Drought Preparedness stakeholders meeting held on the 17th September 2007.



A fall of certain NGOs had taken place owing to the type of programs they were running, leaving only 55% of the agencies on ground as at the time of the study. This included agencies that responded in the area of health and nutrition, feeding programs and those NGOs who's funding had come to an end, and were not able to secure more funding to continue with activities in this area. However, there are 2 NGOs, who had not responded to the famine disaster and had secured funding for reconstruction activities, in particular with in the pastoralists livelihood protection. These agencies included CAFOD and COOPI.

Those agencies that participated in drought response had prior experience in the Arid and semi arid regions of Kenya in the areas of:

- Water and Sanitation
- Veterinary health
- Human medical health
- Livelihood programs

The research revealed that prior experience in drought and food security related programs enhanced chances of accessing funds in drought preparedness and response. As such, new comers in the 'aid market' despite their expertise in drought management would have problems accessing funds.

All the NGOs involved in drought response reported the good level of cooperation between them and local communities. However, on average, the agencies reported community capacity on drought/food insecurity response as poor. This means that the agencies themselves, donor and government of Kenya had to invest more resources in building the community capacity to the level that they can fully prepare and respond to disasters on their own.

4.2.3.1 Activities carried under Drought and food security response

Most agencies carried out more than one activity. The distributions of the respondents across activity are shown in the table below:

ACTIVITY TYPE	Number of responses per category	PERCENTAGE
Water tracking, borehole drilling, well and or water pan constructions	12	52%
Food distribution	9	39%
Livelihood programs that included small scale irrigation projects and income generating activities,	19	83%
Livestock protection and fodder provision	3	13%

The activities above were done as continuous reconstruction/response activities that were geared towards improving current food and water access situation. As much as this activities were initiated as a response to the famine disaster, they were seen as reconstruction activities geared towards building community resilience and hence mitigate the impact of future droughts

4.3 CONTINGENCY PLANS

All the 23 NGOs responded that they did not have contingency plan in the event that another drought came into place. The Agencies had small scale contingency plans that were required by the donors in the event that a crisis emerged during project implementation. In all the small scale contingency mentioned, there was the mentioned of food aid supply and water trucking that entailed a certain amount of fund diversion.

However, it was noted that the government and the donor had a contingency plan in terms of cash that was kept to respond to any sort of emergency. The government has spelt out a 10 year plan which allocated a budget of 10 billion shillings that would enable

development of food secure and drought management projects within the ASAL regions. The Donors had a disaster management kitty, which was aimed at disaster response, and as the study revealed, could be diverted to any other disasters, not necessarily drought and food insecurity. Financial allocation to this kitty is dependant upon annual budget reviews and donor interests.

4.4 ANALYSIS OF POLICY ON DROUGHT AND FOOD SECURITY IN KENYA

4.4.1 Policies Guiding Humanitarian Interventions at the KFSSG Level

On the part of the donors, the Millennium Development Goals (MDGs), the UNDP policy documents and sphere standards were a major operating tool directing their intervention. However, key to any sort of intervention was governments guiding policy that directed the intervention that they put in place. 100% of all agencies respondents acknowledged that they used the government policy to guide their intervention. However, 50% of them acknowledged where the policy was considered unfriendly, and sometimes vague.

It was considered too general to use in the case of small scale disaster responses. 90% of agencies acknowledged use of the Sphere standards as a guiding factor in addition to other international budget allocations and policies.

Only 33% of respondents from NGOs acknowledged having their own established policies on disaster response and management. However, this policy was a general guide to responses to all sorts of disaster and not specifically, drought and food insecurity management. The KFFSG was bound by the government policies and implemented activities through the stipulated GoK policies.

The government had developed an overriding policy of food security and drought management that was used as a reference point by all other actors as well. An analysis of these policies is presented here below.

It was noted that there was no an all inclusive policy for KFSSG members neither was there standard measures of policy adherence. This provided loop hole for below standards humanitarian and brief case services.

4.4.2 Government policies in drought and food insecurity

The government had several policies that were related to drought management and food security in Kenya. These policies included:

1. National policy for the sustainable development of arid and semi arid lands of Kenya
2. National food and nutrition policy (2006)

Other important papers include:

1. Kenya's position paper on Horn of Africa Initiative on tackling Food insecurity
2. Sessional paper 19(2006) on sustainable development policy of arid and semi arid lands

All the papers have one thing in common; they emphasize on measures to secure livelihood for communities in the country and in particular those living in ASAL regions that form 80% of the country land mass.

4.4.2.1 Critique of Government policies in drought and food insecurity

The national and food policy released on the 28th June 2007 states Kenya's position and the way forward on food security and nutrition status in country. This policy acknowledged the government's inability to half number of poor and underweight children in Kenya by 2015²³. Although this policy paper acknowledges the four sphere standards indicator of food security namely: availability, accessibility, stability and meeting nutritional requirements, it also clearly states the government's limitation in ensuring that this indicators are met. In all, the government clearly admits an overall production of food that is below the rising demand of the country. In order to improve the food access base in Kenya, the government proposes an eight (8) action steps all agriculture based. The problem of the agriculture based livelihood enhancement programs is that they are weather based. If failure of rain or inadequacy of it results to drought, and if the drought is the main cause of food insecurity in Kenya, then, agriculture based livelihoods are not the alternative in ensuring community resilience to food insecurity. The government fails to mention concrete measures that can ensure that the livelihoods of people living in ASAL regions, and who are at the highest risk to food insecurity and drought induced shocks are protected.

²³ Millennium Development Goal no. 1

Other proposal included in the Food and nutrition policy includes the pre-positioning of food reserves. The government has set up Strategic Food Reserve (SFR) trust fund and storage facilities (silos) that is supposed to be fall back in the event of diminishing food availability and famine in country. However, the government acknowledges that the silos so far hold only 19% of their capacity. Further, the government acknowledges the fact that the only food reserved to date is the maize grain, that doesn't form staple food for most of the community in constant food insecurity. The need to diversify cereal storage to cover other foods has been brought up in various forums but once again, it has never been put to action. Cash reserves for the same purpose is put aside at every budget reading but this cash must be used within the budgetary year within which it is allocated. In most of the case, the budget allocation is not reflective of EWS information released nor the agricultural production of the current year. This allocation always does not respond to the need of the country in terms of food security since it is arbitrary allocation, depending on the priorities of the government.

In the ASAL policy paper, the government does admit failing in policy development as far as securing livelihood in Arid and semi arid lands are concerned. It argues *"For far too long, ASALs have been marginalized. There is no coherent pastoral development policy in Kenya. Previously, pastoralist development issues were articulated in other policies such as the one for agriculture and livestock development, and tourism. This has resulted in the relegation of pastoralist development issues to second place. The piece-meal approach to ASAL policy formulation has introduced inconsistencies and challenges in policy implementation to the detriment of ASAL development²⁴...."* This kind of admission clearly tells of policy inadequacies which go way to affect food security and drought preparedness.

Although there is great potential for ASAL development in Kenya, the current picture is rather grim. Droughts and conflicts still significantly affect both lives and livelihoods in these areas. The policy highlights losses and wastage of the livestock resource through disease, death and theft, especially in border regions of Uganda and Ethiopia. The government points out that an estimated 10 million Kenyans suffer from chronic food insecurity, and occupy the ASALs that has the highest incidents of poverty and drought. As a result, Kenya is no longer self-sufficient in red meat production.

²⁴ National policy for sustainable development of Arid and semi arid lands of Kenya

The government does admit that the local market for beef considerably relies on cattle imports from Ethiopia, Somalia, Sudan and Tanzania due to inadequate local production. This is detrimental to the pastoralist livelihoods, who lack market for their livestock and livestock products. By importing and allowing livestock products into the Kenya market, the government itself contravenes its policy in protecting and promoting the ASAL livelihoods.

In all, there are some of the proposals within the policy that even the government admits failing in the past. The re-inclusion of this proposal in the current policy paper does again come as set back to true food security and drought management. Some of the interventions considered less successful include:

- i. Contingency funds and cereal reserves; not very successful because the Kenya Government financial management rules do not allow government funds to sit unused anywhere except the treasury, and development partners rarely respond to EWS or pleas for assistance until central government declares an emergency.
- ii. Provision of human and veterinary assistance suffers from the same problem as contingency funds and cereal reserves.
- iii. Support for the private sector has never been an explicitly stated policy, although cash-for-work and livestock marketing interventions have ensured that local shopkeepers and traders have more business as a result of cash circulating within communities.
- iv. Provision of emergency grazing and fodder has been limited, and cow-calf camps have been *ad hoc*.

4.4.2.2 Past Policies and their Inadequacies

There has been some attempts to develop policies to address ASAL development issues recognizing that it will be difficult to achieve overall economic growth if ASALs are not developed and fully integrated into the national economy. Past policies such as the 1979 policy have fallen short because ASAL “voices” were lacking and the policy formulators put emphasis on technical issues such as land degradation; irrigation and the need to find solutions to the nomadic pastoralism “menace”. The policy had a technical solution to problems that were mainly social and political. Under the 1979 policy framework, attempts were made to settle pastoralists in irrigation schemes, group ranches and other alternative land use systems. In 1992, it was realized that not much

was being achieved and the policy was then revised based on the lessons that had been learnt. As at now, that policy has largely been overtaken by events requires major re-casting to fine-tune it to the existing political, environmental and socio-economic realities prevailing in ASAL areas.

The conventional approach of Government and other development actors in the past had been to address the symptoms of underdevelopment instead of tackling the root causes. This has often been done through projects, which came in attractive neat packages with tight geographical boundaries and limited timeframes. Many of these projects were planned in a top-down manner without adequate knowledge of the situation of the target groups. Often, the impact of these projects was limited or even counterproductive in the fight against impoverishment and marginalization²⁵.

Neglect of participatory approaches by stakeholders and policy makers in dealing with pastoralist communities because it was assumed that they were uneducated and primitive, without capacity to decide what was good for them²⁶. This element boils back to community participation which is a challenge till now.

Inability to implement formulated strategies because of lack of voice and political influence to demand for services and development investment coupled with the lack of government commitment to pastoral areas in order to bring about change and

4.5 TIMELINESS OF DROUGHT AND FOOD INSECURITY RESPONSES

When the respondents were asked if they were able to respond to drought/food insecurity in time, 90% indicated that they were not able to respond to drought in time. 6% reported that they were able to respond on time while 4% did not respond. The 6% were already on the ground doing food security related projects by the time the 2005-06 famine disaster was declared by the president. The physical presence on the ground gave them the opportunity to divert their activities and reallocate funds to intervene through food relief.

²⁵ See ASAL policy 2006

²⁶ Criticisms of ASAL policy 1992

4.5.1 Causes of delayed interventions

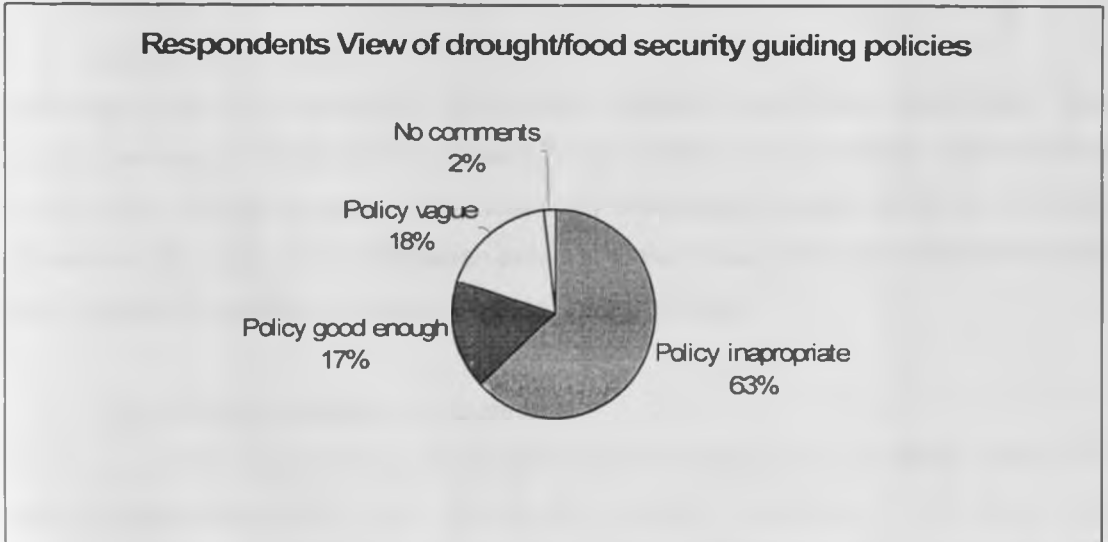
The following were identified as the causes of delays in drought/food insecurity response:

1. Funding

All respondents acknowledged that lack of funding and delays in funding did contribute significantly to delayed humanitarian interventions. In fact the element of funding came out as the most significant cause of delayed interventions.

2. Policy

Lack of appropriate policy was attributed to delays in disaster mitigation by a 63% of the respondents. This was despite the fact that 17 % of the respondents did find the policy good enough to guide humanitarian intervention. At least 18 % of respondents reported that the policies used to guide humanitarian intervention were vague and confusing hence resulting to unnecessary delays. The policy was faulted in the sense that it did not state when a state of emergency can be declared as far as food security /drought are concerned, and neither did it define food insecurity. Respondents indicated that it did not clearly define when an intervention is developmental or is emergency.



3. Planning

Poor planning that included the logistics and flow of information between donors, implementing agencies and their partners, suppliers and beneficiaries communities was also identified as causing delayed interventions 38% of respondents attributed poor planning to lack of prior training in emergencies, while a significant other 56% associated poor planning to poor coordination among humanitarian actors.

4. Infrastructure

Poor infrastructure- respondents identified drought endemic zones as characterized by poor infrastructure that made access to communities a nightmare. Respondents from 3 agencies who intervened in Mandera district noted that they took two weeks, and even more to ferry good to famine affected areas in the district.

5. Priorities

Wrong donor priorities- it was reported there more often than not, donor funding was pegged to "own" interests and not necessarily the case of the humanitarian principle. It was further reported that donors used funding to pursue their interest and hence missed the point

6. Political Environment

Unfriendly political environment- government policies and levels cooperation were identified as key in humanitarian delivery. It was noted that there were sections of the country that were led to state of food insecurity emergence through politically motivated clashes. In this state, the humanitarian actors are also endangered and have to wait until there is political stability for them to go in to deliver services.

7. Humanitarian activities as a business

NGOs were seen by members of the government as being in a business where they seek funding wherever it is even without the necessary expertise. To the government officials, much of the relief funds directed to NGOs ended up with "expatriates" who shipped it back to their countries and hence had very little impact on the ground.

8. Guidelines of declaring an emergence

Only four out of the 40 respondents interviewed mentioned the criteria of declaring emergencies as per the sphere standards. According to these respondents, the sphere standards did hinder timely intervention, with malnutrition identified as a major indicator of food insecurity, the families or communities going with only one meal a day but gets a balanced meal at the end of the day is not considered as food insecure. Yet, only prolonged case of lack of one or several essential nutrients would result to malnutrition, meaning, persons will have suffered for a certain unspecified period of time before they can qualify to suffer food insecurity. As such, there was a need for clear definition of food insecurity.

4.6 MITIGATION OPPORTUNITIES

Respondents were asked to suggest various opportunities that provide opportunities to scale up mitigation in drought and food security. The responses given were condensed in line with the theme and are listed below:

- a) Donors, the government and humanitarian agencies must be proactive in putting up drought preparedness structures and responding to early warning other than the reactive approach of responding to community needs after the disaster has already occurred.
- b) Budget allocation be increased, and a specified allocation for food security and drought management set apart from other disasters.
- c) Strengthen EWS information dissemination through by linking the forecasters to the target community. This can be done through District steering groups (DSGs), Agricultural and Livestock extension officers, chiefs and sub chiefs, humanitarian agencies working in the communities and the use of religious leaders who were identified as vital in information dissemination.
- d) Strengthening and diversifying the ASAL livelihoods will enhance food security in the country. Recommendations from the respondents included the development of an industrial economy including tannery while at the same time promotion of agricultural livelihoods would enhance the food security of this country.

- e) The KFFSG need to step up coordination of humanitarian actors to ensure complementary interventions and protect areas that may be having accessibility challenges. The group needs to put up logistical pipeline information in place to prevent delays emanating from information and aid flow.
- f) In-depth surveys and researches on how to end famine and other drought related disasters was strongly recommended. Further, agricultural researches on food secure projects need to be replicated in the country other than having Kenyans invest their taxes on researches that do not come back to help them. The government should be keen on promoting evidence based agricultural projects especially for the rain fed farming.
- g) Humanitarian NGOs and the Government (members of KFSSG) need to push their agenda to the donor to increase need based funding other than donor interest based funding
- h) Past experiences in humanitarian delivery showed that the donors and even the government preferred a single pipeline for food response through UN WFP. This called for enabling environment for existing UN intervention missions and the creation of UN quick response units for any immediate intervention. The UN has the funding and capacity to handle disasters at national level. However, coordination among the various agencies must be addressed urgently, in the otherwise independent units of UN body. The UN need to put up a drought and food insecurity disaster response team that is on standby once a disaster is declared.

CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

The study revealed that the area of drought management and food security in Kenya has become a major area of interest and attraction for donor and NGO funding. Following the 2005-06 famine disaster the Government quickly moved to strengthen its drought/food security capacity by putting up structures specifically focused on drought response programs. It also emerged that donors; EU, USAID and DFID in particular increased their funding portfolio and in specific put up DMI funds to manage disasters with focus on the Arid and Semi Arid Land (ASAL) zones of Kenya. On the part of governance, 2005/06 drought awakened the government which quickly moved to develop policies targeting the grey area of food insecurity and drought management.

Donor decisions and direction of funding has generally been reactive and adhoc to major disasters. The donors admitted this being a major weakness, and that response was out of compassion and public relations other than duty. This kind of response did not seem to elicit a view of continued funding and fear is ripe that the lack of commitment in future funding may affect serious drought management in Kenya.

The Kenya government together with donors and humanitarian agencies has set up appropriate structures for drought preparedness and response. However, this plans and structures are highly dependant upon external funding. In this case, the withdrawal of these funds or under allocation may threaten the sustainability of these programs.

NGOS are more involved in reconstruction activities with little regards to preparedness. Further, KFSSG members' areas of intervention are highly dependant upon donor funds and donor priorities.

The study showed reduced level on involvement in mitigation/reconstruction activities from 69% during the 05'-06' famine to current rates of 55%. It also showed very low levels of new entrants into the field on mitigation/reconstruction.

The study also revealed that there was huge gap in the area of disaster preparedness and timeliness of interventions. Delays in humanitarian intervention were hugely baled on lack of funds. Other causes of delays were socio-political and infrastructural challenges

5.2 CONCLUSIONS

From the above study, the following conclusions have been drawn:

1. From this study, it is observed little consumption and utility of the information disseminated by FAO, meteorological department and FEWSNET to scale up preparedness activities.
2. Existing polices did not adequately address the issues of drought management and livelihood especially the pastoral livelihoods
3. There is a need to define food insecurity and drought especially with regards to the Kenya situation. This is because the international standards did actually come out as contributing to delayed interventions. Defining food security according to the Kenyan needs will be helpful in responding to the same needs in a manner acceptable to the Kenyans.
4. According to this study, the causes of delayed intervention have not yet been overcome. Therefore some of the challenges identified may still hinder timely delivery of humanitarian aid.
5. The levels of preparedness to drought and food insecurity are alarmingly poor. This is despite the slow onset characteristics of the drought. As a result, this study concludes KFSSG is not yet well prepared to deal with drought and food security disasters.
6. It was also noted that there was a significant level of dependence on the relief aid and external help that was considered as hindering sustainable solutions to community based food secure and drought management projects

5.3 RECOMMENDATIONS

Drought and food insecurity in Kenya can be said to be a real threat especially in view of the findings presented in Chapter four above. However, there are available opportunities that can be explored to mitigate and lessen the impact of drought related disasters in the country. In this regards, the following actions are recommended:

- a. Donors, government and also INGOs should work towards developing drought management specific funds
- b. Review of drought and food security policy with the involvement of all the stakeholders within the group
- c. Develop a supply chain for information and goods flow management to enable appropriate mitigation and response of emergencies
- d. The government to prioritize infrastructural development especially drought prone zones of Kenya. This will in it self promote the livelihood diversification within the ASAL zones
- e. KFSSG to develop a group monitoring and evaluation system to be able to follow up and assess the impact of the humanitarian interventions
- f. KFSSG to develop clear indicators that demarcate development need from emergency needs to promote timely response to emergencies.
- g. From this study a closer collaboration, efficiently, with all stakeholders involved, or working in field of drought management, food security, community awareness or other similar fields is recommended.
- h. KFSSG to consider closer working relationship and higher levels of involvement of the community members who are mainly the affected in the event of disaster. In fact KFSSG should focus on developing a community based drought management policy.

5.2.1 Areas for further research

Having established some of the causes of delayed humanitarian in Kenya, and recommended various opportunities for mitigation of drought/food insecurity, this study recommends further investigation in:

- I. Viable livelihood projects in particular within the ASAL regions of Kenya
- II. A comparative investigation on efficiency and cost effectiveness of newly set up drought management systems in Kenya and other countries like Israel to establish if they (Kenyan systems) are able to match the challenge.

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