



*Proposed Makueni County Fire fighting,
Emergencies and Disaster Management
Policy 2019*



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CHAPTER ONE:

BACKGROUND:

County Physiographic, Administrative and Demographic Characteristics.

Makueni County is one of the forty-seven counties in Kenya. It is situated in the South Eastern part of the Country. It borders Machakos County to the North, Kitui County to the East, Taita Taveta County to the South and Kajiado County to the West. The County lies between Latitude 1° 35' and 30 ° ' South and Longitude 37°10' and 38° 30' east and covers an area of 8,008.7 KM².

The major physical features in Makueni County include; the volcanic Chyulu Hills which lie along the South West border of the County in Kibwezi East and West Sub Counties, Mbooni Hills in Mbooni Sub County and Kilungu and Iuani Hills in Kaiti Sub County. Other features include Makongo forest and scenic view, Makuli Forest and Nzau Hill. The County is largely arid and semi-arid and usually prone to frequent droughts. The lower regions receive rainfall ranging from 250mm to 400mm while the high regions receive rainfall ranging from 800mm to 900mm.

Administratively, the County is divided into six Sub-Counties, which are also the parliamentary constituencies. These are: Makueni, Mbooni, Kibwezi East, Kibwezi West, Kaiti and Kilome. The six Sub- Counties are further subdivided into 30 electoral wards each of which is further subdivided into 60 sub wards (Villages).

Based on the 2009 National census, the projected population for 2018 is 1,002,979 with 488,378 being male and 514,601 female. The population density in the county is 125 persons per Km². The population distribution for Makueni County indicates that most of the populations consist of youth who account for almost 60 percent of the population. It indicates a population with high fertility rates and hence the need to plan for the current youthful population and the foreseen population growth which could push demand for social services and food higher. The growth in population in future may portend food insecurity, increased land subdivision into uneconomical sizes, increased demand for secondary and tertiary education and health as well as high unemployment rates if current economic investments do not guarantee entrepreneurial and job opportunities.

Nationally, Makueni County is Categorized as one among the 14 (Fourteen) ASAL Counties. This means that the County faces a great risk of drought and hence extreme food deficiencies.

Another important factor is that key National Infrastructure such as Nairobi-Mombasa Highway, the Standard Gauge Railway, Nairobi-Mombasa Kenya Oil Pipeline, Nairobi-Mombasa flight path, all traverses Makueni County. These are situations that put the County in a situation of great vulnerability to occurrence of Fire and other traffic related Emergencies/Disasters.

Thus, Makueni County Government recognizes that Disaster Risk Management is a critical development agenda and therefore comprehensive disaster risk management should be

mainstreamed into county policies and programmes. There is need for mitigation and preparedness as opposed to the earlier approach of reacting after a disaster occurs.

Makueni County Government seeks to prioritize Disaster Risk Management as it also pursues citizen empowerment within its borders. To this end, Makueni County Government shall employ a bottom-up approach focusing on the village level for Disaster preparedness, response, recovery and rehabilitation programmes. Building capacities of people living in disaster prone areas and improvement of their capabilities in order to cope with all hazards is therefore a central and critical aspiration and intention of Makueni County Government.

SITUATION ANALYSIS:

Makueni County over the years has experienced various forms of disasters that have been of various degree and magnitude, and which have had devastating effects on livelihoods within the human populations. In some cases, it has resulted in the loss of both human life and livestock. The major forms of disasters in the county are as depicted in the table below:

Rank	Hazard	Impact
1	Drought	Total crop failure, livestock death, high malnutrition, death.
2	Human disease	Death and loss of employment, low productivity.
3	Livestock disease	Death of livestock, loss of livelihood,
4	Crop disease	Loss of livelihood, death, malnutrition.
5	Road Traffic Accidents	Loss of lives and property.
6	Fire	Loss of lives, injuries, loss of property and livelihoods.
7	Floods	Loss of property and life, destruction of infrastructure, increase in water borne diseases.
8	Landslides	Loss of lives and property, destruction of environment.
9	Conflicts	Loss of lives, destruction of property and crops.
10	Drowning	Loss of Lives, Pollution of Water sources.
11	Land degradation	Low productivity of land, destruction of water sources, destruction of livelihoods, affects the water cycle.
12	Sand Mining Accidents	Loss of lives.
13	Oil Spillage	Destruction of crops, pollution of water sources, diseases.

The disaster mitigation and preparedness unit shall be responsible for but not limited to the management of the following hazards or disasters.

- Drought
- Floods
- Landslides, mudslides, land subsidence, sand mining accidents.
- Oil spillage.
- Conflicts and violence.
- Road and rail traffic accidents.
- Drowning.
- Building Collapse.
- Terrorism.
- Whirlwinds.

Drought:

The climate of Makueni County is characteristically that of the Semi-Arid lands with an average rainfall of between 300mm-1200 mm per annum. In terms of rainfall pattern, the county is characterized by erratic rainfall, drought and massive crop failure which have affected the livelihoods of the rural small holder farming population. The three main livelihood zones in the county are: marginal mixed farming (cotton and beef) comprising of 30% of the population, mixed farming (coffee/dairy/irrigation) with 30% of the population and mixed farming (food crops/cotton/livestock) dominating with 40% of the total population here Makueni sub county lies.

Drought is defined as an extended period when a region notes a deficiency in its water supply whether surface or underground water and can last for months or years. It occurs when a region consistently receives below average rainfall. Drought occurs when a long period of abnormally dry weather leads to severe water shortage.

Drought can be divided into three types;

- a. **Meteorological drought** which is defined usually on the basis of the degree of dryness (in comparison to some “normal” or average amount) and the duration of the dry period. Definitions of meteorological drought must be considered as region specific since the atmospheric conditions that result in deficiencies of precipitation are highly variable from region to region.
- b. **Hydrological drought** which is associated with the effects of periods of precipitation (including snowfall) shortfalls on surface or subsurface water supply (i.e., streamflow, reservoir and lake levels, groundwater). The frequency and severity of hydrological drought is often defined on a watershed or river basin scale. Although all droughts originate with a deficiency of precipitation, hydrologists are more concerned with how this deficiency plays out through the hydrologic system.

- c. **Agricultural drought** that links various characteristics of meteorological (or hydrological) drought to agricultural impacts, focusing on precipitation shortages, differences between actual and potential evapotranspiration, soil water deficits, reduced groundwater or reservoir levels, and so forth.

Records show that severe droughts, with serious impacts to both man and animals occurred in 1928, 1933-34, 1939, 1942-44, 1952-55, 1960-61, 1965, 1984-85, 1987, 1992-94, 1999-2000, 2005-06 and 2008 – 2011, (FAO 2002). Maximum drought intensity (length or duration of a drought) varies within the county, ranging from 16 – 20 months in the driest areas: Kibwezi East, Kibwezi West and some parts of Makueni sub county, where they practice marginal farming livelihoods and mixed farming: livestock, food crops and livestock and 4 – 7 months in the wettest areas: Mbooni and Kaiti sub-counties where they practice mixed farming livelihoods; coffee, dairy and irrigation. (Makueni County Contingency plan, 2014).

Drought can lead to the following impacts or consequences if not mitigated:

- Famine.
- Fire.
- Decline in crop yields and thus increased food insecurity.
- Livestock deaths (losses).
- Forced sale of household assets leading of loss of livelihoods.
- Forced sale of land as people tend to migrate to better areas.
- Increased crime due to lost livelihoods.
- Depletion of water for human use (e.g., for drinking, cooking and cleaning);
- Decline in health (e.g., through malnutrition or lack of safe drinking water) which can lead to loss of lives.
- Displacement/migration of populations.
- Civil unrest/conflict over scarce resources during drought periods.
- Depletion of water for use in business/industry (e.g., hydropower); and national economic impact.

Drought Management Approach:

Currently, the only structured approach to Drought disaster management leans towards Drought related emergencies. This is largely the arrangement that has been put in place by the National Drought Management Authority (NDMA). There also exists the County Steering Group Committee at the County Level, the Sub County Steering Groups which are located at the Sub county levels and are tasked with the responsibility of overseeing drought related matters.

Drought management assumes a multifaceted management approach and is majorly championed by the National Drought Management Authority (NDMA) which has laid down strategies towards ending drought emergencies though majorly at the national level. Other actors and stakeholders in Makueni County include Kenya Red Cross, World Food Programme, World Vision (K) and other

Non-Governmental and International Non-Governmental Organization (NGOs and INGOs), Interested and Affected Parties (IAAPs).

The applicability of a particular approach adopted depends on the timing of interventions or phase of drought management cycle.

Floods:

Makueni County receives an average rainfall of between 300mm-1200 mm per annum. The rains have been characterized by flash floods and storms which have increasingly destroyed shelters, infrastructure and also led to fatalities and injuries. For instance in the March-April-May (MAM) rains of 2018, 15 fatalities were reported as a result of the heavy rains experienced across the county. In the last dekad of April (starting 21st April) 2018, Makueni Sub County experienced heavy rains marked with flash floods and storms that led to two fatalities, 1 major injury and 6 minor injuries, destruction of shelters, infrastructure and livelihoods (mainly food crops). These additional incidents were reported in Wote/Nziu ward.

Similar incidents of flash floods and storms were also experienced along River Athi which destroyed shelters, infrastructure and livelihoods (mainly food crops) in Kibwezi East in the last dekad of April 2018. Unfortunately, Masongaleni ward was affected the most where in homes were completely washed away by floods, agricultural farms destroyed as well as damage to farm infrastructure experienced. Among the sectors affected were social sector, productive sector, industry, infrastructural sector as well as cross sectoral sector. Among the areas affected were Katulye, Makutano, Mwaani, Bondeni, Yikita, Nguuni, Kiwanzani, Kithyululu, Iia Itune, Kativani, Ndetani, Kivumbuni, Wandei, Masimbani, Ulilinzi, Athi- Muangeni and Yumbuni areas.

Buildings Collapse:

Structural and infrastructural developments are on the rise in Makueni County especially high rise/storey buildings. Poor structural designs, fires, road and rail constructions, earth movements, mining, mudflows, landslides etc. has increased vulnerability to building collapse. When this happens there can be loss of lives, destruction to property and loss of livelihoods.

Road and Rail traffic Accidents:

Makueni County is served by a large stretch of the Standard Gauge railway and Nairobi- Mombasa Highway and has a high risk of experiencing road and rail accidents and derails. Most of the petroleum transporting trucks and rail wagons have either derailed or overturned and in the process causing oil spills whilst also risking fire outbreaks. Unfortunately, these incidents have led to loss of lives and other economic losses.

Drowning:

Drowning cases are on the rise in Makueni County and majorly occurs in rivers and dams. If proper mechanisms are not made and rescue done in time, drowning victims lose their lives. Some cases are intentional and others definitely not intentional. In the year 2018 alone, the Directorate of Special Programmes and emergencies responded to six (6) cases of drowning and successfully retrieved the drowned bodies.

Landslides/Mudslides/Land Subsidence:

A landslide is the movement of a mass of rock, debris, or earth down a slope. Landslides are a type of "mass wasting," which denotes any down-slope movement of soil and rock under the direct influence of gravity. The term "landslide" encompasses five modes of slope movement: falls, topples, slides, spreads, and flows. These are further subdivided by the type of geologic material (bedrock, debris, or earth). Debris flows (commonly referred to as mudflows or mudslides) and rock falls are examples of common landslide types.

Almost every landslide has multiple causes. Slope movement occurs when forces acting down-slope (mainly due to gravity) exceed the strength of the earth materials that compose the slope. Causes include factors that increase the effects of down-slope forces and factors that contribute to low or reduced strength. Landslides can be initiated in slopes already on the verge of movement by rainfall, snowmelt, changes in water level, stream erosion, and changes in ground water, earthquakes, volcanic activity, disturbance by human activities, or any combination of these factors.

Land subsidence is the loss of surface elevation due to removal of subsurface support. Subsidence is one of the most diverse forms of ground failure, ranging from small or local collapses to broad regional lowering of the earth's surface. The causes (mostly due to human activities) of subsidence are as diverse as the forms of failure, and include dewatering (oxidation) of peat or organic soils, dissolution in limestone aquifers, first-time wetting of moisture-deficient low-density soils (hydro compaction), natural compaction, liquefaction, crustal deformation, subterranean mining, and withdrawal of fluids (groundwater, petroleum, geothermal).

Landslides, mudslides and land subsidence though not most common in Makueni are more likely to occur with the causes ranging from; rock and sand mining, buildings in wetlands, poor cultivation methods that attract soil erosion, natural earth movements and ground water failures.

Sand mining accidents. Most of the sand mining activities occur in rivers and river banks and other designated sites. If not properly done, the activity could lead to accidents causing loss of lives.

Most of the areas susceptible to landslides, mudflows and land subsidence are Kaiti and Mbooni Sub County.

Terrorism:

Terrorism is the unlawful use of force or violence against persons or property to intimidate or coerce a Government, the civilian population, or any segment thereof, in furtherance of political or social objectives. It is the premeditated, politically motivated violence perpetrated against non-combatant targets by sub-national groups or clandestine agents, usually intended to influence an audience.

Terror attacks are on the increase in Kenya and especially at the capital (Nairobi). Examples of such incidences are

- 1975 Nairobi bombing.
- 1980 Norfolk Hotel Bombing.
- 1998 United States Embassy Bombings.
- 2002 Kikambala Hotel Bombing and Arkia Airlines Missile attack
- 2012 Alshabaab Attacks.
- 2013 Westgate Mall Shootings.
- 2014 Mpeketoni Attacks.
- 2015 Garissa Attacks.
- 2019 Nairobi Dusit D2 Hotel Attacks.

These malicious acts threaten lives and cause serious environmental and economic impacts. With the regime of devolution and decentralization of governance in Kenya, this has led to mushrooming of terror cells in small to big cities and calls for preventive and preparedness measures to counter such animosities or mindless acts of violence.

Oil Spillage:

The Nairobi-Mombasa Kenya Oil Pipeline traverses Makueni County and as such, oil spillage is an emerging disaster concern in Makueni County.

With respect to the oil spillage, it has in the recent past been occasioned by petroleum transporting trucks and train derailment as well as punctures of the oil pipelines leading to premature discharge of oil into the environment. For instance, the 2015 oil spillage in Makueni was occasioned by a puncture on the Mombasa-Nairobi oil pipeline, according to Kenya Pipeline Company. This affected hundreds of households including farmers and their livelihoods. Liver and stomach diseases are amongst the ailments that have been linked to the spillage. A report on the environment and social impact of the spillage shows that it would cost the government Sh217, 442, 454 to fully restore the livelihoods of affected residents and areas.

Whirl winds:

A whirlwind is a weather phenomenon in which a vortex of wind (a vertically oriented rotating column of air) forms due to instabilities and turbulence created by heating and flow (current)

gradients. Whirlwinds occur all over the world and in any season and often occur in Makueni. When they occur, they leave in their wake massive destruction of shelter, property and crops.

Conflicts and Violence

Conflict is a serious disagreement or argument, typically a protracted one. It can be politically influenced (political), religious, trans-boundaries, resource based, domestic or workplace. If not well managed, conflict can escalate to violence. Example is the Kenya's 2007/2008 Post-Election Violence (PEV) that was politically instigated. Governance has been devolved to county structures that have also attracted political competition, created trans-boundaries of former merged geographical provinces that may cause political differences, trans-boundary conflicts and political animosities.

Makueni County borders Machakos to the North, Kitui to the East, Taita Taveta to the South and Kajiado to the West. There is also further division of the county to decentralized units; sub counties, wards and villages. There have emerged trans-boundary disputes in the past in the Makueni –Kajiado borders calling for conflict resolution by the top leadership. Conflict management and resolution is therefore crucial to avert any eventuality.

Situation Analysis on Firefighting:

Makueni County is at the forefront of fighting fire emergencies that occur in buildings, public amenities like schools and other county infrastructure. The county through the directorate of special programmes and emergency services anchors the fire unit that currently operates two firefighting equipment; one rapid intervention vehicle (RIV) and a major fire engine that are manned on 24 hour basis.

In the year 2018 alone, the firefighting unit responded and contained twenty four (24) fire incidents: three (3) residential/house, seven (7) commercial/business, five (5) school, one (1) forest, three (3) grass, four (4) road traffic accident and one (1) train derail fires.

Situation Analysis on Emergency Management:

Makueni County has in the past been affected by various emergencies including flood emergencies, drought related emergencies like hunger and famine, diseases, drowning and fire related emergencies. For instance in 18/09/2016, the Wote Jua kali market fire at Wote town affected over 60 traders and cost the county a total estimated amount of KShs 24.4 M for rehabilitation & reconstruction.

During the 2018 March – May (MAM) rains, Makueni County received above average rainfall (unprecedented heavy long rains) characterized by flash floods, mudslides and storms that had massive destruction on lives and livelihoods. The county leadership co-chaired by the Governor and County Commissioner had to hold several meetings to come up with strategies to save lives

and livelihoods. Equally, they had to appoint a technical working group to develop flood response units that were mainly mandated to mobilize for emergency support, identify and speed up recovery to emergency victims.

Currently the only legal framework available for emergency management is the Makueni County Emergency Fund Act, 2015 that relies mainly on monies appropriated by the County Assembly and grants and donations made into the fund.

Existing Legal Framework:

Makueni County Government came into being as a result of the system of devolved governance in Kenya as provided for under the 2010 Constitution. The Fourth Schedule of the Constitution of Kenya 2010 provides for Disaster risk management as a shared function between the two levels of government; this means that both levels of government have important roles and contributions towards disaster management.

Thus, Makueni County Government must be at the fore front in Disaster Risk Management. While the National government has a big role to play in Disaster Risk Management in Makueni, the County Government finds itself at the doorstep of the populations at risk. Consequently, the County Government is the first point of call in case of any Disaster risk or its occurrence. Makueni County Government is therefore committed to play its rightful role in safe guarding the interests, lives and properties of the people of Makueni. In line with the bill of rights that emphasizes the right for every individual to live a dignified life in a safe and healthy environment, the County Government of Makueni is committed to being well equipped and able to efficiently respond in a timely manner to all Disaster Risks occurring within its borders.

The thrust of this policy is to institutionalize and mainstream Disaster Risk Management in the county's development initiatives. Ideally, the focus is with keeping up with International and Regional initiatives as contained in;

- i. Yokohama Strategy and Plan of Action for a Safer World (1994).
- ii. The Johannesburg Plan of Implementation issued at the World Summit on Sustainable Development (2002).
- iii. The Copenhagen Conference (2009)
- iv. Mexico Conference (2010) on Climate Change respectively,
- v. The World Conference on Disaster Reduction held in Kobe, Japan, January 2005
- vi. The Hyogo Declaration and Hyogo Framework of Action 2005—2015; on “Building Resilience of Nations and Communities to Disasters”
- vii. Sendai Framework for Disaster Risk Reduction (2015-2030).
- viii. Sustainable Development Goals (SDG) (2016-2030)
- ix. The Kenya's constitution 2010 schedule IV that states that firefighting and disaster management as a shared function by County and National Government

These have provided a solid ground for this policy which encompasses a full continuum from prevention, preparedness, relief and rehabilitation, back to mitigation and prevention. The policy aims to increase and sustain resilience of vulnerable communities to hazards which entails a radical shift from the short term relief responses to sustainable development and continual risk reduction and preparedness.

CHALLENGES AND ISSUES TO BE ADDRESSED:

The challenges that are mainly experienced in Makueni County revolve around inadequate Disaster Management Structures to wit;

a. Lack of disaster management structures from county level to village level

The current situation in Makueni County is that there is no Disaster Management officers present all the way from the County Level down to the Villages.

Only a few months ago, a directorate was established in the Department of Devolution, County administration, Participatory development and Public Service.

b. Inadequate staff

Currently the firefighting and disaster management services are under the Directorate of Special Programmes and Emergency service that has inadequate staff to perform their specific functions. For instance the Directorate has only two staff who are on permanent and pensionable basis; the Director and the fire engine driver deployed to the firefighting unit. The directorate relies on a contracted staff and officer on internship program. This makes it ineffective to provide its crucial services and mandate.

c. Inadequate management and dissemination of Fire Fighting, Emergencies and Disaster information

The County of Makueni lacks one stop shop/Centre where all information relating to Disasters can be found. This is largely so because Disaster Management has never been centralized and has all along been addressed on an adhoc manner. Education, health, Trade, and all other departments have individually spearheaded their own Disaster response and management any time they are confronted by such situations. To address this, the Makueni County Disaster Risk Reduction Policy provides for establishment of Disaster information Centre. This is proposed to be the center where all Disaster Related information is collected, collated, analyzed and saved/stored. Community awareness and sensitization shall be broadened to promote disaster risk culture

d. Inadequate Disaster Management Resources and Equipment

Disaster Preparedness, Response, Recovery and rehabilitation can be a very expensive undertaking. It consumes lots of resources to gather disaster related information as well as act on it. In a Disaster situation there is usually need for lots of readily available resources. Currently no such arrangement is in place.

The county has two firefighting equipment (one Rapid Intervention Vehicle and a major engine) that are expected to cover the vast geographical area of Makueni County.

e. Office space

There is inadequate office space to provide official clerical services on firefighting, disaster s and emergency management. There is also no fire station for firefighters and equipment.

f. Low levels of Literacy on Disaster Preparedness, Response, Recovery and Rehabilitation.

A general observation throughout the County shows that the literacy levels on the field of Disaster and disaster management is fairly low. From the general public, business community to serving public and private sector operatives, most are not adequately informed. This policy proposes enhanced sensitization programmes.

g. Lack of schemes of service for firefighting and disaster management

The Directorate in collaboration with the County Public Service Board shall develop and adapt schemes of service for fire fighters. This shall state clearly the respective cadres in fire service, their job description, job scales and performance framework.

h. Lack of adequate binding legal framework

There is insufficient legal framework to regulate disaster management activities. Currently the only legal framework available is the Makueni County Emergency Fund, 2015 that is biased to emergency management only and that also requires proposals for amendment for efficiency.

CHAPTER TWO:

POLICY STATEMENT:

As has already been stated, Makueni County Government came into being after Kenya adopted the devolved system of government. As it is, Fire Fighting, and Emergency/Disaster Management is a shared function between the two levels of Government.

The thrust of disaster management is to establish a process and structure for a coordinated and effective delivery of assistance and to address the consequences of major disasters declared both in the country and county under the appropriate and as supported by the requisite institutional and legislative framework. This is so because of the lack of comprehensive Disaster Management Strategy, lack of coordinated and clear lines of roles and responsibilities, and inadequate capacity on the part of the county government to timely respond to disasters.

To address the aforementioned problem and to take the programme of disaster management risk forward, the Government of Makueni felt the obvious need to develop a comprehensive policy document that clearly states the aims, objectives, strategies, roles and responsibilities of coordinating institutions and implementing agencies.

The Disaster Management Policy is a comprehensive approach that enhances increased political commitment to disaster risk management thereby encouraging county government agencies to take the lead with the support of stakeholders in disaster management. It also promotes public awareness and the incorporation of disaster risk management into development planning. The policy highlights the sources of funding and the reduction of bureaucracies in accessing such funds for effective disaster coordination.

The Policy document emphasizes on the following objectives and outcomes:

- a. Efficient and timely response to all incidences of Fire and all other forms of Emergencies/Disasters.
- b. Management of both risks and consequences of disasters that include preparedness, response and recovery.
- c. Community involvement and empowerment in preparedness programmes for purposes of protecting lives and livelihoods will be given priority and this includes advocacy and public awareness.
- d. Scientific research and application of modern technology will be embraced while acknowledging the role of indigenous knowledge and coping mechanism on disasters.
- e. Ensure the integration of disaster risk management into sustainable development programmes and policies to ensure a holistic approach to disaster management.
- f. Ensure priority and requisite institutional capacities for disaster risk reduction at all levels.
- g. Enhance the use of knowledge, education, training, innovation and information sharing to build safe and resilient societies.
- h. Improve the identification, assessment, monitoring and early warning of risks.
- i. Improve effectiveness of response through stronger disaster preparedness.

Principles:

This Policy is based on several principles. The principles underpin the underlying philosophy on which this policy is anchored.

- The unqualified right of all Victims of Fire, Emergencies and Disasters
- The primacy of coordination, collaboration and communication:

Adequate coordinating and communication, at all levels, amongst stakeholders, are critical components of disaster management. The government will establish alternative and effective communication systems, especially, where normal communication is likely to be or has been interrupted during disasters.

Policy Objectives:

The following strategies and mechanisms shall be adapted for purposes of policy implementation.

Objective One:

Increase political commitment on disaster risk reduction;

Strategies:

- Enact and establish the legislative and institutional support for disaster risk management.
- Build a database of government institutions and other stakeholders on disaster risk management.
- Commit government to establish and operationalize the County Emergency Fund in line with the provisions of Public Finance Management Act, 2012.

Objective Two:

Improve identification and assessment of Disaster Risks.

Strategies:

- Improve the quality of information and data on disaster risk.
- Improve identification assessment and monitoring of hazards, vulnerabilities and capacities.
- Set up and strengthen early warning systems, institutions, capacities and resource base, including observational and research sub systems.
- Establish communication and information exchange amongst stakeholders in risk identification and assessment.
- Disaster Management Department shall engage other stakeholder institutions in joint assessment exercise.

Objective Three:

Increase public awareness of disaster risk reduction.

Strategies:

- Improve information dissemination and communication considering the existing information and feedback after problem identification.
- Mainstream the media in public education on Disaster Management.
- Strengthen the role of women, youths and vulnerable groups in disaster risk management.

Objective Four:

Improve governance of disaster risk reduction institutions.

Strategies;

- Assess the existing capacities of institutions to harmonize terms, policies and strategies at national and local levels.

- Develop and strengthen county platforms for disaster risk reduction at required levels.
- Strengthen decentralization of disaster risk reduction interventions.
- Promote public participation in planning and implementing disaster risk reduction interventions.
- Promote increased inter-county cooperation and coordination.
- Strengthen monitoring and evaluation in the context of Disaster Management.

Objective Five:

Integrate disaster risk management into development effort.

Strategies:

- Advocate the inclusion of disaster risk reduction in development strategies and emergency response management.
- Prepare and disseminate guidelines for integrating disaster risk reduction in development planning and activities consistent with environmental action plan.
- Facilitate the strengthening of contingency planning and emergency response towards disaster risk reduction.
- Advocate adoption of multi-hazard approach to disaster risk reduction in sustainable development strategies taking into account prevalent hazards, for example environmental and human induced phenomena.
- Consultation with national and international partners for training and capacity building in disaster risk reduction for disaster managers and volunteers

CHAPTER THREE:

DISASTER MANAGEMENT: INSTITUTIONAL DESIGN AND RELATIONSHIPS

A disaster is phenomenon that causes widespread social, environmental and economic losses that exceeds the capacity of the affected community or society to cope using its own resources.

Disasters occur when a hazard meets a vulnerable community or phenomenon causing effects that are beyond the capacity of the existing structures. Disasters can either be man-made or natural, and either slow or rapid onset.

Disaster (D) = H*V/C

Where H= Hazard; a phenomenon that has potential to cause serious social, environmental and economic losses

V= Vulnerability; the level of exposure to a hazardous event e.g. people living in flood plains are more vulnerable/prone to flood disasters

C= Capacity; the existing/available resources in form of human, material and non-material

Disaster Management is the systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters.

It comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

Disaster Management Phases/Cycle

Disaster management comprises mainly two phases

- i. **Pre disaster risk reduction phase;** Disaster prevention, mitigation & Disaster preparedness,
- ii. **Post disaster recovery phase;** Disaster response, rehabilitation & reconstruction.

The phases are linked in such a way that if activities are well carried out in one phase, it enhances operations in the succeeding phase.

Further, there are some overlaps in the phases, such that some activities of one phase can be started as the activities of a preceding phase still go on.

The phases can be illustrated diagrammatically in a disaster management cycle as shown below

Disaster Management Cycle



Preparedness phase

It is the phase prior to the actual occurrence of a disaster event. In the preparedness phase, arrangement and several measures are undertaken by governments, organizations, and individuals.

The aims of activities in the preparedness phase are:

- To save lives from the expected disaster
- Minimize post disaster damage and losses
- Enhance disaster response operations when the disaster eventually occurs. Carrying out emergency exercises/training

The actual measures undertaken in the preparedness phase are:

- Development of preparedness plans
- Developing warning systems
- Installing emergency communications systems
- Develop evacuations plans and training
- Establish resource inventories
- Compile emergency personnel/contact lists
- Enter mutual aid agreements
- Provision of public information/education

Response phase

Response phase is the phase that immediately follows a disaster event. The activities in the response phase are aimed at:

- Providing emergency assistance for casualties.
- Alleviating human suffering.
- Reducing the probability of secondary damage.
- Speeding recovery operations.

Measures in the response phase of a disaster are:

- Activating public warning system
- Notifying of public authorities about the disaster
- Mobilizing emergency personnel and equipment
- Providing emergency medical assistance
- Establishing and manning emergency operations centers
- Declaring disasters and evacuating people
- Mobilizing security forces to beef up security of persons and property in the affected area
- Carrying out search and rescue operations

Recovery phase

Recovery phase starts when the disaster has been contained or brought under control. It is carried out weeks and months after the disaster.

- The goal is to restore all systems in the area affected by the disaster to normal or better.
- Recovery measures can be both short (rehabilitation) and long term (reconstruction).

The measures put in place in the recovery phase are:

- Returning vital life-support systems to minimum operating standards e.g. sanitation water supply, electricity, etc.
- Providing damage insurance, loans and grants.
- Providing temporary housing.
- Providing long-term medical care for the affected population.
- Providing disaster unemployment insurance

Mitigation phase

The mitigation phase starts when disaster management improvements have been made in anticipation of the next disaster event.

In mitigation phase, various activities and measures are undertaken to eliminate or reduce the probability of occurrence of another disaster, or reduce the effects of unavoidable disasters.

Measures undertaken during mitigation phase include the following:

- Developing and enforcing building codes e.g.
- Requirement for specific building uses for instance storage of flammable substances or housing a large number of people
- Requirements for earthquakes (seismic code), whirl winds, flood and resistance especially in disaster prone areas or for very large building where a failure would be catastrophic
- Fire codes rules to minimize the risk of a fire and to ensure safe evacuation in the event of such an emergency.
- Minimum and maximum room and exit sizes and location
- Positioning of lightning arrestors and seismic detectors.
- Undertaking vulnerability analyses updates.
- Coming up with tax incentives and disincentives that encourage people to undertake certain measures that reduce disaster risk.
- Providing preventive health care.
- Provision of public education.

County Emergency Committee:

Currently, though insufficient, the existing legal framework for emergency management is the Makeni County Emergency Fund Act, 2015.

Therefore, and based on the need to mainstream Emergency management in the County, the County Emergency Management Committee shall be appointed by H.E the Governor. The County Executive Committee shall with the advice of the CEC-Finance establish the County Emergencies Fund.

It is proposed that 2% of the entire County Budget be voted for as County Emergencies fund with adequate arrangements to ensure full time replenishment of the fund.

The Directorate in charge of Disaster Management as guided by the CEC-Finance shall have effective access to the county Emergency fund especially during times of dealing with Emergencies.

For any Emergencies other than occurrence of Fire accidents, the Directorate shall ensure that it is always adequately staffed and is in a position to promptly respond. Such Emergencies may include Landslides, Floods, Drought, Drowning, Road Traffic Accidents, Collapsed buildings, poisoning, Arson, etc.

The Membership of the Emergency Committee is proposed to include:

1. Governor- Chair
2. Deputy Governor-ViceChair
3. County Secretary-Secretary
4. ECM-Finance
5. ECM- Water
6. ECM-Devolution
7. ECM- Health
8. ECM -Agriculture
9. ECM-Education
10. ECM-Infrastructure
11. The Director-Disaster Management

For purposes of smooth coordination the following process for dealing with Disasters shall apply;

- a. All Emergencies are to be reported to the Directorate in charge of Disaster Management.
- b. Upon receipt of any reported Emergency cases the Directorate shall sift and determine the appropriate course of action including response for each respective case.
- c. For cases in which the Directorate has adequate means and capacity to respond, the director shall with concurrence by the Chief Officer mobilize all requisite resources and manpower and respond to the emergency.
- d. For reported cases and which the directorate is unable to adequately respond, the Director shall consult with the Chief Officer and escalate such cases to the office of the County Secretary. The county secretary shall then cause the County Emergency Committee to convene and consider such cases.

- e. The County Emergency Committee shall either approve for funding or Reject any cases forwarded to it based on the information availed before it. Any case approved for Funding by the Emergency Committee shall either be referred to the respective Department for implementation, or be implemented in any other manner as the County Emergency Committee may direct.
- f. For purposes of procurement for Emergency projects, the Directorate of Procurement and Supply Chain management shall guide while taking to consideration the nature of need to be addressed. Where and whenever procurement procedures threaten to derail Emergency response, the county Government shall find ways to ensure that Emergency response is not jeopardized.

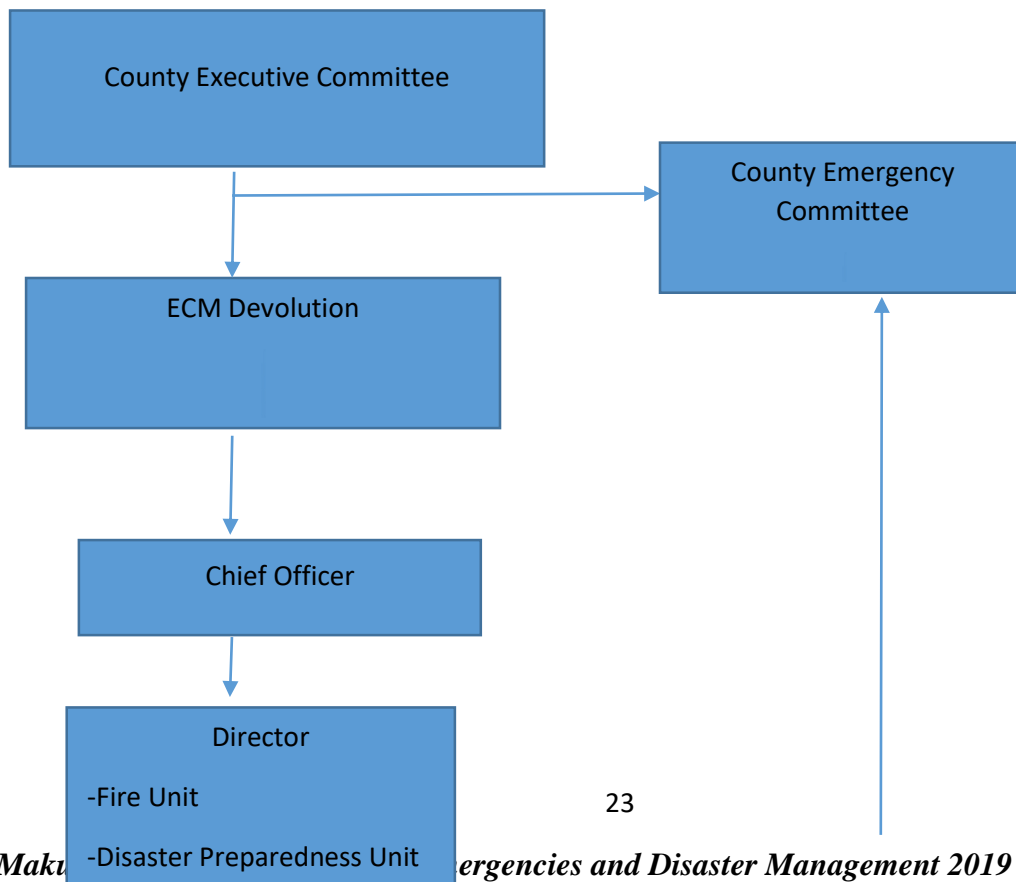
Like all other County Governments, Emergency projects shall be subjected to effective Monitoring and Evaluation to ensure that value for money is always the guiding principle.

All efforts shall be made to ensure that Emergency projects are procured and implemented in a manner that is sensitive to the nature of Emergency need intended to be solve.

Any cases that in the opinion of the county Emergency Committee do not qualify for funding under the Emergency fund shall be rejected and referred to the relevant Department for consideration under the ordinary budgeting process.

A criterion is to be developed by the County Emergency Committee to guide on eligibility for funding under the Emergency fund.

Organizational Structure



Declaration of Disasters:

It is noteworthy that while all Emergencies have the potential to mutate into Disasters, all disasters are initially Emergencies.

The magnitude of severity and resources required to manage the situation, spread of the risk among other factors are critical in differentiating a disaster from an emergency. Therefore, for any occurrence to be certified as a Disaster, it must be DECLARED as such by an authority legally recognized as competent enough to make such Declaration.

In the case of Makueni County Government, the sole mandate to declare a Disaster is vested with the Governor.

During such Declaration of a Disaster, the Governor may task the County Emergency Committee or constitute any other committee deemed appropriate to take lead role in addressing the Disaster.

The Declaration of Disaster gives the County Government of Makueni latitude in mobilization and allocation of resources in dealing with the declared Disaster.

During Declaration of a Disaster, the Governor may establish a disaster kitty and allocate such resources as per the advice of the CEC in charge of Disaster management for purposes of early response, recovery and mitigation of the disaster.

Upon Declaration of a Disaster, the Secretariat/Committees mandated to spearhead the management of the Disaster shall have the authority to

- i. Recommend to the Governor and County Executive Committee ways and means to mobilize resources for management of the Disaster
- ii. Incur expenditure on account of management of the Disaster
- iii. Convert such identified institutions from their regular utilization to evacuation, rescue, Centres/Call Centres for purposes related to the Disaster
- iv. Open, operate and Maintain such Bank Accounts as deemed appropriate in Handling the Disaster
- v. Establish such Disaster support Centres as collection points for Disaster support items
- vi. Hire casual Staff, Counsellors, First Responders, care givers, evacuation squads, rapid transporters, etc for purposes of ensuring prompt Management of and Response to the Disaster.
- vii. Enter into Emergency supply contracts,

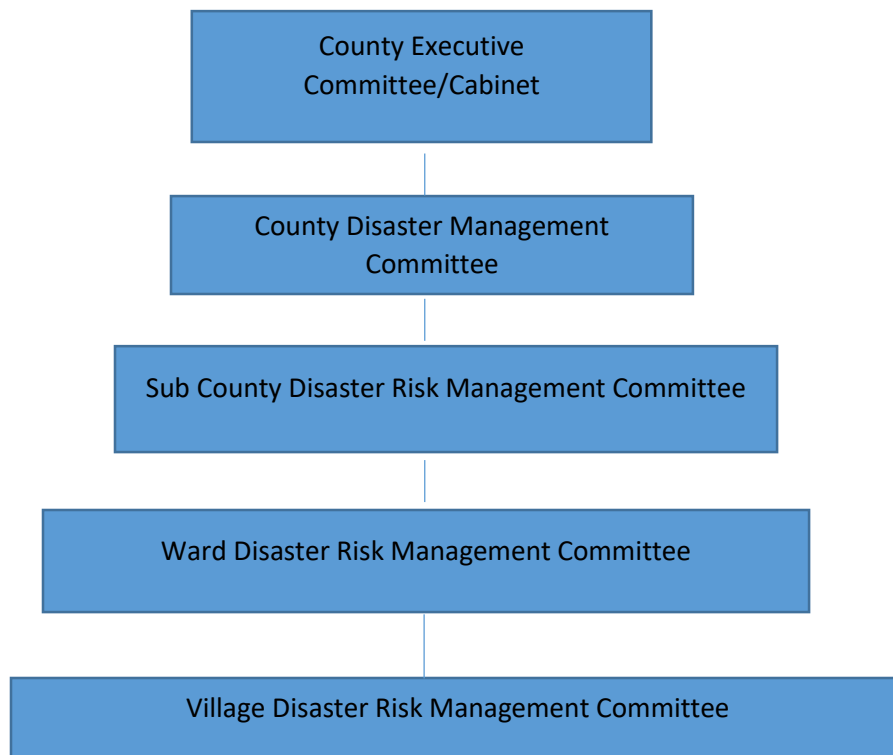
- viii. Deploy such machinery and equipment as deemed suitable in dealing with the prevailing situation
- ix. Objectively demolish any erected structure that stands in the way of accessing the Disaster site and whose continued existence highly compromises the response and recovery efforts.
- x. Erect Barriers and obstruct passages if such acts enhance the Disaster Response operation without grossly compromising the interests of the otherwise users of such passages.
- xi. Make on the spot decisions in furthering the mitigation, response and recovery efforts

The CEC-Finance shall ensure that all funds appropriated in relation to Disaster are spend prudently and may at times guide as deemed appropriate.

The Directorate in Charge of Disaster Management shall establish and maintain such bulk storage facilities as deemed appropriate and ensure targeted stock piling especially of Non Food Items (NFIs) for purposes of Emergency response

Disaster Management Committees

Figure 5.1: Shows the overarching structure of disaster risk management bodies/Committees established and recognized by this policy within the County.



The composition for the membership into the various Disaster Risk Management Committees is to be provided in the regulations.

Mandates of Disaster Management Committees

This Policy proposes for the establishment of the County Disaster Risk Management Committee.

The membership of the County Disaster Risk Management committee shall be:

- a. The Governor as the Chairperson
- b. The deputy Governor as the Vice Chair person
- c. The County Secretary as the Secretary
- d. The County Executive responsible for finance
- e. The County Executive responsible for health
- f. The County Executive responsible for environment
- g. The County Executive responsible for Infrastructure
- h. The County Executive responsible for Devolution
- i. The County Executive responsible for Education
- j. The County Executive responsible for water
- k. The County Director for Disaster preparedness and response
- l. The County Commissioner
- m. The County Liaison Officer of the Kenya Red Cross Society or representative of any other organization serving as auxiliary to the public authorities in the humanitarian field.
- n. The County Director of Meteorological Services
- o. At least two representatives of the public, representing both genders duly appointed by the Governor with approval from the County Assembly.
- p. At least two persons representing the youth and the disabled duly appointed by the Governor with approval from the County Assembly.
- q. Atleast one person representing the private sector from the relevant associations duly appointed by the governor with the approval from the county assembly.

1. The County Disaster Risk Reduction Committee:

- i. Is the senior most Committee and is responsible for giving general advise and Direction in all matters relating to Disaster Risk Reduction in the County
- ii. Advises the Cabinet/County Executive Committee on all matters relating to Disaster Risk Management.
- iii. Receives and reviews reports from the Sub County Disaster Risk Management Committees
- iv. Facilitate implementation of Decisions of the County Executive Committee in all matters relating to Disaster Risk Management

- v. Propose to the County Executive Committee measures deemed appropriate in promoting Disaster Risk Reduction.
- vi. Coordination of all Disaster related operations at the County Level.

2. The Sub County Disaster Management Committee

- i. Is responsible for giving general advice and direction in all matters relating to Disaster Risk Reduction at Sub County level.
- ii. Advises and makes suggestions to the County Disaster Risk Reduction Committee.
- iii. Receives and reviews reports from the ward Disaster Risk Management Committees.
- iv. Is an agent of the County Disaster Management Committee and implements decisions of the County Disaster Management Committee.

3. The Ward Disaster Risk Management Committee

- i. Is responsible for giving general advice and direction in all matters relating to Disaster Risk Reduction at Ward level.
- ii. Is responsible for coordination of Disaster Response, interventions, Education and sensitization.
- iii. Is an agent of the County Disaster Management Committee and implements decisions of the County Disaster Management Committee at Ward level.

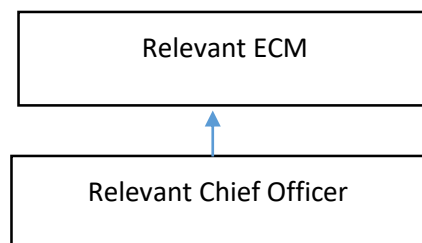
4. Village Disaster Management Committee

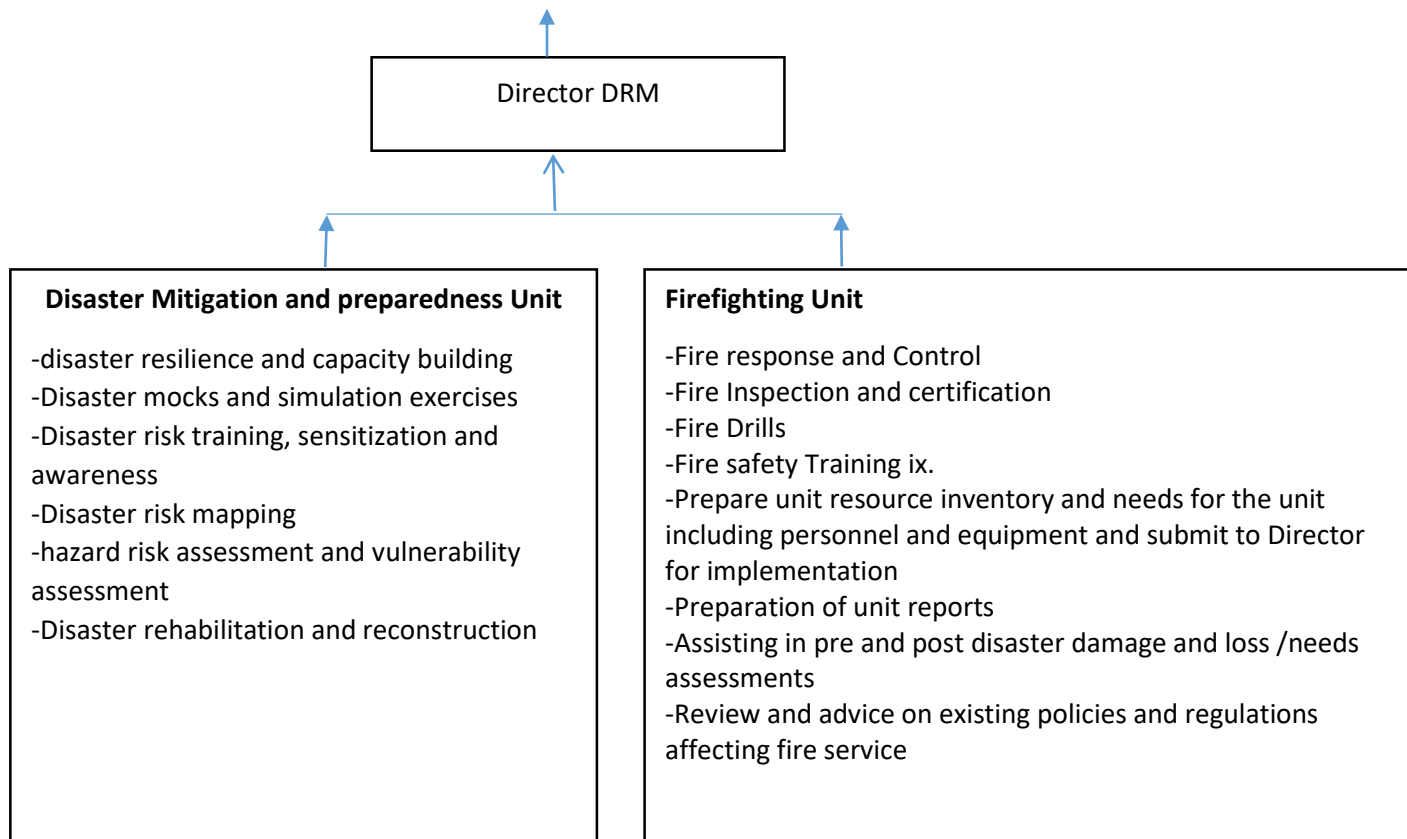
- i. Is responsible for giving general advice and Direction in all matters relating to Disaster Risk Reduction at village level.
- ii. Is responsible for coordination of Disaster Response, interventions, Education and sensitization at the village level
- iii. Is an agent of the County Disaster Management Committee and implements Decisions of the County Disaster Management Committee at village level.

Establishment of Directorate of Disaster Risk Management

There shall be established the Directorate of Disaster Risk Management. The Directorate shall be anchored in the County Department in charge of Disaster risk management in the County.

The directorate shall comprise of two units namely: disaster mitigation and preparedness unit and the firefighting unit. Figure 5.2 shows the proposed structure of the disaster risk management.





Functions of the Directorate of Disaster Risk Management

- i. Act as the secretariat to the MCDRMC and serve as the central agency for ensuring proper and effective implementation of the policy activities among all line departments, ministries and sectors.
- ii. Coordinate all disaster management issues in Makueni County and advise the MCG accordingly.
- iii. Establish and operate a comprehensive County Disaster Operations Centre.
- iv. Monitor all disasters on 24 hrs. 7 days a week, 365 days a year basis.
- v. Establish and operationalize the Disaster Risk Assessment and Early Warning systems
- vi. Implement DRM Capacity Development and Training
- vii. Operationalize the Preparedness and Response unit
- viii. Carry out DR Recovery and Rehabilitation Functions
- ix. Develop, update and coordinate implementation of the Disaster Risk Management Strategy, disaster management plans, County disaster response plan and search and rescue.
- x. Coordinate, collate, review and analyze information relevant to DRM.

- xi. Establish a County Early Warning and emergency communication strategy.
- xii. Coordinate and support disaster education and training and public awareness and provide advice at all levels. Monitor, evaluate and document lessons learnt, and their application towards improving disaster risk management.
- xiii. Promote and strengthen linkages with key departments, ministries, CSOs, international, national and local organizations, sub-counties and community-based disaster management structures.
- xiv. Coordinate preparation and maintenance of County hazard atlas including data bank and information on potential hazards and vulnerabilities at all levels.
- xv. Prepare guidelines for participation in county, national, regional and international disaster management activities.
- xvi. Establish disaster management centers at county, sub-county and ward and village authority levels.
- xvii. Coordinate resource mobilization strategies for the disaster reduction functions.
- xviii. Coordinate firefighting, search and rescue, and training Research and Development.

Specific functions for the Units

a) Disaster Mitigation and preparedness Unit

The functions of the Disaster Mitigation and Preparedness unit shall include:

- i. Lead and coordinate routine hazard identification and vulnerability and risk assessments in all sectors
- ii. Undertake Disaster Response, Recovery and rehabilitation
- iii. Establish effective people-centered, Early warning systems at county levels and disseminate risk and early warning information in a timely and accurate manner
- iv. Develop and guide the implementation of structural and non-structural mitigation measures in all County Government sectors
- v. Promote public awareness on DRM
- vi. Collect, analyze, document and share DRM information with all stakeholders
- vii. Undertake and Coordinate DRM research
- viii. Lead and coordinate Mainstreaming of DRM in County government strategies, policies and plans
- ix. Build/or strengthen DRM institutional capacity for county Government structures
- x. Lead and/or coordinate the preparation of County, sub-county, ward and village contingency and disaster preparedness plans and strategies

- xi. Organize periodic disaster simulation exercises and drills for rapid ‘on-set’ disaster events
- xii. Development of hazard maps and disaster risk profiles based on a baseline year; and continue to update this information for future scenario planning in collaboration with other partners and stakeholders

The disaster mitigation and preparedness unit shall be responsible of but not limited to the management of the following hazards or disasters.

- a) Drought
- b) Floods
- c) Landslides, mudslides and land subsidence
- d) Conflicts and violence
- e) Road and rail traffic accidents
- f) Drowning
- g) Building collapse
- h) Terrorism
- i) Oil spillage
- j) Whirl winds

DROUGHT:

Drought Management Approach:

Drought risk management should recognize the wide scope of drought and thus the implications for coherent strategies to manage it across sectors, levels and disciplines. The Directorate shall use a multi- faceted approach towards drought risk management. Since disaster management and firefighting is a shared function by County and National governments, the directorate of disaster management shall form part of the key actor in mainstreaming drought risk management and ensuring that drought doesn’t create other emergencies like fires.

The Directorate of disaster management shall collaborate and coordinate to match resources with key sectors and actors of drought management like the National Drought Management Authority (NDMA) which have laid down strategies towards ending drought emergencies, Kenya Red Cross, World Food Programme, World Vision (K) and other Non-Governmental and International Non-Governmental Organization (NGOs and INGOs), Interested and Affected Parties (IAAPs). The directorate shall also recognize the role of other county departments like Agriculture and Livestock and other stakeholders and work to coordinate drought risk management. This shall be made to ensure that drought does not escalate to disasters and people are able to cope and adapt in a drought situation. The applicability of a particular approach adopted shall depend on the timing of interventions or phase of drought management cycle. The following measures shall be taken to manage drought emergencies.

Drought preparedness phase

This is the phase that precedes the actual drought occurrence. The following strategies shall be developed.

- Development of preparedness plans
- Developing drought early warning systems
- Installing emergency communications systems
- Develop evacuations plans and training
- Establish resource inventories
- Stock piling
- Compile emergency personnel/contact lists
- Enter mutual aid agreements with collaborating partners
- Provision of public information/education.

Drought Response phase

Response phase immediately follows a disaster event. The purpose of drought response is to; provide emergency assistance for casualties, reducing the probability of secondary damage and speeding recovery operations.

Measures in the drought response phase shall be:

- Activating public warning and plans
- Notifying of public authorities and key actors about the disaster
- Mobilizing emergency personnel and equipment. Sometimes drought could escalate to fires. In this regard the emergency personnel shall be put on standby to respond to any case of fire outbreak
- Matching of resources with key actors
- Providing emergency medical assistance to drought victims
- Establishing and manning emergency operations centers
- Provision of emergency relief (food and non-food items)
- Declaring drought as a disaster by the governor

Recovery Phase

Recovery phase starts when the disaster has been contained or brought under control. The recovery activities aim at restoring all systems in the area affected by the disaster to normal or better. Recovery measures can be both short and long term.

The measures put in place in the recovery phase shall be:

- Providing damage insurance, loans and grants like on livestock deaths and or crop failure

- Providing temporary/ permanent housing incase drought escalates to fires
- Providing long-term medical care for the affected population
- Providing drought disasterunemployment insurance
- Providing public information necessary to help people in their recovery efforts
- Provide health and safety education
- Reconstruction of critical infrastructure damaged as a result of drought disasters
- Provision of counseling programs
- Carrying out economic impact studies and documentation
- Re-unite disaster/emergency victims

Mitigation Phase

The mitigation phase starts when disaster management improvements have been made in anticipation of the next disaster event. In mitigation phase, various activities and measures are undertaken to eliminate or reduce the probability of occurrence of another disaster, or reduce the effects of unavoidable disasters.

Measures in drought mitigation phase shall include the following:

- Undertaking vulnerability analysis updates
- Providing damage insurance, loans and grants on livestock deaths and or crop failure and unpredictable uncertainties
- Providing preventive health care
- Provision of public health and safety education
- Provision of incentives for smart agriculture

FLOODS:

Flood mitigation

The Directorate of disaster risk management shall coordinate and collaborate with the relevant departments and stakeholders to realize the following flood mitigation measures:

Structural measures

- Construction of gabions in gullies
- Erect retention walls to prevent surface runoffs
- Ensure that all dams constructed have check walls and flood gates

- Digging of terraces and retention ditches to reduce surface run off
- Reforestation and afforestation of watersheds
- Planting of bamboos along river banks and planting of grass to reduce level of erosion by water
- Control of land use - Carefully planned settlements
 - Restriction of settlements in flood plain areas
 - Restriction of farming along river banks
- Rain water harvesting and promotion of RHM (rain water harvesting mechanisms)- collection and storage of rainwater from roofs or other suitable catchments to reduce surface runoff and flash floods

Non-structural measures:

- Raising awareness of local community on issues of flood risks and factors of vulnerability
- Gazettement of flood plain regions
- Restriction of human settlement in flood plain areas
- Community sensitization on flood mitigation, preparedness and responses.
- Coming up with tax incentives and disincentives that encourage people to undertake certain measures that reduce disaster risk

Flood preparedness

In collaboration with relevant actors:

- Evacuate people from flood prone zones to safe areas
- Develop contingency plans on floods
- Stock pile
- Develop Search and Rescue plans/procedures

Flood response

In collaboration with relevant actors:

- Conduct evacuation/search and rescue during and after floods
- Resettle of affected population temporary
- Supply of food and non-food items to affected communities
- Give emergency health care and first Aid
- Activate contingency plans
- Conduct Post Disaster Needs Assessment (PDNA) and Damages and Loss Assessment (DaLA)

Flood recovery

In collaboration with relevant actors:

- Assist to return vital life-support systems to minimum operating standards
- Help in resettlement of affected population (permanent)
- Activate contingency plans
- Give psycho-social support and care
- Implement DaLA and PDNA
- Re-unite disaster/emergency victims

Building Collapse:

The following measures shall be put in place to prevent/mitigate, as well as responding to building collapse.

Prevention/mitigation of building collapse

In collaboration with relevant actors:

- Develop and enforce building codes
- Undertake zoning of land, which allows for land use management, reducing inappropriate use of marginal land
- Come up with regulation guiding use of building and safety codes
- Conduct fire safety inspections in buildings before approvals and after completion
- Ensure that all approvals are made before building constructions

Preparedness measures to building collapse

In collaboration with relevant actors:

- Conduct regular fire and safety inspections and enforcement of building standards
- Develop SAR procedures
- Train personnel on search and rescue
- Mobilize equipment for SAR
- Activate Early warning system
- Maintenance of emergency personnel conduct list
- Conduct pre- emergency/disaster mocks and simulation exercises/drills

Response to building collapse

In collaboration with relevant actors:

- Activate/ conduct SAR procedures/missions
- Mobilize emergency personnel and equipment
- Offer emergency relief
- Offer emergency medical care and support
- Offer psycho-social support to victims

- Conduct PDNA and DaLA

Measures to be taken during recovery

In collaboration with relevant actors:

- Provision of shelters to post disaster victims (permanent and temporary)
- Implementation of PDNA and DaLA results
- Re-unite disaster/emergency victims

Road and Rail traffic Accidents

The following measures shall be taken to manage road and rail traffic accidents.

In collaboration with relevant actors:

- Develop emergency care unit and response centers
- Train emergency response personnel on rescue techniques
- Mobilize resources/equipment for rescue
- Sensitization of road users on road safety measures.

Drowning

The following measures shall be taken to manage drowning incidents

Prevention/mitigation measures to drowning

In collaboration with relevant actors:

- Ensure that dams, water reservoirs and pools are fenced
- Develop regulations to ban swimming activities on dams, water reservoirs and un-manned pools

Preparedness measures to drowning

In collaboration with relevant actors:

- Train emergency responders on diving and water rescue techniques
- Develop regulations to ensure all pool attendants are trained on water rescue techniques
- Conduct simulation exercises and drills on drowning scenarios
- Develop incident command structures
- Enforce regulations on drowning risks

Response to drowning

In collaboration with relevant actors:

- Coordinate search and rescue missions
- Man and manage scene of incidents (incident command system)
- Coordinate medical and first aid provision to the victims

- Man emergency operation centers

Recovery to drowning

- Ensure post medical care provision to disaster victims
- Give psycho-social support and care
- Man emergency operation centers

Landslides/Mudslides/Land Subsidence

The following measures shall be taken to manage landslides.

Preventive/Mitigative Measures

In collaboration with relevant actors the directorate shall:

- Undertake zoning of land, which allows for land use management, reducing inappropriate use of wetlands
- Come up with regulation guiding use of building and safety codes to reduces physical vulnerability
- Develop hazard profiles and gazette hazard areas
- Educate the public on sustainable land use management

Preparedness Measures

In collaboration with relevant actors the directorate shall:

- Develop SAR procedures and methodology
- Train personnel on search and rescue
- Mobilize equipment for SAR
- Test and activate early warning system
- Maintain of emergency personnel conduct list
- Conduct pre- emergency/disaster mocks and simulation exercises/drills
- Sign mutual aid agreements
- Evacuate vulnerable population

Response measures to landslides, mudslides and land subsidence

In collaboration with relevant actors the directorate shall:

- Coordinate search and rescue
- Coordinate provision of temporary shelter ton disaster victims
- Man emergency operation centers
- Coordinate administration of DaLA and PDNA

Recovery measures to landslides, mudslides and land subsidence

In collaboration with relevant actors the directorate shall:

- Man emergency operation centers
- Coordinate the implementation of DaLA and PDNA
- Reunite disaster and emergency victims

Terrorism

Measures to be taken against terrorism

- Anti- terrorism regulations. The directorate shall in collaboration with other actors like the county assembly come up with anti-terrorism legislations. The directorate shall work with other departments and actors like police to administer counter terrorism
- Coordinate with the law enforcers to ensure existing legislations like the Nyumba Kumi Initiative and other government regulation are adhered to
- In the event of terrorism emergency respond shall be made only with the assurance of personal safety of the emergency responders

Conflicts and Violence:

The following measures shall be taken to manage conflicts and violence.

The Directorate in collaboration with key actors shall;

- Formulate conflict resolution mechanisms/strategies
- Advise the county leadership on conflict resolution strategies
- Spearhead/champion signing of mutual agreements between warring parties and affected communities/population.

Oil spillage

The following measures shall be taken to manage oil spillage

The Directorate in collaboration with key actors shall;

- Come up with Spill Prevention, Control, and Countermeasure (SPCC) rules and the Facility Response Plan (FRP) rules. The SPCC rule helps facilities prevent a discharge of oil into navigable waters or adjoining shorelines. The FRP rule requires certain facilities to submit a response plan and prepare to respond to a worst case oil discharge or threat of a discharge.
- Formulate and enforce regulations against illegal oil spillages
- Develop contingency plans on oil spillages

Whirl winds

The Directorate in collaboration with key actors like the meteorological department shall;

- Develop early warning system for whirl winds
- Develop and update mutual aid agreements

- Come up with evacuation and recovery plans

Fire Fighting Unit:

Fire Fighting is the most visible function that is carried out by the Directorate of Disaster Risk Management.

The Fire Fighting Unit is established to deal with all situations involving occurrence of Fire and related events in any part of Makueni County.

The Functions of the Firefighting Unit Include:

- i. Response and suppression of all forms of fire outbreaks occurring in the county including county infrastructure and public institutions.
- ii. Establishment and operationalization of County Fire Station(s)
- iii. Conduct of fire Inspections within Makueni County and in equal measure, issue Fire Compliance Certificates.
- iv. In collaboration with other key ministries, approve building plans like high rise buildings, petrol stations and other disaster prone developments before and after construction to ensure that developments comply to fire safety and occupational safety standards and to realize sustainable development.
- v. Conduct of fire drills.
- vi. Coordination of fire safety activities such as training of rapid response volunteers, fire safety education and drills.
- vii. Coordination of search and rescue operations.
- viii. Preparation of unit budget for the sector in consultation with the director for disaster management.
- ix. Preparation of unit resource inventory and needs for the unit including personnel and equipment.
- x. Preparation of unit reports.
- xi. Assisting in pre and post disaster damage and loss /needs assessments.
- xii. Coordinating all fire related activities to ensure operational efficiency in fire management.
- xiii. Review and advise on existing policies and regulations affecting fire service.

Firefighting Unit Structure

Firefighting services is a devolved function of the county governments in line with the 2010 Constitution. However, there lacks a clear structure/schemes of fire service to guide the operational efficiency of the service to the people of Makueni County. The policy proposes for the development of Makueni County *Schemes of Service for Firefighters* to realize this key mandate. The following shall be the functions of the various cadres in the fire service.

1. Chief Fire Officer

The Chief Fire Officer (CFO) heads the Fire-fighting Unit and reports to the Deputy Director or Director- Firefighting and Disaster risk Management. He/she shall be responsible for administrative and operational efficiency of Fire and Rescue Service.

The Chief Fire Officer shall be in charge of all firemen in the County. He/she shall be the Commander of the Fire Unit and shall have an office at the County Fire Station. The CFO will ensure that working schedules for all fire fighters are maintained and at the same time ensure that they always report to work as expected, coordinate regular fire drills and guarantee the physical fitness of all firemen. The CFO shall be the overall officer in-charge of fire safety inspections, trainings and research as well as formulation and implementation of firefighting plans and review of policies affecting the fire service in consultation with the Director under whose docket Firefighting and disaster risk management falls.

For any other Fire Stations or Substations other than the County Fire station, the CFO shall in Consultation with the Director, designate an Officer to be in-charge.

2. Deputy Chief Fire Officer (DCFO)

This shall be the principal officer deputizing the Chief Fire Officer in all matters affecting the fire brigade at both administrative and operational level. The officer shall be answerable to the Chief Fire Officer and the relevant Director. The DCFO's office shall be housed at fire brigade headquarters.

3. Assistant Chief Fire Officer (ACFO)

This shall be an officer second to Deputy Chief Fire Officer. His/her duties include planning of training, fire prevention and inspections. The officer shall report to the Deputy Chief Fire Officer or Chief Fire Officer on administrative and operational matters.

4. Senior Divisional Fire Officer (SDFO)

This shall be an officer second to Assistant Chief fire Officer. The officer's duties shall include: planning of trainings, fire prevention and inspections. Further, the officer shall report to the Assistant Chief Fire Officer or Deputy Chief Fire Officer or Chief Fire Officer on administrative and operational matters.

5. Divisional fire officer (DFO)

This officer shall be answerable to Senior Divisional Fire Officer or Assistant chief fire officer on matters pertaining to administration and operations. The officer supervises a group of stations with reference to the Divisional Headquarters or works at Brigade Headquarters with special reference to Deputy or Divisional Commander in a smaller Brigade.

6. Assistant Divisional Fire Officer (ADFO)

This officer shall be answerable to the Divisional Fire Officer and his duties include assisting the DFO in supervising staff under him or her.

7. Fire Station Officer (FSO)

This officer shall be answerable to the ADFO. The officer's duties shall include supervision and assisting the Assistant Divisional Fire Officer on matters pertaining to operations and administration of the stations or sub stations.

8. Senior Hydrant Inspector

This officer shall be in-charge of fire-hydrant inspection and operation and shall be answerable to the Station fire officer or the Assistant Divisional Fire Officer.

9. Fire Sub-Officer/ Cadet Officer

This shall be a junior officer usually in charge of a crew/shift. He/She shall be answerable to the Fire Station Officer.

10. Hydrant Inspector

The officer shall ensure that all fire hydrants within his or her jurisdiction are in proper working condition whilst also maintaining a proper records of all Fire Hydrants. The officer shall be answerable to the Station Fire Officer.

11. Leading Fireman/Senior Fireman/Control Room Attendants

A junior officer at the first level of command usually in charge of a crew and shall be answerable to the Cadet / Sub - Station Officer.

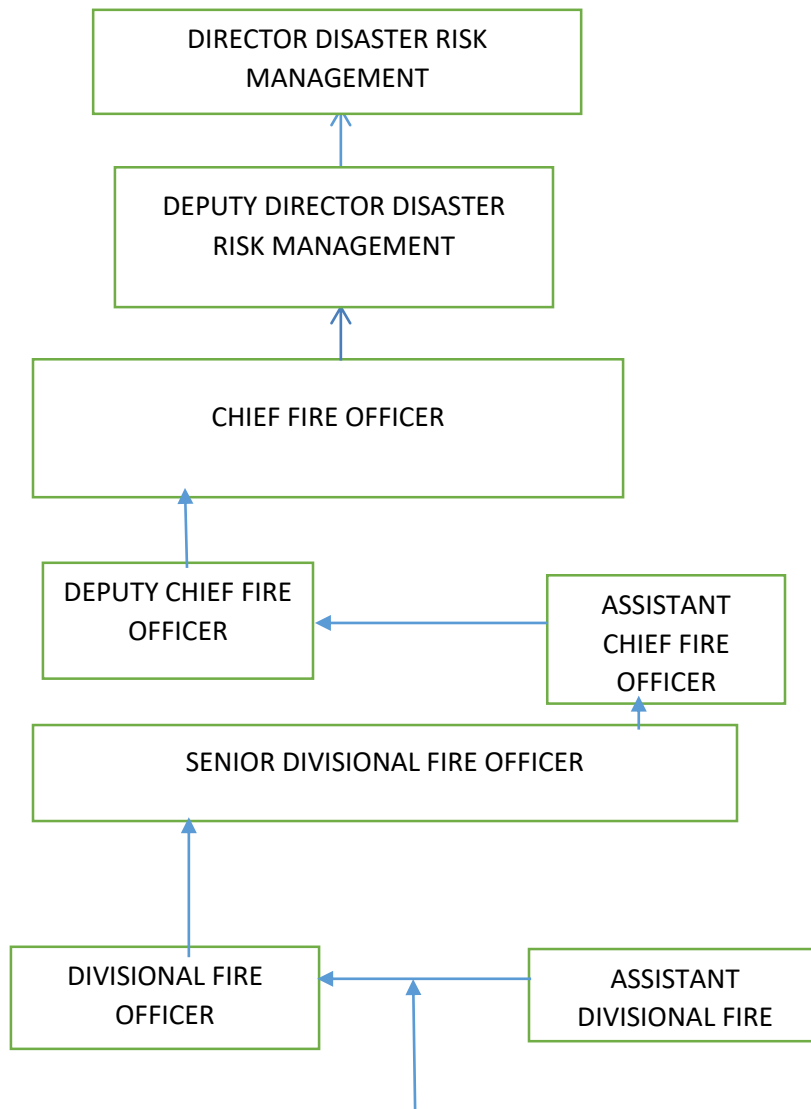
13. Fire Engine Driver

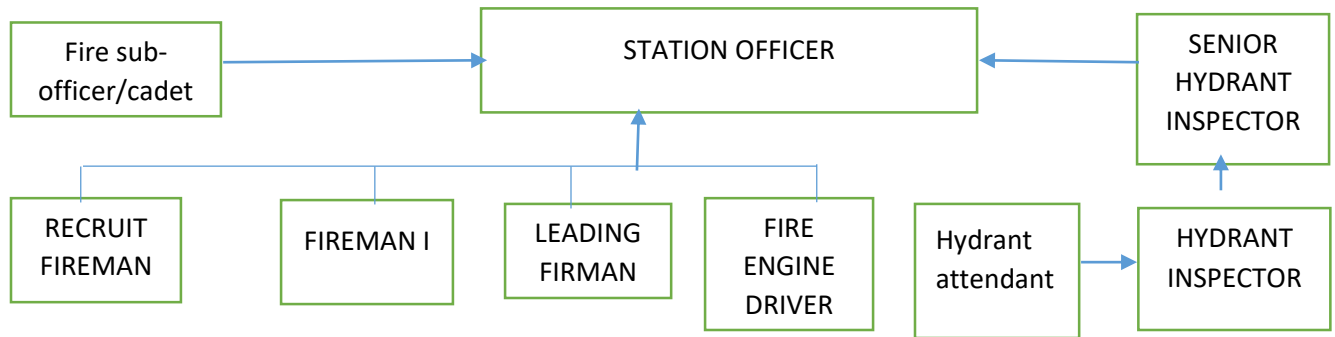
The duties of a fire engine driver shall include: water pump/centrifugal pump operation, hydraulic platform and turntable ladder operation and can work as a firefighter. Part of his/her stand by time during each day shift shall be spent in drills, practices and keeping fire engine in order and other duties about the fire station. He/she shall also make sure that the Fire Engine /Ambulance is in good working condition. He/she shall be answerable to leading fire man, fire sub officers or fire station officer.

14. Fire Hydrant Attendant:

He/she makes sure that all Hydrants are inspected, repair those that are defective and install new ones at strategic points. He/ she shall be answerable to Fire Hydrant Inspector.

Proposed Fire Fighting Structure (Organogram)





The Directorate shall through the established channels, propose to the County Public Service Board the structure and staffing needs for the firefighting Unit. The Directorate shall also advise the county public service board on the minimum qualification requirements and entry scales for each of the position within the unit that is set to be filled.

Emergency line management

In order to ensure efficiency in firefighting, there shall be an emergency fire call line established for purposes of reporting fire occurrence. A control room in each fire station shall be established and equipped with communication tools, gadgets and manned for 24hours without exception. TheDirector shall putarrangements in place to ensure that the fire line is manned on 24 hour basis.

Fire stations and substations

The Directorate shall establish such number of fire stations as will be determined as optimum for effective and timely provision of Firefighting services across the County. There shall be established the county fire station that shall serve as the fire brigade headquarter. The directorate shall put measures to ensure that the fire stations are fully equipped with personnel and equipment.

Firefighting uniforms and personal protective equipment (PPEs)

- a) The directorate shall provide the fire fighters with a pair of personal protective equipment (PPEs) including: pair of firefighting boots, a helmet, tunics, leggings and gloves. They shall also be provided with a pair of duty uniforms. They shall be required to be in uniforms all the time while on duty and on special occasions such as National Holidays.
- b) Officers shall maintain the uniforms and PPEs in a clean and serviceable condition. For this purpose, a monthly issue of one – kilogram of washing soap shall be made to each officer.
- c) The uniform and PPEs becomes the property of the officer to whom they have been issued but the rank markings shall remain the property of Fire and Rescue Service Authority including protective clothing.

d) Any officer whose services is terminated for whatever reason (or) cause shall be required by the Fire And Rescue Authority to surrender the uniform and PPEs issued to him or her that year in question. This is as summarized below.

UNIFORMS FOR FIREFIGHTERS IN THE FIRE SERVICE(Yes this can be transferred to the departmental guidelines)

No	Item	Quantity	Duration
1.	Navy blue shirts	2 Pairs	Annually
2.	Navy blue Trouser	2 Pairs	Annually
3.	Navy blue jumper	1 Pair	Annually
4.	Ceremonial clothing (Navy Blue) with a white shirt and white hand gloves	1 Pair	Annually
5.	Protective Clothing including legging and tunic	1 pair	Annually
6.	Firefighting hood	1 pair	Annually
7.	Fireman Helmet	I pc	On demand
8.	Caps with Logo	1pc	Annually
9.	Berets with Logo	1pc	Annually
10.	Buttons with Logo	20 pcs	Annually
11.	Black tie	2 pcs	Annually
12.	Pullover-beige	2pcs	Annually
13.	Black shoes	2pairs	Annually
14.	Fireman boots	1 pair	Annually
15.	Industrial fire shoes	I pair	Annually
16.	Industrial leather gloves	2 pairs	Annually
17.	Rank markings (fabric and metallic)	1 pair	Once
18.	Staff identification card	1 pair	Once
19.	Rain coat	1 pc	Annually

20. Self-contained breathing apparatus (SCBA)	1 per firefighter responding to fire	Once on demand during fire outbreaks
21. High frequency (long range) radio	1 pc	Fire fighter attending a fire/emergency incident

Hours of work and overtime

Firefighting and emergency services shall work a 24 hours shift system. Payment of overtime shall be done in accordance with departmental guidelines on the same and in this case, the **Makueni County Schemes of Service for Fire Fighters**.

Firefighting risk insurance and medical covers/schemes

The County shall provide the fire fighters with risk and medical covers/schemes in line with their respective positions or ranks. Further, the County Public Service Board in consultation with the directorate of DRM shall play a critical role in determining these benefits.

Partnerships and collaboration

The Firefighting Unit shall establish such partnerships and networks locally, nationally and internationally as are deemed proper and necessary to enhance performance of the Unit.

Firefighting charges

Currently, most fire Services are free. This is not sustainable. The Directorate shall propose measures to guide cost sharing approach to Fire services where Business Communities, Institutions and general public contribute/partner with the County government. The Directorate in collaboration with other key county departments like the finance department shall propose charges to ensure that funds are mobilized from the firefighting unit services like fire safety inspections, hire of firefighting equipment, standby services, fire reports, trainings etc. Such funds shall be utilized only, unless authorized otherwise by the chief officer in charge of disaster management in promoting the operational efficiency of the fire unit including equipping the firefighting unit. The directorate shall make proposals for firefighting services and review existing ones. Chargeable services shall include but not limited to the above mentioned.

Other strategies on disaster management

1. County Disaster Management Plan

There shall be established county disaster plan to provide guidelines and procedures that will assure maximum and efficient utilization of all disaster management resources, minimizes loss of life and or injury to the people and protect and conserve resources and facilities during emergencies considered to be of disaster magnitude. The plan will include information on:

- i. Vulnerability across the county
- ii. Measures to be adopted for prevention and mitigation of disasters
- iii. Manner in which mitigation will be integrated with the development plans and projects
- iv. Capacity building and preparedness measures to be taken
- v. Roles and responsibilities of various departments of the county in addressing part (ii)
- vi. Roles and responsibilities of various departments of the county in addressing part (iii) and (iv)
- vii. Roles and responsibilities of various departments of the county in responding to any threatening disaster situation

2. Disaster Response, Vulnerability and Risk Assessments

The county government together with its partners shall build capacity of the technical personnel and support in risk analysis, vulnerability and resilience tools and methods. Risk and vulnerability assessments will involve identifying all undesirable incidents, assessing immediate negative consequences, analyzing the vulnerability of the activities and assessing the ability to cope with situations. The county government shall procure relevant equipment for effective monitoring, assessments and response.

3. Development of Early Warning Systems

The Directorate of Disaster Management and all other stakeholders will ensure that relevant, reliable, up-to-date and timely information is provided to the community and the citizens. The Directorate of Disaster Management will establish a forum for coordination of the various early warning systems and in liaison with the NDMA, Meteorological Department/Services and other actors; generate and disseminate early warning bulletins. In addition, the department of disaster management at the county will establish Memorandums of Understanding with local FM Radio, TV Stations and Mobile Phone Telecommunications Companies to enable the use of their facilities to send out early warning messages whenever the need arises.

4. Physical Planning (Zoning laws and Building Codes)

Poor planning in the community settlement and urban areas increases risk and vulnerability of the population and other resources to disasters such as fires, diseases outbreaks and accidents. The county Land, Physical Planning and Urban Areas Management ministry are obliged to ensure that all human settlement and urban centers planning is responsive to Disaster Management standards. Such standards include provision of road access to all housing units, ensuring that constructions adhere to disaster standards in their architectural and structural plans. For instance, public facilities

should be compliant with all the requirements such as fire-extinguishers, escape doors, and structures for the physically challenged or special groups such as the elderly or children. The Physical Planning unit shall be required to establish an urban physical plan to curb the rise of unplanned settlements for effective disaster preparedness and response like firefighting.

All building plan approvals shall be subjected to fire safety inspections. They shall also be re-inspected after completion and compliance certificate issued or withheld depending on their compliance levels. The chief fire officer and the director disaster risk management shall champion this exercise in coordination with the County Land, Physical Planning and Urban Areas department. The directorate of disaster management shall work with relevant department to come up with zoning laws and building codes that shall be reviewed from time to time and to promote sustainable development.

5. Hazard profiling and gazettement of disaster prone Zones

The directorate of disaster risk management shall in coordination with key departments gazette disaster prone areas for instance, flood prone areas and restrict human settlement in such risk areas. The hazard maps will be updated periodically to keep with the changing dynamics. The County risk, hazard and disaster profiles and maps shall be produced and re-produced in sufficient quantities for distribution. Electronic copies of the profiles and maps shall be made available to the public through relevant websites and other electronic mechanisms at the County. Communities living in very risky and hazard prone areas will be informed of planned gazettement by the County Government. Resettlement shall be done in accordance to set guidelines.

6. Disaster risk awareness and knowledge management

The directorate in-charge of disaster management shall set forums for disaster risk awareness and outreach to the community, business proprietors and staff to increase their capacity on disaster prevention, mitigation, preparedness and response. This shall be conducted from time to time. The Directorate will also seek to intensify sensitization to communities living near Water bodies on how to avoid occurrence of such accidents.

The directorate will endeavor to promote and sustain the culture of Disaster risk Reduction, prevention and preparedness among all people of Makueni County.

7. Defining of enforcement standards

The county government shall be responsible for establishing regulatory standards, guidelines and procedures for all the disasters, setting building standards, hazard mapping, and advising local communities in disaster prone areas. Since the County government is responsible for approving development projects and building plans, they will ensure that they meet the standards for disasters preparedness. As a means to address increasing cases of drowning, The Directorate will work closely with relevant the Department of Water, Irrigation and Environment to ensure that all water masses are protected/fenced. Punitive laws shall be put in place to curb risky behaviors in the dam

sites or hazard prone water sources. The directorate shall work with the enforcement directorate to define and implement these standards.

8. Disaster Research and Documentation

The County Government through the directorate of disaster management shall partner with research and academic institutions to undertake research, disaster assessment and documentation. Research plays a significant role in all stages of disaster risk and its management often providing rapid scientific assessment of and usable knowledge to decision makers. The documentation of past experiences, customary and indigenous knowledge will enable the Government and other agencies to make adequate preparations to manage disasters. The documentation will be crucial in developing disaster profiles, mapping and early warning and prediction systems in the County. Partnership with research and academic institutions will be instrumental to the delivery of this mechanism for disaster preparedness and response.

9. Capacity Building

The Directorate shall train and always have a pool of professional divers who can be mobilized on quick notice in case of an accident. The directorate shall also train more fire fighters and existing ones on emerging fire and disaster trends frequently to enhance their skills and competencies.

10. International, National partnership and cooperation

The County Government through the relevant department shall seek to establish partnerships with like-minded partners, government agencies, neighboring counties, bilateral and multilateral partners. It shall work closely with National Government, private financial institutions, development partners International NGOs, local NGOs and UN Agencies in disaster preparedness and response initiatives. The County Government shall enter into Partnerships with all players in the quest to have a Disaster resilient County. The Directorate shall take a lead role in Disaster Risk Mapping, Resource mobilization and Promotion of partnerships in Disaster response. This will enable partners with Disaster response equipment to assist in Response and recovery work. It will also seek to empower the local business community and recognize their role during pre and post disaster events.

CHAPTER FOUR:

STAKEHOLDERS ANALYSIS AND RESPONSIBILITIES:

The day-to-day implementation of disaster management activities will, in many cases be carried out by sectoral ministries, departments, other public and private institutions in close consultation and guidance of the Directorate of Disaster Management. In disaster management, complementary roles are performed by these Sectors and community groups right down to household units. These complementary roles relate to all phases of disaster risk management and not only disaster response. Ultimately, disaster risk reduction is the responsibility of all citizens, not just those who have been identified in this policy. In the Policy keyroles are going to be defined and responsible institutions spelt out under each ministry and the county.

Role of County Departments and Institutions

1. The Office of the Governor

The office of governor is responsible for the declaration of Disasters in the county. Declaration of Disaster provides for accelerated and enhanced approach especially in resource mobilization for purposes of Disaster response and mitigation. The Office of the Governor plays a key role in the area of identification of potential Partners in Development and will be heavily relied upon for enhanced Networks in the area of Disaster Management.

2. Department of Devolution, County Administration, Participatory Development and Public Service

This is the lead Department and is responsible for Disaster management in the County. It is the home to the directorate of disaster management and shall coordinate and provide policy direction for risk reduction, prevention, preparedness, mitigation and response actions in the county in consultation with other line ministries, humanitarian and development partners, and the private sector. The County Administration staff and structure which is present up to the village level has been identified as a critical organ especially in the field coordination of disaster risk response activities.

3. Finance and Social-Economic Planning

The department of Finance and Social-Economic Planning is charged with the overall responsibility of financial allocation to Disaster management. It will be relied upon to ensure that adequate and timely resources are availed for purposes of Disaster Preparedness, prevention, Response and Rehabilitation programs.

4. Department of roads, transport, public works and infrastructure

Many bridges and roads are swept away in different parts of the county whenever there are heavy rains. Poorly maintained and narrow roads have in the past contributed to incidences of Road traffic accidents. In addition, the Department has equipment that can be called upon for rescue purposes in case of collapsed buildings, Fire, etc.

The objective will be to work together and encourage designs of roads and bridges with adequate capacities to withstand hazardous situations.

5. Department of Lands, Mining and Urban Planning

The department of lands and urban planning shall ensure that developments plans adhere to disaster management regulations. Urban settlements shall be done in such a way that they do not obstruct emergency response activities.

Haphazard settlements, poor urban physical planning, lack of quality assurance and building standards, and lack of risk analysis in infrastructure development are among the several factors that increase people's vulnerability to disasters in the County. There is need to ensure that infrastructure development in particular, housing are designed and constructed with adequate capacities to withstand hazardous situations.

6. Department of Health Services.

The Directorate of Disaster Risk Management is committed to working closely with the Department of Health services to provide adequate as well as timely health services which prevent unnecessary loss of life, whenever disaster strikes and quick restoration of the victims' productive capacity. It will also be resourceful in public health sensitization and outreach, provision of social psychological support to victims during post disaster period

7. Department of Water, Sanitation, Environment and Climate change

The department responsible for environment is mandated to ensure a safe and secure environment. Working together as well as enlisting the support of other crucial players such as the National Environment Management Authority (NEMA) as the coordinating body, the Department can enhance the health and quality of life of all the people of Makueni and promote long term sustainable socioeconomic development through sound environmental, natural resource management and use. Environment Department will be relied upon to ensure the integration of

environmental concerns in all development policies, planning and activities at county, sub-county and local levels, with the full participation of the individual and community. The Department will be expected to encourage optimized resource use and the achievement of a sustainable level of resource consumption, by raising public awareness to understand and appreciate the linkages between the environment and development. Climate change is a key contributor to the adversities of disasters and their occurrence like drought and forest fires. The department will be a key actor in providing solutions to climate change mitigation and adaptation. As a way of addressing the increasing cases of drowning, The Directorate will work closely with the Department of Water, Irrigation and Environment to ensure that all water masses are protected/fenced.

8. Department of Education and ICT

This policy seeks to promote enhanced partnership with the Department especially in the area of mainstreaming disaster risk management to the education curriculum at all levels. This is projected to enable the children to grow up while knowing the risks and hazards in their society and how to avoid or manage them. Pupils and students are also good educators of the communities where they come from and equally contribute to community education on risk and hazards management once equipped with the knowledge at school.

The overarching objective is to minimize risks of hazards and impact of disasters on school going children and to improve safety of school buildings and mainstream disaster risk education into school's curriculum at all levels.

Again, Information, Communications Technology (ICT) is a very crucial pillar in effective Disaster Management. This policy seeks enhanced cooperation and support with the ICT sector for fast handling and dispatch of disaster related Information.

12. Department of Agriculture, Fisheries and Livestock

This Department has the general responsibility to promote and guarantee food security the people of Makueni. The Department will be relied upon to mobilize all players in the food production sector to increase safe food production and storage as a means to avert food shortage crises in the County. The overarching objective will be to ensure that adequate food is produced for all areas of Makueni County by promoting appropriate production and post-production systems, good animal husbandry and fisheries practices.

13. Makueni County Assembly

The County Assembly is the legislative arm of the County government of Makueni. The assembly has representation from all the wards in Makueni. It therefore carries the voice of the Citizens of Makueni. It will be a major stakeholder especially because it approves the county Governments Budget. The elected leaders are also critical in public communication with and to the public

Role of National and other Institutions /Structures

Disaster management is a national and county government function according to the Kenya's constitution 2010 hence national institutions shall have a role to play in the policy implementation

1. National Disaster Operation Centre

The NDOC is a department in the ministry of state for provincial administration and internal security office of the president. It was established in January 1998 by an act of parliament to act the focal point for coordinating response to emergencies and disasters in Kenya. The center is manned on 24/7 basis by officers drawn from

- Ministry of state for defense
- Ministry of health
- The Kenya Police
- Administration police
- National Youth Service
- The provincial Administration

Roles and responsibilities

- Ensuring agencies are informed of the activation of disaster contingency plans
- Translating the decisions of the National Disaster Coordination committee (NDCC) into action
- Prepare inventories for resources/ assets countrywide
- Prepare evacuation plans, shelter and refugee areas
- Prepare disaster information media programmes
- Clearance for aircrafts, overseas disaster relief personnel, agencies supplies
- Carry out annual review, evaluation and validation disaster preparedness and response in the country
- Prepare and issue daily situation report (SITREP) on disasters/incidences in the country
- Coordinate disaster management activities
- Collaborate and network with other stakeholders
- Mobilize national resources to combat rapid onset disasters

2. The National Drought Management Authority (NDMA)

NDMA was formed in November 2011 by the Government of Kenya as a permanent and specialist government institution to manage drought and climate risks. It ensures that drought does not result in emergencies and that the impacts of climate change are sufficiently mitigated. The authority is committed towards Ending Drought Emergencies.

Among the functions of NDMA in the County are:

- Drought leadership and coordination.

- Drought risk communication.
- Drought response and resilience building.
- Supervision and coordination over all matters relating to drought management.

3. The Kenya Red Cross, County, National and International Humanitarian Agencies

The Kenya Red cross, County, National and International Humanitarian Agencies and professional bodies have valuable contributions to all aspects of disaster risk reduction in the county through, disaster prevention, mitigation, preparedness, response and recovery. They play a key role at county and local levels to disseminate information on disaster risks, mitigation and adaptation. The Kenya Red cross society helps during emergencies in providing food and non-food items as well as coordinating disaster response.

4. The National Disaster Management Unit (NDMU), Kenya police, Kenya Defense forces, National Youth service, ministry of devolution and planning and other agencies

The security forces are a major source of equipment and well trained personnel and other logistics of emergency management. They offer a range of support during search, rescue and recovery. They can be called upon for security provision during emergencies as they are located strategically countrywide. The National Disaster Management Unit plays a major role in disaster coordination, incident management during major disasters as well as maintaining disaster management information systems. Other stakeholders include; Kenya National Fire Brigade Association (Association of Fire Fighters) which provides an avenue for trainings of fire fighters, Emergency Medical Trainings, coordination with international bodies and disaster management support groups and addressing challenges faced by Kenyan fire fighters and disaster managers.

5. The National Platform for disaster risk reduction

This is a stakeholder forum for consultation, negotiation, mediation and consensus building on disaster risk reduction. Membership is drawn from all line ministries, NGOs and CBOs. The UN agencies and private sector also participate and share their information, knowledge and expertise with other stakeholders. The platform works closely with the ministry of Devolution & planning directorates, NDOC and NDMA in coordination with the county DRR platform. The forum serves to:

- Promote and enhance education, public awareness and advocacy of disaster risks
- Obtain commitment from the public leadership to disaster risk reduction
- Stimulate and strengthen multidisciplinary and multi sectoral partnerships and networks for disaster Risk Reduction at all levels
- Improve dissemination and understanding of natural and man-made causes of disasters and their related effects upon vulnerable communities.
- Pan dissemination of information on Disaster Risk Reduction
- Play an advisory role to all the stakeholders on DRR

6. Kenya Meteorological Department (KMD)

KMD is responsible for the provision and dissemination of accurate and timely climate information, weather updates and situation reporting when needed. This is crucial in management of climate related hydrological and meteorological hazards like floods.

7. Communities and Individuals

Communities are responsible for taking measures within their own capacities; protecting their own livelihoods and property. Measures taken by individual households and communities should be integrated into the county disaster management strategy.

Targeted audience: Roles and Obligations.

This Policy is Applicable to:

- a) County Government of Makueni and all its agencies.
- b) County government partners.
- c) Residents including public institutions, business community and investors. It will be their role in ensuring compliance of disaster management regulation and legal frameworks
- d) Intra-governmental and intergovernmental organizations. The county government through the relevant Directorate shall coordinate for resource mobilization with NGOs and interested and affected partners.

Monitoring and Evaluation Mechanisms.

Constant and progressive monitoring and evaluation shall be conducted to know and assess the impact of this policy in disaster management. The monitoring and evaluation system adopted shall be designed to provide feedback to the communities and stakeholders to ensure accountability and transparency, facilitate appropriate decisions on future implementation and review of the policy. Monitoring of compliance by stakeholders to disaster management shall also be done and recommendations for implementation made.

The County Disaster Management committee shall be given the overall responsibility of the M&E and shall report to the CEC in charge of DRM and firefighting for implementation. The County Disaster Management committee shall coordinate with sub county, ward and village disaster committees to conduct this exercise. Some of the M&E activities to be conducted by the County Disaster management committee shall be:

- i. Do regular review and update of the Early warning systems for disaster preparedness and response
- ii. Develop disaster management monitoring guidelines and a standardized reporting system to assist the sub county, ward and village disaster committees in monitoring and data collection and reporting
- iii. Periodically conduct impact assessment studies for the DRM and firefighting interventions to track changes and results for evidence based decision making
- iv. Do regular review and assessment of the strategic interventions for disaster preparedness and response at all levels including the county government
- v. Document and publish periodically county and sub-county state of disaster preparedness and disaster reports
- vi. Assessing the efficiency, effectiveness and overall outcomes of disaster interventions with respect to vulnerable groups and their life and livelihoods, socio-economic systems and the environment.

There shall be developed Makueni county disaster, emergency management and firefighting act that shall highlight these activities.

Policy Review

The policy shall be reviewed every 3 years (short term) and 5 years (long term) and its implementation monitored systematically due to the dynamism of disaster events and unpredictable climate change scenarios. This will help to trace if the measures identified to achieve policy objectives have been appropriately taken.

Policy Enforcement and Implementation Guidelines

- a. There shall be enabling legislation to strengthen the mechanisms of accountability for DRM as outlined in this policy.
- b. Detailed, DRM policy implementation guidelines and manuals shall be developed for policies that require further elaboration. These shall be reviewed and updated as necessary.
- c. There shall be a review and, where appropriate, revision of existing legislation, implementation guidelines and manuals across all sectors to strengthen DRM efforts, accountabilities, and directions.
- d. Responsible individuals and bodies shall be empowered and capacitated to implement risk management activities and be held legally accountable in case of failures of discharging their DRM duties and responsibilities.

LIST OF APPENDICES

Definition of terms

The following definitions apply for the purposes of this Policy.

Conflict a serious disagreement or argument between two or more parties.

Director: Director-in-charge of Disaster management

Disaster A disaster is a serious disruption of the functioning of a community or society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community/society to cope using its own resources.

Disaster Management Disaster management is the organized analysis, planning, and decision-making, allocations of resources, roles and responsibilities to prepare, prevent, mitigate, respond and recover/rehabilitate from disruptions by disasters.

Disaster Risk Reduction This is a systematic development, application of policies, strategies and practices to minimize vulnerabilities and disaster risks through preparedness, prevention and mitigation of adverse impacts of hazards within a context of sustainable development.

Disaster Risk Management The systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards.

Early Warning Systems(EWS) This is an organized structure for prediction and dissemination of timely and effective information to allow individuals who may be at risk to take action to avoid or reduce their risk and prepare for effective response

Emergency Management This is organization, management of resources and responsibilities for dealing with all aspects of emergencies, particularly preparedness, response and rehabilitation.

Environment it refers to everything that is around us. It can be living or non-living things. It includes physical, chemical and other natural forces

Hazard a potentially damaging physical event that may be caused by environmental and biotechnological processes resulting to loss of life and livelihoods, injury, damage of property and infrastructure, disruption of economic and social functioning of individuals/communities.

Hydro meteorological Hazards This is a natural or human induced phenomenon causing atmospheric, hydrological and oceanic disturbances that may result in loss of lives and livelihoods, injuries, economic and social disruptions and environmental degradation.

Mitigation These are measures undertaken to limit adverse effects that may result from a hazard.

Preparedness These are activities and measures undertaken in advance to ensure effective response to the impact of hazards, including the insurance of timely and effective early warnings, temporary evacuation of people and property from threatened locations.

Prevention These are activities for outright avoidance of adverse impacts of hazards related to hazards.

Relief/Response This is assistance and/or intervention during or immediately after a disaster to meet preservation of life and livelihoods through provision of basic subsistence needs to the affected individuals/community. It may be of immediate, short-term or protracted duration.

Resilience/Resilient This is the capacity of a system and/or a community/society exposed to hazards to resist and adapts in order to obtain an acceptable level in functioning structure. This is determined by the degree to which the social system is capable of organizing itself and the ability for learning and adaptation, including capacity to recover from a disaster.

Vulnerability conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards

List of Abbreviations

ACFO- Assistant Chief Fire Officer

ADFO- Assistant Divisional Fire Officer

ASAL- Arid and Semi-Arid Lands

C- Capacity

CFO- Chief Fire Officer

CEC- County Executive Committee

CIDP- County Integrated Development Plan

D- Disaster

DaLA- Damages and Loss Assessment

DCFO- Deputy Chief Fire Officer

DFO- Divisional Fire Officer

DRR- Disaster Risk Reduction

DRM- Disaster Risk Management

EDE- Ending Drought Emergencies

EWS- Early warning System

FAO- Food and Agriculture Organization

FSO- Fire Station Officer

H- Hazard

IDDRSI- Drought Disaster Resilience and Sustainability Initiative

IAAPs- Interested and Affected Parties

ICT- Information Communication Technology

IGAD- Intergovernmental Authority on Development

INGO- *International Non-Governmental Organization*

KMD- Kenya Meteorological Department

MAM- March April May

MCDRMC- Makueni County Disaster Risk Management Committee

MCG- Makueni County Government

M& E- Monitoring and Evaluation

MTP- Medium Term Plan

NDCC- National Disaster Coordination Committee

NDMA- National Drought Management Authority

NDMU- National Disaster Management Unit

NDOC-National Disaster Operations Centre

NEMA-National Environment Management Authority

NFI- Non Food Items

NGO- Non-Governmental Organization

PDNA-Post Disaster Needs Assessment

PEV- Post Election Violence

PPE – Personal Protective Equipment

RIV- Rapid Intervention Vehicle

SDG-Sustainable Development Goals

SAR- Search and Rescue

SDFO- Senior Divisional Fire Officer

UN- United Nations

V- Vulnerability