



**THE UNITED REPUBLIC OF TANZANIA
PRIME MINISTER'S OFFICE**

**THE NATIONAL OPERATIONAL
GUIDELINES FOR DISASTER MANAGEMENT
DEPARTMENT**

(Second Edition - 2014)

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PREFACE

Tanzania is vulnerable to recurring natural and man-made disasters that affect lives, livelihoods, destroy infrastructure and cause food insecurity and health problems. The frequency and magnitude of both natural and man-made disasters are on the rise. Their impacts not only affect individuals and their property, but also lead to costly damage to public infrastructure and property. This in turn hamper the overall development process and undermine national and international efforts to reduce poverty such as the National Strategy for Growth and Reduction of Poverty (NSGRP II), the National Development Vision 2015 and the Millennium Development Goals (MDGs).

Persistent vulnerabilities and associated risks require a well organized multi sector approach to strengthen national disaster management structures in efforts to minimize risks, prepare for potential disasters and support the building of sustainable capacities of the stakeholders to manage disaster response.

The reviewed National Operational Guidelines for Disaster Management (NOG) have been prepared to address the current needs and responsibilities of all stakeholders in disaster management. They provide an overall framework within which government ministries, departments and agencies, non-governmental organisations, international agencies and volunteer organisations will operate to prevent, prepare, mitigate and respond to emergencies and disaster situations in order to reduce disaster impacts and ensure a safer, resilient and more sustainable Tanzanian society.

The guidelines place a particular emphasis on climate change, food security and nutrition, gender, psycho-social issues, water supply and sanitation, and the environment. While the guidelines essentially cover the response part of disaster management, they nevertheless address issues related to prevention, mitigation, and preparedness-within the current Disaster Risk Reduction (DRR) framework. Furthermore, the guidelines recognise the linkages with international and regional disaster risk reduction strategies and plans.

It should be remembered that planning for effective and efficient coordination mechanisms for disaster management is an ever-evolving process. The Prime Minister Office (PMO), through the Disaster Management Department (DMD) wishes to share this plan with all relevant stakeholders in order to obtain feedback and seek their active collaboration. Any comments or suggestions will be highly appreciated and reflected in future versions of this document.

ACKNOWLEDGEMENTS

The National Operational Guidelines for Disaster Management (NOG, second edition) were prepared through a consultative process among stakeholders at all levels. The initial review of the guidelines was undertaken by Mr. Wilhelm Kiwango, a consultant from the University of Dodoma. The Disaster Management Department (DMD) under the Prime Minister's office (PMO) coordinated and facilitated two national level consultative workshops with the aim to provide inputs and comments to the draft guidelines. The review process was funded through the Disaster Management Project under the UNDP-United Nations Development Assistance Plan (UNDAP).

I would like to put on record the significant contributions made by stakeholders representing ministries and central government agencies/ departments, Local Governments Research and Academic institutions, UN agencies, International humanitarian organisations, Civil Society Organisations, Non-governmental Organisations, Faith Based Organisations, The Private Sector, and the Media for their invaluable support and contributions during the review process: their patient reading of various drafts, constructive criticism , guidance and suggestions in the review process which helped to improve the content and presentation of these guidelines.

Special thanks go to the consultant for his tireless efforts in the review process. I would also like to express my sincere gratitude to the DMD staff for their tireless efforts in providing technical and material support to the consultant and stakeholders.

Lastly, but not least, I wish to sincerely acknowledge the financial support provided by UNDP-UNDAP project for this review. It is hoped that this support will prove useful in the revised NOG for Disaster Management in Tanzania through effective and efficient coordination mechanisms to prepare for, prevent, mitigate, respond and manage emergencies and disasters.



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Permanent Secretary Prime Minister's Office.

ACRONYMS

CBO	Community Based Organisation
CSO	Civil Society Organisation
DIDMAC	District Disaster Management Committee
DMA	Disaster Management Authority
DMD	Disaster Management Department
DOE	Department of Environment
DRR	Disaster Risk Reduction
EAC	East African Community
EAC-DRM	East African Community Disaster Risk and Management Strategy
EMA	Environmental Management Act (2004)
EPRP	Emergency Preparedness and Response Plans
EWURA	Energy and Water Utilities Regulatory Authority
FBO	Faith Based Organisation
HFA	Hyogo Framework for Action (2005-2015)
HIV/AIDS	Human Immunodeficiency Syndrome/Acquired Immunodeficiency Syndrome
ICP	Incident Command Post
MDG	Millennium Development Goals
NADMAC	National Disaster Management Committee
NAPA	National Adaptation Plan of Action
NEMC	National Environmental Management Council
NGO	Non-Governmental Organisation
NSGRP	National Strategy for Growth and Reduction of Poverty
NSA	Non State Actors
PMO	Prime Minister's Office
PMO-RALG	Prime Minister's Office Regional Administration and Local
REDMAC	Regional Disaster Management Committee Government
RVF	Rift Valley Fever
SADC	Southern African Development Community
ESIA	Environmental and Social Impact Assessment
SOP	Standard Operating Procedures

TC	Technical Committee
TCG	Tactical Coordinating Group
TEPRP	Tanzania Emergency Preparedness and Response Plan
TMA	Tanzania Meteorological Agency
TSh	Tanzanian Shillings
UNICEF	United Nations Children's Fund
UNISDR	United Nations International Strategy for Disaster Reduction
VIDMAC	Village Disaster Management Committee
VPO	Vice President's Office
WADMAC	Ward Disaster Management Committee

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GLOSSARY OF TERMS

Accident: A man-made transport type of disaster comprising of air, marine, road, and rail crash which suddenly destroys life, property and quite often the environment;

Assessment: An evaluation or appraisal for making a judgement about the problems, needs, priorities, resources or capacity, of a specific system, community or region. It may be carried out through direct observation, review of literature, interview or survey.

Climate change: refers to a change in climate which is attributed directly or indirectly to human activity which alters the composition of the global atmosphere and which is additional to natural climate variability observed over comparable time periods.¹

Command: The authority and responsibility of an officer to direct the actions of the authority's resources (both personnel and equipment).

Community Participation: refers to the active involvement/engagement of communities in all aspects of assessing, planning, implementing, monitoring and evaluating disaster management projects/activities in the disaster management cycle.

Conflict: Disagreement between two groups which can cause social and economic disruption in a community, e.g. war, insurgency from radical or

¹ Article 1, United Nations Framework Convention on Climate Change.

political groups or civil unrest such as student or mob activity;

Control: The process of influencing the activity of a service or group of services, by setting tasks, objectives or targets, without necessarily having the authority to give direct orders.

Co-ordination: The process of systematically analysing a situation, developing relevant information, and informing appropriate command authority of viable alternatives for selection of the most effective combination of available resources to meet specific objectives.

Crew Commander: An officer responsible for the supervision of specific number of personnel (The Crew) assembled for a specific assignment such as search and rescue. The number of persons in a crew should be 3-7.

Cyclone: A condition of the atmosphere characterized by a central area of pressure much lower than that of surrounding areas, and a system of winds blowing inward and around (clockwise in the southern hemisphere and counter-clockwise in the northern hemisphere). It is also called a low-area storm. It is characterized by high temperature, moist air, abundant precipitation, and clouded sky.

Disaster: refers to a serious disruption of the functioning of a society, community or a project causing widespread or serious human, material, economic or environmental losses, which exceed the coping ability of the affected society, community or project using its own resources

Disaster management cycle: refers to the ongoing process by which all stakeholders including government and non-governmental agencies and organizations plan for and reduce the impact of disasters, react during and immediately following a disaster, and take steps to recover after a disaster has occurred. It includes prevention, mitigation, preparedness, response and recovery. Appropriate actions at all points in the cycle lead to greater preparedness, better warnings, reduced vulnerability or the prevention of disasters during the next iteration of the cycle.

Disaster Risk Reduction: the concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Drought: refers to the naturally occurring phenomenon that exists when precipitation has been significantly below normal recorded levels, causing serious hydrological imbalances that adversely affect land resource production systems

Early Warning System: A chain of information communication system to monitor and warn of the threat of disasters ahead of time, to trigger timely, appropriate, preventive measures. Such a programme involves monitoring at household, community, district, and national levels.

Earthquake: refers to the sudden release of slowly accumulated energy along tectonic plates that make up the earth's crust. They represent a particularly severe threat due to the irregular intervals between events, the

lack of adequate predictive models, and the associated hazards which include: ground shaking; vertical or horizontal fault movements; landslides, and liquefaction (amplification of ground shaking in areas of unconsolidated materials and high water tables).

Emergency: A situation generated by the real or imminent occurrence of an event requiring immediate attention by the affected community using its own resources.

Emergency public information: This involves developing and delivering timely and accurate messages and instructions to the public throughout an emergency or disaster. It informs the public on what is happening, how the government is responding and what the public should do to maintain its own safety.

Epidemics: A pronounced rise of cases of a disease (parasitic or infectious) often ending in death or disability as a result of exposure to a biologically active agent;

Evacuation: This is the movement of people to a safe area from an area believed to be at risk when an emergency or disaster situation occurs.

Explosion: A violent and destructive shattering of something such as a bomb blast or liquid petroleum gas;

Fire: Uncontrollable burning of fuel or other materials that destroys life and property;

Flood: Significant rise of water level in a stream, river, lake, ocean etc that can lead to destruction of life and property.

Gender: refers to the social differences between females and males throughout the life cycle that are learned, and though deeply rooted in every culture, are changeable over time and have wide variations both within and between cultures. “Gender” determines the roles, power and resources for females and males in any culture.

Gender equality means that each gender has equal conditions for realizing their human rights and potential, to engage in political, economic, social and cultural development, and benefit from the outcomes.²

Geological Hazard: Geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Guiding principles: refers to fundamental values, rules and norms that guide all governmental ministries and agencies, as well as non governmental agencies and organizations in implementing disaster management activities in all circumstances irrespective of changes in authority, goals, objectives, strategies or resource availability

Hazard: refers to a potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

² UNDP Gender Equality Strategy 2008-2012.

Incident Commander: The officer having overall responsibility for managing the incident and dictating tactics and resource management.

Incident officer: An officer responsible for incident management from various agencies/organisations. In an emergency/disaster situation involving more than one agency/organisation, incident officer remain under the control of the overall Incident Commander.

Incident Management Plan: A strategic plan prepared by the Incident Commander that identifies the broad objectives of the emergency incident activities, and the basic manner in which operations should be conducted. At minor incidents this may be verbally conveyed to officers on scene; however, at larger incidents the plan should be documented in written format

Incident: An occurrence or event, either human-caused or by natural phenomena, that threatens human welfare, environment or security of the country and that requires action by emergency response personnel to prevent or minimise loss of life or damage to property and/or natural resources.

Landslides: A landslide is a down slope transport of soil and rock resulting from naturally occurring vibrations, changes of water content or removal of lateral support;

Mass Care: All actions taken to protect evacuees and other displaced victims from the effects of an emergency or disaster. It includes the provision of temporary shelter, food, medical care, clothing and other essential life-support needs to those displaced because of a disaster or threat.

Mitigation: Measures taken to reduce the loss of life, livelihood and property by disaster, either by reducing vulnerability or by modifying the hazard, where possible.

Natural Hazard: Natural processes or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Pest infestations: Increase in pest numbers due to ecological factors e.g. temperature, monoculture of crops, new pest species, favourable weather patterns, and migration. This leads to excessive damage of plants and harvested crops, consequently leading to food shortages, famine and economic stress;

Preparedness: Measures taken to enhance the abilities of individuals, communities, and businesses to respond to a disaster. Disaster simulation exercises, disaster-preparedness training, and public education are examples of preparedness activities.

Prevention: Measures aimed at stopping a disaster from occurring and/or preventing such occurrence having harmful effects on communities (or groups of individuals) such as vaccination programmes by the health sector.

Recovery: Those activities necessary to provide a rapid return to normalcy both for the affected community and for those involved with the response.

Response: All activities taken during or right after a hazard that address the immediate and short-term effects of an emergency or disaster. Response

includes immediate actions to save lives, protect property, and to meet basic human needs.

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

Search and Rescue: This includes locating, extricating and providing first aid to victims trapped in collapsed buildings, or other structures, aircraft, train, road and marine accidents. It also involves providing immediate medical treatment to the seriously injured on site and transportation to medical facilities.

Sector Commander: An officer tasked with responsibility for tactical and safety management of a clearly defined part of an incident. Subject to objectives set by the Incident Commander, the Sector Commander has control of all operations within the sector and must remain within it.

Support Agency: Any central government department or agency designated to assist a specific lead agency with available resources, capabilities, or expertise in support of the national response operations under the co-ordination of the lead agency.

Technological Hazard: A hazard originating from technological or industrial conditions, including accidents, dangerous procedures, infrastructure failures or specific human activities, that may cause loss of life, injury, illness or other health impacts, property damage, loss of

livelihoods and services, social and economic disruption, or environmental damage.

Telecommunication Resources: refers to personnel, equipment, materials, information, training, radio-frequency spectrum, network or transmission capacity or other resources necessary for telecommunication.

Tsunami: Refers to series of ocean waves generated by sudden displacements in the sea floor, landslides, or volcanic activity. The tsunami wave may come gently ashore or may increase in height to become a fast moving wall of turbulent water several meters high. Although a tsunami cannot be prevented, the impact of a tsunami can be mitigated through community preparedness, timely warnings, and effective response³.

Volcano: A violent expulsion of the molten material, magma, and gases at high pressure from inside the molten earth through the crust.

Vulnerable Groups: Categories of disaster affected persons, or displaced persons, with special needs, invariably defined to include: unaccompanied minors, the elderly, the mentally and physically disabled, victims of physical abuse or violence and pregnant, lactating or single women.

³ National Oceanic and Atmospheric Administration (NOAA).

CHAPTER ONE

1. INTRODUCTION

1.1. Authority

The National Operational Guidelines for disaster management are prepared according to the Disaster Relief and Coordination Act No. 9 of 1990⁴ which also outlines the agencies responsible for its preparation and implementation.

The Act derives its powers from the Constitution of the United Republic of Tanzania (1977). The Constitution empowers the President (article 32) to proclaim a state of emergency if there is imminent occurrence of danger or disaster, which threatens the communities or part thereof in the United Republic of Tanzania.

At the regional and district levels, the Regional and District Commissioners are the appropriate authority to declare a regional and district disaster or emergency situations respectively.

1.2. Background information

1.2.1. Location

The United Republic of Tanzania is located in Eastern Africa between longitude 29° and 41° East, Latitude 1° and 12° South. It is bordered by Kenya and Uganda to the North, Rwanda, Burundi and The Democratic Republic of Congo to the West, and Zambia, Malawi and Mozambique to the South. The country's eastern border lies in the Indian Ocean (Figure 1).

⁴ The Disaster Relief and Coordination and Act No. 9 of 1990 is currently under review.

1.2.2. Land Size and topography

The country lies on an area of 945,000 sq.km of which 884,000 sq km is land mass and 61,000 sq. km is water (lakes, rivers and seashore). The land altitude range from 0-1500 metres above sea level and has three physiographic regions: the Islands and the coastal plains to the east, the inland saucer-shaped plateau, and the highlands. In the north and northeast the high plateau leads to distinct volcanic mountains among which are mountains Meru and Kilimanjaro.

The Great Rift Valley runs from north east of Africa through central Tanzania forming two massive scarps of east and west rift valley arms, commonly affected by earthquakes. It runs from the Red Sea/Gulf of Aden/Afar triple junction in the north to offshore Tanzania and Mozambique in the south. The rift bifurcates around Lake Victoria into the Eastern and Western branches.

The valley is dotted with unique lakes, which include Lakes Rukwa, Tanganyika, Nyasa, Eyasi and Manyara. The uplands include Udzungwa, Livingstone, and the Ufipa plateau forming the southern highlands. The Usambara, Pare, Meru, Kilimanjaro, the Ngorongoro Crater and the Oldonyo Lengai, all form the northern highlands. From these Highlands and the central saucer plateau flow the drainage system to the Indian Ocean, Atlantic Ocean, Mediterranean Sea and the inland drainage system.



Figure 1: Tanzania: Location and Administrative Map.

Source: Ministry of Lands, Housing and Human Settlement Development, 2012.

1.2.3. Climate

Tanzania is characterized by tropical type of climate with unimodal and bimodal rainfall regimes. The unimodal rainfall regime is typical for the Southern, Central, Western and South-Western part of the country where rainfall is more pronounced during the month of November through April.

The Bimodal rainfall regime is typical for area around Lake Victoria Basin, North-Eastern Highland and the Northern Coast and is characterized by two distinct rainfall seasons, October – December (OND), and March – May (MAM) seasons. Mean annual rainfall varies from 550 mm in the central part of the country up to 3690 mm in some parts of South-Western Highlands.⁵ Spatial distribution of mean annual rainfall is presented in

Figure 2 .

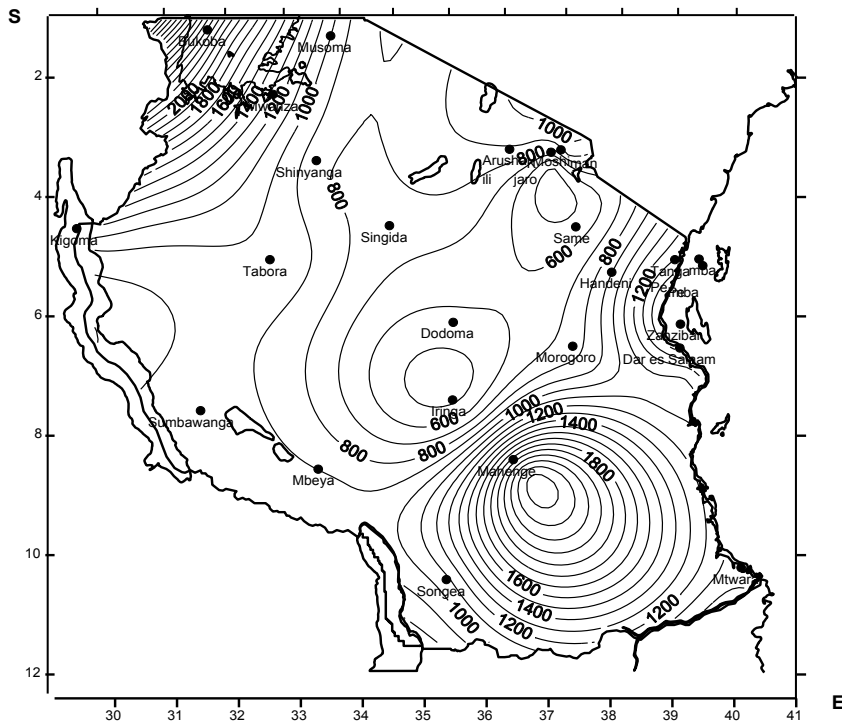


Figure 2: Spatial distribution of mean annual rainfall (1970 – 2000).

Temperature varies according to the geographical location, relief and altitude. Along the coast and in the off-shore islands the average temperatures ranges between 27°C and 29°C, while in the central, northern and western parts temperatures range between 20 °C and 30°C.

⁵ Chang’a L. B., Yanda P. Z., and Ngana J. (2010b). Indigenous knowledge in seasonal rainfall prediction in Tanzania: A case of the South-western Highland of Tanzania. *Journal of Geography and Regional Planning*, Vol. 3(4), pp. 066 – 072.

Temperatures are higher between the months of December and March and coolest during the months of June and July. In the South-Western and North-Eastern Highlands, temperature occasionally drops below 15°C at night (URT, 2008⁶), and in the cold months on June and July sub-zero temperatures can also be experienced. Spatial patterns of mean annual maximum (Tmax) is presented in Figure 3.

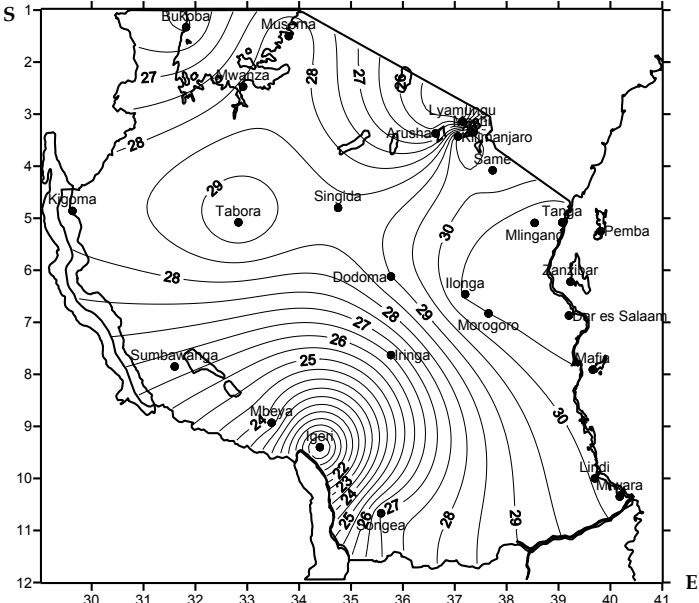


Figure 3: Mean annual maximum temperature (°C), 1970-2000.

1.2.4. Population and Social Economic characteristics

According to the National Population and Housing Census held in August, 2012 the population of Tanzania Mainland reached a total of 48.9 million people, out of which 51.2% are females and 48.8% are males⁷. The population growth rate over the period 1988 – 2002 was 2.9% per annum with a projected decrease of 2.5% in 2025. The population density has increased from the national average of 26 people in 1988 to 39 people per

⁶ URT (2008). State of the Environment Report 2008. Vice President’s Office, Division of Environment, Dar es Salaam.

⁷ The population as of December, 2012 stands at 44.9 million people.

square kilometre in 2002. However, at the regional level the population density varies between regions; that is, from 12 people per square kilometre for Lindi region to 1,793 people per square kilometre for Dar es Salaam region.

The majority of the population (approximately 80%) depends on subsistence agricultural production (i.e., small-scale farming, livestock keeping and fishing). Major crops produced include maize, paddy, sorghum/millet, cassava, potatoes for food and coffee, tea, cotton, tobacco, cashew nuts, cloves and sisal as cash crops. Tanzania is also rich in natural resources, which include minerals, forests, woodlands, wildlife, rivers, lakes and wetlands.

1.3. Tanzania Disaster Profile

Tanzania is vulnerable to a number of disasters, which can be categorized into natural and man-made disasters. These include drought, floods, pests, epidemics, fire, accidents, cyclones/strong winds, conflicts, landslides, explosions, earthquakes, technological disasters and terrorism.⁸ Different parts of the country are vulnerable to different disasters due to the difference in physical, social and economic characteristics together with variation in geographic locations. Apart from variations in physical, social and economic characteristic, the country's vulnerability is compounded by inadequate arrangements for preparing and responding to disasters. Moreover, climate change and its associated impacts is a current

⁸ PMO, (2003). Country Vulnerability Assessment Report.

phenomenon that is likely to accentuate the impacts of weather related disasters such as drought and floods.

Major hazards experienced in Tanzania for the past decade are drought, epidemics, floods, vermin/pest infestation, fire, major accidents, strong winds, civil conflict and earthquakes⁹. Potential hazards for Tanzania are summarized in

Table 1 below.

Table 1: A summary of Potential Hazards in Tanzania¹⁰.

I: NATURAL HAZARDS	
1.	Flood
2.	Drought
3.	Tropical cyclones
4.	Earthquake
5.	Lightning
6.	Landslides
7.	Tsunami
8.	Strong Winds
9.	Beach erosion
10	Epidemics (Cholera, Rift Valley Fever, Bird Flu, Food Poisoning, Swine Flu, etc)
11	HIV/AIDS
12	Animal Disease outbreak(Anthrax, Beak Quarter, Foot and Mouth disease, lumpy Skin etc)
13	Pest Infestations
14	Volcanic Eruptions

⁹ According to the Prime Minister’s Report (2003) on Vulnerability Assessment and field survey conducted in sector ministries and regions. Similarly, Risk, Vulnerability and Capacities Assessment for Kondoa, Mpwapwa and Chamwino districts in Dodoma region in 2012 indicate the same major types of hazards.

¹⁰ Following PMO, 2012. Tanzania Emergency Preparedness and Response Plan

II: MAN-MADE/TECHNOLOGICAL HAZARDS	
1.	Fire Outbreak
2.	Road Accidents
3.	Power Failure
4.	Proliferation of Unplanned Settlements
5.	Environmental Degradation and Pollution
6.	Marine Accidents
7.	Collapse of Buildings
8.	Oil Spill
9.	Civil Disorder
10.	Aircraft Accidents
11.	Hazardous Material (including radioactive material)
12.	Industrial Disasters
13.	Terrorism

1.3.1. Drought

Tanzania normally experiences recurring droughts in every four years. According to available data, the country has been hit by drought more than 18 times¹¹ since its independence. The recent one occurred in 2007/2008. It affected Arusha, Dodoma, Iringa, Kilimanjaro, Manyara, Shinyanga, Lindi, Singida, Tabora and Mwanza regions. About 46,661.1 tons of maize and 1,403.67 tons of sorghum were distributed to affected population. Another serious drought occurred in 2008/2009 affecting mainly the northern regions of the country particularly Arusha, where seed cows stocks had to be distributed in Ngorongoro, Longido and Monduli Districts. Areas most frequently affected by drought are the central regions of Dodoma, Singida, Tabora and Shinyanga that normally receive low rainfall between 200-

¹¹ Tanzania disaster profile data from the Disaster Management Department, Prime Minister's Office

600mm annually. Others include Arusha, Manyara, Mara, Mwanza, Kigoma and Mbeya regions¹² .

1.3.2. Floods

Floods in Tanzania are exacerbated due poor land use planning and squatter development in urban centres which often block natural and constructed water ways. Low lying areas near rivers and lakes especially in Mbeya and Morogoro regions have been particularly prone to floods. Other flood prone areas are Dar es Salaam, Tanga, Mbeya, Pwani, Rukwa and Mtwara. The immediate problems created by floods are shelter, food shortages and water contamination in the affected areas necessitating emergency support for medical and food supplies and seed for the next crop season.

For example, floods in Dar es Salaam on 19th and 20th December 2011 claimed about 41 lives, and the government spent more than 1.8billion TSh in response and recovery activities. Likewise, floods affected Kilosa district in Morogoro region on December 2009/January 2010 whereby 2 people died and 6,203 households with 26,103 people were affected. The total cost for this disaster amounted to Tsh 9.8billion¹³. In rural areas people prefer to live in flood prone areas because of poor land use management and farming systems, thereby increasing their vulnerability to floods.

1.3.3. Epidemics

Epidemics have regularly hit the country. Epidemics include human and animal diseases. Major human diseases are malaria, dysentery, cholera and

¹² Disaster Risk Reduction Capacity Needs report, 2008

¹³ PMO, 2012. Tanzania disaster profile.

meningitis Malaria is still a major health concern in Tanzania especially for pregnant women and children younger than five years of age. HIV/AIDS, on the other hand, is a serious pandemic affecting about 1.4million people in the country. According to the 2011-2012 Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS), prevalence rate for this pandemic is at 5.1 per cent, of which men accounts for 3.8 per cent and women 6.2 percent of the average prevalence rate. Likewise, Cholera outbreak in Kigoma (1987) killed about 90 people. Furthermore a widespread cholera outbreak in 1977 killed 500 people and affected 6000 others.

Major livestock diseases are foot and mouth diseases, trypanosomiasis, rabies, ndigana, anthrax, African swine fever and Rift Valley Fever (RVF).

1.3.4. Pest infestations

Pest infestations in this context include insects, diseases, wildlife and vermin that destroy plants. Common pests in Tanzania include locusts, armyworms, quelea quelea, cassava mealy bugs and wildlife. The most affected Regions are Arusha, Singida, Dodoma, Mtwara, Kagera, Shinyanga and all regions adjacent to conservation areas. The major implications of pest outbreaks include reduced level of crop production, which lead to low economic gain (and sometimes famine) among households in the affected areas. For example, in 2005/2006, armyworm infestation affected about 321,000 people in Lindi region with total damages estimated at TSh3.4 billion.

1.3.5. Fire

Urban and Bush fires are common in Tanzania. In urban areas fire is mainly due to electrical faults and flammable industrial products, while in rural areas rural fires are due to burning of natural vegetation or remnants of crop residues in farms. Fire accidents occur in all zones at different levels of magnitude. However, it has been reported at relatively higher levels in Rukwa-Ruaha rift valley zone, Inland sedimentary plateau, Ufipa plateau and western highlands, Central plateau and Coastal zone.

In recent years major fire incidents have occurred in urban areas including Dar es Salaam, Mwanza, Arusha, Mbeya and Songea. Fire accidents have caused death, loss of property and injuries to human beings and destruction to the environment.

1.3.6. Major accidents

Accidents occur due to transportation, industrial and other socio-economic activities. Recently, Marine accidents have claimed 347 lives, while 619 persons have not been located. On 10th September 2011, MV Spice Islander capsized in Nungwi-Zanzibar, killing about 203, while MV Skagit capsized on 18th July 2012 killing 144 people. Other major marine accident occurred on 21st May 1997 in Lake Victoria, where MV Bukoba capsized killing 833 people.

Majority of accidents in Tanzania relate to road transportation. Studies¹⁴ indicate that although the road traffic accidents problem is spread

¹⁴ Komba, 2006. Risk Factors and Road Traffic Accidents in Tanzania: A Case Study of Kibaha District.

countrywide, three geographical zones can be singled out as the most accidents prone. These zones are the large urban centres in the country like Dar es Salaam, the regions traversed by the Tanzania Zambia motor Highway across Kibaha District (TANZAM) and the regions traversed by the road from Chalinze- Segera –Arusha to Namanga border. These three spatial zones account for over 70% of all road traffic accidents in the country. The most transportation accident-prone regions are Dar es Salaam, Morogoro, Pwani, Mbeya, Arusha, Kilimajaro and Tanga.

The Traffic Police reports in the country indicate that road accidents have been on the increase. For example, in 2002 the total road accidents were 15,490 claiming 1994 lives. This number went up to 23,578 in 2012 claiming 3696 lives. This means in a period of 10 years the road accidents have increased for more than a half (52.2%, Figure 4). Similarly, the number of people injured as a result of road accidents has been on the increase (Figure 5). According to the report of the Council the most vulnerable groups are passengers and pedestrians It is estimated that accidents cost the country about TSh 190 billion annually. Train accidents, on the other hand, have also killed and injured people. In 24th June, 2002 for example, a train accident at Msagali village, Dodoma region killed 283 people and injured 466 others.

On the other hand, accidents involving bombs stored in the army barracks have also occurred recently. This is a relatively new form of accident in the country. For instance, on 29th April 2009 a bomb blast occurred in Mbagala,

Dar es Salaam claiming about 26 lives and affecting 9704 people. The total cost for response and recovery for this operation amounted to TSh10.8billion in terms of relief, compensation and rehabilitation. The same incident happened on 16th February 2011 at Gongo la Mboto, Dar salaam whereby 30 people were killed and 1693 households were affected. The total cost for this operation amounted to more than TSh5.8 billion. Other non-road accidents include a mining accident that occurred in Mererani area in Manyara region, whereby 100 miners¹⁵ died after the mining area was flooded with rainwater, a collapse of a 16 storey building in Dar es Salaam in 2013 which claimed 34 lives and involved a major rescue operation.

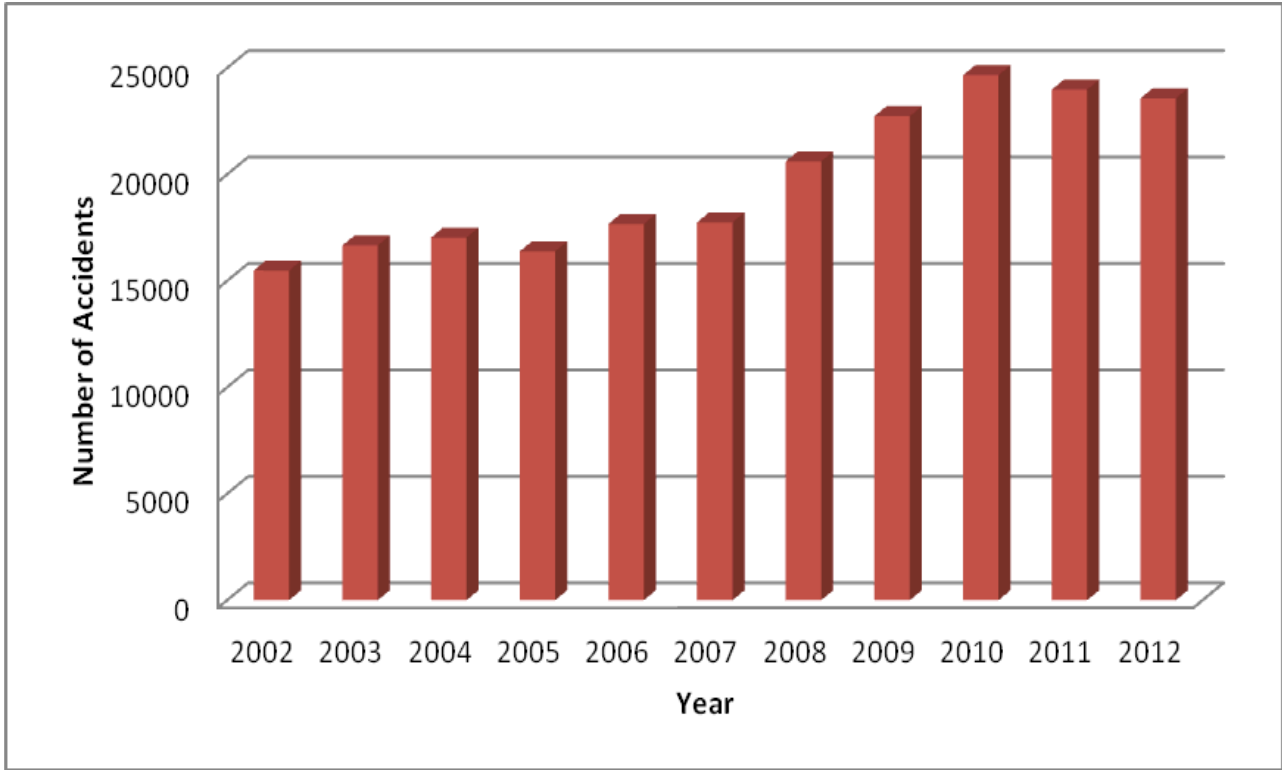


Figure 4: Road Accidents in Tanzania, 2002-2012. Source: Traffic Police, 2013

¹⁵PMO, 2008. DRR Capacity Needs Assessment report.

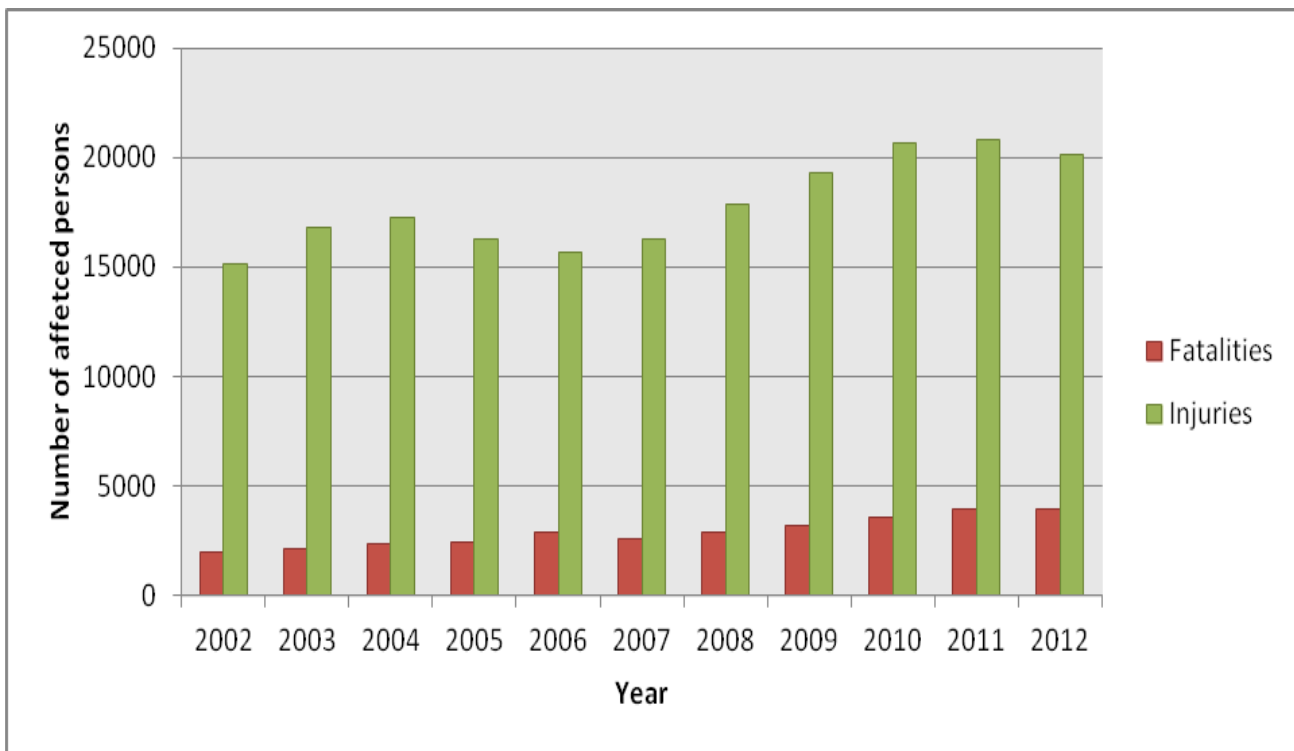


Figure 5: Number of fatalities and injuries from Road accidents 2002-2012. Source: Traffic Police, 2013.

1.3.7. Earthquakes

Tanzania is traversed by two rift valleys and such it is vulnerable to earthquakes. Earthquakes and volcanoes are reported to occur mostly in two zones; the Rukwa-Ruaha rift zone and Northern rift valley including volcanic lands which are all located in tectonically active areas. The most recent earthquakes and volcanic activities occurred in Rukwa, Mbeya and Arusha regions. Homes and properties were destroyed and a number of people were shifted away from an active volcano mountain.

1.3.8. Conflicts

Conflicts occur due to primarily land related issues. They are reported to be occurring mostly in southern highlands, coastal and central plateau zones.

Major types of conflicts that have been witnessed in Tanzania over the past decade are those related to properties/land boundaries, conflicts between farmers and pastoralists and conflicts between refugees and local communities. Conflicts on properties/land boundaries are common in Arusha, Manyara, Mara, Kilimanjaro and Kagera regions while those between farmers and pastoralists occur mainly in Arusha, Mbeya and Morogoro regions.

1.3.9. Cyclones/Strong winds

Cyclones or strong winds are often experienced in parts of Arusha, Tanga, Manyara, and parts of Dodoma, Lindi, Mtwara and Ruvuma regions. For example, a cyclone associated with heavy rains occurred in Bahi, Dodoma, damaging about 13 houses at a cost of TSh10Million and affecting livestock. In recent years cyclones have also affected Dar-es Salaam, Mwanza and Mbeya regions. In Mtwara, Mbeya and regions along Lake Victoria cyclones it have been noted that strong winds especially during heavy rain seasons are accompanied by thunderstorms. Storms cause negative impacts including death, destruction of property and the environment. An overview of the occurrence of five main hazards based on agro ecological zones in shown in Figure 6.

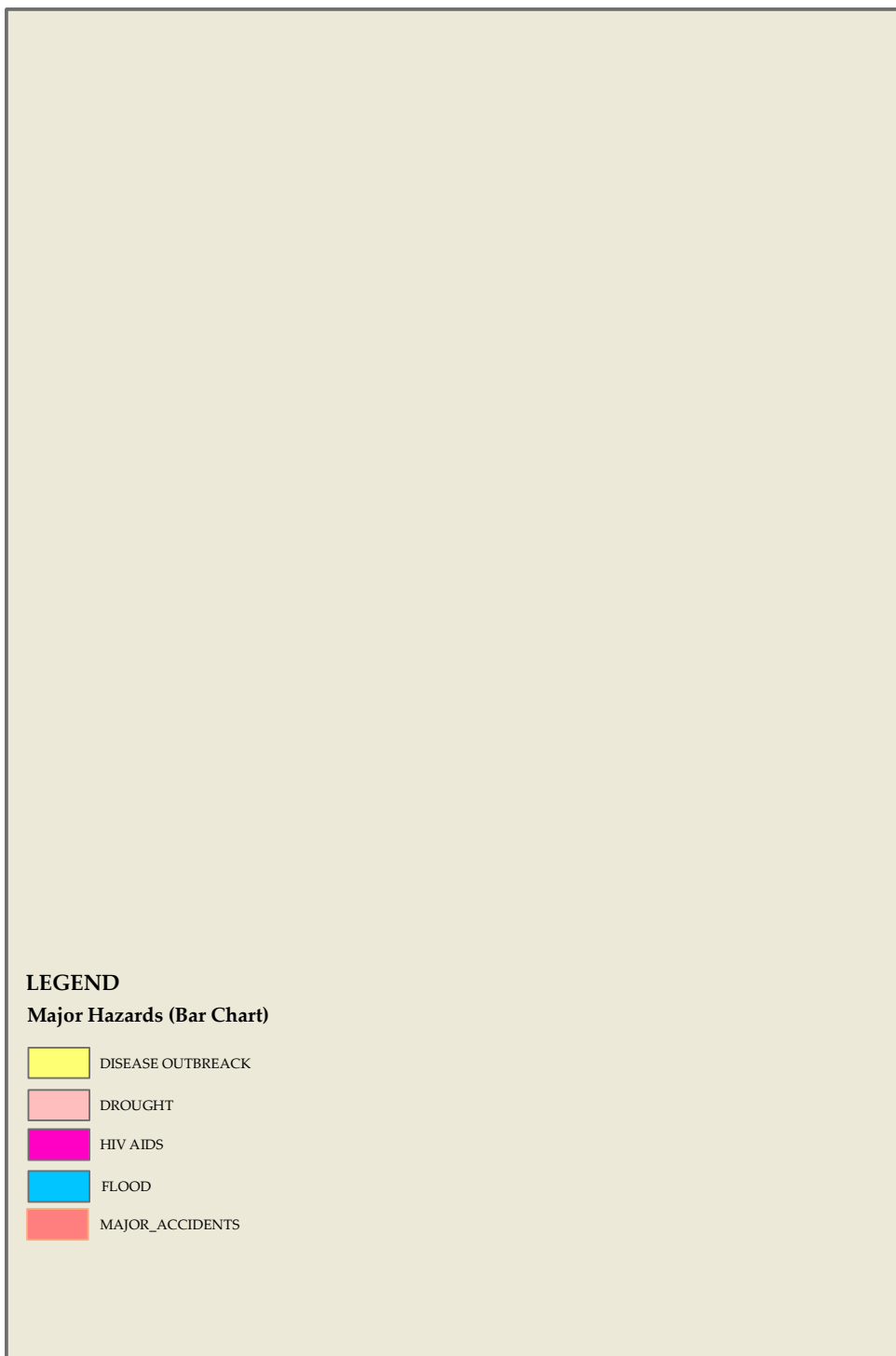


Figure 6: Hazard Occurrence based on five agro-ecological zones, Tanzania

Source: PMO, 2008. DRR capacity needs assessment report

CHAPTER TWO

2. GOALS AND OBJECTIVES

2.1. Goal

To reduce disaster impacts due to natural and man-made hazards (including climate change) for a safer, resilient and more sustainable Tanzanian Society through effective and efficient coordination mechanisms to prepare for, prevent, mitigate, respond and manage emergencies and disasters.

2.2. Objectives

It will be the primary responsibilities of government ministries, departments and agencies, Civil Society Organizations (CSOs), international agencies and any other organization involved in disaster management to cooperate in order to achieve the following common objectives:

- i. To ensure that disaster and emergency preparedness and response measures such as Emergency preparedness and response plans (EPRPs) and Standard Operating Procedures (SOPs) are in place and functioning efficiently and effectively at all levels;
- ii. To integrate Disaster Management activities, including Disaster Risk Reduction (DRR) into the development process at all levels;
- iii. To secure and coordinate efficient utilization of resources in disaster management;
 - i. Establish and maintain an effective institutional coordination mechanism for coordination, collaboration, cooperation and

participation in Disaster Management activities among key stakeholders;

- ii. To integrate research and innovation in Disaster Management activities

2.3. Guiding Principles

Effective and efficient disaster management requires adherence to the following key guiding principles. :

- (i) **Effective planning, coordination, collaboration, cooperation and communication:** Competent planning, co-ordination, collaboration and communication, at all levels, amongst stakeholders, are critical components of disaster management. Alternative and effective communication systems¹⁶, especially, where normal communication is likely to be or has been interrupted during disasters should be established in all government agencies and collaborating organizations.
- (ii) **Minimum standards in disaster response:** These guidelines, in line with the Sphere Standards, recognize that all those affected by disaster and emergency situations have the right to life and human dignity and therefore require assistance, and also the need to take all appropriate measures to alleviate human suffering arising from disaster impacts and emergency situation. Therefore, all stakeholders in disaster management

¹⁶ The Tanzania Emergency Disaster Communication Strategy is already in place.

shall adhere to internationally agreed set of minimum standards¹⁷ in order to improve the quality of humanitarian actions.

(iii) **Community Participation in Disaster prevention and Management:** Communities at local levels are the most affected by disasters and yet are the first responders through their traditional coping mechanisms. In view of this, strategies for disaster management based on community consultation, experience and participation should be established. Communities should be encouraged to establish mechanisms, building on their traditional coping strategies to enable them to share knowledge and technologies and to pool together local resources for disaster preparedness, mitigation, prevention, response and recovery. This will strengthen Decentralization of Disaster Management and enhance the Bottom Up Approach.

(iv) **Integrating Climate Change into Disaster Management:** More frequent disasters occurring in Tanzania such as floods and drought are related to extreme climate change events that are key causal factors that lead to disasters. Therefore, mainstreaming climate change/weather information (such as Early Warning) in disaster management is a vital component of these guidelines.

¹⁷ Examples of minimum standards widely in use include the Sphere Standards. *The Sphere project Humanitarian Charter and Minimum Standards in Humanitarian Response* is one of the most widely known and internationally recognized sets of common principles and universal minimum standards in humanitarian response. These principles ensure that the rights of people affected by disaster are respected, as well as quality and accountability during humanitarian response. <http://www.sphereproject.org/>.

- (v) **Multidisciplinary and multisectoral approach:** Disasters cut across disciplines and sectors; and, so, the government shall promote adoption of a multidisciplinary and multisectoral approach in disaster management. Such approaches include the National Platforms for DRR¹⁸ that serve as a “multi stakeholder platform” for DRR.
- (vi) **Regional and International cooperation:** Some hazards such as drought, epidemics, conflicts and proliferation of small arms are not confined within national borders. The Government will promote linkages with regional and international institutions, in order to facilitate collaboration, e.g., in Early Warning Systems; and in fostering joint initiatives for Disaster Risk reduction and response.
- (vii) **Capacity Building for Disaster Management:** In view of the dynamic nature of disasters, the government and other stakeholders will continue to strengthen capacities through provision of necessary equipments, training and skills development at all levels.

2.4. Purpose

- i. These guidelines aims to provide a framework through which government agencies, NGOs, international agencies and other

¹⁸ According to the United Nations International Strategy for Disaster Reduction (UNISDR), Multi Stakeholder Platforms refers to a “mechanism that serves as an advocate for DRR towards coordination, analysis and advice on areas of priority needing concerted action.” See Djalante, R., (2012). Adaptive Governance and Disaster Resilience: Multi Stakeholder Platforms in Disaster Risk Reduction. *Natural Hazards and Earth System Sciences*, 12 (9): 2923 – 2942.

relevant stakeholders will effectively and efficiently operate to prepare, prevent, mitigate, respond and manage emergencies and disasters within Tanzania.

- ii. These guidelines provide a framework through which more detailed sectoral operational plans will be prepared and implemented by various government agencies, NGOs, CSOs, international agencies and other stakeholders.
- iii. These guidelines supplement the National Disaster Management Policy, National Disaster Management Act, Tanzania Emergency Preparedness and Response Plan, and its associated Communication Strategy.

2.5. Code of Conduct

These guidelines adhere to a “code of conduct” to guide stakeholders’ behaviour throughout disaster management cycle to ensure high operational standards of effectiveness and efficiency in line with other international standards¹⁹. The following code of conduct will apply for all stakeholders:

- i. **Disaster response interventions based on facts and verifiable information:** Data from the early warning systems and the continuous monitoring of disaster occurrence and trends will be the basis of disaster response.
- ii. **The humanitarian imperative comes first:** the right to receive relief assistance during disasters is a fundamental humanitarian principle

¹⁹ Following the Disaster Management Policy (Draft, 2012), that calls for institutionalization of a code of conduct to ensure effective aid distribution among others. C.f. The Red Cross Code of Conduct in disaster and emergency situations.

which should be enjoyed by all citizens of Tanzania regardless of race, colour, gender or ethnicity. The need for an unimpeded access to affected populations is of fundamental importance in exercising responsibility.

- iii. **Aid is given regardless of ethnicity, political or religious affiliation or geographical considerations:** at all times, stakeholders will seek to base the provision of disaster assistance on a thorough assessment of the needs of the affected populations or their available local capacities to meet those needs alone, and not otherwise
- iv. **Respect culture and customs:** Stakeholders shall endeavour to respect the culture and customs as well as structures of the communities and households affected by the disaster.
- v. **Disaster assistance must strive to reduce future vulnerabilities to disaster as well as meeting basic need:** all disaster assistance will affect the prospects for long term development, either in positive or negative fashion. Recognising this, all stakeholders will strive to implement disaster assistance programmes which actively reduce the beneficiaries' vulnerability to future disasters and help create sustainable lifestyles.
- vi. **Stakeholders will reinforce the capacity of local communities to manage the full Disaster Cycle:** even in disaster situations, communities still possess capacities as well as vulnerabilities. Where possible, stakeholders will strengthen these capacities by employing

local staff and procuring local resources. All activities in Disaster Management should reinforce rather than undermine existing capacities.

- vii. **Involvement of beneficiaries in Disaster Management Programmes:** The Government and stakeholders will fully involve communities in the design, management, implementation, monitoring and evaluation of Disaster programmes.
- viii. **Recognising the dignity of disaster victims:** In information, communication and publicity activities, stakeholders will recognise disaster victims as dignified human beings, not hopeless objects.
- ix. **Transparency, credibility and accountability:** At all times, stakeholders will be transparent, credible and accountable to both those they seek to assist and those from whom they accept resources.

2.6. Scope of the guidelines

The Guidelines apply to all stakeholders that have a responsibility or mandate to manage disasters. The guidelines cover the broad subjects of mitigation, preparedness, response and recovery. As such they cover a broad range of activities in disaster response including, but not limited to:

- i. Provision of information and warning;
- ii. Evacuation of persons from a disaster site;
- iii. Provision and management of shelter to the displaced;
- iv. Provision of basic utensils and management of energy needs of the displaced;

- v. Search and Rescue of persons from a disaster site;
- vi. Medical services including first-aid;
- vii. Fire fighting;
- viii. Detection and marking of danger areas;
- ix. Decontamination of hazardous areas and similar protective measures;
- x. Provision of emergency accommodation and supplies;
- xi. Emergency assistance in the restoration and maintenance of order in distressed areas;
- xii. Emergency repair of indispensable public utilities;
- xiii. Emergency disposal of the dead;
- xiv. Assistance in the preservation of objects essential for survival;
- xv. Establishment of evacuation centres;
- xvi. Emergency food provision;
- xvii. Tracing and family links.

2.7. Key Assumptions

The following assumptions are made in these guidelines:

- (i) Tanzania disaster profile will remain as outlined (In chapter 1:3). However, these guidelines recognize that other hazards may develop in the future especially those related to climate change.
- (ii) Government ministries, departments and organizations will be aware of these guidelines as well as their assigned responsibilities to execute the plan as the need arise.

- (iii) The government, through responsible ministries, departments and agencies, will share and disseminate these guidelines at all levels.
- (iv) Resources and assistance will be available when needed. The guidelines recognize the limited capacity of the Tanzania government to prepare and respond effectively to disasters and emergency situations. Effective collaboration between the government, NGOs, local and international agencies, volunteer organizations and the private sector will be important in securing necessary resources and assistance.
- (v) These guidelines will be reviewed and updated in recognition of changes on organizational capacity, changes in law, government agencies or emergency of new disaster situations.

CHAPTER THREE

3. LEGAL AND INSTITUTIONAL FRAMEWORK FOR DISASTER MANAGEMENT

This section of the guidelines outlines the institutional and legal frameworks from which they derive their existence. It further describes the structures, responsibilities and functions of various key players in disaster management.

3.1. International Legal instruments

The government of Tanzania shall strive to adhere to ratified international treaties and conventions which are relevant for disaster management. These include the Geneva Conventions, the United Nations Universal Declaration on Human Rights, the African Charter on Human and People's Rights and its Optional Protocol on the Rights of Women in Africa, the African Charter on the Rights and Welfare of the Child, the United Nations Framework Convention for Climate Change and the Kyoto Protocol, and the UN Convention for Combating Desertification and the Basel Convention on control of trans-boundary hazardous wastes and their disposal.

3.2. National Legal Instruments

There are a variety of laws that empower different agencies of government to take discrete action on disasters.

These include:

1. Inland water transport (Amendment) Act 1965
2. Road traffic Act, of 1973, revised 2002

3. Roads Act, 2007
4. Civil aviation Act, of 2003
5. The Surface and Marine Transport Act, 2001
6. Aerodromes (licensing and control) Act of 1974
7. Aerodrome licensing regulations, 2007
8. The Tanzania Airport Authority Act 1999
9. Tanzania Ports Authority Act, 2004
10. Tanzania Railways Act, 2002
11. Tanzania Communications Act, 1993
12. Tanzania Communications Regulatory Authority Act, 2003
13. Territorial Sea and Exclusive Economic Zone Act, of 1989
14. Allocation of Business to Departments and Assignments of Responsibilities to Minister's Government Notice Number 720 of 1995
15. Public Health Act, 2009
16. The HIV and AIDS (Prevention and Control) Act, 2008
17. Mining Act, 1998
18. Food, Drugs and Cosmetics Act, 2003
19. Wildlife conservation Act, 2009
20. The National Parks Act, 1959
21. Fire and Rescue Force Act, 2007
22. Fisheries Act, 2003
23. Forest Act, 2003
24. Environmental Management Act, 2004
25. Water Supply and Sanitation Act, 2009

26. Water Resources Management Act 2009
27. The Atomic Energy Act, 2003
28. Atomic Energy (Protection from Ionizing Radiation) Regulations, 2004
29. Energy and Water Utilities Regulatory Authority Act, 2001
30. The Engineers Registration Act, 1997
31. Animal Disease Act, 2003
32. Food Security Act 1991
33. Plant Protection Act, 1997
34. Pesticide Control Regulations, 1984
35. Veterinary Act, 2003
36. Employment and Labour Relations Act, 2004
37. Worker's Compensation Act, 2008
38. The Occupational Health and Safety Act, 2003
39. The Land (Amendment) Act, 2004
40. Village Land Act, 2009
41. Town Planning Act, 2007
42. Land use planning Act, 2007
43. The Local Government Laws (Miscellaneous Amendments) Act, 2006
44. Marine Parks and Reserves Act, 1997
45. Electronics and Postal Communications Act, 2010
46. Tanzania Meteorological Executive Agency Act, 1997
47. Prevention of Terrorism Act, 2002
48. Penal Code-Criminal procedural Act 1985

49. Arms and Ammunition act, 1991

50. Law of the child act, 2009.

3.3. Institutional Framework

Disaster management requires an integrated multi-sectoral approach, which provides for a comprehensive and active participation and interaction of all key players. As a result, structures need to be established at each administrative level and across sectors. Emphasis is on using existing institutions and organizations, and all existing skills and expertise wherever possible. The focus is on coordination and facilitation, bringing together the required elements and creating an appropriate operational environment. Central to the effectiveness of this is the importance of the sectors, regions and districts. They have a pivotal role in providing a link between the national level competence and the local level needs. It is at these levels that the main emphasis for operational guidelines should be. These guidelines therefore:

- i. Recognise the commitment of stakeholders and the need for collaboration across all levels of government, community, the private sector, government agencies, private and volunteer organisations, and local communities in all aspects of disaster management; and
- ii. Acknowledge the relationship between Tanzania and other regional bodies and countries in major disaster events;
- iii. Emphasise building and maintaining sincere relationships, trust, teamwork, consultative decision-making and shared responsibilities among stakeholders.

In order to achieve effective coordination, structures must be in place across all sectors and levels. It is emphasized that existing structures, institutions and personnel be used wherever possible.

3.3.1. Disaster Management Agency

The Disaster Management Agency (DMA) is, in accordance with the Disaster Management Act²⁰, the “national focal point for disaster prevention, mitigation, preparedness, response and recovery for all types of disasters”. The DMA is charged with several responsibilities to ensure effective coordination of disaster management activities in the country. The functions²¹ of the DMA are set out as follows:

In non-emergencies

- i. Prepare national emergency and disaster plans and other similar plans at other administrative levels;
- ii. Monitor, evaluate and update national disaster plans and procedures;
- iii. Collect, analyse and disseminate information relating to disaster prevention, preparedness, mitigation, response and recovery;
- iv. Conduct mapping of hazards, vulnerability analysis and risk assessment in the country;
- v. Arrange for and carry out the dissemination, of information concerning disaster prevention, preparedness, mitigation, response and recovery;

²⁰ Currently a Draft Disaster Management Act(2011)

²¹ Section 21(2) of the draft Disaster Management Act

- vi. assist local government authorities in establishing civil protection systems;
- vii. Ensure the establishment of regional, district, ward and village disaster management committees;
- viii. Mobilize financial and material resources for the purpose of disaster management;
- ix. Perform any other functions which are incidental to the above functions;

During Emergencies

During Emergencies, the DMA shall perform the following functions, according to the Disaster Management Act Section 31(2) the Disaster Management Policy²² and the Tanzania Emergency Preparedness and Response Plan (TERPP) and the Tanzania Disaster Communication Strategy (TDCS). These functions are paraphrased for the purpose of these guidelines as follows:

- i. Upon the government's declaration of a disaster situation, facilitate the implementation of the TEPRP to meet the emergency requirements until the crisis ends;
- ii. To coordinate the supply and distribution of relief food assistance through the relevant technical sub-committee;
- iii. To coordinate and collaborate with relevant government and non governmental agencies the evacuation of people, in their own interest or that of the public;

²² The Disaster Management Policy (Draft) tasks the DMA with the overall coordination of disaster plans, operations and plans in the country.

- iv. In collaboration with relevant authorities, maintain the means of transportation by land, air or water and the control of transport of persons and their property ;
- v. To facilitate the temporary acquisition or control of any property, undertaking or land;
- vi. To facilitate search and rescue operations including entering of any premises.
- vii. To ensure operability, interoperability and continuity of communications to allow emergency responders to communicate as needed, on demand, and as authorized at all levels of government.

3.3.2. Technical Committees

The Director for DMA may form a Technical Committee (TC)²³ that will provide technical expertise in specific matters related to disaster management according to pre determined procedures.

The composition of the TC shall be flexible to reflect different experiences, knowledge and skills in dealing with different disaster situations. The membership shall comprise, but not limited to:

- a) Members from specific government ministries, departments and agencies,
- b) UN and other international agencies
- c) Non-governmental organizations,
- d) The Private Sector

²³ Provided for in the draft Disaster Management Act (Section 26) and the Disaster Management Policy

e) Community Based Organizations

In addition to giving technical advice in relation to the implementation of particular elements of the programme, they may be called upon to execute certain duties as may be delegated by the DMA. Also, they will assist in the development of disaster management plans, provide inputs in training, awareness raising, and assist in the review of programmes.

The functions of the technical committees will be to -

- a) Keep under review sectoral early warning reports;
- b) Propose for the DMA approval and, when approved, monitor the implementation of sectoral prevention, mitigation, preparedness, response and recovery measures;
- c) Recommend sectoral budgetary, information and training requirements to the DMA
- d) Give regular technical advice and sectoral progress reports to the DMA, during a disaster including the emergency and recovery phase.

3.3.3. Linkages with Sectoral Ministries

While the DMA will be charged with monitoring, planning and coordination of disaster management, implementation will be the responsibility of the

relevant sectoral ministries. Thus, the development of strong links between these Ministries and the DMA is critical in order to achieve effective coordination.

Focal point officers will be nominated in sectoral ministries. The officers will be responsible for disaster management activities. The key ministries will participate in the National Disaster Management Committee (NADMAC)²⁴ and in the National Disaster management Forum²⁵ in the fulfilment of the multi-sectoral and participatory approach to disaster management. The NADMAC will be responsible to generally oversee and coordinate the activities of the DMA for effective mitigation, preparedness, response and recovery in disaster management.

3.3.4. Linkage with Regional and District Disaster Management Committees

The development of strong links between communities and DMA is crucial for effective implementation of these guidelines. In this context, the DMA's functional linkages with the regions and districts will be established through the creation of Regional Disaster Management Authorities (REDMAC), District Disaster Management Committees (DIDMAC) and Ward and Village/street (“mtaa”) Disaster Management Committees (WADMIC, VIDMAC) as provided for in the National Disaster Management Act and Policy. The main links between the DMA and the regions and districts will

²⁴ To be established. The current draft Disaster Management Policy provides for the establishment of a National Disaster Management Committee. However, the draft Disaster Management Act provides for the establishment of National Disaster Management Council and the Regional, district and ward or village level disaster management committees.

²⁵ To be established

be through assistance with policy and legislative issues. DMA's assistance to the regions and districts in disaster management planning and capacity building will be primarily through the respective Disaster Management committees at the regional, district, ward and village levels.

The REDMAC and DIDMAC will assume the following responsibilities at the regional and district levels respectively:²⁶

- a) to facilitate the implementation of disaster management programmes prepared by the DMA to ensure the highest level of preparedness at the regional and district levels;
- b) to ensure that disaster management, including DRR concerns are integrated in the regional and district level development planning;
- c) in the event of a disaster, to mobilise resources for disaster response and respond to disasters occurring in their respective jurisdiction according to prepared plans and procedures;
- d) to assume initial role in the event of a disaster and coordinate all the agencies and individuals in accordance with the plans that have been prepared, understood and rehearsed;
- e) to continuously monitor in collaboration with DMA the disaster threats and the conditions of the vulnerable population within the region;
- f) to conduct studies in collaboration with DMA on the conditions of the vulnerable population and prepare recommendations on reducing their vulnerability;

²⁶ Adopted from the Draft Disaster Management Act, Modified

- g) to prepare plans for the prevention and mitigation of any disaster in the region, which includes training and simulation exercises;
- h) to collect, analyse and disseminate disaster management information, including early warning information;
- i) to ensure that local people, NGOs, the Private sector, Community Based Organisations (CBOs), Faith-Based Organisation (FBOs), UN and other international organizations fully participate in disaster management planning, decision making and implementation of disaster management activities;
- j) to coordinate district plans on the prevention of disasters and their mitigation submitted by the District Committee;
- k) to oversee the preparation of regional and district level plans and procedures

3.3.5. Linkages with Regional and International Policies, Strategies and Plans

3.3.5.1. The Hyogo Framework for Action 2005-2015

The Hyogo Framework for Action, 2005-2015 (HFA) in which Tanzania is a signatory, is the key instrument for implementing Disaster Risk Reduction (DRR), and has been adopted by 168 Member States of the United Nations. Its overarching goal is to build resilience of nations and communities to disasters, by achieving substantive reduction of disaster losses by 2015 – in lives, and in the social, economic, and environmental assets of communities and countries. *Priority 5 of the HFA calls for strengthening of disaster*

preparedness for effective response at all levels. These guidelines have been prepared to address this priority of the HFA.

3.3.5.2. The Africa Regional Strategy for Disaster Risk Reduction

The Africa Regional Strategy for Disaster Risk Reduction (2004) addresses the need for a strategic approach to improving and enhancing the effectiveness and efficiency of disaster risk management in Africa by emphasizing disaster risk reduction within the New Partnership for Africa's Development (NEPAD) framework. The NEPAD's objective is to eradicate poverty and promote sustainable development. The Strategy covers both natural and man-made hazards and provides a framework through which Regional Economic Communities (REC) can develop and implement their disaster risk reduction strategies. The main objective of the Strategy is to contribute to the attainment of sustainable development and poverty eradication by integrating disaster risk reduction into development activities, as envisioned in these guidelines.

3.3.5.3. SADC Disaster Risk Strategic Plan (2006-2010)

The Southern African Development Community (SADC) Disaster Risk Strategic Plan (2006-2010) aims to facilitate disaster risk and vulnerability reduction to the impact of disasters by providing a regional framework for coordinating disaster risk reduction related activities within the SADC Member States. The strategy maximises linkages in DRR through capacity building creation and strengthening at regional, national and community

levels. Through its goals, objectives and various responsibilities assigned to various agencies, these guidelines align to the SADC Strategic plan.

3.3.5.4. The East African Community Disaster Risk Reduction and Management (EAC-DRRM)

The EAC Disaster Risk Reduction and Management (DRRM) Strategy recognizes and focuses on current paradigm shift in disaster management. The emphasis in this new paradigm placed on the need to move from reactive (response actions) disaster risk management, based on emergency and crisis management to a proactive (prevention actions) based on the analysis of vulnerability, risk evaluations, and situational assessments with a view to mitigate disasters impacts before they occur. This paradigm shift calls for effective application of early warning systems, effective communication and knowledge sharing in order to increase the resilience of the communities. The EAC-DRRM therefore requires DRR activities to be part of development planning, programs and projects as a means to foster sustainable development in the partner states and in the region as a whole. These guidelines share the same objective to integrate disaster management activities into development planning.

3.3.6. The Role of UN agencies, International NGOs, CSOs, Private Sectors, FBOs and Volunteers

Non-State Actors-comprising the UN agencies, international NGOS, CSOs, The Private Sector, volunteers Faith Based Organisations (FBOs) and international humanitarian organisations such as the Red Cross Society are important actors in Disaster Management. Given their specialised skills,

knowledge, experience, commitment and reliability and availability of resources, these organisations have great potentials to provide skilled services and resources in the whole disaster management cycle.

For example, the UN agencies, are important non-state actors specializing in provision of technical and financial assistance to both government and non-governmental agencies working in disaster management. The Private sector, on the other hand, has a large untapped potential to help provide skilled services in form of technical manpower or in-kind donations of goods or services for preparedness & emergency response phase of disaster management.

International humanitarian organizations such as the International Federation of the Red Cross and Red Crescent Society (IFRC) are specialized in providing humanitarian assistance in disasters and health emergency before, during and after their onset. The Tanzania Red Cross Society (TRCS), established by the act of parliament no 71 of 1962 fulfil these roles at the country level.

The Role played by FBOs and CSOs compliment government initiatives in disaster management, and plays a key role in addressing poverty alleviation and promoting sustainable development. FBOs and CSOs are often one of the responders in disaster situations, and their broad support and membership from a wide section of the communities contribute to their successful operations.

The government can therefore tap the potential of NSAs through established set of Standard Operating Procedures in order to minimise damage and protect life and property in disaster and emergency situations.

In collaboration with the DMA and other relevant stakeholders, all NSAs will be responsible to:

- (i) Facilitate the implementation of disaster management policies by the public, particularly the local communities,
- (ii) Facilitate public awareness creation and capacity building in disaster mitigation, preparedness, response and recovery at all levels,
- (iii) Facilitate preparedness drills and simulation exercises in preparation for potential disasters,
- (iv) Participate in disaster and emergency response operations in line with established SOPs, including, but not limited to search and rescue, evacuation, emergency shelter provision, provision of security services, handling of mass casualty and rehabilitation,
- (v) Assist in provision of material, human and financial resources for disaster risk reduction initiatives and response operations,
- (vi) Facilitate access to accurate information and basic communication.

CHAPTER FOUR

4. SPECIFIC GUIDELINES FOR CROSSCUTTING ISSUES

Disaster management in Tanzania acknowledges that the magnitude and scale of disaster impacts differ among sectors, various groups of people and location. For example, while an earthquake of high magnitude would have almost a complete damage to infrastructure, resulting to mass casualties and deaths; drought, on the other hand, would have varying impacts even in households located in the same village and individuals within a household. Women, children, the elderly, physically challenged and the sick persons are considered more vulnerable to disaster impacts. On the other hand, climate change and its resulting vulnerability pose a new challenge to the society's coping capacity to disaster impacts.

Against this background, these guidelines provide a framework through which cross cutting issues would be integrated in disaster management activities. This section provides specific guidelines for cross cutting issues namely:

- a) Climate change
- b) Gender and vulnerable groups
- c) Psychosocial issues
- d) Environment
- e) Food Security and Nutrition
- f) Water Supply and Sanitation
- g) Human Rights
- h) Health

i) Education

j) Information and Communication Technology (ICT)

4.1. Climate change

The impacts of climate change in Tanzania are increasingly more evident leading to disaster vulnerability. They exacerbate the onset, impacts and magnitude of climate-related hazards like floods, drought, epidemics, ice melting, sea level rise and pest infestations-hazards that have become a common phenomenon in the World.

According to the National Adaptation Plan of Action (NAPA), recent rainfall pattern for the country has become much unpredictable with some areas/zones receiving extremely minimum and maximum rainfall per year (deviating from the mean annual values of 500mm to 2,500mm). Similarly, the mean temperatures will increase throughout the country particularly during the cool months by 3.5⁰C while annual temperatures will increase between 2.1⁰C in the North Eastern parts to 4⁰C in the Central and Western parts of the country²⁷. Overall, the country is predicted to warm by 2-4⁰C by 2100.²⁸

The impacts of climate change and related extreme events have devastation consequence to people and various production sectors. For example, climate change impacts on agriculture upon which 80% of the population depend, often lead to a situation of food insecurity affecting most the poor and

²⁷ NAPA, (2006). See also the National Climate Change Strategy 2012 (Draft).

²⁸ Paavola, J. (2003). Livelihoods, Vulnerability and Adaptation to Climate Change in the Morogoro Region, Tanzania. CSERGE Working Paper EDM 04-12. University of East Anglia, UK.

marginalized peoples, including women and children, with its ultimate repercussion on the nation's economic growth. It is estimated that with an increase in temperature and reduced rainfall as well as change in rainfall patterns (as outlined above), the average yield of maize will decrease by 33% countrywide. Furthermore, yield of the same crop will decrease by up to 84% in the central regions, 22% in North-eastern highlands, 17% in the Lake Victoria region, and 10 – 15% in the Southern highland²⁹.

In view of the above, it is imperative to adopt appropriate interventions and right measures in order to adapt effectively to the challenges posed by climate related disasters. The guidelines recognise the following considerations in addressing climate related disaster impacts:

- i. The need to adapt to present climate variability as a first step towards addressing future climate change;
- ii. The need for a DRR approach in addressing climate change impacts
- iii. The need for a multi-sectoral approach to managing climate change implications for disaster management;
- iv. The need for community based disaster management approach in order to benefit from first-hand experiences from the communities in addressing climate related disaster impacts.

These following interventions and measures will be adopted in line with national, Regional and International strategies; policies and plans³⁰ by the

²⁹ Ibid.

³⁰ The Tanzania National Adaptation and Plan of Action, 2006; the National Disaster Management Policy, SADC Disaster Risk Reduction Strategic Plan (2006-2010), the East African Community Disaster Risk Reduction and Management Strategy (2012-2016), the Hyogo Framework of Action (HFA) 2005-2015.

DMA to address the challenges of climate change and ensure its integration in disaster management activities in the country:

- i. Strengthen institutional and technical capacity for climate change adaptation and disaster risk management across all sectors
- ii. In collaboration with relevant agencies (VPO (DOE, NEMC) MAFC, TMA) assess and monitoring climate risks (current and future) and vulnerabilities and enhance early warning systems
- iii. Improve knowledge management, awareness raising and education on climate change impacts, adaptation and disaster risk management
- iv. Reduce climate related risks and the underlying vulnerabilities by implementing technical options in vulnerable sectors such as agriculture and livestock
- v. Strengthen capacities and procedures for effective disaster preparedness, response and rehabilitation at all levels and integration of climate change adaptation initiatives.

4.2. Gender and Vulnerable Groups

It is now widely acknowledged that disasters do not affect men and women equally and there is a need to focus on vulnerable groups³¹. Available data on Risk and Vulnerability Assessments and poverty trends in Tanzania indicate that women, children, physically challenged and the elderly are most vulnerable to the impacts of disaster³². When disasters strike, it is the

³¹ Asia Pacific forum on Women, Law and Development (2006). Guidelines for Gender Sensitive Disaster Management; The Republic of Uganda, 2010. See also the National Policy for Disaster Preparedness and Management; Inter-Agency Standing Committee (2006). Guidelines for Gender-based Violence Interventions in Humanitarian Settings;

³² See for example; PMO, 2003. National Vulnerability Assessment Report and PMO, 2012. Risk, Vulnerability and Capacities for Chamwino, Mpwapwa and Kondoa Districts.

most vulnerable groups such as women, children, marginalized groups, physically challenged and the sick who bear the brunt of the tragedy. It is therefore necessary to analyze and understand the relevance and implications of gender roles in disaster management in order to:

- i. Save lives by better targeting of beneficiaries;
- ii. Ensure the effective and efficient distribution and use of resources in the planning and implementation of all phases of disaster management;
- iii. Empower women and men to assess risks and undertake actions;
- iv. Enable participation of both men and women in disaster risk management activities, including projects and programmes.

The DMA will have the main responsibility to integrate gender issues in Disaster Management at the national, regional, district and village levels. The following categories, drawn upon the disaster management cycle, will guide the analysis of gender to ensure gender equity and equality in disaster management:

A. Disaster Risk Reduction/Mitigation

- i. Ensure that women and vulnerable groups priorities are considered in the planning and implementation of DRR activities and programmes, e.g. budgetary allocation, participation and capacity development;
- ii. Ensure that both men and women are involved equally in enhancing early warning and monitoring risk, e.g. in assessment of risk, vulnerabilities and capacities, ensure

- women's participation in early warning systems, and equal access to early warning information;
- iii. Ensure that capacity building programmes promote a culture of safety among men and women;
 - iv. Reduce underlying risk factors, by ensuring that critical safety facilities and infrastructure (e.g. evacuation centres and emergency shelters, water, sanitation, and health systems) are accessible by both men and women;
 - v. Strengthen effective preparedness and response by ensuring that disaster preparedness and response plans take into account differentiated capacities and vulnerabilities among men and women,
 - vi. Promote the importance of women as important key change agents and prioritize actions that reduce risks and vulnerabilities for women in preparedness and response plans.

B. Emergency Response

- i. Mobilise and encourage maximum inputs from women's organizations and their members in emergency operations
- ii. Ensure evacuation arrangements have been made to cater for the special needs of children, women, the elderly, physically challenged and the sick,
- iii. Ensure that evacuation routes are cleared and easily accessible to vulnerable groups;

- iv. Identify security risks and threats facing vulnerable groups and device appropriate policies to prevent and respond to violence, abuse and exploitation against women and children;
- v. ensure that women and vulnerable groups are trained in various communications systems to facilitate quick dissemination of information in disaster situations;

C. Post Disaster/Relief

In the immediate post disaster scenario, emergency relief should be sensitive to the needs and priorities of various groups of men, women and children. Awareness of the capacities of men and women in this period are important, as well as their coping strategies. The following responsibilities should be undertaken to address women and other vulnerable groups concerns in post disaster situations:

- i. Ensure the basic needs of both women and men and other vulnerable groups are met through collaboration, involvement and coordination with emergency management workers;
- ii. Involve women in collection and using information for immediate damage/needs assessment;
- iii. Collect and disaggregate data according to sex, age and socio economic status;
- iv. Identify the needs for both men and women that would enable them to return to their livelihoods or find other alternatives;
- v. Ensure equal accessibility and distribution of water and food to vulnerable groups

- vi. Address feminine hygienic needs as necessary, including their privacy and dignity.
- vii. Ensure that health services accessible to all men, women, children, youth, and the physically challenged.
- viii. Devise measures are in place to ensure that children resume studies as quickly as possible to promote a quicker return to routine and normalcy.
- ix. Ensure that shelters for vulnerable groups such as unaccompanied children or female-headed households are given special consideration such as location and proximity to facilities and distribution points.

4.3. Psycho-Social Issues

Usually, in disaster situations, psychological effects are common among all people in the affected communities. Strategies must be in place to address the Psychological and Social needs of different groups of people. The following responsibilities should be undertaken at all levels to:

- i. Ensure the availability of psychosocial support initiatives, such as child and women friendly spaces, support groups and other coping strategies for dealing with grief, changed life circumstances, violence, parenting skills and understanding and helping children deal with loss and trauma;
- ii. Identify specific risks for violence in the context of the affected communities;
- iii. Ensure that psychosocial services also address men and provide them with acceptable outlets for increased frustration and

tension, changes in gender roles, and perceptions of masculinity in the aftermath of a disaster.

4.4. The Environment

The Environmental Management Act No. 20 of 2004 (EMA, 2004), enacted following the National Environmental Policy (1997), provides for a legal and institutional framework for sustainable management of the environment, prevention and control pollution, waste management, environmental quality standards, public participation, environmental compliance and enforcement. The Act gives the National Environmental Management Council (NEMC) mandates to undertake enforcement, compliance, review and monitoring of environmental impact assessment, research, facilitate public participation in environmental decision-making, raise environmental awareness and collect and disseminate environmental information. On the other hand, the Division of Environment (DOE) in the Vice President's Office (VPO) has the responsibility to formulate environmental policies, laws, strategies and guidelines on environmental issues among others.

In order to harmonise and integrate disaster management activities with Environmental Management in the country, the DMA, in close collaboration with NEMC and DOE/VPO will undertake the following responsibilities:

- i. Integrate Disaster management activities, including DRR, in National Adaptation Plan of Action for climate change,
- ii. Ensure that DRR activities are integrated into new Environmental and Social and Impact Assessment (ESIA) for new development projects;

- iii. Encourage the integration of disaster management activities including DRR into project monitoring and audit,
- iv. Align Disaster Management Activities with the National Climate Change Strategy;³³
- v. Ensure that risk and vulnerability assessments conducted in the country clearly indicate where and to what extent a particular hazard is likely to pose threat to ecosystems.

4.5. Food Security and Nutrition

Disasters and food insecurity are directly interconnected. They are a leading cause of hunger and affect all dimensions of food security, including economic and physical access to food, the availability and stability of supplies, and nutrition. Floods, cyclones, strong winds, heavy rains and hazards destroy agricultural, livestock and fishing infrastructure, assets, inputs and production capacity. They interrupt communities' normal livelihood activities and reduce food supply and income. On the other hand, drought, pests infestations have a direct economic impact by reducing or eliminating farm production, by adversely affecting prices and trade, and by decreasing farm income. Economic crises such as soaring food prices reduce real income, force the poor to sell their assets, decrease food consumption and reduce their dietary diversity. Therefore, disasters create poverty traps that increase the prevalence of food insecurity and malnutrition³⁴.

³³ The National Climate Change Strategy is currently under preparation.

³⁴ FAO, (2011). Resilient Livelihoods – Disaster Risk Reduction for Food and Nutrition Security Framework Programme; WFP, (2011). WFP policy on Disaster Risk reduction and management: Building Food Security and Resilience. Informal Consultation Paper, Rome.

When disasters strike, their associated losses are accentuated in poor households and communities and result in long-term consequences for food security, health, nutrition, education and other critical sectors. Without serious efforts to address them, the risks of disasters will become an increasingly serious obstacle to achievement of the Millennium Development Goals (MDGs).³⁵

Given the inter-linkages between food security and nutrition with disaster management, it will be the responsibility of the government to ensure food availability and appropriate nutrition to the affected population. The DMA in collaboration with MAFC will work together to ensure that;

A. In Preparedness

- i. a **specified amount** of food grains is procured every year from within the country and properly stored in the National Strategic Grain reserves in according to SOPs³⁶;
- ii. a **security stock** of food grains is maintained at a specified level to cater for disaster risks;
- iii. **food security situation** in the country is periodically monitored through Rapid Vulnerability Assessments (RVAs) and other methods as appropriate;
- iv. **the price** of food grains is stabilised to ensure regular food supply;

B. In response:

35 United Nations, 2011. 2011 Global Assessment Report on Disaster Risk Reduction. New York.

36 This will reduce the risk of food crisis during disasters. Moreover, food storage would help to keep food supplies stable and act as a safety net for the poor communities

Food provision

- i. Food is distributed to everyone who lost food security as a result of a disaster: to those who lost livelihoods and jobs as a result of a disaster, not only those who lost family members;
- ii. Food distribution mechanisms should respect dignity of disaster affected people without making them fight for food or feeling like beggars;
- iii. Whenever possible, women should be receivers of food to ensure that food is not sold by men to collect money for alcohol.
- iv. Pregnant and breastfeeding women, widows, elderly, orphaned children and disabled should be provided food aid until their food security has been ensured.
- v. Distributed food must be of appropriate quality and fit for human consumption.
- vi. Nutritional needs are met to ensure access to a variety of food,
- vii. Basic food aid include milk and sugar and be provided regularly until families are able to restore food security

Nutritional needs

- i. In order to ensure effective, timely and efficient response, and avoiding duplication of information, all stakeholders responding to nutrition emergencies shall adhere to the guidelines established under the Emergency Preparedness and response Plan for Nutrition under the Ministry responsible for Health and Social Welfare.

- ii. To adhere to the International Code of Marketing and Breast-milk substitutes
- iii. In adhering to standards of SPHERE standards of 2011

4.6. Water Supply and Sanitation

As shown in other sections of these guidelines, disasters seriously disrupt the lives of individuals, and the functioning of entire communities or even whole societies. Resulting widespread human, material, economic, and environmental losses stress existing infrastructure and leave individuals in states of shock and despair. Rebuilding damaged infrastructures, such as sewage systems and water supply, not only help to restore a sense of normalcy, but also arrest the spread of disease.

The first goal of emergency response is to prevent outbreaks of waterborne diseases, caused by malfunctioning water supply, polluted water resources, and lack of sanitation facilities. Top priorities for immediate response are provision of sufficient quantities of safe water, arrangement of basic sanitation, and promotion of good hygiene behaviour.

The following guidelines should be followed by government agencies, NGO, the Private sector and all other stakeholders involved in disaster response to ensure safe supply of water and good hygiene behaviour in disasters or emergency situations:

A. Planning considerations

The following planning issues should be considered:

- i. Assess the **demand for water**, i.e. how much water is needed for persons, health centres, livestock, food and toilets depending on local conditions;
- ii. Determine the **location** and security of the water sources-in this case, water sources could be existing ones, local sources or distant sources;³⁷
- iii. Determine the **level of treatment** required for use/consumption
- iv. Determine how water should be **distributed**-water tankers may be used at the beginning and a piped network later on.
- v. **Water collection points** should be accessible to all groups of people especially women, children and the physically challenged.
- vi. **Water collection and storage vessels** that are easy to use and clean as contamination of water usually occurs after it has been collected from the supply.

B. Other considerations

In addition to the above, the following general guidelines should be observed:

³⁷ Existing water sources imply those that can possibly be revived in the disaster area. Local sources of water include those existing in an area where the existing supplies are inaccessible. They include wells, ponds, springs, streams, or rainwater. Distant sources refer to the availability of water from distant communities that might not have been affected by the disaster

- i. Ensure that men and women are involved in hygiene promotion activities;
- ii. Properly address feminine hygienic needs;
- iii. Ensure separate and secure latrines and bathing spaces for women and girls in order to avoid harassment and sexual threats;

4.7. Human Rights

In disaster and emergency situations, the protection of human rights is often overlooked-and more attention is devoted to the provision of humanitarian assistance. However, when disasters strike, the affected populations often face a multitude of human rights challenges. This include unequal access to humanitarian assistance, discrimination in aid provision, enforced relocation, sexual and gender-based violence, loss of documentation, recruitment of children into fighting forces, unsafe or involuntary return or resettlement, and issues of property restoration and access to land are just some of the that are often encountered by those affected by the consequences of disasters. Ensuring that their rights are protected will ensure that their dignity is safeguarded against discrimination and abuse. These guidelines therefore aim at ensuring that human rights principles and protection standards, including the fundamental principles of non-discrimination and accountability, are integrated in disaster management activities.

A: Basic Principles

These specific guidelines on Human Rights in disaster and emergency situations are formulated under the guiding principle that:

- i. Those affected by disasters or an emergency situation are Tanzanian residents and at most citizens. As such, they do not lose their rights as a consequence of the disaster, although they have particular needs that call for special protection and assistance;
- ii. The primary responsibility to provide such protection and assistance lies within the government authority,
- iii. Protection extends beyond securing survival and physical security and property to civil, political, economical and social aspects of the affected population;
- iv. In all cases States have an obligation to respect, protect and fulfil the rights of their citizens and of the people living in their territory;
- v. UN agencies, international and national NGOs, CSOs/FBOs the Private Sector (NSAs) and other relevant national and international actors have an essential role to play in advocating on behalf of the rights of the victims, in addition to their roles specified in these guidelines. The protection responsibilities of NSAs can be:³⁸
 - a. *Responsive*: aimed at stopping, preventing or mitigating a pattern of ongoing abuse;

³⁸ Following the UN Inter Agency Standing Committee operational guidelines and manual on the protection of persons in situations of natural disasters.

- b. *Remedial*: aimed at restoring people's dignity and ensuring adequate living conditions subsequent to a pattern of violation, through rehabilitation, restitution, compensation and repair; or
- c. *Environment building*: aiming to create and/or consolidate an environment – political, social, cultural, institutional, economic and
- d. *Legal* – conducive to full respect for the rights of the individual.

B: Operational Procedures

The operational procedures for protection of human rights, as outlined in the Inter Agency Committee (IASC)³⁹ operational guidelines (and paraphrased here) for protection of humans in disaster situations for in disaster and emergency situations are organized in four main themes, namely:

- i. Protection of life; security and physical, mental and moral integrity;
- ii. Protection of rights related to basic necessities of life and livelihoods;
- iii. Protection of other economic, social and cultural rights;
- iv. Protection of specific groups of persons.

(i) Protection of Life, security and physical, mental and moral integrity

³⁹ Detailed operational procedures and steps can be obtained from IASC, 2006. Operational guidelines on the protection of persons in situations of natural disasters-a right-based approach to disaster relief.

- a) If an imminent disaster/emergency creates a serious risk for the life, physical integrity or health of affected individuals and communities, all appropriate measures necessary to protect those in danger, including in particular vulnerable groups, should be taken to the maximum extent possible (e.g. emergency shelter arrangements);
- b) If such measures would be insufficient, endangered persons should be allowed, and assisted to leave the danger zone or assisted to leave the danger zone;
- c) These evacuations should be carried out in a manner that fully respects the right to life, dignity, liberty and security of all those affected, in particular members of vulnerable groups;
- d) Persons affected by the natural disaster should not, under any circumstances, be forced to return to or resettle in any place where their life, safety, liberty and/or health would be at further risk.
- e) Persons affected by disasters, displaced or not, should be protected against the dangers of potential secondary hazards and other disaster risks.
- f) During and after the emergency phase, law enforcement personnel and local authorities should be encouraged to take effective measures to ensure the security of populations affected by the disaster.

g) Security should be provided in camps, in particular by monitoring, through law enforcement personnel and camp committees drawn from among the affected communities.

(ii) Protection of rights related to basic necessities of life and livelihoods⁴⁰

a) Measures should be taken to ensure that persons affected by natural disasters have unimpeded and non-discriminatory access to goods and services necessary to address their basic needs.⁴¹

b) Safe and non-discriminatory access to available humanitarian assistance should be secured for all persons in need. In particular, measures should be taken to grant priority access to such vulnerable groups as minorities, single-headed households, elderly physically challenged, and unaccompanied and separated children.

c) During and after the emergency phase of the disaster, adequate food, water and sanitation, shelter, clothing, and essential health services should be provided to persons affected by natural disasters who are in need of these goods and services. Provision of goods and services should be without any discrimination of any kind.

(iii) Protection of other economic, social and cultural rights

⁴⁰ In conjunction with the article 2 of universal declaration of human rights.

⁴¹ Read together with the code of conduct to be adhered to by all stakeholders providing humanitarian assistance in these guidelines.

- a) **Education:** The return of children, whether displaced or not, to schooling should be facilitated as quickly as possible after the disaster.
- b) **Possessions and Property:** Competent authorities should be requested to protect, to the maximum extent possible, against looting, destruction, and arbitrary or illegal appropriation, occupation or use of property and possessions left behind by persons or communities displaced by the disaster.
- c) **Housing:** As soon as possible, appropriate measures should be taken, without discrimination of any kind, to allow for the speedy transition from temporary or intermediate shelter to temporary or permanent housing.
- d) **Livelihood and Work:** Projects to restore economic activities, opportunities and livelihoods that are disrupted by the natural disaster should start as soon and as completely as possible.

(iv) Protection of specific groups of persons.

Certain groups of people are particularly vulnerable in the event of a disaster. However, the specific human rights concerns that these groups may face, have been integrated into the guidelines (part i-iii, and also in other parts). In order to succeed in securing the rights of vulnerable groups, and meet their specific needs, it is important to ensure that a detailed census of the affected people is carried out as soon as possible in the relief effort.

4.8. Health

The health sector can be severely impacted with a natural or man-made disaster with medical and/or health threats. For example, floods may exacerbate the risk of water borne diseases such as cholera, while severe drought may result in severe malnutrition due to inadequate diet, particularly for the vulnerable groups. Globalisation and cross border movements may increase the risk of Avian Flu or Sever Acute Respiratory Syndrome (SARS).

According to the Tanzania Health Sector Strategic Plan (2009-2015), it is the responsibility of the Health Emergency and Disaster Preparedness and Response Section (HEPRS) in the Ministry responsible for Health and Social Welfare to prepare and respond to emergencies and disaster at all levels in collaboration with the DMA and other relevant stakeholders.

The following general guidelines will be followed before, during and after emergencies and disasters in matters related to health, by all stakeholders involved in health issues:

- i. Ensure that internationally acceptable minimum standards for health services are adhered to, such as the SPHERE Minimum Standards for Health Services;
- ii. Ensure that a preventive health strategy is put in place at the earliest time possible of the response operation;
- iii. Set up basic health facilities to respond immediately to any outbreaks of infectious diseases. These facilities should be accessible to all people, regardless of their financial resources;

- iv. Ensure that vaccination campaigns are initiated essential nutritional supplements are distributed;
- v. Ensure that everyone, especially women have full, safe and easy access to life saving reproductive and specialized health services from the early phase of the disaster, followed by more comprehensive reproductive health services in the later/recovery phases⁴²
- vi. Integrate culturally sensitive psycho-social programmes for children, adolescent and single parents in the long term recovery efforts.
- vii. Ensure outreach health services for the elderly, physically challenged people.

4.9. Education

Disaster and emergencies (including civil conflicts and war) often disrupt the education system, leading to inability of school children to continue with their education. In more serious events, this can lead to Internally Displaced People (IDP). Therefore, the return of children, whether displaced or not, to schooling should be facilitated as quickly as possible after the disaster in order to minimize disruption to children's' education, support their psycho-social well being and bring back the sense of normalcy in their lives. The Ministry responsible for Education, in collaboration with the DMA and other stakeholders has the responsibility to ensure that:

⁴² The Minimal Initial Service Package for Reproductive Health Services in crisis (MISP) requires that reproductive health (RH) services be coordinated as part of broader health services and should include prevention of HIV transmission, prevention and management of Sexual Violence and prevention of excess maternal and newborn mortality and morbidity in the early phases followed by more comprehensive RH services in the recovery phases.

- i. All children are facilitated to return back to school as early as possible after the disaster or emergency situation;
- ii. Education is free and compulsory at the primary level, in line with the Dakar Framework for Action (2000)⁴³
- iii. Special efforts are made to ensure full and equal participation in education programme for boys and girls affected by disaster
- iv. Schools, to the extent possible, provide a positive, child friendly learning environment as well as sufficient recreational opportunities to restore a sense of normalcy and balance to children's lives in the aftermath of a disaster.

4.10. Information and Communication Technology

Information and Communications Technology (ICT) is an important tool that can be used in the disaster management cycle to facilitate prevention, mitigation, preparedness, response and recovery activities. Timely deployment and use of **Telecommunication resources** can play a crucial role in saving lives, reducing suffering, and facilitate mitigation and relief operations. For example, in the preparedness and mitigation phases, ICT tools can be used to create early warning systems using more than one ICT media in simultaneously (radio, television, telephones-including cell phones, the internet). On the other hand, in the immediate aftermath of a disaster, special computer software packages can be used for activities such as registering missing persons, administrating on-line requests and keeping

⁴³ The Dakar framework for action commits member states to achieving education for every citizen in every society. It was adopted in Dakar, Senegal in 2000. It also refers to the Universal Declaration of Human rights (the right to education) in a broader context.

track of relief organizations or camps of displaced persons. In addition, geographic information systems (GIS) and remote sensing software are being effectively used in all phases of disaster management. The DMA and all actors in Disaster Management shall adhere to the following guidelines with regards to the use of ICT:

I. In Mitigation:

Mitigation involves all pre-disaster activities aimed at reducing the impacts of disasters such as formulation of policies and laws that prevents buildings and settlements in areas prone to floods. The creation and maintenance of critical baseline data, linked to GIS along with modelling and analysis capabilities also form part of mitigation.

ICT requirements to meet the needs of mitigation phase should:

- i. Meet the need to move large volumes of data/information,
- ii. Have a broad connectivity among diverse group of agencies/organisations
- iii. Be timely and accurate to ensure data quality.

II. In preparedness

Preparedness activities range from early warning, community development, training, simulation exercises, resources and supply systems needed for response to early warning and monitoring activities preceding disasters. ICT during this phase should:

- i. Ensure the timely distribution of warning information through a dedicated network.

- ii. Timeliness is critical in this phase especially for disasters with rapid onset such as storms and earthquakes.
- iii. In rural areas, the public awareness through available communication types, including traditional ways should be adopted to ensure a timely and wide coverage of the warning information.

III. In response:

Timeliness in response activities is critical as communications among responders and the general public becomes vital. Therefore, it will be the responsibility of all stakeholders to ensure a rapid, reliable, configurable, controlled access communication for efficient disaster response operations. The management of property and casualty status, resource information, and response priorities are vital and require special access capabilities beyond normal commercial telephone/ Internet services.

IV. In recovery:

In the recovery phase, much of the information needed will be mainly related to significant in site data collection for processing claims, reconstruction and documentation of lessons learnt. In this phase, timeliness is relaxed in favour of efficiency.

V. The use of GIS and Remote Sensing applications

Geographical Information Systems (GIS) and Remote Sensing are examples of ICT tools being widely used in almost all the phases of disaster management activities. Timely information on the occurrence, progression

and regression of disasters during the various phases are essential for effective management of disasters

In the planning process GIS can be used to identify and pinpoint risk prone geographical areas, as a GIS-based 3-dimension map provides much more information compared to an ordinary 2-dimension map. GIS can be use to determine evacuation routes or locating vulnerable infrastructure and vital lifelines. It also supports logistical planning to be able to provide relief supplies by displaying previously available information on roads, bridges, airports, railway and port conditions and limitations. Apart from this, activities such as evacuee camp planning can also be done using GIS. Remotely Sensed data from Earth observation satellites can be used to view the same area over long periods of time and as a result, make it possible to monitor environmental change, human impact and natural processes. In the mitigation phase, GIS are helpful in monitoring.

CHAPTER FIVE

5. RESPONSE MANAGEMENT

In order to achieve effective disaster response, it is imperative that the coordinated responses and resources from different agencies at all levels are combined and linked in an orderly manner. The Tanzania Emergency Preparedness and Response Plan (TEPRP), District Emergency Preparedness and Response Plans as well as other agencies and sector's emergency plans provides the details of ACTIONS and Responsibilities that will be taken by the government agencies, volunteer organisations, UN and other international agencies to:

- 1) Prevent disasters and reduce the vulnerability of Tanzania residents to any disasters that may strike.
- 2) Establish capabilities for protecting residents from the impacts of disasters.
- 3) Respond effectively to the actual occurrence of any emergency and disasters within the country.
- 4) Plan for recovery after occurrence of the disaster or an emergency

These actions are elaborated in functional annexes in the respective plans. In view of that, these guidelines provide an overview of response management

structure in disaster and emergency situations, which would supplement emergency procedures outlined in respective plans.

5.1. Principles of Incident Management

Response to every incident requires to be tailored to its particular circumstances. These circumstances will define the appropriate level of management required. Response management designates the responsibilities for various personnel while involved at an emergency incident. Response management can be divided into three levels - *Strategic, Tactical and Operational*. The terms “Strategic”, “Tactical” and “Operational” command are the titles given to the three normal managerial levels associated with emergency incidents⁴⁴. The management of the response to the incident will normally be undertaken at one or more of the three levels-not all tiers, single or multi-agency, will necessarily be convened for all emergencies.

5.1.1. Strategic Level

The strategic level of incident management involves the planning and directing of the organisation’s resources in order to meet its overall objectives. The main purpose of this management level is:

- (i) To consider the emergency in its wider context
- (ii) To determine longer-term and wider impacts and risks with review of strategic implications
- (iii) To define and communicate the overarching strategy and objectives for the emergency response

⁴⁴ Operational, Tactical and Strategic are sometimes referred to as Bronze, Silver and Gold.

- (iv) To establish the framework, policy and parameters for lower-level tiers
- (v) To monitor risks, impacts and progress towards defined objectives.

The strategic level involves the overall command of the incident, and requires the appraisal of the situation and creation of an incident management plan by the Incident Commander (IC). The plan defines the objectives and determines how, where and when available resources will be assigned and directed. It includes the formulation of systems to manage the risks of certain incident types in seeking to achieve these objectives. Such systems are necessary to ensure safe and effective working on the incident ground.

The main objectives of **an incident management plan** are:

- (i) Saving and protecting those in immediate danger
- (ii) Preventing the escalation of the incident and threats to those in the vicinity
- (iii) Ensuring the safety of operational personnel and the public
- (iv) Protecting property, infrastructure and the environment
- (v) Facilitate the recovery process.

The strategic level of incident management is normally located away from the incident. It may be necessary to convene a multi-agency coordinating group at the strategic level where an emergency or incident has:

- (i) An especially significant impact
- (ii) Substantial resource implications
- (iii) Involves a large number of organisations

(iv) Lasts for an extended duration.

Meetings at the strategic level must comprise representatives of appropriate seniority and authority who are empowered to make executive decisions in respect of their organisation's resources. This underlines the necessity for each organisation to select, train and exercise sufficient senior individuals who are capable of fulfilling this role.

- i. The strategic group will take overall responsibility for the multi-agency management of the emergency and to establish the policy and strategic framework within which lower-tier command and coordinating groups will work. It will:
- ii. Determine and promulgate a clear strategic aim and objectives and review them regularly
- iii. Develop an incident management plan
- iv. Establish any parameters within which any tactical groups are to operate in the management of the incident
- v. Prioritise the requirements of the tactical tier and allocate personnel and resources accordingly
- vi. Formulate and implement media-handling and public communication plans, potentially delegating this to one responding agency
- vii. Assess the need to adjust normal business priorities in the light of competing resource demands created by the emergency
- viii. Direct planning and operations beyond the immediate response in order to facilitate the recovery process.

- ix. Ensure the safety of personnel and public.

5.1.2. Tactical level

A Tactical level of management is introduced in order to determine priority in allocating resources, to plan and co-ordinate when a task will be undertaken, and to obtain other resources as required. Thus, the purpose of tactical management is to ensure that actions taken at the operational level are coordinated, coherent and integrated in order to maximise effectiveness and efficiency. Tactical Command is undertaken from the Incident Commanding Post (ICP) in the vicinity of the disaster site

While the Incident Commander decides the overall plan, the application of tactics is almost always the responsibility of the Sector Commander. The tactical commander usually has freedom within the overall approach to determine the tactics to be employed; almost invariably they will be based on operational procedures and practices. The Sector Commander will be allocated certain responsibilities and operational goals and it is the Sector Commander who determines how these sectoral goals are to be achieved, and allocates tasks to crews in order to achieve those goals.

When an emergency requires a tactical level of management, a Tactical Coordinating Group (TCG) should be established. The TCG is the forum at which the tactical plan is agreed and implemented, with an agreed common aim and objectives. During a spontaneous incident this group may meet close to the scene at an ICP. This forum is normally chaired by the police.

Liaison officers from the local authority should attend and other agencies such as the transport police or utilities may be invited to attend.

Most, but not all, of the Tactical functions will be discharged at or close to the scene of the incident. When more than one agency is operating at the tactical level, there must be consultation between the various agencies Incident Officers. The Tactical Commanders should not become involved with the activities at the scene being discharged by Incident Officers, but concentrate on the overall general management.

If it becomes apparent that resources, or expertise beyond the level of the Tactical Commander is required, or should there be the need to co-ordinate more than one incident/scene (where tactical command has been established), it may be necessary to implement a Strategic level of management.

Working in co-ordination, the responder agencies' tactical commanders will:

- (i) determine priorities for allocating available resources
- (ii) plan and co-ordinate how and when tasks will be undertaken
- (iii) obtain additional resources if required
- (iv) assess significant risks and use this to inform tasking of operational commanders
- (v) Mitigate risks to the health and safety of the public and personnel.
- (vi) Establish chain of command and ensure all personnel are aware of it
- (vii) Direct and coordinate all tactical personnel at the disaster site

- (viii) Provide situational briefing to the other agencies as needed
- (ix) Direct control of the inner and outer parameters and disaster site
- (x) Coordinate all legal matters that arise during the emergency/disaster situation.

5.1.3. Operational level

Operational is the level at which the management of immediate "hands-on" work is undertaken at the site(s) of the incident or other affected areas.

At the smallest incidents all three levels of command decision-making will be the responsibility of one individual. This is likely to be the first arriving officer, who will be concerned with the initial tactics and operational tasks. They will also delegate responsibility for functional tasks where sufficient resources are available.

At larger incidents, the team of officers responsible for various command functions will be organised by the Incident Commander to discharge the operational tasks, while the Incident Commander retains overall command. Crew commanders will be assigned responsibility for command of the various tasks that contribute to the overall tactical plan being implemented.

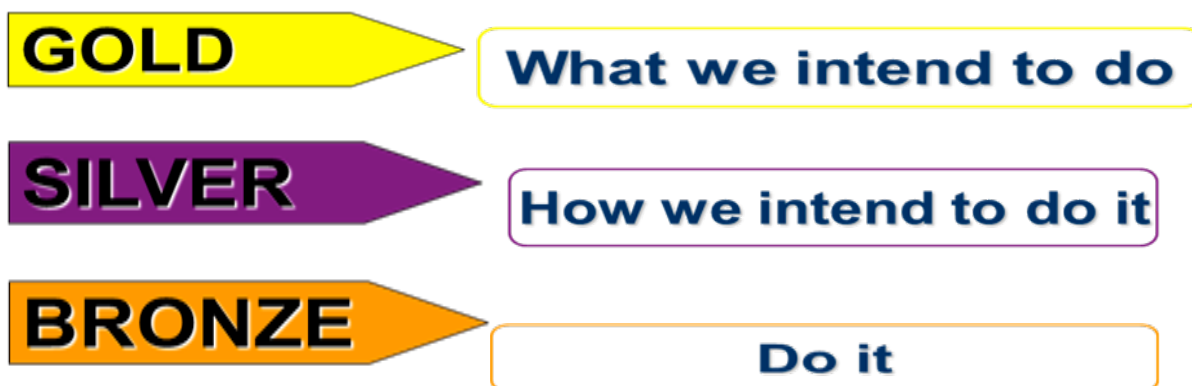
On arrival at the scene of an event, the emergency services will take appropriate immediate measures and assess the extent of the problem, under the command of their respective Incident Officers. They will concentrate on their specific tasks within their areas of responsibility and act on delegated responsibility from their parent organisations until other levels of command

are established. All this takes place at the Operational level and is the normal day-to-day arrangement for responding to any incident.

The command of the resources belonging to any agency and applied within a geographical area, or used for specific purpose, will be retained by that agency. Each agency must liaise fully and continually with others employed within the same area to ensure an efficient and combined effort. Where appropriate, the police will normally act as the co-ordinator of this response at the scene.

These arrangements will usually be adequate for the effective resolution of most incidents. However, for more serious incidents - requiring significantly greater resources - it may be necessary to implement an additional level of management.

To summarise, Strategic (Gold), Tactical (Silver) and Operational (Bronze) are titles of functions adopted by each of the emergency service and respective agencies.



The administrative authorities lies within the three levels of command, which comprises of the Authoritative decisions makers (STRATEGIC LEVEL OF COMMAND) who gets advice from the technical level (TACTICAL LEVEL OF COMMAND) and the level which implements the decision made from the higher levels (OPERATIONAL LEVEL OF COMMAND).

5.2. Resources and Control

After the initial predetermined response of resources, the Incident Commander is responsible for determining further resource requirements and controlling resources on the incident ground. The assessment of resources may include the need for additional equipment, personnel, appliances or consumables.

The degree of control an Incident Commander will need to maintain will depend, in part, on the size and demands of the incident. At larger incidents specific areas of resource control may be delegated to appointed officers, including the operations commander who will look after control of resources deployed at the incident, while a command support officer may be delegated the task of managing the acquisition of additional resources.

5.3. Cordon Control

Cordons may be introduced as an effective method of controlling resources and maintaining safety. Cordons are established around the scene of an incident for the following reasons

- i. To guard the scene

- ii. To maintain the safety of the public, personnel, and other emergency responders or staff from utilities attending the incident area/scene
- iii. To prevent unauthorized interference with evidence or property
- iv. To facilitate the operations of all agencies

The following are the main types of cordons that may be used:

- (i) **Inner cordons:** Inner cordons are established around the immediate scene of operations to establish more effective control of access to the area. This is a working area and it is important to maintain the appropriate safety and security standards at all times.

Outer cordon: An outer cordon is established, to designate an area from which the public need to be evacuated for their safety or to prevent access by the public to an area used by responding agencies for support activities (Controlling all access and exit points to the outer cordon).

- (ii) **Traffic Cordons:** A traffic cordon is established so that only essential vehicles have access to the scene. All other traffic will be diverted by the police to prevent congestion and allow responding vehicles a safe and timely passage to the scene.

- (iii) **RVP:** Rendezvous point –refers to a point usually situated in the outer cordon, selected by the responding emergency services as the location for all personnel and vehicles to report to before and after attending a major incident.

- (iv) **Marshalling Area:** Ideally established within the RVP. This area is for resources not immediately required, but may be needed as the

incident progresses. It's used to provide Briefing/Debriefing as recovery for personnel involved at the scene.

5.4. Mass Casualty Management

In most major incidents, such as a major disaster, the need for search, rescue, and first aid is likely to overwhelm the capacity of emergency responders. In such cases, the most immediate help will come from uninjured survivors, and they will have to provide whatever assistance possible, hence the need for community-based training in emergency aid services in the preparation for such incidents.

Transport of the victims to the hospital should be organized at the earliest time possible, but patients should receive adequate field treatment to enable them to tolerate transport delays.

Triage: When the quantity and severity of injuries overwhelms the operative capacity of health facilities, a different approach to medical treatment must be adopted. Triage consists of rapidly classifying the injured on the basis of the severity of their injuries and the likelihood of their survival with prompt medical intervention. The most common classification uses the internationally accepted four colour code system. Red indicates high priority treatment or transfer, yellow signals medium priority, green is used for ambulatory patients, and black for dead or moribund patients. Triage should be carried out at the disaster site in order to determine transportation priority and admission to the hospital or treatment centre where the patient's needs and priority for medical care will be reassessed.

Tagging: All patients must be identified with tags stating their name, age, sex, place of origin, triage category, diagnosis, and initial treatment.

Hospital reception and treatment: At the hospital, triage should be the responsibility of a highly experienced clinician, as it may mean life or death for the patient, and will determine the priorities and activities of the entire staff.

Generally, health services resources should be redirected in order to provide proper treatment to casualties, including bed availability and priority surgical services.

5.5. Communications

Effective, efficient and reliable communications on the incident ground are absolutely essential for the overall management and deployment of all personnel and resources. Information should be gathered, analysed, displayed and decisions made and orders issued on the basis of situation reports received. Therefore, it is the responsibility of the IC to establish and maintain effective communications within the command structure. Specifically, the IC shall ensure:

- i. Setting up a single communication link with the Emergency Operations Centre (EOC).
- ii. Allocation of radios, assignment of channels and call signs which must be adhered to in accordance with the requirements of the Incident Command Structure.

- iii. Establishing communications with other agencies. This may employ radio equipment on agreed channels or direct verbal communications.
- iv. Disseminating to the public, as appropriate, accurate, accessible, and timely information on the incident's cause, size, and current situation; resources committed; and other matters of general interest.

5.6. Debriefing and other Post Incident procedures

Immediately after calling of the response operations, a debriefing should be made to give highlights on the following key issues:

- i. Success or failures noted at the time of the operations
- ii. Strengths and weaknesses of the mass casualty management plan.
- iii. Statistical data of mass casualty victims, i.e. number of deaths, admissions, discharges and referrals to other facilities for further management.

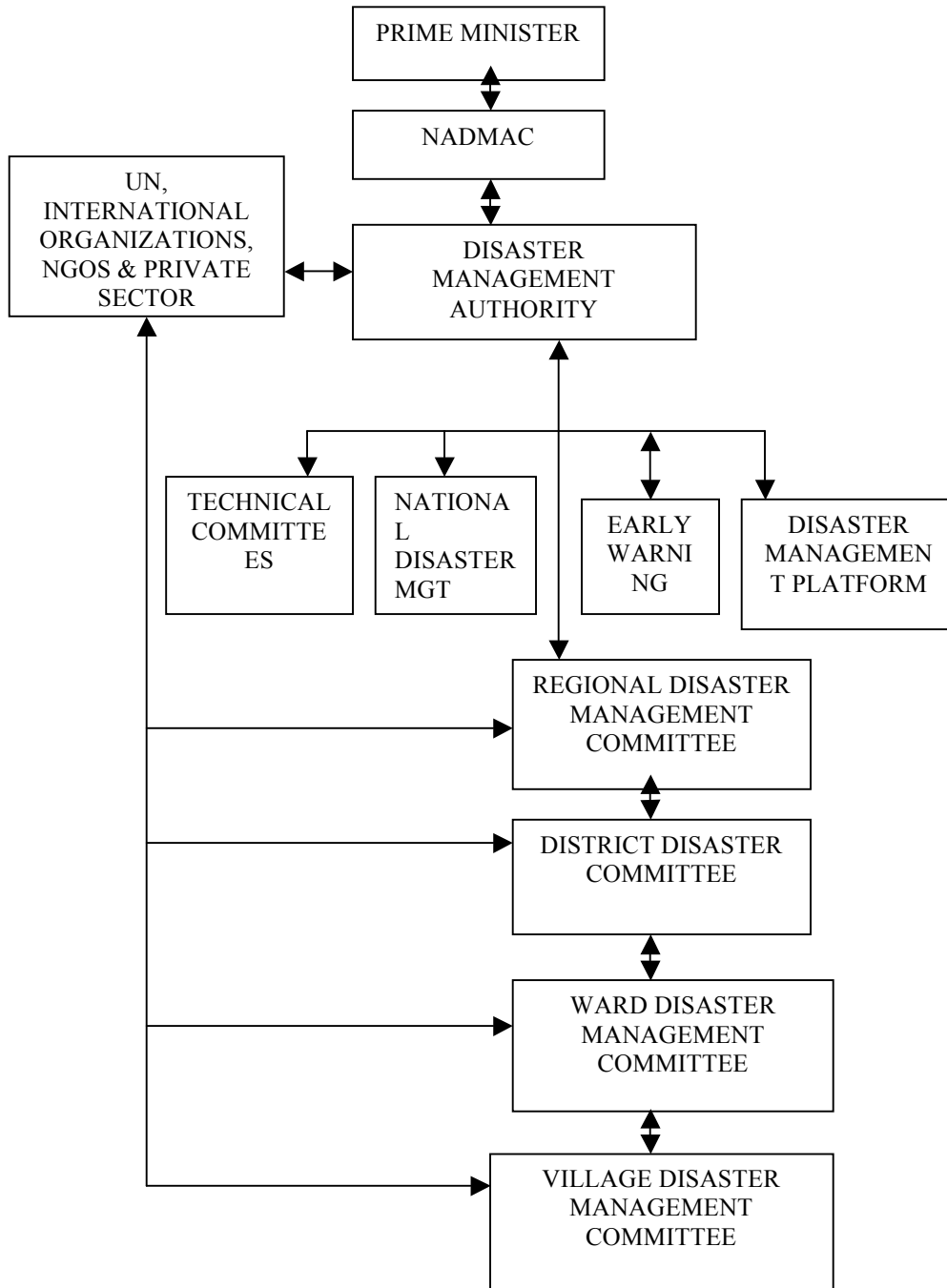
Detailed account of resources used in the operations:

- (i) Number of personnel deployed,
- (ii) Transportation vehicles used
- (iii) Communication facilities applied
- (iv) Quantity and type of material resources used
- (v) Financial resources spent.
- (vi) Lesson learned from the response operation.

The Incident Commander should undertake and/ or supervise the completion of any necessary reports and documentation for the incident, to ensure that a contemporary, complete, accurate report is made available promptly as required.

Although the responding agencies will normally be occupied with issues around the emergency phase of the incident, a number of issues may evolve that require post-emergency handling. Such issues may include conducting post-mortems, fire and accident investigations, public or judicial inquiries and criminal investigations. These issues will be handled by competent authorities/agencies.

ANNEX A: DISASTER MANAGEMENT STRUCTURE



ANNEX B: HAZARDS SPECIFIC GUIDELINES

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
1.	DROUGHT	<ul style="list-style-type: none"> • Dodoma • Singida • Mwanza • Shinyanga • Simiyu • Geita • Tabora • Mtwara • Lindi • Arusha • Manyara • Morogoro • Mara • Iringa • Tanga • Kilimanjaro 	Ministry responsible for Agriculture Food security and Cooperatives (MoAFC)	MoHSW, PMO-RALG, TMA, MoLFD, MoW, PMO, CSOs, PMO	<ul style="list-style-type: none"> • Contingency plan • Food and nutrition situation assessment • Stockpile of food and Seeds • Early warning 	<ul style="list-style-type: none"> • Information management 	<ul style="list-style-type: none"> • Debriefing • Undertake irrigation schemes • Provision of relief food • Provision of food and seeds for drought resistance crops • Livelihood recovery
			TMA		<ul style="list-style-type: none"> • Weather and climate Forecast • Early Warning 	<ul style="list-style-type: none"> • Weather and climate Forecast 	<ul style="list-style-type: none"> • Weather and climate information
			NADMAC		<ul style="list-style-type: none"> • Issue guidance to all levels • Create awareness • Mobilization of resources 	<ul style="list-style-type: none"> • Appeals 	<ul style="list-style-type: none"> • Review/evaluation
			MoLHSD		<ul style="list-style-type: none"> • Land use management Plan • Resettlement Plan 	<ul style="list-style-type: none"> • Resettlement 	<ul style="list-style-type: none"> • Resettlement
			PMO-RALG		<ul style="list-style-type: none"> • Construction of water reserves • Needs assessment • Create awareness • Dissemination of information • Resources mobilization 	<ul style="list-style-type: none"> • Relief Distribution 	<ul style="list-style-type: none"> • Seed distribution
			MoHSW		<ul style="list-style-type: none"> • Awareness raising and training of health service providers 	<ul style="list-style-type: none"> • Provision of essential health services as per SPHERE 	<ul style="list-style-type: none"> • Trauma management • Scale up comprehensive health service

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
					<ul style="list-style-type: none"> Assessment of Nutrition status Stocking up emergency medicine, equipment and supplies 	<ul style="list-style-type: none"> Distribution of food package and medications Disseminate critical public information Deploy Mobile clinic 	<ul style="list-style-type: none"> Public education of health facilities Reconstruction of health facilities
			MoLFD	<ul style="list-style-type: none"> Surveillance Awareness rising 	<ul style="list-style-type: none"> Translocation Provision of emergency water and fodder 	<ul style="list-style-type: none"> Public education 	
			MoEVT	<ul style="list-style-type: none"> Awareness 	<ul style="list-style-type: none"> Counselling Dissemination of information 	<ul style="list-style-type: none"> Counselling Trauma management Public education 	
			MoW	<ul style="list-style-type: none"> Construction of water reserves Review of water permit 	<ul style="list-style-type: none"> Emergency water supply 	<ul style="list-style-type: none"> Construction of water reserves 	
			Media CSO's (NGO,FBO,CB O's)	<ul style="list-style-type: none"> Dissemination Public Awareness Dissemination 	<ul style="list-style-type: none"> Public information Needs assessment Appeals and relief distribution 	<ul style="list-style-type: none"> Development stories Seed distributions Livelihood recovery Relief food distributions 	
			COMMUNITY	<ul style="list-style-type: none"> Stockpile Food & Seeds Dissemination of Early warning Participate in needs assessment 	<ul style="list-style-type: none"> Relief distribution Needs assessment 	<ul style="list-style-type: none"> Undertake irrigation schemes Public education Debriefing 	
			P/Sector	<ul style="list-style-type: none"> Stockpile Food & 	<ul style="list-style-type: none"> Logistical support 	<ul style="list-style-type: none"> Alternative 	

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
					Seeds	CSR package to be used	investments
			UN/International Agencies		<ul style="list-style-type: none"> • Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> • Technical and Financial Support for response activities 	<ul style="list-style-type: none"> • Debriefing • Evaluation
2.	FLOODS	Tanga Dar es Salaam Mbeya Mtwara Rukwa Pwani Morogoro Dodoma Mwanza	Ministry responsible for Water (MoW)		<ul style="list-style-type: none"> • Risk Assessment and Hazards Mapping • Monitoring of stream flows • Prepare contingency plan • Construction of flood dams and blanks • Remove unauthorized water blockage courses 	<ul style="list-style-type: none"> • provision of emergency water • Needs assessment 	<ul style="list-style-type: none"> • Decontaminate water source • Debriefing • Restore lifelines
				PMO_RALG	<ul style="list-style-type: none"> • Preparation of evacuation centres • Stock pile supplies (food, cloth & medicine) • Enforce land use Plan • Disseminations of early warning 	<ul style="list-style-type: none"> • Relief supply 	<ul style="list-style-type: none"> • Allocation of plots • Rehabilitations of health centres • Enforcement of by-laws
				TMA	<ul style="list-style-type: none"> • Weather and climate Forecast • Early Warning 	<ul style="list-style-type: none"> • Weather and climate Forecast 	<ul style="list-style-type: none"> • Weather and climate information
				NADMAC	<ul style="list-style-type: none"> • Issue guidance to all 	<ul style="list-style-type: none"> • Appeals 	<ul style="list-style-type: none"> • Review/evaluation

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness levels	Response	Recovery	
					<ul style="list-style-type: none"> Create awareness Mobilization of resources 			
				MoEVT	<ul style="list-style-type: none"> Awareness 	<ul style="list-style-type: none"> Counselling Dissemination of information 	<ul style="list-style-type: none"> Counselling Trauma management 	
				MoT	<ul style="list-style-type: none"> Monitoring Preparation of Contingency Plan 	<ul style="list-style-type: none"> Transport facilitations Needs assessment 	<ul style="list-style-type: none"> Rehabilitation of infrastructure 	
				MoW	<ul style="list-style-type: none"> Risk assessments Preparation contingency Plan 	<ul style="list-style-type: none"> Temporary bridge Needs assessment 	<ul style="list-style-type: none"> Rehabilitation of infrastructure 	
				MoHSW	<ul style="list-style-type: none"> Preparation of equipments and supplies Prepare for managing mass causality Training of health staffs and arrangements for space Awareness raising Assessment of Nutrition status Stocking up emergency medicine, equipment and supplies 	<ul style="list-style-type: none"> Contain epidemics Deploy Mobile clinics and establishment treatment centres Deploy advance medical response team (ambulance) Distribution of food package and medications Provision of essential health services as per SPHERE standards Disseminate critical public information 	<ul style="list-style-type: none"> Disease monitoring and surveillance Continuous mass care Public education and psychosocial therapy Rehabilitations of health centres 	

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response and rescue	Recovery
						<ul style="list-style-type: none"> Evacuation 	<ul style="list-style-type: none"> Enforcement of by Laws
				Media	<ul style="list-style-type: none"> -dissemination of information Awareness 	<ul style="list-style-type: none"> Public information 	<ul style="list-style-type: none"> Development stories
				CSOs	<ul style="list-style-type: none"> Risk assessment and mapping Prepare contingency Plan Stock pile supplies (food, cloth & medicine) 	<ul style="list-style-type: none"> Relief supply Search & rescue Evacuation 	<ul style="list-style-type: none"> Restore lifelines
				P/Sector	<ul style="list-style-type: none"> Stockpile of supplies 	<ul style="list-style-type: none"> Logistical support CSR package to be used 	<ul style="list-style-type: none"> Alternative investments
3.	EPIDEMICS	Entire country	MoHSW/DM A, NADMAC	UN/International Agencies	<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation
				PMO-RALG	<ul style="list-style-type: none"> Dissemination of Early warning 	<ul style="list-style-type: none"> Public awareness Law enforcement 	<ul style="list-style-type: none"> Enforce by-laws
				NADMAC	<ul style="list-style-type: none"> Issue guidance to all levels Create awareness Mobilization of resources 	<ul style="list-style-type: none"> Appeals 	<ul style="list-style-type: none"> Review/evaluation
				TMA	<ul style="list-style-type: none"> Provision of Weather and climate information 	<ul style="list-style-type: none"> Provision of Weather and climate information 	<ul style="list-style-type: none"> Provision of weather and climate information

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Media	<ul style="list-style-type: none"> Public awareness Dissemination of information 	<ul style="list-style-type: none"> Public information 	<ul style="list-style-type: none"> Developing stories
					<ul style="list-style-type: none"> Issue guidance to all levels Create awareness Mobilization of resources 	<ul style="list-style-type: none"> Appeals 	<ul style="list-style-type: none"> Review/evaluation
				MoEVT	Awareness	<ul style="list-style-type: none"> Counselling Dissemination of information 	<ul style="list-style-type: none"> Counselling Trauma management
				MNRT	Surveillance	<ul style="list-style-type: none"> Culling of infected species 	<ul style="list-style-type: none"> Translocation of animals and birds
				MoD		<ul style="list-style-type: none"> Humanitarian assistance 	<ul style="list-style-type: none"> Humanitarian assistance
				MoW	<ul style="list-style-type: none"> Monitoring Provision of water and sanitation services 	<ul style="list-style-type: none"> Continue monitoring of system Implement succession plan 	<ul style="list-style-type: none"> Continue monitoring of system and return to the normal services
				MoLFD	<ul style="list-style-type: none"> Surveillance Vaccination Awareness rising 	<ul style="list-style-type: none"> Culling of infected species 	<ul style="list-style-type: none"> Translocation of animals and birds
				CSOs	<ul style="list-style-type: none"> Risk assessment and Plan Prepare contingency mapping Stock pile supplies (food, cloth & medicine) Dissemination of Early warning 	<ul style="list-style-type: none"> Relief supply Search & rescue Evacuation Public awareness Handling of mass casualties 	<ul style="list-style-type: none"> Restore lifelines

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				COMM	<ul style="list-style-type: none"> Dissemination of early warning information Participate in needs assessment 	<ul style="list-style-type: none"> Relief distribution 	<ul style="list-style-type: none"> Participate in by laws enforcement
				P. Sector	<ul style="list-style-type: none"> Logistical support 	<ul style="list-style-type: none"> Logistical support 	<ul style="list-style-type: none"> Logistical support CSR package to be used
				UN/International Agencies	<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation
4.	VERMIN & PEST INFESTATION	<ul style="list-style-type: none"> Dodoma Tabora Kigoma Rukwa Katavi Mbeya Singida Arusha Shinyanga Simiyu Geita Kagera Morogoro 	Ministry responsible for Agriculture	<ul style="list-style-type: none"> Preparation of contingency Plan Training of farmers Stocking of appropriate and sufficient supply of pharmaceuticals and ammunition Law enforcement Community awareness on vermin and pest infestation 	<ul style="list-style-type: none"> Spraying of breeding and infected areas Vermin control Information management Distribution/ supply of drugs Public Information Vulnerability Assessment 	<ul style="list-style-type: none"> Food supply Public education Debriefing Supply of Farm implements Regular monitoring and Evaluation 	
				Ministry responsible for local government (MoRALG)	<ul style="list-style-type: none"> Formation of vermin control brigades and training Preparation of contingency Plan Train farmers through their relevant disaster committees 	<ul style="list-style-type: none"> Vermin control Vulnerability Assessment 	<ul style="list-style-type: none"> Strengthen vermin control brigade
				Ministry Responsible for	<ul style="list-style-type: none"> Public awareness Preparation of 	<ul style="list-style-type: none"> Public Information To provide key 	<ul style="list-style-type: none"> Public Education

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Communication	contingency Plan	messages to media and public at large	
				Responsible Disaster Management Committees	<ul style="list-style-type: none"> Public awareness Monitoring Preparation of contingency Plan 	<ul style="list-style-type: none"> Coordinate Response operations 	<ul style="list-style-type: none"> Coordinate recovery activities
				Media	Public awareness	Public information	Public education
				Communities			
5.	URBAN FIRE	<ul style="list-style-type: none"> All urban areas 	Ministry responsible for Home Affairs, (Fire and Rescue Force)	Private Sector	Public awareness	Provide inputs and services	
				CSO/UN/International Agencies	<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation
				Ministry responsible for Defence and National Service	Preparation of contingency Plan	Search and Rescue	
				Media	Public Awareness	Public information	Public education
				Ministry responsible for Local Government MRALG	<ul style="list-style-type: none"> Law enforcement Preparation of contingency Plan 	<ul style="list-style-type: none"> Temporary shelter Damage and loss assessment 	Shelter management
				Ministry responsible for Infrastructure	<ul style="list-style-type: none"> Contingency Plans Provision of service roads 	<ul style="list-style-type: none"> Removal of debris Search and rescue 	<ul style="list-style-type: none"> Restoration of life lines
				Ministry responsible for	Law enforcement	<ul style="list-style-type: none"> Temporary shelter Damage and loss 	<ul style="list-style-type: none"> Resettlement

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				housing and settlement development		Assessment	
			Ministry responsible for water	Ministry responsible for water	<ul style="list-style-type: none"> Installation, maintenance and management of fire hydrants. Preparation of contingency Plan Establishment of open water pools 	<ul style="list-style-type: none"> Ensure water supply in hydrants and in open water pools 	<ul style="list-style-type: none"> Regular monitoring of hydrants and open water pools
			CSO	CSO	Public awareness	Relief Supply	<ul style="list-style-type: none"> Camp management Relief support
			Communities	Communities	-	<ul style="list-style-type: none"> Temporary shelter Fire fighting Security Damage and loss assessment 	
6.	BUSH FIRE	<ul style="list-style-type: none"> Rural areas 	Ministry responsible for Home Affairs, (Fire and Rescue Force)	Private Sector	<ul style="list-style-type: none"> Fire drills and training Stockpiling of fire suppressing gears Contingency plan 	<ul style="list-style-type: none"> Search and Rescue Fire fighting Removal of debris Security Relief supplies 	<ul style="list-style-type: none"> Public education Rehabilitation Compensation through insurance
			Ministry responsible for local government MoRALG	Ministry responsible for Health and Social Welfare MoH	<ul style="list-style-type: none"> - Awareness creation Contingency plan Law enforcement 	<ul style="list-style-type: none"> Fire fighting Evacuation Information management 	<ul style="list-style-type: none"> Public education Law enforcement Environmental rehabilitation
			Ministry responsible for Health and Social Welfare MoH	Ministry responsible for Health and Social Welfare MoH	<ul style="list-style-type: none"> Build capacity of Emergency Units Preparation of contingency Plan 	<ul style="list-style-type: none"> Treatment of casualties 	<ul style="list-style-type: none"> Trauma management Psychosocial support

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Ministry Responsible for Forestry	<ul style="list-style-type: none"> Contingency plan Law/bylaws enforcement Fire fighting drills On job trainings Establishment of fire breaks 	<ul style="list-style-type: none"> Fire fighting Evacuation Information management Establishment of fire breaks Search and Rescue 	<ul style="list-style-type: none"> Afforestation
				Ministry responsible for Environment	<ul style="list-style-type: none"> Law enforcement Contingency plan 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Environmental damage assessment
				Media	<ul style="list-style-type: none"> Awareness creation 	<ul style="list-style-type: none"> Public information 	<ul style="list-style-type: none"> Public education
				CSO	<ul style="list-style-type: none"> Awareness creation 	<ul style="list-style-type: none"> Relief support Trace of lost person and family re union 	<ul style="list-style-type: none"> Relief support Rehabilitation and recovery
7.	ROAD/ RAILWAY ACCIDENTS	<ul style="list-style-type: none"> urban areas and along highways Railway and on railway crossings 	Ministry responsible for Home affairs(MoH A) (Police) (Fire and Rescue)	Private. Sector	<ul style="list-style-type: none"> Contingency plan Fire drills and training Stockpiling of fire suppressing gears 	<ul style="list-style-type: none"> Fire fighting Search and rescue 	<ul style="list-style-type: none"> Public education Debriefing
				Ministry responsible for Health and Social Welfare (MoHSW)	<ul style="list-style-type: none"> Preparation of contingency Plan Build capacity of Emergency Units Preparation of contingency Plan Preparation of equipments and supplies Prepare for managing mass casualty Training of health 	<ul style="list-style-type: none"> Handling of mass casualties and dead bodies Deploy Mobile clinics and establishment treatment centres Deploy advance medical response team (ambulance) and medications Provision of 	<ul style="list-style-type: none"> Psychosocial support Scale up comprehensive health service delivery Public education

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
					<ul style="list-style-type: none"> • Staffs and arrangements for space • Stocking up emergency medicine, equipment and supplies 	<ul style="list-style-type: none"> • essential health services as per SPHERE standards • Disseminate critical public information 	
				Ministry responsible for Local government	<ul style="list-style-type: none"> • Preparation of contingency Plan 	<ul style="list-style-type: none"> • Bury of un identified bodies • Removal of damaged vehicles • Maintenance of Infrastructures • Install road user safety signs and features 	<ul style="list-style-type: none"> • Rehabilitation of Infrastructures, user safety signs and features
				Media	<ul style="list-style-type: none"> • Public awareness 	<ul style="list-style-type: none"> • Public information 	<ul style="list-style-type: none"> • Public education
				Ministry responsible for Infrastructure	<ul style="list-style-type: none"> • Install road and railway user safety signs • Maintenance of infrastructures • Preparation of contingency Plan 	<ul style="list-style-type: none"> • Removal of damaged vehicles 	<ul style="list-style-type: none"> • Infrastructure rehabilitation
				Ministry responsible for Defence and National services	<ul style="list-style-type: none"> • Preparation of contingency Plan 	<ul style="list-style-type: none"> • Search and rescue • Security • Temporary infrastructure 	<ul style="list-style-type: none"> • Infrastructure rehabilitation
				Ministry	<ul style="list-style-type: none"> • Contingency plans 	<ul style="list-style-type: none"> • Removal of 	<ul style="list-style-type: none"> • Rehabilitation of

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				responsible for Transport	<ul style="list-style-type: none"> Regular inspection of vehicles Law enforcement 	<ul style="list-style-type: none"> damaged railways facilities, vans and engines 	<ul style="list-style-type: none"> railways facilities
			CSO	Public awareness	Relief Supply	<ul style="list-style-type: none"> Camp management Relief support 	
			Communities	-	<ul style="list-style-type: none"> Search and Rescue Security Dead body placement 	-	
			Private Sector	<ul style="list-style-type: none"> Ensure effectiveness of ambulance services Capacity building Drills and training 	<ul style="list-style-type: none"> Removal of damaged vehicles Ambulance services Search and Rescue Handling of mass casualty 	<ul style="list-style-type: none"> Compensation through Insurance Public education Rehabilitation 	
8.	MARINE ACCIDENTS	<ul style="list-style-type: none"> Ocean and Lakes Dams and rivers. 	MoT	MoHA,SUMAT RA,TPA,MSCL, MIYCS, REDCROSS TMA, MLDF	<ul style="list-style-type: none"> Inspection of vessels Development of contingency plan Law enforcement Training and drills Procurement of search and rescue equipment Public awareness Early warning 	<ul style="list-style-type: none"> Information management Mobilization of resources/logistics Activate emergence operation centre Search and rescue 	<ul style="list-style-type: none"> Debriefing Support victims Mass burial
			MoHA MoH, SUMATRA,TP AMSCL,SHIPPI NG COMPANIES , RED CROSS	<ul style="list-style-type: none"> Procurement of search and rescue equipment Availability of medical resources 	<ul style="list-style-type: none"> Search and rescue Handling of dead bodies Investigation Handling of casualties/Triage 	<ul style="list-style-type: none"> Investigation Assist the victims on their rights(Insurance) 	

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
				MoHSW,	<ul style="list-style-type: none"> Build capacity of Emergency Units Preparation of contingency Plan Preparation of equipments and supplies Prepare for managing mass causality Training of health staffs and arrangements for space Awareness raising Assessment of Nutrition status Stocking up emergency medicine, equipment and supplies 	<ul style="list-style-type: none"> Handling of mass casualties and dead bodies Deploy Mobile clinics and establishment treatment centres Deploy advance medical response team (ambulance) and medications Provision of essential health services as per SPHERE standards Disseminate critical public information 	<ul style="list-style-type: none"> Trauma management Scale up comprehensive health service delivery Public education 	
				Media,MAELE ZO	List of Media Houses Training	<ul style="list-style-type: none"> Procurement of search and rescue equipment Public awareness 	<ul style="list-style-type: none"> Public information 	<ul style="list-style-type: none"> Public education
				NGO/CBO	<ul style="list-style-type: none"> Procurement of search and rescue equipment Public awareness 	<ul style="list-style-type: none"> Mobilization of resources Support search and rescue 	<ul style="list-style-type: none"> Support victims 	
				UN/International Agencies	<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation 	

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
9.	AIRCRAFT ACCIDENTS	<ul style="list-style-type: none"> Entire country 	MoT	Airlines,TAA,TCAA	<ul style="list-style-type: none"> Develop contingency plan Inspection of Aircraft 	<ul style="list-style-type: none"> Information Management 	<ul style="list-style-type: none"> Investigation-
				TCAA,TAA FIRE AND RESCUE FORCE,MoHA,MoDNS ,MoHSW,,RED CROSS,P.S ECTOR,AI RLINES	<ul style="list-style-type: none"> Simulation exercises Development of contingency plan Law enforcement Training and drills Procurement of search and rescue equipment Public awareness 	<ul style="list-style-type: none"> Search and rescue Fire fighting Activate emergency operation centre (EOC, SRC) Handling of dead bodies Investigation Handling of casualties 	<ul style="list-style-type: none"> Debriefing Investigation Support victims Mass burial Assist the victims on their rights(Insurance)
				MoHA TCAA,TAA,TPA, FIRE AND RESCUE FORCE,MoHA, MoDNS,MoHSW,KIA,RED CROSS,P.SECTOR,AIRLINES	<ul style="list-style-type: none"> Inspection of Aircraft Development of contingency plan Law enforcement Training and drills Procurement of search and rescue equipment Public awareness 	<ul style="list-style-type: none"> Search and rescue Fire fighting Activate emergency operation centre (EOC, SRC) Handling of dead bodies Investigation Handling of casualties 	<ul style="list-style-type: none"> Debriefing Investigation Support victims Mass burial Assist the victims on their rights(Insurance)
				MoHSW	<ul style="list-style-type: none"> Hospital Contingency plans Availability of Medical resources 	<ul style="list-style-type: none"> Handling of mass casualties 	<ul style="list-style-type: none"> Debriefing

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Tanzania Airports Authority ,Air lines,MoHSW	<ul style="list-style-type: none"> Contingency plan Drills 	<ul style="list-style-type: none"> Handling of victims Information management Establishment of rescue centre 	<ul style="list-style-type: none"> Debriefing Investigation Support victims Mass burial Assist the victims on their rights(Insurance)
			MoLYD, MoHSW, FBOs, MoHA	<ul style="list-style-type: none"> Availability of resources Availability of names and their communication 	<ul style="list-style-type: none"> Establishment of centres 	<ul style="list-style-type: none"> Trauma management Memorial 	
			Media, MIYCS, CSOs	<ul style="list-style-type: none"> List of Media Houses Training Procurement of rescue equipment Public awareness 	<ul style="list-style-type: none"> Public education Training Rescue 	<ul style="list-style-type: none"> Public education Support victims 	
			UN/International Agencies	<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation 	

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
10.	STRONG WINDS	<ul style="list-style-type: none"> Along the coast and Lake shores 	MoT	TMA	<ul style="list-style-type: none"> Improve weather forecast Risk assessment and mapping Installation of warning system 	<ul style="list-style-type: none"> Information management 	<ul style="list-style-type: none"> Weather Information
				LOCAL GOV. AUTHORITIES ,TMA,MoHA,MYCS/MCST, Min. responsible for Land use and Human Settlement, MoHSW, RED CROSS	<ul style="list-style-type: none"> Develop contingency plan Installation of wind breakers Establish emergency communication system Training and drills Law enforcement Public awareness 	<ul style="list-style-type: none"> Provide emergency shelter, food, clothing and water Provide Medical supplies 	<ul style="list-style-type: none"> Resettlement programme Debriefing
				MoHA,TMA,MoDNS,LOCAL GOVERNMENT AUTHORITIES	<ul style="list-style-type: none"> Drills and equipment 	<ul style="list-style-type: none"> Conduct search and rescue Evacuation Investigation 	<ul style="list-style-type: none"> Investigation
				MoHA, MoHSW,REDCROSS, CBOs, NGOs, FBOs	<ul style="list-style-type: none"> Hospital Contingency plans Availability of resources 	<ul style="list-style-type: none"> Handling mass casualties 	<ul style="list-style-type: none"> Investigation Support victims Mass burial Assist the victims on their rights(Insurance - Public Education
				Media MAELEZO	<ul style="list-style-type: none"> List of Media Houses Training Public Education 	<ul style="list-style-type: none"> Public information 	
				MoLYD	<ul style="list-style-type: none"> Availability of 	<ul style="list-style-type: none"> Establishment of 	<ul style="list-style-type: none"> Trauma

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				MoHSW, FBOs	resources <ul style="list-style-type: none"> • Availability of names and their communication address 	centres <ul style="list-style-type: none"> • Handling mass casualties 	management
				MoW and Agencies	-	-	<ul style="list-style-type: none"> • Restoration of lifelines
				MoT	-	-	<ul style="list-style-type: none"> • Restoration of lifelines
				NGO/CBO,RED CROSS	<ul style="list-style-type: none"> • Training and drills • Public awareness 	<ul style="list-style-type: none"> • Emergency shelter, food and clothes • Medical supplies 	<ul style="list-style-type: none"> • Resettlement programme
				Private Sector	<ul style="list-style-type: none"> • Public awareness • Stockpiling supplies 	<ul style="list-style-type: none"> • Provide emergency shelter, food, clothing and water - 	<ul style="list-style-type: none"> • Restoration of lifelines
				UN/International Agencies	<ul style="list-style-type: none"> • Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> • Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> • Debriefing • Evaluation

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
11	CONFLICTS / Internally Displaced Persons (IDPs)	<ul style="list-style-type: none"> • Kilimanjaro • Arusha • Kagera • Morogoro • Mbeya • Mara • Dodoma • Manyara • Geita • Lindi 	MoHA	MoDNS	<ul style="list-style-type: none"> • Contingency plan • Security 	<ul style="list-style-type: none"> • Security Information management 	<ul style="list-style-type: none"> • Debriefing
			Min. responsible for Land use and Human Settlement Local Government.	<ul style="list-style-type: none"> • Defined boundaries • Prepare Land use plan • Adhere to land use plan 	<ul style="list-style-type: none"> • Land allocation 	<ul style="list-style-type: none"> • Education on land laws 	
			PMO-RALG, MoHA, MoHSW RED CROSS	<ul style="list-style-type: none"> • Temporary shelter/ relief supplies • Conflict resolution 	<ul style="list-style-type: none"> • Mobilization and distribution of resources 	<ul style="list-style-type: none"> • Negotiation • Civic education 	
			MoHSW, MoDNS, MoHA	<ul style="list-style-type: none"> • Public awareness • Simulation exercises 	<ul style="list-style-type: none"> • Handling mass casualties 	<ul style="list-style-type: none"> • Securing affected areas 	
			Media, MAELEZO	<ul style="list-style-type: none"> • List of Media Houses • Training 	<ul style="list-style-type: none"> • Public information • Public Education 	<ul style="list-style-type: none"> • Public education 	
			MoHSW	<ul style="list-style-type: none"> • Build capacity of Emergency Units • Preparation of contingency Plan • Preparation of equipments and supplies • Prepare for managing mass causality • Training of health staffs and arrangements for space • Awareness raising Assessment of Nutrition status 	<ul style="list-style-type: none"> • Provision of essential health services as per SPHERE standards • Disseminate critical public information 	<ul style="list-style-type: none"> • Scale up comprehensive health service delivery • Public education 	

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
					<ul style="list-style-type: none"> Stocking up emergency medicine, equipment and supplies Availability of resources Trainings 	<ul style="list-style-type: none"> Temporary shelter Relief supply Civic and public education 	<ul style="list-style-type: none"> Public education 	
			CSOs		<ul style="list-style-type: none"> Temporary shelter/relief supplies Conflict resolution 	<ul style="list-style-type: none"> Mobilization and distribution of resources 	<ul style="list-style-type: none"> Negotiation Civic education 	
			Private Sector		<ul style="list-style-type: none"> Training and Drills Stockpiling supplies 	<ul style="list-style-type: none"> Removal of damaged vehicles 	<ul style="list-style-type: none"> Rehabilitation 	
			P. Sector		<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation 	
			UN/International Agencies			<ul style="list-style-type: none"> Emergency shelters and other supplies Information management 	<ul style="list-style-type: none"> Relocate people to new settlement Reseed the affected (denude) areas Debriefing 	
12.	LANDSLIDES	<ul style="list-style-type: none"> Tanga Lindi Ruvuma Tabora Kilimanjaro 	PMO-RALG		<ul style="list-style-type: none"> Public education Provision of preventive measures Establish early warning systems 	<ul style="list-style-type: none"> Risk assessment and mapping Contingency plans Laws enforcement 	<ul style="list-style-type: none"> Rapid assessment 	<ul style="list-style-type: none"> Damage assessment Institute land use plan
			MoLUS					
			MoHA				<ul style="list-style-type: none"> Search and rescue Evacuation Security Investigation 	

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
				MoHSW	<ul style="list-style-type: none"> Build capacity of Emergency Units Preparation of contingency Plan Preparation of equipments and supplies Prepare for managing mass causality Training of health staffs and arrangements for space Awareness raising Assessment of Nutrition status Stocking up emergency medicine, equipment and supplies - 	<ul style="list-style-type: none"> Handling of mass casualties Provision of essential health services as per SPHERE standards Disseminate critical public information 	<ul style="list-style-type: none"> Scale up comprehensive health service delivery Public education 	
				MoW	-		<ul style="list-style-type: none"> Removal of debris 	<ul style="list-style-type: none"> Restoration of lifelines
				Media	Public Education		<ul style="list-style-type: none"> Public information 	<ul style="list-style-type: none"> Public education
				MoLYD	-		-	<ul style="list-style-type: none"> Trauma management
				NGO/CBO	Risk assessment and mapping	<ul style="list-style-type: none"> Risk assessment and mapping 	<ul style="list-style-type: none"> Emergency shelters and other supplies Rapid assessment Search and rescue Evacuation 	<ul style="list-style-type: none"> Damage assessment Reseed the affected (denude) areas Damage assessment

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				COMM.	<ul style="list-style-type: none"> Traditional early warning 	<ul style="list-style-type: none"> Emergency shelter Removal of debris Security 	<ul style="list-style-type: none"> Reseed the affected area
13.	EARTHQUAKE	<ul style="list-style-type: none"> Regions along Rift Valley Mbeya Ruvuma Arusha Kigoma Rukwa Dodoma 	Ministry responsible for Local government	P. Sector	<ul style="list-style-type: none"> Household Emergency Plan Identify safe places for public gatherings Education and public Awareness creation Stockpiling of supplies Disaster Drills Develop & apply building code Establish early warning systems Conduct Risk assessment and mapping 	<ul style="list-style-type: none"> Activate household emergency procedures Utilize allocated areas for shelter Utilization of emergency supply and relief stocks Rapid assessment 	<ul style="list-style-type: none"> Assessment to determine extent of damage Relocate people to new settlement Reseed the affected (denude) areas Debriefing Removal of debris
				Ministry responsible, Energy & Minerals.	<ul style="list-style-type: none"> Risk assessment and mapping (hazard maps) Early warning systems & timely dissemination of info Contingency plan 	<ul style="list-style-type: none"> Rapid assessment 	<ul style="list-style-type: none"> Disaster assessment to determine extent of damage; Update hazard maps; Research on past & future events

S/No.	Hazards	Prone areas	Agency		Activity				
			Leading	Support	Preparedness	Response	Recovery		
				Ministry responsible for Housing/Land	<ul style="list-style-type: none"> • Risk assessment and mapping • Contingency plans • Laws enforcement 	<ul style="list-style-type: none"> • Rapid assessment • Assessment of land / property loss • Allocation of new land sites 			
				Ministry responsible for Health	<ul style="list-style-type: none"> • Build capacity of Emergency Units • Preparation of contingency Plan • Preparation of equipments and supplies • Prepare for managing mass casualty • Training of health staffs and arrangements for space • Awareness raising • Assessment of Nutrition status 	<ul style="list-style-type: none"> • Contain infectious diseases and mass burials • Deployment of mobile health facilities • Handling of mass casualties • Provision of essential health services as per SPHERE standards • Disseminate critical public information 	<ul style="list-style-type: none"> • Psychosocial services • Medical treatments • Scale up comprehensive health service delivery • Public education 		
					<ul style="list-style-type: none"> • Stocking up emergency medicine, equipment and supplies 				

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Ministry responsible for Home Affairs	<ul style="list-style-type: none"> • Trained & skilled rescue personnel available; • Material resources for rescue plans 	<ul style="list-style-type: none"> • Search and rescue • Evacuation • Security • Investigation 	<ul style="list-style-type: none"> • Investigation • Maintain law & order; •
			Ministry responsible for Information/Communication	<ul style="list-style-type: none"> • Develop an Emergency Communication Plan • Enhance Traditional early warning system • Public education and awareness on Disaster Risk Reduction • Availability of Emergency Communication infrastructure Plan • Implementation of emergency communication infrastructures • Establish one-stop-information centre 	<ul style="list-style-type: none"> • Information management • Establish one-stop-information centre • Active traditional warning system • utilize one-stop-information centre • Dissemination of up-to-date info; • Public education to respond on the ongoing disaster situation • Deploy emergency Communication networks 	<ul style="list-style-type: none"> • Public education & information dissemination awareness • Restoration of damaged communication infrastructures • Public education & information dissemination awareness • Restoration of damaged 	
					Enhance Traditional early warning system		

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Ministry responsible for Works	<ul style="list-style-type: none"> Plan for availability of emergency feed roads/rails/airfields/marine ports 	<ul style="list-style-type: none"> Use of emergency feeder roads/rails/airfields/marine ports Removal of debris 	<ul style="list-style-type: none"> Restoration of bridges/roads/rails/airfields/marine ports
				Media	Educate, sensitize & info dissemination DRR	<ul style="list-style-type: none"> Educate, sensitize & info dissemination 	<ul style="list-style-type: none"> Educate, sensitize & info dissemination
				Ministry responsible for Labour	<ul style="list-style-type: none"> Train on entrepreneurship & disaster management skills 	<ul style="list-style-type: none"> Collective responsibility of youths on supporting rescue management team 	<ul style="list-style-type: none"> Develop entrepreneurship skills
				CSOs/ Private sector	<ul style="list-style-type: none"> Support Government activities Drills and Exercises Stockpiling supplies Capacity building 	<ul style="list-style-type: none"> Respond to public appeals Temporary shelter and supplies Rapid assessment Support handling of mass casualties Support search and rescue efforts 	<ul style="list-style-type: none"> Damage assessment Reseed the affected (denude) areas
				<ul style="list-style-type: none"> Ministry responsible for Education 	<ul style="list-style-type: none"> Develop emergency protection plans in curriculum Develop training programme on DRR Drills and Exercises 	<ul style="list-style-type: none"> Apply emergency protection programs 	<ul style="list-style-type: none"> Continue build capacity on DRR Enhance DRR training programmes
				UN/International Agencies	<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation Reseed the affected (denude) areas

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
14.	EXPLOSION (Bombs, Industrial, Mining and Fishing), nuclear radiation	<ul style="list-style-type: none"> • Dar es Salaam • Arusha • Kilimanjaro • Shinyanga • Singida • Mara • Mtwara • Lindi • Coast region • Ruvuma 	<p>Ministry responsible for Home Affairs, Ministry responsible for Defence and national service, Ministry responsible for Energy and Mining</p>		<ul style="list-style-type: none"> • Household Emergency Supply Kit (non-perishable food, water, hand radio, etc • Community's warning systems; • Family and community Emergency Plan; • Disaster plans, evacuation routes, warning systems (radiation detectors) • Establish Local Emergency Planning Committees (LEPCs) – collect info on hazardous materials in the community and making this information available to the public (mines, fishing) • Establish disaster recovery plan • Adhere to Planning Guidance for Response to a nuclear explosion¹ 	<ul style="list-style-type: none"> • Search and rescue • Evacuation/Invacuation • Contain explosion • Information management • Handling of dead bodies • Investigation • Security • Mobile health centres for casualties • Cordoning affected areas 	<ul style="list-style-type: none"> • Execute Disaster Recovery / Business Continuity Audit Program • Damage assessment • Administer Health & Safety Guidelines • Investigation • Debriefing

¹ Available at <http://www.epa.gov/rpdweb00/docs/er/planning-guidance-for-response-to-nuclear-detonation-2-edition-final.pdf>

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
							<ul style="list-style-type: none"> • Awareness creation • Drills
			Ministry. Responsible for Local and Regional Administration		<ul style="list-style-type: none"> • Laws enforcement 	<ul style="list-style-type: none"> • Temporary shelter and relief supplies • Search and rescue • Cordoning affected areas 	<ul style="list-style-type: none"> • Damage assessment • Identify all affected households
			Ministry. responsible for labour		<ul style="list-style-type: none"> • Industrial inspection (OSHA) 		<ul style="list-style-type: none"> • Trauma management
			Min responsible for Health		<ul style="list-style-type: none"> • First aid training 	<ul style="list-style-type: none"> • Deployment of mobile 	<ul style="list-style-type: none"> • Monitoring of radiation
					<ul style="list-style-type: none"> • Emergency and disaster management training for health personnel • Preparation of contingency Plan • Preparation of equipments and supplies • Prepare for managing mass causality • Training of health staffs and arrangements for space • Awareness raising • Assessment of Nutrition status • Stocking up emergency medicine, equipment and supplies 	<ul style="list-style-type: none"> • health facilities • Handling of mass casualties • Provision of essential health services as per SPHERE standards • Disseminate critical public information 	<ul style="list-style-type: none"> • levels, casualties, Scale up comprehensive health service delivery • Public education • Reconstruct critical health facilities

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Ministry Responsible for Works Media	<ul style="list-style-type: none"> Educate, sensitize & info dissemination DRR 	<ul style="list-style-type: none"> Educate, sensitize & info dissemination 	<ul style="list-style-type: none"> Restoration of lifelines Educate, sensitize & info dissemination
				NGO/CBO/ private sector	<ul style="list-style-type: none"> Support government activities & initiatives 	<ul style="list-style-type: none"> Evacuation Search and rescue Temporary shelters and relief supplies Rapid assessment 	<ul style="list-style-type: none"> Continue to support government activities & initiatives
				Ministry responsible for Education	<ul style="list-style-type: none"> Build capacities in schools on explosion disasters Develop emergency explosion protection plans in curriculum Test emergency explosion protection programs 	<ul style="list-style-type: none"> Apply emergency protection programs Contain students & pupils in case of emergency 	<ul style="list-style-type: none"> Continue build capacity on DRR
				Ministry responsible for Natural resources and tourism	<ul style="list-style-type: none"> Monitoring of mining activities with potential impacts to wild flora and fauna Law enforcement 	<ul style="list-style-type: none"> Rapid Assessment 	<ul style="list-style-type: none"> Debriefing Evaluation Assessment to determine the extent of damage to natural resources
				Tanzania atomic energy Agency	<ul style="list-style-type: none"> Monitor mining activities with potential radiation impacts 	<ul style="list-style-type: none"> Rapid damage assessment Retrofitting 	<ul style="list-style-type: none"> Damage assessment Debriefing and evaluation
				UN/International Agencies	<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
15.	VOLCANIC ERUPTIONS A hard rain of abrasive particles	<ul style="list-style-type: none"> Regions along Rift Valley Arusha Kilimanjaro Mara 	Min responsible for Local Government		<ul style="list-style-type: none"> Develop and test a contingency plan that can be used in a variety of emergencies e.g. Settlement Emergency Plan for livestock and wild animals Provide information frequently and directly to the public about volcanic ash Develop IC network with nearby Aviation control towers 	<ul style="list-style-type: none"> Send Information to Aviation control towers to block the airspace Activate household emergency procedures Utilize allocated areas for shelter Utilization of emergency supply stocks Rapid assessment Temporary shelter and relief supplies 	<ul style="list-style-type: none"> Damage assessment Building capacity for preparedness
			Ministry responsible, Energy & Min.	<ul style="list-style-type: none"> Early warning systems & timely dissemination of info Risk assessment and updating hazard maps available 	<ul style="list-style-type: none"> Research during event and timely information dissemination 	<ul style="list-style-type: none"> Disaster assessment; Update hazard maps; Research - past & future events 	
			Min responsible for Lands	<ul style="list-style-type: none"> Risk assessment and mapping Contingency plans 	<ul style="list-style-type: none"> Execute contingency plans 	<ul style="list-style-type: none"> Rapid assessment of land / property loss Allocation of new land sites 	
			Min responsible for Health	<ul style="list-style-type: none"> Trained & skilled personnel; Availability & distribution Educational materials on² 	<ul style="list-style-type: none"> Establish health centres & mobile units Contain infectious 	<ul style="list-style-type: none"> Provide psychosocial services Scale up comprehensive health 	

² Health Hazards of Volcanic Ash - A Guide for the Public' on the International Volcanic Health Hazard Network (IVHHN) www.ivhnn.org/images/pamphlets/Preparedness_Guidelines_Swahili_WEB.pdf

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
					<ul style="list-style-type: none"> health hazards of volcanic ash 	diseases and mass burials <ul style="list-style-type: none"> Timely Handling of mass casualties Emergency shelters³ Deployment of mobile health facilities Handling of mass casualties Provision of essential health services as per SPHERE standards Disseminate critical public information 	<ul style="list-style-type: none"> Public education Reconstruct critical health facilities
					<ul style="list-style-type: none"> Trained & skilled rescue personnel available; Material resources for rescue plans 	<ul style="list-style-type: none"> Search and rescue Evacuation people downstream Tightening security 	<ul style="list-style-type: none"> Maintain law & order;
				Min responsible for Home Affairs Min responsible for Information & Communication	<ul style="list-style-type: none"> Develop an Emergency Communication Plan Enhance Traditional early warning system 	<ul style="list-style-type: none"> Information management Establish one-stop-information centre Emergency Communication facilities available Active traditional 	<ul style="list-style-type: none"> Public education & information dissemination awareness Restoration of damaged communication Infrastructure

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
						warning system	
				Min responsible for Natural Res.	<ul style="list-style-type: none"> Develop emergency plan for the wildlife grazing areas in NCA Develop emergency plan for the Tourists in NCA & Serengeti 	<ul style="list-style-type: none"> Rescue / evacuate vulnerable & endangered and infants in safe places 	<ul style="list-style-type: none"> Monitor movement of wildlife & migrating animals
				Min responsible for water	<ul style="list-style-type: none"> Develop emergency water supply plans 	<ul style="list-style-type: none"> Functional emergency water supply system for people, livestock and wildlife 	<ul style="list-style-type: none"> Drill wells to supply water for settlements and wildlife
				Min responsible for Education	<ul style="list-style-type: none"> Build capacities in schools on ash fall disasters Develop emergency ash fall protection plans in curriculum Test emergency ash fall protection programs 	<ul style="list-style-type: none"> Apply emergency protection programs Retain students & pupils in case of ash fall emergency 	<ul style="list-style-type: none"> Continue build capacity on RDD
				TMA	<ul style="list-style-type: none"> Establish weather stations and a record of daily/monthly wind movements and rains 	<ul style="list-style-type: none"> Inform the public the wind direction & rains during eruption time; 	<ul style="list-style-type: none"> Continue monitoring weather conditions
				Media/Min. Responsible for Communication	<ul style="list-style-type: none"> Educate, sensitize & info dissemination DRR 	<ul style="list-style-type: none"> Educate, sensitize & info dissemination 	<ul style="list-style-type: none"> Educate, sensitize & info dissemination
				CSOs/ Private sector	<ul style="list-style-type: none"> Support Government activities / initiatives 	<ul style="list-style-type: none"> Support public appeals Temporary shelter and supplies Rapid assessment 	<ul style="list-style-type: none"> Support Government initiatives & activities.
				UN/International Agencies	<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
16	NATURAL GAS WELLS & PIPE EXPLOSIONS; NATURAL CARBON DIOXIDE LEAKAGES IN VOLCANIC AREAS	<ul style="list-style-type: none"> Regions along Southern part of Rift Valley Dar es Salaam Lindi Mtwara Mwanza Arusha 	Min responsible for Energy & Min	<ul style="list-style-type: none"> Min responsible for Home Affairs 	<ul style="list-style-type: none"> Map carbon dioxide(CO₂) gas vents in the Rungwe Volcanic Province and produce CO₂ gas hazard maps Develop and Community Emergency preparedness plans (flammability, reactivity to air or water, corrosion, & toxicity). Develop communication and determination plans at community level Establish full pledged regional emergency gas pipe repair units 	<ul style="list-style-type: none"> Ensure community infrastructure centres – schools, hospitals, mosques, churches are well ventilated; Execute Community Emergency preparedness programs Communicate leakages / spillage to higher authorities (TPDC) Emergency gas repair units to act timely 	<ul style="list-style-type: none"> Continue monitoring CO₂ gas spillage in valleys; Install warnings in CO₂ vents & downstream areas Damage assessment Building capacity for preparedness Continue support emergency units
				<ul style="list-style-type: none"> Min responsible for Lands 	<ul style="list-style-type: none"> Trained & skilled rescue personnel available; material resources for rescue plans material resources to fight gas leakages 	<ul style="list-style-type: none"> Search and rescue Evacuation people & households downstream Tightening security 	<ul style="list-style-type: none"> Maintain law & order;
			Min responsible for Lands	<ul style="list-style-type: none"> Risk assessment & proper land use planning in areas located along the gas pipes Contingency plans for gas explosions 	<ul style="list-style-type: none"> Stop agricultural activities 	<ul style="list-style-type: none"> Rapid assessment of land / property loss 	
			Min responsible for Health	<ul style="list-style-type: none"> Trained & skilled personnel; Develop first aid treatment & rescue plans 	<ul style="list-style-type: none"> Establish health mobile units 	<ul style="list-style-type: none"> Counselling services Medical treatments Dissemination of public health info 	
			MEDIA	<ul style="list-style-type: none"> Educate, sensitize & info 	<ul style="list-style-type: none"> Educate, sensitize & 	<ul style="list-style-type: none"> Educate, sensitize & 	

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
				UN/International Agencies	dissemination DRR	info dissemination	info dissemination	Debriefing Evaluation
				Agencies	financial support for	for response activities		
				CSOs/ Private sector	Support Government activities / initiatives	Respond to public appeals Temporary shelter and supplies Rapid assessment	Support Government initiatives & activities.	
17	MUDFALS & MUDFLOWS	<ul style="list-style-type: none"> Kilimanjaro & Tanga - North & South Pare Mountains Morogoro - Uluguru Mountains Mbeya - Rungwe Volcanic Province 	Min responsible for Lands	<ul style="list-style-type: none"> Public education on proper land use Develop household emergency plans Establish warning systems for heavy rainfall Develop long term preventive measure plans during heavy rains Law enforcement 	<ul style="list-style-type: none"> Activate household emergency procedures Utilize allocated areas for shelter Utilization of emergency supply stocks Rapid assessment & supply of temporary shelter and relief supplies 	<ul style="list-style-type: none"> Relocate people to new settlement in devastated areas Execute long term preventive measure programs Land damage assessment & institute land use plan 		
				Min responsible for Energy & Min	<ul style="list-style-type: none"> Risk assessment on slope stability; Mapping of hazard areas 	Rapid assessment & update hazard maps	Continue research	

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
					<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • 	
			Ministry responsible for Home Affairs		<ul style="list-style-type: none"> • Trained & skilled mountain climbing rescue personnel available; • material resources for rescue plans 	<ul style="list-style-type: none"> • Search and rescue • Evacuation • Security • Investigation 	<ul style="list-style-type: none"> • • 	Maintain law & order;
			Ministry responsible for Health		<ul style="list-style-type: none"> • Trained & skilled personnel; • material resources • Availability & distribution Educational materials 	<ul style="list-style-type: none"> • Search & Evacuate • Timely Handling of mass casualties • Counselling services • Emergency shelters 	<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • Counselling services • Medical treatments • Dissemination of public health info
			Ministry responsible for Infrastructure		<ul style="list-style-type: none"> • Plan for availability of emergency feeder roads outlet include heliports- 	<ul style="list-style-type: none"> • Use of emergency feeder roads • Removal of mudflows 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • Restoration of roads, bridges
			Min responsible for Info. & Communications		<ul style="list-style-type: none"> • Public education on DRR; • Availability of Communication infrastructure Plan • Enhance Traditional early warning system 	<ul style="list-style-type: none"> • Information management • Establish one-stop-information centre • Dissemination of up-to-date info; 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • Public education & information dissemination awareness • Restoration of damaged comm..
						<ul style="list-style-type: none"> • Public education • Availability of Communications network 		

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
				Media/Min. responsible for Communication			<ul style="list-style-type: none"> Educate, sensitize & info dissemination DRR 	<ul style="list-style-type: none"> Educate, sensitize & info dissemination
				Min responsible for Education		<ul style="list-style-type: none"> Develop children's emergency protective plans in curriculum Test emergency programs 	<ul style="list-style-type: none"> Apply emergency protection emergency programs 	<ul style="list-style-type: none"> Continue build capacity on RDD
				CSOs Private sectors		<ul style="list-style-type: none"> Support Government initiatives & activities. 	<ul style="list-style-type: none"> Emergency shelters and other supplies Rapid assessment, search & rescue / Evacuation 	<ul style="list-style-type: none"> Continue supporting Government initiatives & activities.
				UN/International Agencies		<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Debriefing Evaluation
18.	TERRORI SM	Entire Country	Ministry responsible for Home affairs		<ul style="list-style-type: none"> Security Awareness creation Intelligence Contingency plan Install special signal and sirens Establish evacuation system 	<ul style="list-style-type: none"> Cordon Evacuation Search and rescue Rapid assessment Handling of dead bodies Crowd management/special group Information management Investigation 	<ul style="list-style-type: none"> Search for culprits Debriefing Investigation 	
				PMO-RALG		<ul style="list-style-type: none"> Negotiations 	<ul style="list-style-type: none"> Relief supplies 	<ul style="list-style-type: none"> Public education
				Media/ Ministry responsible for Information		<ul style="list-style-type: none"> Good Linkages with Lead Ministry & Community 	<ul style="list-style-type: none"> Public information 	<ul style="list-style-type: none"> Public education

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
					<ul style="list-style-type: none"> • • • 			<ul style="list-style-type: none"> • • •
				Ministry responsible for National Defense and National Service	<ul style="list-style-type: none"> • Putting in place enough security agents to prevent any kind of insecurity in every part of the nation. • Ensuring public co-operation with the security agents on any terrorist sighted. • Putting in place good communication network. • Creation of security committees at district and Wards to constantly monitor and act on any element of insecurity. • Creating cohesive security agents - military, Police, intelligence, leaders 	<ul style="list-style-type: none"> • Putting in place enough security agents to prevent any kind of insecurity in every part of the nation. • Ensuring public co-operation with the security agents on any terrorist sighted. • Putting in place good communication network. • Creation of security committees at district and Wards to constantly monitor and act on any element of insecurity. • Creating cohesive security agents - military, Police, intelligence, leaders 	<ul style="list-style-type: none"> • Employ the military to repel the attack. • Assist in effective control of entry points. • Armed escort to convoys. • Surveillance of our international borders. • Cordon and search. • Road blocks. • Armed patrols. • Crowd dispersal. • Raids/Anti terrorists Operations. 	<ul style="list-style-type: none"> • Rehabilitation of destroyed facilities. • Putting up emergency operation centre. • Security coordination. • Control and coordination of government agents, VIPs and diplomatic. • Movement and control of displaced persons, patients stranglers etc. • Effective manning of gates, check points etc. • Effective broadcasts to inform all about the disaster and education of the public on the damage and involved casualties.
					<ul style="list-style-type: none"> • and public. • Putting in place the logistic backup for security Operations. • Monitoring external hostile agents and putting in place adequate security measures. • Safeguarding major 			

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Ministry responsible for Foreign Affairs and International Cooperation	Operationalisation of National Foreign Policy	Negotiation	Diplomatic Dialogues
				Ministries responsible for Water & Works	Provision and maintenance of lifelines	Restoration of lifelines	Restoration of lifelines
				Ministry responsible for Health and Social Welfare	<ul style="list-style-type: none"> Emergency and disaster management training for health personnel Preparation of contingency Plan Preparation of equipments and supplies Prepare for managing mass causality Training of health staffs and arrangements for space Awareness raising Assessment of Nutrition status Stocking up emergency medicine, equipment and supplies 	<ul style="list-style-type: none"> Deployment of mobile health facilities Handling of mass casualties Provision of essential health services as per SPHERE standards Disseminate critical public information 	<ul style="list-style-type: none"> Provide psychosocial services Scale up comprehensive health service delivery Public education Reconstruct critical health facilities
				CSOs/International Humanitarian organizations	Capacity Building	<ul style="list-style-type: none"> Rapid assessment Search and rescue Relief supplies 	Relief supplies

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
			Community				<ul style="list-style-type: none"> Friendly posture disposition to rescuers 	Restoration of lifelines
			Private Sector		<ul style="list-style-type: none"> Maintenance of Security consciousness and awareness Capacity building Awareness creation 	<ul style="list-style-type: none"> Search and Rescue Handling of Mass casualty Materiel support to fighting echelons 	<ul style="list-style-type: none"> Restoration of lifelines 	
19.	ANIMAL DISEASES	<ul style="list-style-type: none"> Dodoma Singida Shinyanga Mwanza Arusha 	Ministry responsible for Livestock		<ul style="list-style-type: none"> Preventive measures Stockpiling of medics Contingency plan Vaccination Law enforcement 	<ul style="list-style-type: none"> Treat and contain spread of disease Information management Law enforcement 	<ul style="list-style-type: none"> Awareness Debriefing Evaluation 	
			PMO-RALG		<ul style="list-style-type: none"> Awareness and public campaigns Good animal husbandry Preventive measures 	Law enforcement	<ul style="list-style-type: none"> Law enforcement Improve preventive services 	
			Media/ministry responsible for Information		Good linkages with lead Ministry & Community	Public information	Public education	
			CSOs		<ul style="list-style-type: none"> Good animal husbandry Public awareness 	<ul style="list-style-type: none"> Moral and Material Support 	<ul style="list-style-type: none"> Support animal husbandry restoration initiatives 	

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
								Community/ PMO-RALG
20.	MARINE OIL SPILLS	Territorial Inland and Coastal Waters	Ministry responsible for Transport		<ul style="list-style-type: none"> Preventive measures Policy development Law enforcement Oil spill awareness campaigns 	<ul style="list-style-type: none"> Training on Identification of disease symptoms and good animal husbandry Stock piling of medics 	<ul style="list-style-type: none"> Animal Keeping Management Expertise and Material Support 	<ul style="list-style-type: none"> Restoration of animal husbandry Support Animal Husbandry Restoration Initiatives
				SUMATRA	<ul style="list-style-type: none"> Preventive measures Undertake Ship inspection Coordinate training and drills Maintain the Marine Rescue Coordination Centre Collect and monitor information on oil and hazardous pollution at the international level 	<ul style="list-style-type: none"> Technical, material and financial support 	<ul style="list-style-type: none"> Technical, material and Financial Support Provide situation reports Supervision of oil spill control, containment and cleanup 	<ul style="list-style-type: none"> Monitoring and Evaluation Debriefing Monitoring and Evaluation
					<ul style="list-style-type: none"> Law enforcement Search and rescue Assessment and monitoring Order appropriate measures for oil spill control, containment, cleanup and recovery Communicate the incident to relevant stakeholders Collect 			

S/No.	Hazards	Prone areas	Agency		Activity			
			Leading	Support	Preparedness	Response	Recovery	
				PMO/Disaster Management Agency	<ul style="list-style-type: none"> Develop national guidelines and response plans Undertake training and drills Public education Capacity building 	<ul style="list-style-type: none"> information on the scope and impact of a pollution incident 	<ul style="list-style-type: none"> Coordinate response operations at the national level Provide Emergency public information 	<ul style="list-style-type: none"> Debriefing and Monitoring and Evaluation Restoration of livelihood of victims
				VPO/NEMC	<ul style="list-style-type: none"> Identify pollution hotspots along the coastline Identify locations for temporary and final disposal of oil wastes Develop oils spill drift model for Tanzania waters 	<ul style="list-style-type: none"> Provide expertise on clean up operations Determine the degree of pollution and extent of environmental degradation 	<ul style="list-style-type: none"> Establish a monitoring and evaluation programme after the cleanup operation, Propose and supervise mitigation restoration measures restoration plans and costs 	
				Ministry responsible for Health and Social Welfare	<ul style="list-style-type: none"> Conduct training and drills 	<ul style="list-style-type: none"> Search and rescue Provide emergency health care 	<ul style="list-style-type: none"> Public education 	

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Ministry responsible for Local Government and Regional Administration EWURA	<ul style="list-style-type: none"> Oil spill awareness campaigns at regional and district level Prepare guidelines for internal emergency response for oil facilities Monitoring and evaluation of oil facilities 	<ul style="list-style-type: none"> Identification of oil spill victims Monitoring and evaluation of oil facilities 	<ul style="list-style-type: none"> Supervision of restoration of livelihood of victims Monitoring and evaluation of oil facilities
				Private Sector/Oil Facility Owners	<ul style="list-style-type: none"> Capacity building Training and drills Prepare response contingency plans 	<ul style="list-style-type: none"> Search and rescue Evacuation Oil spill control, containment, cleanup and recovery Repair the facility 	<ul style="list-style-type: none"> Monitoring and Evaluation
				Ministry Responsible for Defense (Navy Command)	<ul style="list-style-type: none"> Provide protection for Tanzanian waters Undertake training and drills Report sightings of oil spill 	<ul style="list-style-type: none"> Search and rescue Evacuation Enforce temporary exclusion zones Coordinate supply of resources Aid in control, containment and cleanup activities 	<ul style="list-style-type: none"> Debriefing Monitoring and Evaluation

S/No.	Hazards	Prone areas	Agency		Activity		
			Leading	Support	Preparedness	Response	Recovery
				Ministry responsible for Home Affairs	Maintain law and order, safety and security	<ul style="list-style-type: none"> Search and rescue Provide vessels and manpower for response operations Establish cordons as appropriate 	<ul style="list-style-type: none"> Conduct investigations Undertake court proceedings Law enforcement
				Tanzania Ports Authority	<ul style="list-style-type: none"> Formulate emergency response plans for ports Equipment and personnel mobilization Organize training and drills 	<ul style="list-style-type: none"> Provide equipment and manpower for response operations Cordon 	<ul style="list-style-type: none"> Debriefing Monitoring and Evaluation
				Fire and Rescue Force	<ul style="list-style-type: none"> Training and Drills 	<ul style="list-style-type: none"> Search and rescue (where appropriate) 	
				UN/International Agencies	<ul style="list-style-type: none"> Technical, material and financial support for preparedness 	<ul style="list-style-type: none"> Technical, material and Financial Support for response activities 	<ul style="list-style-type: none"> Monitoring and Evaluation
				Other Ministries, Agencies and Organizations	<ul style="list-style-type: none"> Duties and Responsibilities as outlined in the National Marine Oil Spill Response Contingency Plan 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">