NATIONAL POLICY ON DISASTER MANAGEMENT



TABLE OF CONTENTS

CHAPTER 1:	INTRODUCTION	
SITUATION ANAL	YSIS	2
Drought and	Desertification.	4
<u>Landslides</u>		4
Earthquakes	and Volcanic Activity	
<u>Terrorism</u>	***************************************	5
<u> Civil Conflict</u>	<u>t</u>	5
	azards and Pollution	
	and Disease Epidemics	
<u>Livestock a</u>	and Wildlife Diseases	6
	Accidents	
<u>Pest Intest</u>	tation	
	ol and substance abuse	
rires		&
<u>Otner Haza</u>	ards	8
CHAPTER 2:	GOAL, OBJECTIVES AND GUIDELINES	10
OBJECTIVES		10
GUIDELINES	EVICTIAL DOLLARIE	11
The Maties	EXISTING POLICIES	13
	nal Development Plan 2002 - 2008	
National E	ry Reduction Strategy Paper 2000-2003	
<u>IVALIVIIAI F(</u>	00d Policy - 1994	13
	Policy - 1997	
	EXISTING LEGISLATION	
	nal Treaties and Agreements	
CHAPTER 3:	THE POLICY ELEMENTS	18
MAIN POLICY I	<u>ELEMENTS</u>	18
PREPAREDNES	S, PREVENTION & MITIGATION	18
<u>Preparedne</u>	<u>ess</u>	18
<u>Strategic F</u>	ood Reserve	18
	<u>tockpiles</u>	
<u>The Disasto</u>	<u>er Trust Fund</u>	19
<u>Community</u>	y disaster prevention and coping mechanisms	19
	,	
<u>Informatio</u>	<u>n Systems</u>	20
<u>Risk Inforn</u>	<u>mation</u>	20
	ty Analysis	
<u>Early Warn</u>	ing Systems	20
	ontingency Plans	
	and Public Awareness	
	nventory	
	nd Development	
<u>Public Safe</u>	<u>ty</u>	22
<u>RESPONSE AND</u>	O RECOVERY	22
<u>Recovery</u>		22
<u>Insurance</u> I	Initiatives in Response and Recovery	22

<u>CHAPTER 4: INSTITUTIONAL FRAMEWORK</u>	
Existing Institutions in Disaster Management	23
PROPOSED DISASTER MANAGEMENT INSTITUTIONS	
National Disaster Management Authority, (NADIMA)	
The NADIMA Secretariat	
The Department of Finance and Administration	
The Department of Planning & Research	
The Department of Disaster Response and Recovery	
80. KENYA FOOD SECURITY MEETING	
Sectoral Ministries	
Partner Agencies	
District Committees	
Division, Location, Sub-Location and Community Levels,	
Private Sector	
Organizational Structure	28
LEGISLATIVE FRAMEWORK	
CHART 1: THE ORGANIZATIONAL STRUCTURE OF THE PROPOSED	
DISASTER MANAGEMENT AUTHORITY (NADIMA)	
CHAPTER 5: RESOURCE MOBILIZATION AND MANAGEMENT	70
Disaster Trust Fund	30
DISTRICT CONTINGENCY FUNDS	
INTERNATIONAL SUPPORT	31
CHAPTER 6: MONITORING AND EVALUATION	32
ANNEX I: HISTORICAL CALENDER OF EVENTS	33

ACRONYMS

CEWARN Conflict Early Warning And Response Network

IGAD Intergovernmental Authority For Development

NGOs Non- Governmental Organisations

HIV/AIDS Human Immune Virus/ Acquired Immuno-Deficiency Syndrome

MTEF Medium Term Expenditure Framework

PRSP Poverty Reduction Strategy Paper

UN United Nations

M&E Monitoring And Evaluation

NADIMA National Disaster Management Authority

FORWARD

Recent disaster profiles in Kenya have been dominated by incidents of droughts, fire, floods, terrorism, industrial, road traffic accidents, HIV/AIDS, among others. Disasters disrupt people's livelihoods, destroy infrastructure, divert planned use of resources, interrupt economic activities and retard development. In the pursuit of minimising and reducing exposure to risks and vulnerabilities, the Government has conceived a national policy on disaster management with the objective of institutionalising mechanisms for dealing with disasters as and when they occur.

The policy emphasizes preparedness on the part of the Government, Communities and Stakeholders in the field of disaster concerns. In this regard, the policy provides for the enactment of an Act of Parliament to promote and facilitate coordination of disaster management through establishment of a National Disaster Authority. An institutional framework along with appropriate legislation is considered to be the best way forward in ensuring that Kenya responds adequately to disasters.

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EXECUTIVE SUMMARY

The Government, through the leadership and co-ordination of the Office of the President has formulated a National Policy on Disaster Management. This policy aims at addressing the increasing incidences and emergence of both slow and rapid on-set disasters, which result into serious human distress and suffering, destruction of property and infrastructure, disruption of the environment and overall welfare of the society.

The most common disasters in the country are weather related natural phenomena such as floods, droughts, landslides and lightning. In the recent past, the emergence of man-induced type of disasters such as traffic accidents, civil conflicts, terrorism and industrial hazards have also become common. The frequencies, complexity, scope and severity of destruction levels of these disasters have become more serious, thus necessitating concerted efforts towards prevention of their occurrence and institution of appropriate remedial measures on their adverse impact on the communities. Furthermore, in addition to the periodic occurrence of extreme outbreaks of the common diseases such as cholera, malaria, meningitis and typhoid to disaster levels, the recent emergence of the HIV/AIDS scourge has now developed into a pandemic in the country. It is estimated that about 2.2 million people in the country are living with HIV/AIDS. About 75% of the reported cases occur amongst the economically productive age groups; 15-49 years. This has dire socio-economic consequences for the country.

Government Ministries/Departments, Agencies, Non-Governmental and Civil Society organizations, the Private Sector and International Development Partners and UN Agencies have pursued a wide range of strategies and programmes to prevent and respond to disaster situations. However, these initiatives have been undertaken in less consistent and harmonious manner and remained re-active and unco-ordinated outside a coherent policy framework. Accordingly this policy initiative reflects the Government commitment towards formulating a coherent strategy in addressing disaster issues in a more pro-active manner with focus on reduction of the communities to risks and their vulnerability. This is particularly with regard to strengthening their capabilities in preparedness and withstanding the adverse impact of disasters. The document has been prepared through a broad consultative process.

The policy document articulates objectives, strategic guidelines, institutional framework and the supportive legislative instruments. This is to enhance the process of sustainable disaster management in Kenya. The main thrust of the policy is to have it integrated into the national development process. These include the Medium Term Expenditure Framework (MTEF), Poverty Reduction Strategy Paper (PRSP) National Development Plan, National Poverty

Eradication Plan, HIV/AIDS Policy among others. Some of the innovative strategic options recommended for implementation include national disaster strategic plans, strategic stockpiles of non-food items to add to the Strategic Grain Reserves, Disaster Trust Fund, District Contingency Funds and Insurance initiatives.

More fundamentally the institutional framework proposed include the establishment of a National Disaster Management Authority in the Office of the President to provide the necessary leadership and co-ordination. Structurally it will include a Board of Directors, and the secretariat. The Authority will initially comprise of three departments of Finance and Administration, Planning and Research, Response and Recovery. The Board of Directors to comprise of the key stakeholders including the sectoral Ministries, Development Partners, UN Agencies Local Authorities and others.

The operations and implementation of representatives of notably policy will be focused on strengthening the communities capacities to cope with disasters through District and Community based committees, which include Technical staff and local leadership at the grass root levels. With regard to resource mobilization and management, the main sources to include:

- (i) Allocation of funds to the Authority through the parent Ministry
- (ii) Normal Sectoral Ministerial/Departmental budgetary allocation
- (iii) Specific budget lines in the Ministries/Departments to cater for disaster issues and
- (iv) National Disaster Trust Fund drawing contributions from the public and private sectors, International Development Partners, Non-Governmental and Civil Society Organizations and the community at large.

This policy document provides a basis for development of pro-active and strategic initiates towards addressing disaster issues in the country in a more co-ordinated, coherent and consistent manner.

CHAPTER 1:

INTRODUCTION

Background

- 1. Over the years and in recent times, Kenya has been exposed to a variety of disasters such as droughts, fires, floods, HIV/AIDS, industrial accidents and terrorism, among others. Some of these have slow-onset while others have rapid-onset characteristics. Slow-onset disasters are cyclical in nature, they impinge on large numbers of people and their effects can often be predicted, controlled and prevented. Rapid-onset disasters affect fewer people; they take place at any time, may be violent and require a quick response. The Government recognizes its responsibility to minimize the impact of potential disasters. In line with this the Government has put in place administrative, legal and remedial measures during periods of actual or apprehensive national danger or calamity, or in consequence of any disaster.
- 2. In the past, various departments and agencies, governmental and non-governmental, have pursued a wide range of strategies and programmes to respond to and prevent disasters. This has been done outside a policy framework and hence remains reactive. This policy proposes the establishment of a National Disaster Management Authority to co-ordinate issues pertaining to disasters. While the mandate of the Authority will clearly be defined in its operational policies and guidelines, the Authority will seek to improve the level of disaster preparedness, with a capacity to respond to all disasters based on its mandate and the need. The creation of the proposed Authority reinforces the Government's priority towards Disaster Management. The components of the policy will include the goal, objectives, institutional arrangements and broad strategies for co-ordinated and planned disaster management.

Definitions of Basic Disaster Terms

3. The following definitions will apply for the purposes of this policy:

Disaster

A disaster is a serious disruption of the functioning of a society or community, causing widespread human, material or environmental loss, which exceed the ability of the affected society or community to cope without outside intervention.

Disaster Management

Disaster Management is organised analysis, planning, decision-making, and assignment of available resources to mitigate, prepare for, respond to, and recover from the effects of disasters.

Hazard

A hazard is a dangerous event or circumstance that has the potential to lead to an emergency or disaster.

Vulnerability

Vulnerability is the susceptibility of the individual, community, property, infrastructural base or the environment to a hazardous event.

Risk

Risk is the probability or likelihood of a population suffering the disruption of a disaster. The risk is determined by a combination of the hazards that threaten the population and its vulnerability to those hazards.

Situation Analysis

Kenya has experienced several kinds of disasters. The country has a recorded history of disasters dating back to 1899, which until recent times present a definite pattern of occurrences (see Annex). Disasters that hit Kenya in the last 30 years came from a diversity of hazards, such as droughts, fires, floods, terrorism, collapsing buildings and accidents in the transport industry. It is evident that most of the disasters that have occurred in Kenya are related to extreme climate events, improper land use and professional negligence. The table below highlights some of the recent disasters that have occurred in the country.

Table 1: Recent History of Disasters in Kenya

YEAR	TYPE OF	AREA OF	No. of People Affected
	DISASTER	COVERAGE	
2002	Landslide	Meru Central, Muranga, Nandi	2,000
2002	Floods	Nyanza, Busia, Tana River Basin	150,000
2001	Road accident	Kericho/Londiani road	76 dead
2001	Road Accident	River Sabaki	40 dead
1999/2000	Drought	Widespread	4.4 million
1999	Road Accident	Voi/Mtito Andei	40 dead
1999	Train Accident	Tsavo	32 dead 358 injured
August 1998	Bomb Blast (Terrorist Attack)	Nairobi	214 killed and 5,600 injured
1998	PetrolTanker	Kisumu/Busia road	36 dead
1997/1998	El Nino Flood	Widespread	1.5million
1995/96	Drought	Widespread	1.41 million
1994	Ferry accident	Mtongwe channel	270 dead
1992	Train Accident	Mtito Andei	31 died, 207 were injured
1991/92	Drought	Arid and Semi-Arid Districts of NE, Rift, Eastern and Coast	1.5 million
1990	Fire	Lamu	20 dead
1985	Floods	Nyanza/Western	10,000
1984 to 2001	HIV/AIDS	Widespread and continuing	2.2 million dead by 2001 700 die daily as of 2001
1983/84	Drought	Widespread	200,000
1982	Fire	Nairobi	10,000
1982	Flood	Nyanza	4,000
1982	Fire	Lamu	4,000
1981	Bomb Blast (Terrorist Attack)	Norfolk Hotel Nairobi	5 dead 75 injured
1980	Drought	Widespread	40,000
1977	Drought	Widespread	20,000
1976	Train accident	Darajani	50 died
1975	Bomb Blast (Terrorist Attack)	OTC Bus Terminus Nairobi	27 dead
1975	Drought	Widespread	16,000
1974	Air accident	JKIA	60 dead
1971	Drought	Widespread	150,000¹

¹ Source of data from row one up to the 1990 Fire in Lamu is the 1992 Government Disaster Preparedness Paper for discussion.

Drought and Desertification

5. Drought is a recurrent phenomenon that affects large areas and numbers of people in the country. The cumulative effects of these droughts include the erosion of assets, decreasing ability to cope with future droughts, impoverishment of rural communities and depletion of the Government coffers. It is, therefore, a priority of the Government to strengthen suitable drought preparedness, mitigation and response structures and activities. The effects of drought have become more pronounced in recent decades: in the 1990s there were three major droughts. The effect of the 1991/92 drought in the arid districts led to livestock losses of up to 70% of herds and unprecedented high rates of child malnutrition of up to 50%. During this drought 1.5 million people in seventeen arid & semi- arid districts of four provinces received relief food assistance. Rains failed again at the end of 1995 and in 1996, leading to another drought situation, which affected an estimated 1.41 million people. The worst drought emergency in recent years affected the Central, Eastern, Rift Valley, Coast and North Eastern Provinces, with 4.4 million people requiring food assistance in the year 2000. Some of the major causes of drought and desertification are deforestation, extreme climate events and improper land use, which threaten the environment and people's livelihoods. The government is addressing this problem through appropriate measures.

Floods

6. Floods occasionally cause disasters in Kenya. Areas of Kano Plains in Nyanza Province, Budalangi in Western Province and the lower parts of the Tana River are susceptible to floods. Arid and semi-arid areas of the country also experience flash floods. In 1997/98 the El Nino² phenomenon affected many parts of Kenya causing damage worth millions of shillings, loss of lives, famine and waterborne disease epidemics. With inadequate preparation for the El-Nino floods, national resources were over-stretched in the response phase. The on-going El-Nino Project is part of the Government's efforts to address this problem.

Landslides

7. It is estimated that property worth millions of Kenya Shillings, including coffee and tea plantations and domestic animals have been destroyed by landslides in the last ten years in some parts of Central and Rift Valley Provinces. It is further estimated that in the last twenty years landslides in Murang'a district alone, caused the loss of over one million cubic meters of soil in an area of 30 km². The losses caused by landslides also have a major negative impact on infrastructure such as power transmission, water supplies and irrigation facilities. Appropriate measures are being

² El Nino A climatic phenomenon that causes a rise in seas and ocean temperatures resulting in unusually high and localized rainfall.

undertaken by the Government, through proper land use measures to address this problem.

Earthquakes and Volcanic Activity

The African Rift runs through Kenya and is one of the most earthquake 8. prone areas of the world. The area of the Great Rift Valley within Kenya and parts of Nyanza basin are particularly prone to earthquakes and volcanic activity. Although earthquake damage and casualties have so far been low, recent records of minor, but frequent seismic activities should be closely monitored. There is currently one functioning seismological station in East Africa. This is located in and operated by the Geology Department of the University of Nairobi. Taking into account recent experience and lack of seismic data in this region, there should be an extension of seismic network in Kenya. The government will therefore enhance the knowledge in seismic study through research, monitoring and evaluation in the relevant institutions and regional, international and professional networking.

Terrorism

9. Terrorism is an act that may trigger disaster and is very difficult to prevent. Urban areas are constantly under the threat of terrorism. The August 1998 bomb blast of the US Embassy in Nairobi, which killed 214 people, injured 5,600 and extensively destroyed property, is a case in point. The incident highlighted the need for improvement in surveillance and basic response capabilities by all concerned, notably, the police, fire fighters, ambulances and transportation systems. The destruction caused and problems encountered in response illustrated the necessity to establish a system that can manage such disasters efficiently and effectively. The Government is therefore committed to increasing its capacity to respond to such rapidonset disasters that are difficult to predict.

Civil Conflict

10. This frequently occurs in Kenya and in neighboring countries resulting in both internally displaced persons and cross-border flow of refugees into the country, with its resultant effects. Conflict resulting from ethnic and economic tensions, banditry and cattle rustling have disrupted the lives of those displaced and the lives of the host communities. At the national level community based conflict resolution initiatives are already in place and the government will continue to encourage this approach. At the regional level the Government will support measures to mitigate and prepare for these conflicts, including support to the IGAD Conflict Early Warning and Response (CEWARN).

Industrial Hazards and Pollution

11. Mining accidents, oil spills, radiation, air and water pollution, as well as accidents involving chemicals are all hazards. The risk of fires and explosions is also present in industrial centres as is the case with fuel storage depots. Another hazard is posed from disposal of waste oils, lubricants and chemicals. The Government will support the private sector's initiatives to raise awareness on the causes of industrial disasters. The private sector will consequently play a major role in mitigation and response. To prevent industrial disasters, the regulatory framework under which industry and housing operates will be remforced.

HIV/AIDS and Disease Epidemics

12. Currently HIV/AIDS is a major pandemic affecting Kenya. It is estimated that about 2.2 million people in Kenya are living with HIV/AIDS3. Approximately 75% of reported cases occur among those aged between 15-49 years. This is not only the most economically productive group of the population, but it is also the age at which investment in education is beginning to pay off and families are formed. The people, skills, knowledge and manpower lost due to the disease; imply dire economic and social consequences for the country. It is for this reason that the Government declared HIV/AIDS a national disaster in 1999. The declaration emphasized the importance of establishing effective measures to raise public awareness in the causes of HIV/AIDS, and the need to control it. There are other extreme outbreaks of diseases, such as cholera, malaria, typhoid and meningitis. Similarly, there should be continuous surveillance against the extremely lethal viral hemorrhagic fevers such as ebola, yellow fever, Rift Valley fever and the marbug. The Government will continue to undertake preventive and promotive control measures against such disease outbreaks.

Livestock and Wildlife Diseases

13. The major animal diseases in Kenya are Rift Valley fever, rinderpest, anthrax and foot and mouth. These diseases affect not only livestock but also wildlife and by extension the tourism industry. The diseases hinder the country from engaging in international trade in livestock and livestock products. They have also caused impoverishment to a sizeable population in the country. The government will continue to undertake the necessary control and preventive measures to enhance disease surveillance, control and eradication of any other emerging diseases.

³ National AIDS Control Council and Ministry of Health, 'AIDS in Kenya, 6th edition, 2001'.

Transport Accidents

Major shipping, train, aviation, and road accidents have occurred in Kenya and many people are killed or injured annually due to these accidents. The government has taken great concern over these accidents and has instituted measures to bring the situation under control. These measures include amendments to the Traffic Act, Transport Licensing Board Act, and the Insurance Act, imposition of heavy penalties on offenders, and the suspension of licenses to aircraft operators and owners who violate the Civil Aviation Act. Measures will also be enforced to discourage human settlements in and around airports, ports and road reserves.

Lightning

Lightning often destroys property and lives. It is a natural hazard resulting from the discharge of static electricity generated in parts of storm clouds. In Kenya, the western region experiences at least 240 days a year of lightning discharge. Lightning has disastrous effects causing death to human beings, animals, and destruction of buildings, telecommunication, power installations and electronic systems. This policy will pursue strategies that will promote risk minimising technologies particularly formulation of a code of practice for protection of structures from lightning attacks in addition to erecting arresters in strategic places.

Pest Infestation

Pest infestation causes damage to agricultural production and therefore peoples' livelihoods and the national economy. The most prevalent pests in Kenya are armyworms, locusts, ladybirds, quillea birds and maize -stalk borers, which are known to destroy a significant quantity of food and cash crops. The government has established early warning systems in the Ministry responsible for Agriculture to monitor the occurrence of pests and take appropriate control measures. This policy will ensure that these measures are strengthened.

Drug, Alcohol and substance abuse

17. Uncontrolled drug, alcohol and substance consumption cause degradation of human resources, people's productivity and hamper the growth of the national economy. It is linked to violence, HIV/AIDS scourge, upsurge of crime rate, disturbances in learning institutions, high government expenditure on health and security, family discord and threatens to completely tear social and moral fabric. In Kenya the commonly abused drug substances include various brands of alcoholic liquors (licit and illicit), tobacco, bhang (cannabis sativa), Miraa (khat), inhalants such as glue and self-prescription of medical drugs. However, cocaine, heroine, hashish, mandrax, and various synthetic drugs are increasingly being introduced in

the country. This policy will enhance drug control measures through strengthening law enforcement, rehabilitation & re-interaction of abusing persons regular review of the effectiveness of the relevant legislation, implementation of drug control conventions and collaborating with regional and international enforcement agencies.

Fires

18. Fires are a major risk especially in industries, forests, poorly planned buildings and settlements, overcrowded areas and where most houses are of temporary structures. Currently, there is inadequate provision for preventive and response measures to hazards caused by fires. This policy will ensure the enactment of an umbrella legislation that covers all types of fire hazards. The umbrella legislation will incorporate provisions on Fire Precautions Act and Fire Services Act. The Local Authorities will be strengthened to have adequate and well-equipped fire response capabilities.

Other Hazards

- **19.** Kenya faces other hazards to its social and economic development which include:
 - (i) Water hyacinth;
 - (ii) Frost, fog, strong winds and hailstones;
 - (iii) Street families and orphans from HIV/AIDS;
 - (iv) Technological hazards and
 - (v) Oceanic shoreline changes and the likely effects on the environment and settlements;
 - (vi) Deposition of hazardous waste in the seas;

20. Lessons learned from past experiences

A number of lessons have been learnt from the above disasters, notable of which are:

- (i) That disaster management must include all key actors in a multiagency approach; it needs to be government-led and coordinated and be based within government structures, but to incorporate donors and NGOs (ranging from international, national and local NGOs and local civil society organizations):
- (ii) There is need for effective early warning and quick dissemination of information to all actors in order to elicit quick response to emerging crises:
- (iii) The disaster management system needs long-term funding, through a combination of government, donor, NGO and community resources;

- (iv) The disaster management system needs flexible budgeting and rapid financial disbursement procedures, including national and district disaster contingency funds: there must be decentralized financial decision-making, giving the districts and communities easy access to funds;
- (v) The system must facilitate community participation and community capacity building in all aspects of disaster management;
- (vi) The system must be able to collect, collate, document and disseminate information based on lessons learnt and it should also be able to collect relevant data and undertake research in order to improve preparedness activities at all levels.
- (vii) The system must emphasize public education and awareness on disaster management;
- (viii) That more investments should be made into factoring climate in disaster management as the bulk of disasters in Kenya have so far been climate-related;
- (ix) That the consultative process and the approach of inclusiveness adopted in the formulation of national and public policy as exemplified by this policy and the PRSP process are crucial in enlisting participation and ownership of both the process and the policies.

POLICY INITIATIVE

CASE FOR POLICY INITIATIVE

21. In view of the experiences gained and lessons learned during the management of the various hazards and disasters, the Government is committed to formulating a coherent policy that emphasizes pro-active and preventive strategies in addressing disaster situations. This is particularly with regard to reduction of the communities' exposure to risks and vulnerability through promotion of sustainable disaster management systems.

POLICY OUTLINE

22. This policy lays down objectives, guidelines, co-ordination structures and a legislative framework that will enhance the process of disaster management in Kenya.

CHAPTER 2: GOAL, OBJECTIVES AND GUIDELINES

23. The Sessional Paper No.10 of 1965 on African Socialism and its application to Planning in Kenya articulated the Government's policy which was directed towards reduction of poverty, illiteracy and diseases⁴. Poverty and vulnerability reinforce each other and the occurrence of disasters retards the government's efforts to achieve the stated welfare objectives. Disaster management is therefore a vital component of the societal efforts towards improvement of its livelihood.

The Government recognizes the strong link between poverty and the vulnerability of poor people to disasters. While poverty reduces the community's ability to sustain itself based on self-reliance, disasters erode assets and undermine the resilience of a society's socio-economic system. The Government will mobilize and commit resources in order to provide on-going leadership in disaster management such that disruptions and losses resulting from disasters are minimized.

Goal

24. The overall goal of disaster management policy is to establish and maintain an efficient, effective and co-ordinated system for managing disasters, in order to minimise losses and resulting disruptions on the population, economy and environment.

Objectives

- **25.** The policy objectives include:
 - Establishing an institutional framework that will manage disasters;
 - (ii) Ensuring that disaster management and institutions involved are well coordinated and focused;
 - (iii) Promoting the linkages between disaster management and development planning;
 - (iv) Fostering partnerships between the government and stakeholders at all levels, including regional and international bodies;
 - (v) Promoting programmes and strategies that reduce the vulnerability of Kenyans to hazards;
 - (vi) Providing adequate and specific funds for disaster management;
 - (vii) Mobilizing adequate resources to ensure the effective implementation of the policy and subsequent strategies and programmes; and
 - (viii) Promoting disaster management culture, training, research and information dissemination, community awareness and preparedness.

⁴ Sessional paper No. 10 of 1965 on African Socialism and its application to Planning in Kenya.

Guidelines

26. In order to realize Policy objectives, the following key guidelines will be pursued:

27. The Primacy of Co-ordination and Communication

Adequate co-ordination and communication at all levels and amongst institutions is a critical component of disaster management. The government will establish alternative communication, especially, where normal communication is likely to be or has been interrupted.

28. Building on Existing Capacities and institutions

It is through effective management of civil conflict, droughts, floods, HIV/AIDS and accidents in the transport sector, that Kenya has developed a capacity to respond to disasters. In areas of drought management and food security the Government has established early warning systems and appropriate management programmes. These institutions, however, operate independent of each other. This policy establishes an institutional framework that will enhance the co-ordination of the existing disaster management institutions.

29. Slow-onset and Rapid-onset Disasters

The response mechanisms, information requirements and skills base are different for slow-onset and rapid-onset disasters. To promote appropriate planning for and response to these disasters, slow onset and rapid onset disaster expertise will be established within the overall co-ordination structure.

30. Disaster Management and Development Planning.

A high priority is being given to the areas where disaster management coincides with development planning. Disaster management strategies will, therefore, focus on strengthening the community's ability to cope with the current and future disasters, by factoring contingency plan into development plans and poverty eradication plans. Disaster management initiatives will link with local development plans and Poverty Reduction Strategy Programmes (PRSP).

31. The Necessity of Employing a multi-Sectoral Approach

The Government recognizes that disaster management is a multi-sectoral and multi-disciplinary issue. It is imperative that the secretariat within the proposed Authority will co-ordinate and link closely with various sectors and disciplines. At the national, district and local levels relevant committees will be strengthened to take on board responsibilities arising from this policy. This policy also recognizes that disaster management partners such as the Local Authorities, Private Sector, State Corporations, UN

Organizations, NGOs, the Civil Society, the media, volunteers, Religious groups and development partners have a responsibility in the process of disaster management.

32. The Role of Communities

All people in Kenya have a responsibility in disaster management. The government will promote strategies for disaster management based on community consultation, experience and participation. Communities will be required to establish mechanisms that will enable them to share knowledge on disaster and pool together local resources for disaster mitigation, preparedness, prevention, response and recovery.

33. Research and Information Dissemination

All the players in disaster management have a responsibility to disseminate information on impending disasters, on-going disasters and post-disaster enquiries. The government will promote strategies for providing information, creation of a disaster response website and sensitization to the public on disasters. Dissemination and utilization of research findings is essential to refining early warning systems, preparedness, vulnerability and risk reduction. The Authority will encourage assessment in disaster related areas, and ensure that research findings are integrated into disaster reduction plans, disseminated and implemented.

34. Factoring of Climate and weather information into disaster management

Over 70% of natural disasters in Kenya are related to extreme climate events. These events are recognized as key causal factors for some emergencies that lead to disasters. The optimum factoring of weather and climate information and early warning in disaster management is a vital component of the policy.

35. Regional Perspectives and strategies

This policy recognizes that some hazards are not confined to national borders. Notable examples include: droughts, disease epidemics, conflicts and the proliferation of small firearms. The Government, through the Disaster Management Authority, will seek to develop regional linkages to disaster management institutions. This will not only facilitate collaboration and early warning information exchange but will also foster joint preparedness and response initiatives in the region.

LINKAGES TO EXISTING POLICIES

The National Development Plan 2002 - 2008

36. The National Development Plan recognizes that about 56% of the Kenyan population is afflicted with poverty⁵. The plan further states that the majority of the people are living below the poverty line and are not involved in the development process⁶. Disaster can push more people below the poverty line or increase the impoverishment of the existing poor. The policy seeks to archive sustainable economic growth and eliminate poverty by involving all stakeholders in the development process. The process will improve living standards through increased people's income inorder to reduce their vulnerability to disasters. Hence an an effective disaster management system is vital to achieving the aims of the National Development Plan.

The Poverty Reduction Strategy Paper 2000-2003

37. The strategy paper recognises that the poor are particularly vulnerable to natural disasters⁷. It identifies some of the hazards faced by the poor to be famine, social unrest and crime. It also outlines mitigation and response activities such as the establishment of social safety nets, establishment and maintenance of strategic water resources and an Anti-Poverty Fund⁸. These strategies are in convergence with the disaster management policy.

National Food Policy - 1994

38. The National Food Policy provides for a sufficient supply of nutritionally balanced food in all parts of the country⁹. It also provides for enhanced food production and strategic grain reserve stock of three million bags and an equivalent cash reserve earmarked for emergency cereal purchases¹⁰. The policy promotes enhanced food production and targeted relief through food for work programmes, designed to reduce poor households' vulnerability to food shortages. It supports the expansion of specific nutritional interventions, such as pre-school feeding, school milk and pregnant mothers programmes.

HIV/AIDS Policy - 1997

39. Sessional Paper No.4 of 1997¹¹ on HIV/AIDS provides a framework for strategies aimed at preventing and controlling the scourge, protection of

⁵ Preface para. 1 National Development Plan 2002 - 2008

⁶ Ibid – Forward para.5

⁷ Poverty Reduction Strategy Paper for the Period 2000-2003, June 2001. Section 2.10.

⁸ Ibid – Section 3.5 and 10.5.

Section 3.37 Food Security Policy Paper No. 2 of 1994, on National Food Policy

Section 3.4 Food Pricing, Marketing and Distribution Policy of Sessional Paper No. 2 on National Food Policy.

Sessional Paper No.4 of 1997.

human rights and care for the afflicted. In recognition of HIV/AIDS as a threat to Kenya's social and economic development, the President of the Republic of Kenya declared HIV/AIDS a national disaster in 1999¹². It is estimated that over 2.2 million Kenyans are living with HIV/AIDS and the number is likely to increase in the next five years. The pandemic not only affects families directly, but it has the potential to cause severe economic impact. The National AIDS Control Council has been established with the mandate to mobilise resources and co-ordinate programmes under this framework. The National Disaster Management Authority will, therefore, work closely with the National Aids Control Council in putting in place Disaster strategies and contingency plans to deal with the pandemic.

LINKAGES TO EXISTING LEGISLATION

The Environmental Management and Co-ordination Act No 9 of 1999

40. The Environmental Management and Co-ordination Act of 1999 established a National Environment Management Authority, which has, amongst its responsibilities, to prevent hazards that may harm the environment and to work to reverse the effects of these hazards¹³ The Disaster Management Policy recognizes the role of the National Environmental Management Authority will collaborate with the National Environmental Management Authority to monitor and respond to disasters at all levels.

The Kenya Red Cross Society Act (Cap 256)

41. The Government acknowledges that the Kenya Red Cross Society is a voluntary aid society, auxiliary to the public authorities and respects the independence and voluntary nature of the society. The objectives of the Kenya Red Cross Society are clearly geared at dealing with or responding to emergencies. The Authority will work closely with the Red Cross Society on issues pertaining to emergencies.

The Water Act (Cap 372)

42. The Water Act empowers the Ministry responsible for water resources to promote the investigation, conservation, proper use of water resources and the provision of water supplies. The Act further empowers the Minister, to declare that an emergency exists, where there is an exceptional shortage

¹³ Section 9.1K, Environmental Management and Co-ordination Act of 1999.

¹² Speech by H.E. President Daniel Arap Moi to the Members of Parliament in Mombasa on 25th November 1999. Extract from Republic of Kenya,

of rain, accident or unforeseen circumstances, therefore causing a serious deficiency of water for essential domestic purpose to exist. In addition the Minister may direct any person who has a supply of water in excess of his domestic purposes to supply water to such area or to any person that is facing the shortage. The Disaster Management policy recognises the role of the Water Resources Authority in the Ministry responsible for water, in investigating the water resources of Kenya and making recommendations to the Minister, in regard to the improvement, preservation, conservation, utilisation and apportionment of water resources. The control of pollution and contamination of water resources is also an important responsibility for the Water Resources Authority.

Grass Fire Act (Cap 327)

43. The Grass Fire Act empowers a Local Authority to declare a state of danger in respect of any area within its jurisdiction, to prohibit the burning of vegetation within the whole or any part of such area. The Local Authority may also call upon the owners or occupiers of land to construct and maintain firebreaks that will guard against spread of fire beyond the boundaries of such land. However, recommendations have been made for the enactment of the Fire Precaution and Fire Services Bill to strengthen the Local Authorities to deal with urban and rural fires. These provisions are in conformity with the Disaster Management Policy.

Petroleum Act (Cap 116)

44. The Petroleum Act seeks to prevent pollution of the environment. It prohibits, *inter alia:* parking of vehicles containing petroleum within 100 metres of any building and spilling of petroleum into any drain, sewer, harbour, or watercourse. This policy proposes that the provisions of this Act are enforced.

The Explosives Act (Cap 115)

45. The Explosives Act provides that every occupier of a factory shall make special rules for regulating the persons employed in the factory with a view to securing the safety and proper discipline of the employees and the safety of the public. This Act is in agreement with the disaster management policy.

St. Johns Ambulance of Kenya Act (Cap 259)

46. One of the objectives of the St. Johns Ambulance of Kenya Act is to render first aid to the sick and wounded in war or in times of peace. The Act

provides for a reserve of technical staff that supplements the medical services of the Government during times of disaster. This is in conformity with the disaster management policy.

Factories and Other Places of Work Act (Cap 514)

- **47.** The Act is in convergence with the Disaster Management Policy as it makes provisions for:
 - (i) Effective and suitable circulation of fresh air in each workroom;
 - (ii) Clean factories, free from effluvia arising from any drain;
 - (iii) Sanitary convenience or accumulation of dirt; and
 - a. Precautions with respect to explosives or inflammable dust or gases.

The Local Authority Act (Cap 265)

48. The Local Government Act (cap.265) is the Act of Parliament that establishes Local Authorities and defines their functions. The Act is currently under review. The draft bill has made provisions for the establishment of a disaster management office in every Local Authority. The office will work very closely and in partnership with other Government Agencies and other organizations that deal with disaster management. It also sets out special powers including resource mobilization that may be used in the event of a local disaster.

Other Acts

49. The disaster management policy recognises other Acts of Parliament that empower government agencies to regulate the operations and activities of the public and private sectors. These departments or agencies, in the course of their activities, address disaster management issues.

(i) The Police Act	Cap 84
(ii)The Chiefs Act	Cap 128
(iii) The Public Health Act	Cap 242
(iv) The Pharmacy and Poisons Act	Cap244
(v) The Medical Practitioners and Dentists Board	Cap 253
(vi) The Kenya Ports Authority Act	Cap 391
(vii) The Civil Aviation Act	Cap 394
(viii) The Transport and Licensing Board Act	Cap 404
(ix) The Animal disease Act	Cap 364
(x) The Kenya Railways Act	Cap 354
(xi) The Forest Act	Cap 385
(xii) The Trade Disputes Act	Cap 234

International Treaties and Agreements

50. This policy recognizes international agreements, treaties and conventions that Kenya is a signatory to and will operate in tandem with their provisions.

CHAPTER 3: THE POLICY ELEMENTS

MAIN POLICY ELEMENTS

In line with the policy guidelines, this policy covers a wide spectrum of 51. activities that include development, prevention, mitigation, preparedness, response, and recovery. These elements form the basis of the Disaster Management Policy. This will be co-ordinated and implemented by an Authority to be established through this policy. It is however, important to note that this policy gives priority to development planning as a measure to enhance the capacity of society to withstand the adverse effects of disasters. This is so because development aims at reducing poverty and Disaster management includes a developmentassociated conditions. based set of activities aimed at reducing vulnerability within populations that are at risk to particular hazards. Disaster management will therefore ensure that adequate measures are in place to prevent the onset of a disaster and deal with disasters when they occur, thus minimising their negative effects and threats to development. Disaster mitigation activities in particular will overlap with development activities, as they are long-term in focus and continuous in nature.

PREPAREDNESS, PREVENTION & MITIGATION

Preparedness

Disaster Preparedness is precautionary measures taken in advance of an imminent threat to help people and institutions respond to and cope with the effects of a disaster. Effective disaster preparedness is based upon a comprehensive and continuous assessment of vulnerabilities and risks. The assessment of risks will create awareness of the most likely hazards, their geographical spread, their magnitude and the elements at risk. A comprehensive assessment of risks and vulnerabilities will therefore assist the targeting of disaster management programmes in Kenya. The Government, in collaboration with its development partners will pursue a strategy that will ensure contingency planning and mechanisms to activate the plans are put in place.

Strategic Food Reserve

53. In addition to the existing strategic grain reserve, the Government will maintain a strategic food reserve that includes other food varieties. The Authority to be established through this policy will be expected to maintain a strategic food reserve revolving fund. The National Cereals and Produce

Board will be encouraged to transact its business trading on a commercial basis but also take into account the strategic role it could play in ensuring effective distribution of grain in the entire country.

Strategic Stockpiles

54. The government will ensure that there is are adequate availability of other basic necessities required in the event of a disaster. These will include water, drugs, clothing materials for shelter and infrastructure.

The Disaster Trust Fund

55. The Government will establish a Disaster Trust Fund in support of disaster management. The fund will be managed by the Authority and disbursed to the districts when need arises. The Government, private sector, NGOs, development partners and other stakeholders will contribute to the Disaster Trust Fund. The Authority will develop operational modalities for this fund.

Prevention

56. Disaster prevention covers measures undertaken to eliminate the occurrence of a disaster. Prevention in this respect will focus on measures aimed at impeding the occurrence of a disaster and minimizing its harmful effects on the community, property and the environment.

Community disaster prevention and coping mechanisms

Coping mechanisms are responses of an individual, group or society to 57. challenging situations. The coping mechanisms lie within the framework of the society's risk aversion or tolerance level in minimizing risk or managing loss. While some mechanisms may be brought into play by a stress factor, others may be an intensification of an already in-built strategy. This is especially true in slow-onset crises. Several coping mechanisms practiced have been hampered by insecurity in some parts of the country. An example is the "exchange of products" between the high rainfall areas and the arid and semi arid districts. The cross-border utilization of natural resources by pastoralists of different ethnic lines is yet another example. This policy recognizes that conflict/insecurity prevention and management can go a long way in enhancing the symbiotic relationship and exchange of information between different areas of this country. The government will therefore seek to enhance conflict prevention and management strategies as a way of providing an enabling environment for the development of socio-economic activities.

Mitigation

58. Hazards like floods, pests and droughts do not make a disaster on their own. It is the population's inability to cope with these hazards that precipitate the disaster. Mitigation measures will aim at increasing the populations' ability to cope with the disasters most likely to affect them.

Information Systems

59. Appropriate baselines and monitoring information is a vital component of disaster management. The information must be well linked to decision-makers and the response system to ensure timely action. The National Disaster Management Authority will generate and collate relevant information from Government Ministries and other sources. The information will be disseminated to users in the Government's disaster management network and external networks.

Risk Information

60. Populations stand the risk of being affected by different hazards, which can turn into disasters if not well managed. A system will be established at all levels to co-ordinate the collection, collation, analysis and dissemination of information on disaster risk.

Vulnerability Analysis

Vulnerability analysis links directly to mitigation activities and provides the context for understanding the effect of any hazard on the population, property and the environment. Baseline vulnerability analyses will be prepared on a continuous basis to assess the impact of the problem on the affected population. Response activities will be undertaken in a manner that ensures that the most vulnerable groups are specifically targeted.

Early Warning Systems

Providing early warning information on impending disaster helps to plan preparedness and response activities. The process allows a lead-time to access funding, expertise and equipment for the necessary intervention. The objective of early warning system is to link the information provision to the response. Early warning information will be analyzed at district and national level and disseminated to all users. The policy will establish an National Early Warning System and encourage the involvement of all stakeholders with regard to information provision, analysis and decision-making.

National Contingency Plans

63. Contingency planning is the forward planning process, for an event which may or may not occur, in which scenarios and objectives are agreed,

managerial and technical actions defined and potential response systems put in place to prevent or respond effectively to an emergency situation. The plans will be drawn defining the actions to be taken to prevent and mitigate disasters. The plans will also deal with preparedness, response and recovery.

Advocacy and Public Awareness

64. Advocacy is necessary to raise stakeholders' awareness on the need to participate in disaster management and promote a culture of disaster prevention. Advocacy will provide a feedback to communities, government and partners at all levels. Public awareness will be undertaken to sensitise the population on the policy and increase peoples' understanding of the disasters they are likely to face and the precautions to be taken. The policy will support the development of community based disaster management initiatives.

Training

65. For effective disaster management and sustainability of programmes, capacity building and training in disaster management is essential. This will be targeted to decision-makers in line ministries, training institutions, NGOs, community-based organisations, the general public, volunteers, and the private sector. A training needs assessment will be conducted to take stock of disaster management skills and experience available in the government, Local Authorities, private sector, local communities and the civil society. Training will focus on specialised skills in search and rescue operations, post- disaster trauma, medical operations, public health specialists, early warning systems and other coping-mechanisms. All learning and training institutions in the country will be encouraged to incorporate disaster management courses, and skills development into their regular education curriculum and training programmes.

Resource Inventory

66. In order to increase the capacity to respond quickly to disasters, a comprehensive and all-inclusive resource inventory will be established.

Research and Development

67. Disaster management needs up to date research on relevant skills, fields and technology. This policy recognises the need for research in disaster management. Research will therefore be funded and supported. Research findings will be disseminated to users for decision-making and utilised in the development planning process.

Public Safety

68. Failure to observe professional and safety standards and ethics in all aspects of life causes various disasters. The promotion of public safety within the realms of building and construction, transport, industries, public sector, employment, educational institutions and other key sectors will be given priority. The Government will ensure compliance to professional and safety standards and ethics.

RESPONSE AND RECOVERY

Response

69. Response involves interventions taken prior to and following a disaster impact. Such actions are directed towards saving lives, providing basic necessities, protecting property and dealing with the immediate damage caused by disaster. In the event of a disaster, the Government, community and other partners will redirect resources towards saving lives, property and the environment.

Recovery

70. The disaster recovery phase will entail programmes designed to help communities to return to normalcy. Rehabilitation and reconstruction are closely allied to ongoing development, providing the bridge between the satisfaction of the people's immediate needs and the implementation of comprehensive vulnerability reduction programmes. The government, in collaboration with development partners will put in place mechanisms to ensure fast recovery and reconstruction after a disaster. Emphasis will also be placed on post-disaster trauma in order to ensure that victims of disasters do not suffer from permanent or prolonged disaster effects.

Insurance Initiatives in Response and Recovery

71. The insurance industry will play a crucial role in mitigating the impact of disasters on the communities in both rural and urban areas. Insurance firms will be encouraged to develop affordable products that can be made available to the society in order to underwrite some of the disaster-related losses.

CHAPTER 4: INSTITUTIONAL FRAMEWORK

Existing Institutions in Disaster Management

The country has existing institutions dealing with disaster related activities 72. but these institutions are not working within a co-ordinated framework. In the Office of the President there is the National Operations Centre, Arid Lands Resource Management Project, the Department of Relief and Rehabilitation and the National Aids Control Council. There are also specialised units, which have roles in search, rescue, anti-terrorism, evacuation, planning and management, enforcement of crowd control, conflict resolution and fire fighting. These units include the Police, the Department of Defence, National Youth Service, Local Authorities' Fire Brigade, Hospitals, the Directorate of Labour, Occupational Health and Safety Services and the Kenya Wildlife Service. It is acknowledged that the Ministries responsible for Agriculture and Rural Development, Natural Resources and Environment, Labour and Human Resource Development, Trade and Industry, Health, Roads and Public Works, Fransport and Communication, Information and Tourism, Energy, Finance and Planning, Lands and Settlement, Education, Science and Technology are involved in disaster management. This policy recognizes their roles and seeks to harmonise their disaster management operations. In addition, IGAD, UN Agencies and other bilateral partners and international NGOs play a significant role in disaster management in Kenya.

Proposed Disaster Management Institutions

National Disaster Management Authority, (NADIMA)

- **73.** There shall be established a National Disaster Management Authority. A non-executive chairman, appointed by the President, shall head it. The Authority shall draw membership from:
 - (i) The key Ministries and Government Departments;
 - (ii) The Local Authorities;
 - (iii) The Private Sector;
 - (iv) United Nations Organizations & Agencies;
 - (v) International donors and development partners
 - (vi) The Red Cross/Red Crescent
 - (vii) Non-Governmental Organizations;
 - (viii) Religious Bodies; and
 - (ix) Other co-opted members.

- 74. The National Disaster Management Authority shall be answerable to the Minister in charge of Disaster Management in the Office of the President. The members of the Authority shall constitute themselves into full Board for the purpose of spear heading Disaster Management Policy matters. Its functions and powers will include: -
 - (i) Being the authority on disaster management in the country;
 - (ii) Reviewing and updating the policy when necessary;
 - (iii) Establishing a National Disaster Trust Fund;
 - (iv) Establishing special committees;
 - (v) Resource mobilization both locally and internationally;
 - (vi) Advising the Government of Kenya on disaster emergency declaration *and*
 - (viii) Reporting to the Minister.

The NADIMA Secretariat

- 75. This policy establishes a Secretariat, headed by a Director-General. The position of the Director-General shall be a competitive post. The Secretariat will service various committees, which shall have membership from all stakeholders. The secretariat shall run the day-to-day activities of the Authority, which will include: -
 - (i) Co-ordinating information relevant to disaster management;
 - (ii) Advising on future policy, and areas that may have a bearing on disaster management;
 - (iii) Establishing a national early warning system;
 - (iv) Planning and co-ordinating all aspects of disaster management within government;
 - (v) Coordinate training and public awareness and provide advice at all levels;
 - (vi) Coordinating search and rescue operations;
 - (vii) Preparing disaster management plans;
 - (viii) Formulating the financial rules and procedures;
 - (ix) Drafting contingency plans and preparing the disaster management budget; and
 - (x) Monitoring, evaluating and documenting lessons learnt, as well as applying them to improve the performance of the system.
 - (xi) Provide the linkage with the districts, local authorities and community based disaster management structures.

NADIMA INSTITUTIONAL STRUCTURE

- **76.** The National Disaster Management Authority will initially consist of the following departments, namely:
 - (a) Finance and Administration
 - (b) Planning & Research
 - (c) Disaster Response and Recovery

The Department of Finance and Administration

77. It will deal with the financial issues of the Authority, human resources and other administrative matters.

The Department of Planning & Research

- **78.** This department will be mandated to coordinate the following programs:
 - (i) National Early warning system
 - (ii) Research
 - (iii) Planning
 - (iv) Information
 - (v) Monitoring and evaluation

The Department of Disaster Response and Recovery

79. This department will comprise of two units: A Drought Management and Food Security Unit will handle slow onset disasters whereas an Emergency Response Unit will handle rapid onset disasters.

Each of them will coordinate the following functions

- (i) Prevention and Mitigation
- (ii) Preparedness
- (iii) Response
- (iv) Recovery
- (v) Relief
- (vi) Rehabilitation & Reconstruction

80. KENYA FOOD SECURITY MEETING

The Government has in the last two decades developed a drought management system based on a central drought management office in the Office of the President and covering 11 districts and 6 Semi Arid districts. Activities include early warning monthly bulletins, the declaration of warning stages (i.e NORMAL, ALERT, ALARM, EMERGENCY) and The drought management preparation of detailed contingency plans. system has for the last four years been co-ordinated through the Kenya Food Security Meeting (KFSM), Kenya Food Security Steering Group (KFSSG), Geolivelihood Review Teams - (GRTS) and Sectoral Working Groups. This forum has a Multi-sectoral co-ordination and decision-making approach in the area of needs - assessment, resource mobilization through preparation of Consolidated Appeals and geographic targeting of food and non-food interventions. This structure enabled the Government, the UN Agencies, Donors, Relief Agencies etc to effectively manage the 1999-2001 drought which affected over 4.4 million Kenyans through implementation of Community Based Food Aid Targeting and Distribution Strategy. The Kenya Food Steering Meeting structure shall be maintained and managed as a discrete, unified activity within the National Disaster Management System. The Kenya Food Security Meeting (KFSM) structure shall be a sub-committee of the National Disaster Management Authority.

Sectoral Ministries

81. Sectoral ministries are directly involved in disaster management at all levels. Their expertise is required in disaster management planning. They provide services and implement programmes that are a part of mitigation, preparedness, prevention, response, and recovery Each concerned Ministry will appoint a representative to sit in the disaster management committees at all levels. The representatives will co-ordinate activities and act as a two-way flow of information between the ministry and the Authority. Sectoral Ministries will also ensure that their activities guard against prolonged disruptive effects of disasters.

Local Authorities

Revamped Local Authorities will play a more active role in disaster management under this policy framework. It is recognized that these Authorities have potential resources that can be effectively used to minimize disaster occurrences in the country. The Central Government will enhance communication and partnership with Local Authorities in order to improve the effective utilization of available resources and enforcement of their respective bylaws to control and regulate disaster preparedness activities within their areas of jurisdiction.

Partner Agencies

83. Organizations outside of government involved in the national disaster management system including donors, international and national NGOs, UN agencies and civil society groups will participate in management of disasters through committees. Partners will provide information sharing, co-ordination and technical advisory roles to the Authority. Partners will also enter into a contractual relationship with the Authority when they fund or implement specific activities in disaster management. This relationship will be formalized through a Memorandum of Understanding.

District Committees

- **84.** In order to maintain the principle of building on existing, strengths and structures, the capacity and mandate of suitable committees will be enhanced to encompass disaster management responsibilities. Their increased responsibilities will include: -
 - (i) Operating the district early warning system;
 - (ii) Coordinating the compilation of district disaster contingency plans;
 - (iii) Administering district disaster funds;
 - (iv) Appointing a lead agency or department that will be responsible for coordinating an emergency response;
 - (v) Conducting inventory on the response capacity of the emergency
 - (vi) services, share this with the district lead agency and supply it to the Authority;
 - (vii) Working with other committees to support community institution building, in disaster management;
 - (viii) In conjunction with local experts, organising and participating in disaster management training needs assessment; and
 - (ix) Monitoring and evaluating disaster management activities in the Districts.
 - (x) Coordinating training and public awareness activities.
- **85.** The District Committees will link directly with the Authority. They will also foster linkages with non-governmental partners, district representatives of sectoral ministries and Local Authorities. They will also work with community groups, individuals and volunteers who have experience in disaster management.

Division, Location, Sub-Location and Community Levels.

86. The Disaster Management Policy gives an important place to community groups in starting and carrying out disaster management activities. Community level planning will be given primacy at the Division, Location and Sub Location levels. The District Officers and the local leaders will

work with the district committees to represent the interests of the communities.

Private Sector

87. The private sector has a role to play in the prevention and response to rapid onset disasters. The sector is responsible for prevention of disasters by upholding human, industrial and environmental safety. The private sector will be required to assist with available resources when a disaster strikes in addition to playing a significant role in the process of advocacy, public education and awareness. The media and other professional bodies such as the institute of engineers could play a critical role in disaster management.

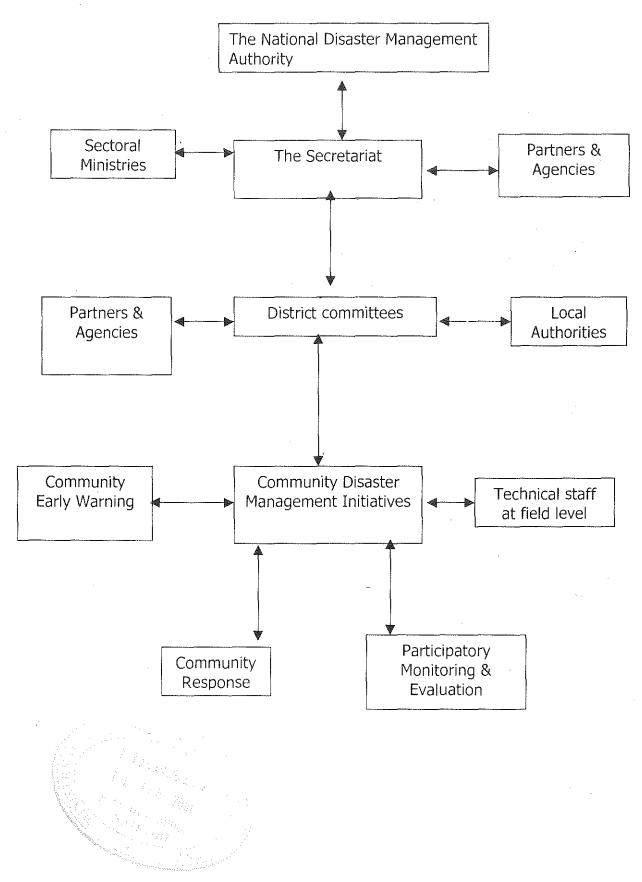
Organizational Structure

88. The proposed Organisational structure will be as provided in Chart 1.

LEGISLATIVE FRAMEWORK

- **89.** A Legal Framework will be established through an Act of Parliament that will make provisions for: -
 - (i) The establishment of the National Disaster Management Authority, the Secretariat and other committees;
 - (ii) The powers, functions and funding of the Authority; and
 - (iii) The activation of disaster management plans to provide immediate assistance to disaster victims even in the absence of a disaster declaration.

CHART 1: THE ORGANIZATIONAL STRUCTURE OF THE PROPOSED NATIONAL DISASTER MANAGEMENT AUTHORITY (NADIMA).



CHAPTER 5: RESOURCE MOBILIZATION AND MANAGEMENT

RESOURCE MOBILIZATION

90. Resource mobilization and allocation are essential elements in disaster management. The Government, Development Partners and other stakeholders will avail human, financial and material resources to be used to prevent, prepare, manage and mitigate the effects of disasters. Disaster Management issues will be integrated into the various national development initiatives for effective and targeted resource mobilization. These include National Development Plan, Medium Term Expenditure Framework (MTEF), Poverty Reduction Strategy Paper (PRSP), Sessional Papers, and Sectoral Policy documents among others.

The financial resources mobilized for the purpose of managing disasters will be subject to the provisions of the Exchequer and Audit Act Cap 412 of the Laws of Kenya. Appropriate exemptions will however be sought and as when necessary to expedite the smooth flow of financial resources.

FUNDING SOURCES

- **91.** The main sources-of budgetary and other financial resources for disaster management will include:-
 - (i) Direct budgetary allocations to the Authority through the parent Ministry;
 - (ii) Normal budgetary provisions in the Ministries/Departments votes with direct and indirect contributions towards addressing disaster issues; and
 - (iii) Contributions from other stakeholders including the communities, NGOs, Civil Society Organizations, Private Sector, Local Authorities, International Development Partners and specialized UN Agencies.
- **92.** The Authority will supervise disbursement and expenditure of the funds through the District Disaster Management Committees.

Disaster Trust Fund

93. There shall be established a National Disaster Trust Fund by the Minister for Finance. The National Disaster Management Authority in accordance with the Provisions of the Exchequer and Audit Act will manage the Trust Fund. The Authority will also be empowered to carry out fund-raising activities to boost the Disaster Trust Fund. It will advise on matters relating to national and international appeal for assistance, in the event of a disaster. Appropriate exemptions will however be sought as when

necessary to expedite the smooth flow of all resources prior to official declaration of a disaster.

District Contingency Funds

94. There will be a district contingency fund in every district. The National Disaster Management Authority will provide the initial funds for operationalising the same and to cater for initial response in the event of a disaster. If these are insufficient, requests by the districts will be made for resources to be drawn from the National Disaster Trust Fund.

International Support

95. The Government appreciates the role played by the International Development Partners and UN Agencies in providing support towards disaster management in the country. The Government will continue to work with these partners for purposes of enhancing effective implementation of this disaster management policy resource mobilization and capacity building.

CHAPTER 6: MONITORING AND EVALUATION

- 96. Monitoring and Evaluation (M&E) is an integral part of any management system. This system will be essential for tracking down activities undertaken and thereby facilitate necessary adjustments implementation of the disaster programmes. The National Disaster Management Authority will be responsible for monitoring and evaluation. The objective of monitoring and evaluation is to measure progress towards planned objectives and implementation of strategies as well as production of expected output within a given time frame. The monitoring and evaluation system adopted for disaster management policy will be designed to provide feedback to stakeholders to facilitate appropriate decisions on future implementation and review of the policy. M&E activities will be undertaken by the Authority and at all levels. The NADIMA should ensure that Monitoring and Evaluation activities are factored into the financial budgeting process.
- **97.** Monitoring and Evaluation activities of the National Disaster Management Authority shall be to: -
 - (i) Effectively review and update early warning systems with a view of improving efficiency and state of preparedness;
 - (ii) Provide regular and independent assessment of the strategies, interventions and objectives of the policy;
 - (iii) Determine the adequacy and efficient utilization of disaster resources;
 - (iv) Assess the impact of disaster management programmes on the population, economy and the environment;
 - (v) Assess the effectiveness of all stakeholders in the implementation of disaster management strategies and activities; and

ANNEX I: HISTORICAL CALENDER OF EVENTS

YEAR	EVENT	DISTRICT
1998	Terrorism	NAIROBI
		KIAMBU
1900	Ngaragu famine	
1901	Gatego- venereal disease	
1919	Kimiri-kind of disease	
1928	Githingithia: An earthquake	
1950	Muhehenguku: An epidemic	
1965	Yellow maize: Famine	
1909	Famine	KIRINYAGA DISTRICT
1918	Famine	
1927	Earthquake	
1928	Locus invasion	
1934	Famine	
1943	Famine	
1961	Locus invasion	
1961	Floods	
1961	Famine	
1965	Famine (yellow maize)	
1928	Earth tremor	MURANGA DISTRICT
1929	Locust	
1934	Famine	
1943	Famine	
1965	Famine (yellow maize)	
1903	Venereal disease	NYERI DISTRICT
1918	Famine	
1901	Famina	
1901	Famine	KILIFI DISTRICT
1907	Famine	
1907	Famine	
1914	Famine Famine	C.
1910	Flood	
1930	Famine (wheat)	
1961	Flood	
1964	Famine (wheat)	
1965	Famine (wheat)	
1976	Famine (yellow maize)	
1981	Famine	
4 3/3/A	Lanuar	

1997	El Nino rains	
1962	Flood	KWALE DISTRICT
1917	Famine	LAMU DISTRICT
1918	Influenza disease	
1961	Floods	
1901	Famine	MALINDI DISTRICT
1904	Famine	
1907	Famine	
1909	Famine	i '
1914	Famine	
1918	Famine	
1930	Floods	
1942	Famine (wheat)	
1976	Famine	
1980	Famine (relief Harambee)	
1916	Flood	MOMBASA DISTRICT
1930	Flood	TAITA TAVETA DISTRICT
1917	Earthquake	
1943	Famine	
1924	Locust	
1942	Flood	ļ
1963	Flood	
1900	Famine	
1943/4	Famine	
1960	Famine	
1924	Flood	
1930	Flood	
1934	Flood	
1935	Flood	
1936	Flood	
1961	Flood/famine	
1976	Road accident	
1976	Drought	
EASTERN P		
1900	Famine	EMBU DISTRICT
1909	Famine	
1918	Famine	
1928	Locust invasion/famine	
1944	Famine Flood/for	ICIOLO DICTRICT
1903	Flood/fog	ISIOLO DISTRICT
1905	Flood(7 consecutive days)	
1916	Flood	
1920	Epidemic (pneumonia)	
1920	Epidemic (rinderpest)	

F	r	
1923	Epidemic (shoats)	
1924	Chicken pox	
1927	Earth tremor/droughts'	
1928	Drought	
1929	Flood (prolonged)	
1932	Thunderstorms without rain	
1934	Leprosy outbreak	
1936	Floods (red water)	
1937	Floods (brown water)	
1940	Floods	
1945	Droughts	-
1946	Locusts	
1951	Floods/drought	
1953	Drought	
1959	Floods/drought	·
1908	Famine	KITUI DISTRICT
1917	Cerebral spinal	
1924	Meningitis	
1929	Famine	
1930	Famine	
1935	Famine	
1942	Famine (selling bones)	
1944	Famine (cassava)	
1946	Famine (locusts)	
1950	Famine	
1961	Famine	
1965	Flood (relief by air)	
1966	Famine	BAARAI (FEBRUAR DA TOMBATONE
1915	Famine	MAKUENI DISTRICT
1919	Epidemics (livestock)	
1927	Locusts	
1929	Famine	
1931	Locusts	
1934	Floods	
1942	Famine	٠.
1943	Famine	
1945	Famine	
1952	Floods	
1962	Floods	
1968	Famine	
1973	Famine	
1974	Drought	
1980	Famine	
1984	Famine	
1707	rannic	<u> </u>

2 2 0 9 9mf Bros.	Army worms	\
1985	f .	
1998	El Nino	MAACUALIOC DICTOICT
1910	Famous star.	MACHAKOS DISTRICT
1915	Famine	
1919	Epidemic (livestock)	
1927	Locust	
1929	Famine	
1931	Locust	
1934	Drought/flood (jua ya ukuku)	
1942	Famine	·
1943	Famine	
1945	Famine	
1952	Floods	
1962	Floods	
1965	Famine	
1973	Famine/droughts	
1974	Drought	
1981	Famine	
1984	Famine	
1985	Army worms	
1929	Famine	MWINGI DISTRICT
1984	Famine	
1010	Famine	THARAKA/MERU SOUTH
1918	Carriere	I I I MICHICALICA SCOTT
1918 1961	Floods	DISTRICT
		1
1961	Floods	1
1961 1981 1981	Floods Famine (money no food)	1
1961 1981 1981	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE	1
1961 1981 1981 NORTH EAS	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust)	DISTRICT
1961 1981 1981 NORTH EAS	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Famine	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920 1926	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought Drought Drought	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920 1926 1932	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought Drought Small pox Famine	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920 1920 1926 1932 1933	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought Drought Drought Small pox	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920 1926 1932 1933 1935'	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought Drought Small pox Famine Drought/locusts	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920 1926 1932 1933 1935' 1936	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought Small pox Famine Drought/locusts Famine	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920 1926 1932 1933 1935' 1936 1937	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought Small pox Famine Drought/locusts Famine Famine Famine	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920 1926 1932 1933 1935' 1936 1937 1938 1940	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought Small pox Famine Drought/locusts Famine Famine Famine Famine Famine Famine Famine Famine Famine Fox disease Famine	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920 1926 1932 1933 1935' 1936 1937	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought Small pox Famine Drought/locusts Famine Famine Famine Famine Famine Floods/sheep died	DISTRICT
1961 1981 1981 NORTH EAS 1902 1906 1915 1920 1920 1926 1932 1933 1935' 1936 1937 1938 1940 1942	Floods Famine (money no food) Famine (yellow maize) TERN PROVINCE Drought (lot of dust) Drought Famine Famine Drought Drought Small pox Famine Drought/locusts Famine Famine Famine Famine Famine Famine Famine Famine Famine Fox disease Famine	DISTRICT

1040		1
1949	Drought	
1950	Drought	
1951	Floods	
1953	Epidemic	
1954	Disease/drought	
1955	Drought	
1958	Famine	
1962	Floods	
1964	Drought	
1970	Cholera	
1975	Drought	
1902	Drought	MANDERA DISTRICT
1908	Rinderpest	
1913	Outbreak of small pox	
1914	Famine	
1919	Floods	
1922	Drought	
1928	Locust	
1924	Camel disease	
1929	Malaria	
1925	Drought	
1931	Drought-dysentery	
1926	Famine/flood	
1933	Flood	
1929	Locust	
1935	Drought	
1932	Famine	
1937	Drought	
1938	Cyclones/famine	
1942	Drought//unexpected rain	
1947	Drought	
1950	Malaria	
1956	Chicken pox	
1959	Drought	
1968	Floods	
1970	Famine/drought	
1972	Floods	
1975	Famine	
1976	Floods	
1981	Floods	
1911	Drought	
1915	Floods	
·		
1944		
1939	Hurricane Flood	

1949	Flood	
1900	Floods	WAJIR DISTRICT
1901	Drought	
1906	Camel disease	
1908	Rinderpest	
1917	Drought	
1919	Floods	
1921	Sleeping sickness	
1924	Locust	
1927	Drought	Ì
1929	Good rains	·
1932	Cholera	
1933	Small pox	
1945	Drought	
1948	Drought	
1952	Drought	
1956	Coughing disease	
1978	Drought	
NYANZA	PROVINCE	
1928	Locust	KISII DISTRICT
1935	Disease	
1943	Small pox	
1961	Floods	
1962	Army worms	
1901	Rat plague	KISUMU DISTRICT
1907	Famine	
1914	Bubonic plague	
1917	Dysentery	
1927	Earth tremor	
1928	Famine	
1931	Locust invasion	
1939-40	Famine	
1943	Famine	
1961	Floods	
1965	Earthquake	
1968	Earthquake	
1905	Famine	KURIA DISRICT
1922	Plague	
1930	Locust	·
1931	Famine	
1940	Famine/locust	
1927	Cattle disease	SIAYA DISTRICT
1930-1	Locust	
1932	Famine	

1945	Famine	
1953	Famine/drought	
1905	Famine	SOUTH NYANZA DISTRICT
1903	Famine	300 IT MIANZA DISTRICT
1917	Disease	
1910-20	Famine	
	1	
1936	Famine	
1927	Locust	
1930	Locust	
1931	Famine	
1934	Famine	
1943	Famine	
1905	Famine	SUBA DISTRICT
1918	Plague	
1930	Locust	
1931	Famine/locust	
1940	Famine/small locusts	
RIFT VAI	LLEY PROVINCE	
1918	Drought	BARINGO DISTRICT
1918	Drought Famine	BARINGO DISTRICT
1928	Drought/famine	
1932	Locust	
1940	Chebloch bridge swept	
1942	Perkera river changes cause	
1943	Locust	
.1946	Flood /	I/A TYA DO DYCTDYCT
1926	Famine	KAJIADO DISTRICT
1929	Small pox	. [
1934	Famine	
1943	Famine	
1951	Flood	
1961	Famine	16570110 5 5 5 5
1931	Locust	KERICHO DISTRICT
1961	Flood	,
1900	Famine	LAIKIPIA DISTRICT
1901	Venereal disease	
1919	Disease	
1928	Earthquake	
1943	Famine	
1950	Epidemic	
1000		BIABLE GREAT PARTITION
1900	Famine	NAKURU DISTRICT
1901	Venereal disease	

1928 Earthquake 1943 Famine 1950 Epidemic 1965 Famine 1945 Famine 1956 Earthquake 1961 Floods 1984 Drought 1985 Bumper harvest 1997-8 El Nino 1899 Small pox 1930 Famine/locust 1942 Famine/locust 1942 Famine 1906 Famine 1907 Liver fluke 1927 Cattle disease 1940 Malaria 1941 Malaria 1940 Famine 1961 Famine 1962 Floods 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1924 Drought 1944 Floods 1951 Drought 1960 Floods 19	1000	F- who can be	
1950	I .	•	
1965	1	-	
1945 Famine 1956 Earthquake 1961 Floods 1984 Drought 1985 Bumper harvest 1997-8 El Nino Small pox 1930 Famine/locust 1942 Famine 1906 Famine 1907 Liver fluke 1926 Locust 1937 Cattle disease 1940 Malaria 1943 Famine 1960 Famine 1960 Famine 1961 Famine 1962 Floods 1976 Famine 1984 Famine 1993 Malaria 1994 Famine 1994 Pleura-Pneumonia (Cattle) 1924 Drought 1955 Drought 1965 Drought 1965 Drought 1960 El Nino 1999 1943 Famine 1993 Famine 1994 Floods 1996 Floods 1996 Floods 1956 Drought 1967 Floods 1968 Tloods 1978 Tlordynt 1989 Tloods 1999 Tloods 1999 Tamine 1999 TurkANA DISTRICT	1 ' 1	· · · · · · · · · · · · · · · · · · ·	
1956 Floods Floods 1984 Drought 1985 Bumper harvest El Nino NANDI DISTRICT 1899 Small pox Famine/locust 1942 Famine 1906 Famine 1907 Liver fluke 1926 Locust 1943 Famine 1960 Famine 1961 Famine 1962 Floods 1976 Famine 1993 Malaria 1993 Malaria 1993 Malaria 1892			·
1961	l i		
1984	1		
1985	1961		
1997-8	1984		
NANDI DISTRICT	1985		
1899 Small pox ELGEYO MARAKWET 1930 Famine/locust Famine 1942 Famine NAROK DISTRICT 1906 Famine NAROK DISTRICT 1907 Liver fluke NAROK DISTRICT 1907 Liver fluke NAROK DISTRICT 1926 Locust NAROK DISTRICT 1937 Cattle disease NAROK DISTRICT 1940 Famine Pleura-Pramine 1960 Famine Famine 1961 Famine SAMBURU DISTRICT 1882- 4 Years of Droughts SAMBURU DISTRICT 1894 Floods Floods 1951 Drought Drought 1960 Floods Floods 1961 Drought Drought 1940 El Nino TURKANA DISTRICT 1943 Famine TURKANA DISTRICT 1943 Famine Famine	1997-8	El Nino	
1930 Famine/locust 1942 Famine 1906 Famine 1907 Liver fluke 1926 Locust 1937 Cattle disease 1940 Malaria 1943 Famine 1960 Famine 1961 Famine 1962 Floods 1976 Famine 1993 Malaria 1892- 4 Years of Droughts 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1943 Famine 1944 Locust 1943 Famine 1944 TurkAna DISTRICT			NANDI DISTRICT
1942 Famine 1906 Famine 1907 Liver fluke 1926 Locust 1937 Cattle disease 1940 Malaria 1941 Famine 1943 Famine 1960 Famine 1961 Famine 1952 Floods 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1943 Famine 1944 Floods 1945 Locust 1943 Famine 1943 Famine	1899	Small pox	ELGEYO MARAKWET
1906 Famine NAROK DISTRICT 1907 Liver fluke NAROK DISTRICT 1926 Locust Locust 1937 Cattle disease Date of the control of the cont	1930	Famine/locust	
1907 Liver fluke 1926 Locust 1937 Cattle disease 1940 Malaria 1943 Famine 1960 Famine 1961 Famine 1962 Floods 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1940 El Nino 1999 1943 Famine 1945 Locust 1943 Famine TURKANA DISTRICT	1942	Famine	1
1926 Locust 1937 Cattle disease 1940 Malaria 1943 Famine 1960 Famine 1961 Famine 1962 Floods 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1940 El Nino 1999 TURKANA DISTRICT 1945 Locust 1943 Famine	1906	Famine	NAROK DISTRICT
1937 Cattle disease 1940 Malaria 1943 Famine 1960 Famine 1961 Famine 1962 Floods 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1940 El Nino 1999 TURKANA DISTRICT 1943 Famine 1943 Famine	1907	Liver fluke	
1940 Malaria 1943 Famine 1960 Famine 1961 Famine 1962 Floods 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1940 El Nino 1999 1943 Famine 1945 Locust 1943 Famine	1926	Locust	
1943 Famine 1960 Famine 1961 Famine 1962 Floods 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 1943 Famine 1945 Locust 1943 Famine	1937	Cattle disease	
1960 Famine 1961 Famine 1962 Floods 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 1943 Famine 1945 Locust 1943 Famine	1940	Malaria	
1961 Famine 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 TURKANA DISTRICT 1943 Famine 1943 Famine	1943	Famine	
1962 Floods 1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1943 Famine 1945 Locust 1943 Famine TURKANA DISTRICT	1960	Famine	
1976 Famine 1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 1943 Famine 1943 Famine 1944 Famine TURKANA DISTRICT	1961	Famine	
1984 Famine 1993 Malaria 1892- 4 Years of Droughts 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1945 El Nino 1943 Famine TURKANA DISTRICT	1962	Floods	
1993Malaria1892-4 Years of DroughtsSAMBURU DISTRICT1898Pleura-Pneumonia (Cattle)1924Drought1944Floods1951Drought1960Floods1961Drought1965Drought1940El Nino1943FamineTURKANA DISTRICT1945Locust1943Famine	1976	Famine	
1892- 4 Years of Droughts SAMBURU DISTRICT 1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 1943 Famine TURKANA DISTRICT	1984	Famine	
1898 Pleura-Pneumonia (Cattle) 1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 1943 Famine TURKANA DISTRICT	1993	Malaria	· ·
1924 Drought 1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 TURKANA DISTRICT 1943 Famine 1943 Famine	1892-	4 Years of Droughts	SAMBURU DISTRICT
1944 Floods 1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 TURKANA DISTRICT 1943 Famine 1943 Famine	1898	Pleura-Pneumonia (Cattle)	
1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 TURKANA DISTRICT 1945 Locust 1943 Famine	1924	Drought	
1951 Drought 1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 TURKANA DISTRICT 1945 Locust 1943 Famine			
1960 Floods 1961 Drought 1965 Drought 1940 El Nino 1999 TURKANA DISTRICT 1943 Famine 1943 Famine	1		
1961 Drought 1965 Drought 1940 El Nino 1999 TURKANA DISTRICT 1943 Famine 1945 Locust 1943 Famine		_	
1965 Drought 1940 El Nino 1999 TURKANA DISTRICT 1943 Famine 1945 Locust 1943 Famine		1	
1940 El Nino 1999 TURKANA DISTRICT 1943 Famine 1945 Locust 1943 Famine	1		
1999 1943 Famine TURKANA DISTRICT 1945 Locust 1943 Famine			
1943 Famine TURKANA DISTRICT 1945 Locust 1943 Famine	1		
1945 Locust 1943 Famine		Famine	TURKANA DISTRICT
1943 Famine		I To The Control of	
1953 Famine/drought	1953	Famine/drought	.·
1958 Mosquitoes		_	
1961 Floods		I	

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1941	Small pox	UASIN GISHU DISTRICT
1942-3	Famine	
1961	Flood	
1980	Famine	
1984	Drought	·
1928	Earthquake	WEST POKOT DISTRICT
1931	Locust	
1943	Famine	
1961	Flood/army worms	
1965	Famine	
WESTER	N PROVINCE	
·	,	BUNGOMA DISTRICT
1900	Famine	BUSIA DISTRICT
1906	Famine	DOSIA DISTACT
1907	Famine	
1908	Rinderpest/famine	·
1913	Chicken pox	
1918	Famine	
1940	Famine	× v
1919	Famine	
1920	Small pox	
1921	Plague/small pox	
1925	Rinderpest	
1926	Earthquake	
1919	Disease	·
1931	Plague/locusts	
1931	Army worms	
1933	Locust	
1942	Famine	
1968	Famine	
1975	Floods	
1976	Cholera/floods	
1977	Army worms/floods	
1904	Famine	BUTERE MUMIAS
1906	Rinderpest	`
1908	Plague	
1912	Famine	· [
1913	Chicken & small pox	
1917	Famine	
1932	Rinderpest	
1943	Earthquake	
1953	Famine/locust	
1961	Famine	1

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1965	Famine	
1971	Flood/army worms	1 A.1
1980	Famine	
1992	Famine	-
1997	El Nino	
1907	Famine	KAKAMEGA DISTRICT
1914-18	Famine	•
1931-32	Locust	
1939	Locust/famine	
1943	Famine	
1947	Chicken pox	
1953	Famine	
1961	Flood/army worms	·
1962	Army worms	
1965	Famine	
1980	Famine	
1997	El Nino	42.5
1907	Famine	VIHIGA DISTRICT
1931-32	Locust	
1943	Famine	:
1961	Flood/army worms	·
1965	Famine	
1980	Famine	
1998	El Nino	

