

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

## NATIONAL DISASTER MANAGEMENT STRATEGY (2022 – 2027)



#### THE UNITED REPUBLIC OF TANZANIA

### **PRIME MINISTER'S OFFICE**

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## LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ARISE	Alliance for Disaster Resilient Societies
CBOs	Community Based Organizations
CIMA	Centro Internazionale in Monitoraggio Ambientale
DIDMAC	District Disaster Management Committee
DMD	Disaster Management Department
DMF	Disaster Management Framework
DMP	Disaster Management Policy
DPs	Development Partners
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRRFPs	Disaster Risk Reduction Focal Points
DRRM	Disaster Risk Reduction and Management
EM-DAT	Emergency Events Database
EOCC	Emergency Operation and Communication Centre
EWS	Early Warning System
FBOs	Faith Based Organizations
GIS	Geographical Information Systems
HFA	Hyogo Framework of Action
HIV	Human Immunodeficiency Virus
ICT	Information, Communication and Technology
IFHV	Institute for International Law of Peace and Armed Conflict
INGOs	International Non-Governmental Organizations

LGAs	Local Government Authorities
LTPP	Long Term Perspective Plan
M&E	Monitoring and Evaluation
MDAs	Ministries, Departments and Agencies
NDMS	National Disaster Management Strategy
NGOs	Non-Governmental Organizations
NOG	National Operational Guidelines
NSGRP	National Strategy for Growth and Reduction of Poverty
РМО	Prime Minister's Office
PO-RALG	President Office – Regional Administration and Local Government
RECs	Regional Economic Communities
REDMAC	Regional Disaster Management Committee
RS	Regional Secretariat
SADC	Southern African Development Community
SDGs	Sustainable Development Goals
SFDRR	Sendai Framework for Disaster Risk Reduction
SOP	Standard Operating Procedures
SWOC	Strengths, Weaknesses, Opportunities and Challenges
TADMAC	Tanzania Disaster Management Council
TANDREC	Tanzania Disaster Relief Coordination Committee
ТС	Technical Committee
TDCS	Tanzania Disaster Communication Strategy

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TDPRP	Tanzania Disaster Preparedness and Response Plan
UN	United Nations
UNDRR	United Nations Office for Disaster Risk Reduction
VIDMAC	Village Disaster Management Committee
WADMAC	Ward Disaster Management Committee

## GLOSSARY<sup>1</sup>

Build back better	The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and the environment.
Building code	A set of ordinances or regulations and associated standards intended to regulate aspects of the design, construction, materials, alteration and occupancy of structures which are necessary to ensure human safety and welfare, including resistance to collapse and damage.
Capacity	The combination of all the strengths, attributes and resources available within an organization, community or society to manage and reduce disaster risks and strengthen resilience.
Disaster	A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts.
Disaster management	The organization, planning and application of measures preparing for, responding to and recovering from disasters.
Disaster risk	The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.
Disaster risk assessment	A qualitative or quantitative approach to determine the nature and extent of disaster risk by analysing potential hazards and evaluating existing conditions of exposure and vulnerability that together could harm people, property, services, livelihoods and the environment on which they depend.
Disaster risk governance	The system of institutions, mechanisms, policy and legal frameworks and other arrangements to guide, coordinate and oversee disaster risk reduction and related areas of policy.
Disaster risk management	The application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.

Disaster risk reduction	Is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.
Disaster risk reduction strategies and policies	Define goals and objectives across different timescales and with concrete targets, indicators and time frames.
Early warning system	An integrated system of hazard monitoring, forecasting and prediction, disaster risk assessment, communication and preparedness activities systems and processes that enables individuals, communities, governments, businesses and others to take timely action to reduce disaster risks in advance of hazardous events.
Exposure	The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas.
Hazard	A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.
Informal settlements	are residential areas where 1) inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing, 2) the neighbourhoods usually lack, or are cut off from, basic services and city infrastructure and 3) the housing may not comply with current planning and building regulations, and is often situated in geographically and environmentally hazardous areas. <sup>1</sup>
Mainstreaming	Refers to consider and address risks emanating from natural hazards in medium-term strategic development frameworks, in legislation and institutional structures, in sectoral strategies and policies, in budgetary processes, in the design and implementation of individual projects and in monitoring and evaluating all of the above (Benson, 2009).
Mitigation	The lessening or minimizing of the adverse impacts of a hazardous event.

Multi-hazard early warning systems	Multi-hazard early warning systems address several hazards and/or impacts of similar or different type in contexts where hazardous events may occur alone, simultaneously, cascading or cumulatively over time, and taking into account the potential interrelated effects.
National platform for disaster risk reduction	A generic term for national mechanisms for coordination and policy guidance on disaster risk reduction that are multisectoral and interdisciplinary in nature, with public, private and civil society participation involving all concerned entities within a country.
Vulnerability	The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.
Vulnerable groups	This includes children, pregnant women, elderly, and persons with disabilities, malnourished, refugees, internally displaced persons and people who are ill or immune-compromised.

### PREFACE



The National Disaster Management Strategy (NDMS) 2022 – 2027 is an outcome of the Government of Tanzania commitments to protect communities' lives and property from the impact of disasters. The strategy aims for effective and efficient disaster risk sensitive and responsive society for sustainable development. This situation

will be realized through commitment and collaboration of all actors and empowerment of communities and institutions on taking appropriate actions to prevent and reduce disaster risks, vulnerabilities and human sufferings due to disaster situations. This will go concurrently with reduction of loss of life, properties and environment degradation. All these need resources and high level of commitment.

This strategy has been developed with understanding that all development achievements and initiatives need protection from impact of disaster events. The government will ensure that disaster risk reduction is the focus and integral part of national policies and programs. It will continue to consider a holistic approach towards disaster risk management and humanitarian services, where emphasis has been given to working together with all stakeholders to develop and implement strategic, scientific and innovative partnerships for community resilience.

The Strategy has draws on the basis of sustainability of achievements of the Tanzania Development Vision 2025, Long Term Perspective Plan (LTPP) 2011/12 – 2025/26, National Five-Year Development Plan 2021/22 - 2025/26 and various sectoral policies, strategies and plans. It also represents Tanzania's commitments to regional and international agreements and frameworks on disaster risk reduction (DRR). It addresses regional and international frameworks on disaster risk reduction and development such as the Sustainable Development Goals (SDGs), Sendai Framework for Disaster Risk Reduction 2015 – 2030, Paris Agreement on Climate Change and Program of Action in line with the Africa Regional DRR Strategy.

The strategy provides indicative actions relevant to sectoral plans, program and strategies in addressing key disaster risks, manage

humanitarian response and implement recovery measures. It reflects the country's commitment to paradigm shift from conventional disaster management to a more comprehensive disaster risk reduction culture having the development linkages. I urge all disaster risk management stakeholders to take part in the implementation of this strategy.



Kassim Majaliwa Majaliwa (MP.)

#### PRIME MINISTER

#### THE UNITED REPUBLIC OF TANZANIA

### ACKNOWLEDGEMENT



The National Disaster Management Strategy is output of collaborative efforts from various stakeholders within the country, regionally and global communities. The engagement of stakeholders from different levels come as the world including our country witness increase in diverse and systemic disaster risk which requires comprehensive.

integrated and inclusive disaster risk management efforts. Therefore, we hope this Strategy will contribute towards a cohesive and coordinated disaster risk management efforts, incorporating government and non-government actors' efforts.

I am grateful to the comments, contributions and recommendations from Ministries, Department and Agencies, Regional Secretariats, Local Government Authorities, United Nations and International Organisations, Non-Governmental Organisations, Faith Based Organisations, Regional Economic Communities, Academic and Research Institutions, Media and other stakeholders in developing of this strategy. Specifically, I extend my heartfelt thanks to the officials of Disaster Management Department for their tireless efforts in coordinating and developing this document in consultation with disaster risk management stakeholders.

This Strategy has as much as possible taken on board wishes and motives of many disaster risk management stakeholders during its preparation process. I hope that stakeholders will find the Strategy useful in implementing disaster risk management activities in their respective sectors for sustainable and disaster resilient community.

Dr. John A. K. Jingu PERMANENT SECRETARY PRIME MINISTER'S OFFICE (POLICY, PARLIAMENTARY AFAIRS AND COORDINATION)

### **EXECUTIVE SUMMARY**

The National Disaster Management Strategy (NDMS) has been developed for implementation during 2022 – 2027. It is based on the fact that Tanzania will continue to be at risk to disasters due to several vulnerability factors including geographical position, climate change and weather variability, assets exposure, urban population pressure, existence of unplanned urban settlements and environmental degradation. Recent events include earthquakes, floods, epidemics, drought and fire, in addition to road and train and marine accidents and interruption of ICT services including distributed denial-of-service, hacking and infrastructure breakdown like the National Communications Backbone.

The government in collaboration with other stakeholders has been taking various measures to address disaster risks including development of National Disaster Management Policy, National Operational Guidelines for Disaster Management, Disaster Management Act and its regulations. The implementation of the policy, act, guidelines and other instruments has contributed significantly in DRR and provision of humanitarian services in the country.

Despite the achievements there have been several challenges in Disaster Risk Reduction and Management (DRRM) including increase in frequency and magnitude of disaster events, high likelihood of trans-boundary disaster risks, inadequate integration of disaster management issues into development planning processes, inadequate public engagement and awareness, lack of comprehensive multi-hazard early warning system and inadequate use GIS, RS and ICT in DRM. Among the main setback to address these challenges has been lack of comprehensive and integrated DRR strategy.

Furthermore, there are new developments that have taken place at the global and regional level on disaster risk reduction and management such as Sendai Framework for Disaster Risk Reduction (SFDRR) 2015 - 2030, Program of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015 - 2030 in Africa, the 2030 Agenda for Sustainable Development, the Paris Agreement under United Nations Framework Convention on Climate Change, The Agenda for Humanity on five responsibilities reached in 2016, the New Urban Agenda and Agenda 2063: The Africa We Want. The government has pledged commitments in these unbinding frameworks and hence the need to have strategies for their implementation that are aligned with their targets and goals and national priorities. The strategy also aligns with various national strategies including the Tanzania Development Vision 2025, Long Term Development Plans

and various sectoral policies, strategies and plans.

The NDMS 2022 – 2027 reaffirms government commitment to strategic planning for disaster risk reduction for community resilience. The focus is multi – hazard, multi - sectoral and whole of society on disaster risk reduction for achieving sustainable development. It also seeks to promote coherence between climate change adaptation, DRR and sustainable development to prevent the creation of new risks and reduce existing and future risks.

The strategy contains ten objectives which seek to address disaster risks and enhance humanitarian services in the country. The objectives include to increase understanding of disaster risks at all levels; enhance disaster prevention, mitigation and preparedness capacity at all levels for community resilience; improve multi-hazard, end-to-end and people-centred early warning systems; strengthen disaster response capacity and humanitarian services at all levels; and increase capacity for build back better in recovery. rehabilitation and reconstruction for community resilience. Other objectives are to increase public and private financing and investments in disaster risk management; strengthen governance on disaster risk management at all levels; strengthen integration of gender, youth, person with disabilities and other vulnerable groups' needs and cultural diversity in disaster risk management: strengthened implementation of recognised regional and international disaster risk management practices; and increase multi-sectoral approach in managing environmental degradation and climate change for disaster resilience

The implementation of the NDMS will be governed through the existing policy, legal and institution framework on DRR. These frameworks provide responsibilities to stakeholders from national to local level through respective disaster management committees. The responsible entities have been provided in simplified matrix which contains objectives, strategies, targets, resources and timeframes.

The institutional arrangements for Monitoring and Evaluation of the NDMS are consistent with existing systems in place at MDAs, RS and LGAs. A list of both quantitative and qualitative indicators has been developed to track the progress towards achieving the identified targets. These will be reviewed annually to meet additional information requirements. Specifically, baseline data will be collected and updated as benchmark of the strategic monitoring on implementation. The reporting flow in the implementation of the strategy will follow the established government reporting system.

#### **1.0 INTRODUCTION**

#### 1.1 Background

Tanzania is susceptible to the impact of various disasters which are further exacerbated by climate change and weather variability, assets exposure and increase in population in disaster prone areas, existence of unplanned urban settlements and environmental degradation. The situation has had far-reaching consequences impeding socio-economic development. Recent events include earthquakes, floods, epidemics, drought, fire, chemical incidents, in addition to road, train and marine accidents. These have resulted in the loss of lives, destruction of infrastructure, disruption of livelihoods and impacted environment. The culmination of these events has resulted in social and economic setbacks, hindered development gained over years and increase susceptibility to hazards and reduce capacity to cope with disaster.

The government has been taking measures to address disaster impact including development of policy and legal frameworks which mandates various sectors and agencies to implement measures to manage disaster risks, hazards monitoring for early warning and provide humanitarian services. These efforts can be traced as far back as 1990 when the Disaster Relief Coordination Act No. 9 of 1990 was enacted. The 1990 Act mandate PMO to coordinate disaster management in the country and established an Inter Ministerial Committee known as the Tanzania Disaster Relief Committee (TANDREC) to oversee relief operations in the country. In 2015, Disaster Management Act No. 7 was enacted to replace Act No. 9 of 1990. The 2015 Act, among others established the Tanzania Disaster Management Council (TADMAC) to replace TANDREC and disaster management committees from region to village level. In Strengthening Disaster Management in the country, the government enacted Disaster Management Act No. 6 of 2022 to replace Act No. 7 of 2015 which establish new DRM framework in the country consists of two parts - decision-making and technical execution. The decision-making side has the Disaster Management Steering Committees (DMSCs) at the national, regional and district levels. Technical execution is through the Disaster Management Technical Committees also at the national, regional and district levels. The technical part is responsible for analysing and proposing technical measures to the decision-makers. In addition to the Act, disaster risk management in Tanzania is guided by the National Disaster Management Policy and the National Operational Guidelines for Disaster Management. Other disaster management tools in the country include the Tanzania Disaster Preparedness and Response Plan (TDPRP) and Tanzania Disaster Communication Strategy (TDCS).

Government has also developed policy and enacted Acts which supports DRM in various sectors and agencies. These policies and Acts address various issues relating to DRR including environment and climate change, public health, food and nutrition security, flood risks and water sources pollution, animal epidemics and pest's infestation, land management, mining operations and military support to civil authorities in public emergency. Others include various services include fire control, search and rescue services; early warning services to weather related disasters; radiation protection and nuclear safety; humanitarian services; control of chemical disasters; prevent and control of maritime accident and oil spill; and safety of air navigation and aircraft. Furthermore, there are ministries and agencies with department and section and a number of sectoral strategies and plans on DRM.

Despite the achievement made in DRR through implementations of those Polices and Acts in the country, there has been increase in disaster incidents with devastating impact in various sectors. This is due to different challenges experienced including inadequate consideration of disaster risk in sector policies, plans, program and budgets; hazards, vulnerability and exposure are not well mapped, packed and disseminated across sectors; increase in number and likelihood of trans-boundary disasters risks; inadequate measures on addressing small and frequent disaster events, damage and needs assessment, post-disaster review and resources coordination among relevant stakeholders; increased exposure and vulnerability for large parts of the population especially in urban, economic active centres and coastal areas; and general focus on managing disaster instead of proactive measure on managing disaster risks.

Therefore, in order to address the challenges experienced, the government developed the National Disaster Management Strategy (NDMS) for implementation in the period of 2022 - 2027 in Tanzania mainland to address disaster risks in the country in holistic manner.

#### 1.2 Disaster risks in development context

The NDMS 2022 – 2027 reaffirms government commitment to strategic planning for disaster risk reduction and community resilience. The strategy aligns with various national strategies including the Tanzania Development Vision 2025, Long Term Perspective Plan (LTPP) 2011/12 – 2025/26, Five Years National Development Plans, National Climate Change Strategy and other sector policies, strategies and plans related to DRM. In addition, it aligns with international frameworks which include the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015 – 2030, Programme of

Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Africa, Southern African Development Community (SADC) Disaster Risk Reduction Strategy and Action Plan 2023 – 2030 and SADC Regional Resilience Strategic Framework and the 2030 Agenda for Sustainable Development, the Paris Agreement under United Nations Framework Convention on Climate Change, The Agenda for Humanity on the Core Commitments from the World Humanitarian Summit of 2016, the New Urban Agenda and Agenda 2063: The Africa we Want. The strategy also takes national and local priorities into consideration and it recognizes the critical importance of emerging issues and opportunities in the areas of urban disasters, extreme weather events and involvement of the private sector in the disaster risk reduction. Finally, the strategy is also aligned with the Road Map for Improving the Availability, Access and Use of Disaster Risk Information for Early Warning and Early Action, developed through a multi-stakeholder process in 2020.<sup>1</sup>

#### 1.3 Purpose and approach on developing the strategy

The purpose of the strategy is to provide guiding actions on disaster risk management interventions in the country to strengthen socio – economic resilience and humanitarian services. The strategy considers a comprehensive and integrated disaster risk management and humanitarian services. It also seeks to promote coherence between climate change adaptation, disaster risk reduction and sustainable development to prevent new, and reduce existing and future disaster risks. The strategy focuses on multi – hazard, multi – sectoral and whole of society on disaster risk management for achieving resilience for sustainable development at all levels (national to village level). Adopting a multi-hazard approach in developing this strategy contributes to building resilience to more than one type of risk and allows for a higher level of efficiency in the use of resources.

The process for developing the strategy involved analysis of collected historical loss data and risk assessments reports for more than one hazard and evaluating existing DRR capacities including policies, Acts, strategies and plans and financing mechanisms. Initial process stated within the PMO where the draft document was prepared based on analyzed historical data and various local and international reports and frameworks on DRM. The draft strategy was discussed with members of the National Platform for Disaster Management to have comments from sectors and creating

<sup>&</sup>lt;sup>1</sup> AUC, UNDRR (2020). *Road Map for Improving the Availability, Access and Use of Disaster Risk Information for Early Warning and Early Action.* African Union Commission / United Nations Office for Disaster Risk Reduction.

ownership. The PMO incorporated comments from members of the platform attended and written comments from members who were not able to attend physically. Also, the strategy was presented for discussion to the Tanzania Disaster Management Council (TADMAC) and their recommendations were incorporated in the document. Then, the strategy was present to the Inter-Ministerial Technical Committee for information and comments for final improvement and enhanced ownership.

The strategy implementation will involve government Ministries, Departments and Agencies (MDAs), Regional Secretariat, Local Government Authorities, non-government actors, UN and international agencies, private sector, development partners, media, academic, research and technical institutions and other stakeholders. The resources for implementation of the NDMS will involve government budget, development partners and contribution from private partners and community. The DRR stakeholders are expected to use this strategy to develop projects, programs and action plans for implementation in their respective sectors.

#### 2.0 SITUATION ANALYSIS

#### 2.1 General situation of disaster in Tanzania

The data from EM-DAT<sup>2</sup> database shows that the primary natural hazard causes of major disasters in the last two decades (1997 - 2017) are floods (40%), epidemics (34%), earthquakes (9%), drought (6%) and storms (6%). Epidemic disasters result in the largest number of fatalities (92%) of total disaster deaths). Droughts, on the other hand, affect a larger number of people. In the last two decades in cases where people required immediate assistance, 91% were as a result of drought (Figure 1).

# Figure 1: Share of occurrence, deaths and affected people in respective total (1997-2017)



Source: EM-DAT: The Emergency Events Database – Université Catholique de Louvain – CRED, 2018

Data from the National Disaster Loss Database<sup>3</sup>, compiled and managed by PMO shows that there is a slight upward trend in disaster events for all accounted hazards, with frequent peaks in some years (Figure 2).

<sup>2</sup> Emergency Events Database (EM-DAT), contains essential core data on the occurrence and effects of over 22,000 mass disasters in the world from 1900 to the present day.

<sup>3</sup> <u>https://www.desinventar.net/DesInventar/profiletab.jsp?countrycode=tza&continue=y</u>

DesInventar is a conceptual and methodological tool allowing for the creation of a National Disaster Loss Inventory. It is an open source online database of damage and loss data aligned with the Sendai Framework for Disaster Risk Reduction 2015 – 2030 indicators.



Source: PMO, UNDRR (2018), DesInventar disaster database.

Description of experienced hazards including recorded impact due disasters caused and areas affected in recent years is as follows: -

Floods has been experienced in different districts across the country, as from 2015 to 2020 it has killed 307 people, affected 317,907 people and destroyed 50,588 houses. The regions which are frequently affected by floods include Dar es Salaam, Tanga, Mwanza, Morogoro, Lindi, Mtwara, Iringa, Dodoma, Kigoma, Rukwa, Pwani and Kilimanjaro. Rain storm killed 47 people, affected 3,500 people and destroyed 634 houses in Kahama district in 2015. In 2015/16 El Niño directly affected 84,643 people and destroyed 1,006 houses and 11,167.4 hectares of food crops, destroyed schools, health facilities, roads, bridges and other public and private infrastructures in Mwanza (Ilemela), Mtwara (Mtwara mikindani and council), Pwani (Rufiji) and Iringa (Iringa municipal). Other major flood occurred in 2009/2010 in Kilosa district whereby 2 people died and affected 26,000 people. This flood event also affected 19,000 people in Kongwa and Mpwapwa districts in Dodoma region, destroyed infrastructure including roads and bridges and contaminated water sources. Also, flood event occurred in Dar es Salaam in December, 2011 which killed 41 people, displaced 5,000 and affected 50,000 people.

Tropical cyclone heading directly to the Tanzania Coastline has been rare until in recent years when Tropical Cyclone Jobo formed in 2021 over northern Madagascar and Tropical cyclone Kenneth which made landfall in Northern Mozambique very near to the Tanzania boarder in 2019. After its formation, Cyclone Jobo moved West-Northwest wards threatening to make landfall in Tanzania near the Coast of Mafia Island on 25th April, as a weak to moderate storm with winds of 45 to 80 Km/h interrupting maritime transportation activities. The Tropical cyclone Jobo also triggered enhanced rainfall activities over Lake Victoria basin in Tanzania. Heavy rains reaching 59mm in 24hours which is above daily rainfall average was observed over Lake Victoria exacerbating flooding of the Lake waters thus impacting community livelihood and environment around the lake. Moreover, records attest to two such rare tropical cyclones, which made landfall in Zanzibar and Bagamoyo in 1872 and the Lindi Cyclone in 1952.

Drought condition is observed more frequently in parts of the northern and central regions including Arusha, Manyara, Shinyanga, Simiyu, and Dodoma. The recent drought which occurred between September 2021 and January 2023 occurred in Coast Region, Tanga, Kilimanjaro, Arusha and Manyara Regions affected crop production, reduced availability of water and pasture for livestock. Specifically, there was death of 157,695 cattle, 48,290 goats, 94,230 sheep, 6,135 donkey and 8 camel. Severe drought in Arusha and Manyara regions in 2008/2009 caused death to 56,585 cattle, 39,766 goats and 28,883 sheep in Monduli district and 231,832 cattle, 171,435 goats and 92.235 sheep in Longido district. Another drought event which occurred in Bahi district in Dodoma in 2005/2006 caused death to 4871 cattle and 1974 goats and sheep. Drought is the major reason for both water and food shortage and also worsens agricultural development. Climate change and environment degradation pose high possibility of drought occurrences with major consequence and high risk as large population of communities depend on rain fed agriculture for their economic livelihood.

Human epidemics are of high concern due to their ability to cause devastating morbidity and mortality. The longest cholera outbreak which started from August, 2015 to December, 2018 caused 550 deaths and affected 33,319 people in 129 districts. Epidemics such as cholera, Acute and Chronic hepatitis and newly emerging and reemerging diseases like Dengue fever, COVID-19 and Chikungunya have great risk to human life and the economy. Epidemic disease has the potential to spread fast. Therefore, if no interventions are put in place to control the spread, the health, social and economic sectors would be heavily affected.

Animal diseases (trans-boundary and zoonotic) significantly hinder the development of the livestock sector and they also expose producers to high livelihood risks and uncertainties. Anthrax was reported in Kiteto district in

April, 2018 where 8 people died and 62 households were affected from eating infected meat. The outbreak also occurred in Moshi district in February, 2019 which killed 2 people.

Pest outbreaks are the major constrains to the development of agricultural industry in Tanzania which may result into devastating crop losses if not well managed. Desert Locust invasion in the period of January to March, 2021 affected a total of five Districts which are Mwanga and Siha (Kilimanjaro), Simanjiro (Manyara); and Longido and Monduli (Arusha). Surveillance and monitoring were carried out and identified the presence of Locusts in groups of an average of 55 million in an area of half a square kilometer. American fall armyworm invasion in 2017 mainly affected cereal crops with maize and rice paddy severely impacted in Geita, Rukwa, Kagera, Pwani, Simiyu, Mwanza, Morogoro, Kilimanjaro, and Njombe regions. The losses are attributed with inadequate defense against invasive pests and diseases, as well as poor post-harvest produce handling procedures and technologies.

Analysis of earthquakes for the areas that fall within the East African Rift System (EARS) in Tanzania which is well-known as prone to seismic activities has been categorized in high certainty of occurrence with minor to moderate consequences but with high risk. Figure 3 shows geographical distribution of maximum ground acceleration that may occur during earthquake shaking at a location in the country



Figure 3: Earthquake hazard in Tanzania<sup>4</sup>

Source: Global Earthquake Model Foundation and the METEOR Project Consortium, 2019

Earthquake occurred in 2017 in Mwanza killed 1 and injured 2 people and damaged some buildings in 4 schools. The major earthquake in Kagera region in September 2016 (magnitude 5.9) killed 17 people, injured 440 and affected 117,721 people, destroyed 2,072 houses and 2,191 public buildings. Other earthquakes were reported in Sumbawanga in March 2019 (magnitude 5.5), Mwanza region in May, 2017 (magnitude 5.0), Lake Natron in July 2007 (magnitude 5.9), Lake Tanganyika in December 2005 (magnitude 6.8) and Northern Dodoma in July 2002 (magnitude 5.6). Earthquake incident in Bariadi in May, 2002 killed 2 and injured 5 people, destroyed 690 and damaged 636 houses. The earthquake also destroyed some buildings in 2 schools in the district.

<sup>&</sup>lt;sup>4</sup> The map depicts the geographic distribution of the Peak Ground Acceleration (PGA) with a 10%

probability of being exceeded in 50 years, computed for reference rock conditions (shear wave velocity, Vs30, of 760-800 m/s).

Landslides occur when the force of gravity acting on the materials within a slope overcomes the material's resistance to shearing. Landslide in Same in 2009 caused 24 deaths and killed 60 cows, damaged 15 kilometers of road and 15 irrigation reservoirs due to impact of mudflow. Landslide incidents were also reported in Makete in 2010 which blocked the road to Njombe for some days. Landslide incidents occurred in Arusha Municipal in April, 2019 where 3 people died and 2 were injured; and Mbogwe district in October, 2019 where 2 people died. Other landslides incidents occurred in Ludewa in March, 2020 where 2 people died and 5 injured and 13 houses were destroyed. Other geographical disaster events involved repeated Volcanic eruption at Oldoinyo Lengai hills in 1880, 1917, 1921, 1940, 1966, 1967, 2007 and 2008 affected people, livestock and environment.

Urban fire is one of the common hazards in the country. There are many causes of urban fire including high use of electrical appliances due to rapid urbanization and the increase in population. A series of fire incidents in schools from 2016 to 2020 have caused damage in some buildings in 34 primary and secondary schools. Fire outbreak in Arusha municipal in March, 2020 destroyed the Samunge market with an area of 3.8 acres consisting of various businesses and infrastructures. The fuel tanker explosion in Morogoro municipal in 2019 killed 105 people.

Major maritime incidences occurred are the MV Nyerere ferry capsized in Lake Victoria in September, 2018 claimed 227 lives and injured 41 people. Mv Skagit Vessel capsized in Indian Ocean in July, 2012 killed 144 people; Mv Spice Islander vessel capsized in Indian ocean in October, 2011 caused 203 death and 1370 missing and Ulanga ferry capsized in Kilombero river in November, 2002 caused 13 death and 6 missing. Also, in Lake Tanganyika, two boats collided in November, 2001 caused 20 deaths and MV Bukoba vessel capsized in Lake Victoria in May, 1996 caused 833 death.

The mining accident at Nyamalinde mines in Geita in May, 2017 killed 4 and injured 3 people. Another, accident occurred in March, 2009 at Mgusu Mines, Geita left 7 dead and 3 injured. Also, mining accident occurred in Mererani Mines, Arusha in March 2008 caused 74 deaths and an event in June, 2002 caused 39 death and 3 were missing. Another disaster event involving a train accident occurred in June, 2002 at Msangali village in Dodoma killed 283 and injured 466 people.

Moreover, according to Tanzania National Nutrition Survey of 2018, acute malnutrition affects over 500,000 children, of which 90,000 are affected

with Severe Acute Malnutrition (SAM) which increase their risk of child morbidity and mortality during emergencies. Maternal under nutrition both before and during pregnancy is one of the main contributory factors for low-birth-weight babies. Nation-wide, 7.3% of non-pregnant women 15-49 years of age were considered being in underweight (BMI<18.5). Thus, nutrition interventions are to be strongly integrated into disaster risk reduction and management in a view to reducing the high risk of children dying if they do not receive appropriate attention and response. Basing on the current findings, the Regions of Singida, Kigoma, Shinyanga and Simiyu are more prone to higher risk to effects of acute malnutrition.

#### 2.2 Climate change related disaster risk in Tanzania

The effects of floods and droughts under present and future climate conditions are likely to worsen. Tanzania's economy and population are exposed to severe effects of flooding. In the current climate, the annual GDP produced in areas affected by floods represents on average 0.26% of the total (147 million\$/Y). Under projected climate conditions this value is expected to increase to 0.36% (208 million\$/Y)<sup>5</sup>. It is estimated that the number of people affected by floods, on average almost 45,000 every year, could increase about fourfold, reaching 210,000 every year on average, consider the future climate and socio-economic development and therefore the possible change in values distribution, concentration and vulnerability as shown in figure 4 (PMO, UNDRR and CIMA, 2019).

<sup>5</sup> 

Present conditions refer to years 1951-2000; and future climate conditions refer to 2050-2100.





Source: PMO, UNDRR and CIMA, 2019

The majority of the population affected is concentrated in the central part of the country, from west to east, with a particular focus on the coastal areas. In the projected future, this pattern is confirmed with marked increases in the eastern and western ends of the country as well as around the Lake Victoria area. The most affected sectors, in terms of direct economic losses, are the service and agricultural sectors, followed by the transportation sector. The spatial distribution of the annual average losses is very similar for the three sectors and the most affected regions are Morogoro, Tanga and Pwani. High impacts are also expected in the western part of the country for the transportation sector. The direct economic losses are estimated on average to increase for all sectors under projected climate conditions. Only in agriculture is a decrease in projected losses visible in the western part (PMO, UNDRR and CIMA, 2019).

There is high probability of more intense and more frequent agricultural droughts under future climatic conditions (2051 - 2100). Computations show that among the 11.8 million people (on average, per year) living in areas affected by drought under current climate conditions, an average of 4.8 million people per year are estimated to be directly affected. This number would increase to 7.8 million under projected climate conditions and to 12 million if both projected climate conditions and socioeconomic evolution are

considered as shown in figure 5 (PMO, UNDRR and CIMA, 2019).

Figure 5: Population affected by drought under present and future climate conditions



Source: PMO, UNDRR and CIMA, 2019

Average annual economic losses in agriculture due to drought is estimated at around 140 million USD under current climate conditions. These would be more than double under projected climate conditions, if no adaptation measures were implemented (PMO, UNDRR and CIMA, 2019).

#### 2.3 Disaster risk prevalence in Tanzania

The INFORM risk index shows Tanzania is at risk to various hazards with high vulnerability and inadequate coping capacity. The trend in three years (2018 - 2020) as shown in Figure 6 there is increase in vulnerability with constant level of hazards and exposure and inadequate coping capacity.



Figure 6: Tanzania INFORM<sup>6</sup> Risk Index

Tanzania is classified as the 51<sup>st</sup> out of 180 countries in the world risk index to natural disasters. However, the constant annual economic growth is not enough to effectively reduce poverty which further exacerbates people's vulnerability to disaster risk. With a total population of approximately 57 million, and a population growth rate of around three percent, less than 30% of the population lives below the international poverty line and about 66.9 per cent of employed in agricultural and other weather-related economic livelihoods. The situation makes the Tanzanian population vulnerable to extreme natural events and the effects of climate change. Tanzania is particularly affected by droughts and sea level rise (UNU-EHS World Risk Report, 2019).

Besides being one of the most vulnerable countries with least adaptive capacity to climate change, Tanzania is also one of the least prepared according to the Notre Dame-Global Adaptation Index (ND-GAIN)<sup>7</sup>. It is ranked at 150<sup>th</sup> out of 181 countries due to its high vulnerability to climate disruptions (2016). The country is ranked 155<sup>th</sup> out of 180 countries in adaptive capacity. It has low ability to leverage and convert investments to adaptation actions, as evidenced by its 143<sup>rd</sup> rank out of 191 countries in readiness.

Food security and nutrition, in terms of availability, accessibility and utilization, depends heavily on climate conditions in Tanzania. Thus, climate change has considerable implications on poverty that are often exacerbated by inequalities, especially in rural areas. These include gender inequalities

<sup>&</sup>lt;sup>6</sup> INFORM is a global, open-source risk assessment for humanitarian crises and disasters. INFORM is a collaboration between the Inter-Agency Standing Committee Task Team for Preparedness and Resilience and the European Commission

<sup>&</sup>lt;sup>7</sup> https://gain.nd.edu/our-work/country-index/rankings/
as more often rural women and girls are poorer, less educated and excluded from political, community and household decision-making, and they possess fewer and inadequate means to cope with the effects of climate change. Experiences of unpredictable rainfall, prolonged dry periods and shifts in agro-ecological zones not only exacerbate poverty but may also lead to increased prevalence of malaria (USAID, 2013). The Fifth Assessment Report (2014) by the Intergovernmental Panel on Climate Change estimated changes in climate could increase poverty and vulnerability to weather related hazards.

# 2.4 Strengths, Areas for Improvement, Opportunities and Challenges Analysis

The analysis has been conducted to identify strengths, areas for improvement, opportunities and challenges (SAOC) as basis for formulation of objectives of this strategy in the context of physical, environmental, political, economic, social and cultural disaster risk factors need to be addressed to strengthen resilience in the country. There are number of strengths and opportunities to build on in order to strengthen DRM. Also, there are areas for improvement to address and deal with challenges encountered in DRM. The analysis is based on outcome of various workshops, meetings and on document review, and is focused on getting an overview of the disaster risk management. The output of this process is a holistic and systematic overview of SAOC which have been used as a basis for deriving ten objectives for implementation in the strategy. The SAOC analysis is presented in Table 1.

The sources of information for SAOC analysis are various sector reports on DRM measures and reports of Tanzania Disaster Management Council and National Platform for Disaster Management from 2017 – 2020, meeting with Regional Disaster Management Committee in Dar es Salaam, Lindi, Morogoro, Mara, Rukwa and Mtwara Regions between 2018 – 2020, training workshop with the District Disaster Management Coordinators from Morogoro, Dar es Salaam and Dodoma in 2019, disaster management reports from various districts for the period of 2017 to 2020. It has also consider the review of Disaster Management Act No. 7 of 2015 and its Regulations of 2017, National Disaster Management Policy of 2004, National Operational Guidelines (NOG) for Disaster Management of 2014, Vulnerability Assessment Report of 2001 and 2003 and Disaster Risks Capacity Needs Assessment for Tanzania Mainland of 2008, Disaster Risk Profile of 2019 for flood and drought, Risk Sensitive Budget Review of 2020, Multiple benefits of DRR investments – Reducing Risk and Building Resilience against floods and droughts in Tanzania of 2020, Tanzania Development Vision 2025, Long Term Development Perspective Plan 2011 – 2016 and Five Year Development Plans. The analysis focuses on disaster risks, vulnerability and capacities which exist in order to addresses a broad range of hazards in the country that necessitates the implementation of all ten objectives identified.

# Table 1: The resulting SAOC analysis

INTERNAL E	INVIRONMENT
Strengths	Areas for Improvement
<ul> <li>Existence of institution for coordination and department and agencies to deal with various disaster</li> <li>Availability of various documents to guide DRR in the country.</li> <li>National and sector plans, strategies and polices consider DRR as key for sustainable development</li> <li>National and sector Emergency Operation Centres</li> <li>Early warning system for extreme weather, food security, human and animal epidemics</li> <li>Prepositioned humanitarian nonfood and food relief items and food reserves at zones level</li> </ul>	<ul> <li>Institution operational mechanisms for disaster risk management</li> <li>Capacity in terms of equipment, funds and human resources</li> <li>Diversification of relief items and food reserves</li> <li>Impact based early warning system with sharing and dissemination of information</li> <li>Hazard specific and multi – hazard comprehensive disaster risk assessments</li> <li>Access to live data including the location and space data, such as Geographic Information System (GIS) on DRR.</li> </ul>
EXTERNAL F	ENVIRONMENT
Opportunities	Challenges
<ul> <li>Mostly small scale with low impact and predictable trend of disasters in terms of time and location</li> <li>DRM courses in education institution.</li> <li>Active media and community in response in disaster situations</li> <li>Political will, private sector and donor interest in DRM.</li> <li>Established DRM Centre and departments in MDA.</li> </ul>	<ul> <li>Hazard identification and risk assessment not sufficiently applied with inadequate information packing and dissemination for DRR needs at all levels.</li> <li>High likelihood of trans-boundary disasters i.e., epidemics, droughts and floods.</li> <li>Inadequate damage and needs assessment, post-disaster review and coordination among relevant stakeholders.</li> <li>High level of vulnerability for large parts of the population especially in urban and economic active centres.</li> <li>Mostly focus on reactive response instead of proactive DRR at all levels.</li> </ul>

The SWOC analysis help to pave way for appropriate actions and effective measures on disaster risk reduction and management in order to save lives, and protect the environment and economy, now and in the future. To achieve this, the strategy outlines ten objectives for DRR and humanitarian services which will lead different actors on measures to anticipate, recognize and cope to disaster risks and events through established mechanism and resources and consideration of cross-cutting issues.

The strategies for anticipating disasters before they happen are outlined through understanding of disaster risks, and for recognizing when they are about to happen or has happened are addressed through forecasting and early warning, coping measures required are outlined in prevention, mitigation and preparedness, response, recovery and reconstruction, and mechanism and resources are outlined in disaster risk governance and public and private financing and investment, and cross-cutting issues have been addressed through gender, vulnerable groups' and cultural diversity, regional and international roles and environmental and climate change issues. These strategies are not only crucial in themselves, but also largely dependent on each other in such a way that the performance of one function requires the output from another function, e.g., to respond through informing the public to evacuate for a coming flood necessitates information from forecasting for early warning.

## 3.0 VISION, MISSION AND OBJECTIVES

### 3.1 Vision

Effective and efficient disaster risk sensitive and responsive society for sustainable development.

### 3.2 Mission

To take appropriate actions and effective measures on disaster risk reduction and management to save lives, and protect properties, environment and economy for national resilience.

### 3.3 Objectives

### 3.3.1 Main objective

To strengthen national disaster resilience through inclusive, comprehensive and integrated DRM measures.

### 3.3.2 Specific objectives

- i. To increase understanding of disaster risks at all levels.
- ii. To enhance disaster prevention, mitigation and preparedness capacity at all levels for community resilience.
- iii. To improve multi-hazard, end-to-end and peoplecentred early warning systems.
- iv. To strengthen disaster response capacity and relief services at all levels.
- v. To strengthen build back better in recovery, rehabilitation and reconstruction for community resilience.
- vi. To increase public and private financing and investments in disaster risk management.
- vii. To improve governance on disaster risk management at all levels.
- viii. To strengthen integration of gender, youth, person

with disabilities and other vulnerable groups' needs and cultural diversity in disaster risk management.

- ix. To strengthen implementation of recognised regional and international disaster risk management practices.
- x. To increase multi-sectoral approach in managing environmental degradation and climate change for disaster resilience.

### 3.4 Guiding principles for disaster risk management

- i. Government has the primary responsibility to prevent and reduce disaster risk and management in collaboration with non-governmental actors including international, regional and bilateral cooperation.
- ii. Consider comprehensive, inclusive, integrated, disaggregated and community-based approach to disaster risk management.
- iii. Address underlying disaster risk factors through disaster riskinformed public and private investments and post-disaster recovery (rehabilitation and reconstruction) for sustainable development.
- iv. Aim at coherence as appropriate with sustainable development, food security, health and safety, climate change and variability, environmental management and disaster risk reduction.
- v. Management of humanitarian assistance is provided in an inclusive, equitable, consistent and predictable manner.
- vi. DRM information shall be inclusive and made available to the public wherever possible to ensure informed decision making.
- vii. Skill development and professional practice are informed through best practice, documented experiences, social and scientific research results.

# 4.0 STRATEGY IMPLEMENTATION

### 4.1 Understanding of disaster risks

### (a) Objective

To increase understanding of disaster risks at all levels.

### (b) Strategies

- (i) Conduct periodic comprehensive disaster risk assessments at all levels, starting where possible from the priorities identified by the country risk profile.
- (ii) Operationalizing up to date disaster risk assessment information for development planning process with the view of promoting the use of risk information for operational priority setting as well as strategy and policy development.
- (iii) Integrating DRR into higher and technical education systems and curricula, and into national research agenda.
- (iv) Advocate DRM research with disaster management stakeholders.
- (v) Facilitate creation of stakeholders' platforms, networks and mechanisms for DRM information sharing.
- (vi) Promote the usage of ICT and geospatial services and applications in DRM.
- (vii) Roll out disaster risk awareness campaign focusing on potential risk scenarios and taking into account specific needs of person with disabilities.
- (viii)Develop DRR advocacy strategy and conduct advocacy to decision makers based on sector risk scenarios.

### (c) Targets

(i) Comprehensive disaster risk assessments and mapping for ten major hazards conducted at all levels by 2027.

- (ii) Comprehensive disaster risk information mainstreamed into sectoral planning process by 2027.
- (iii) DRM curricula and training kits developed and incorporated into higher and technical educational system based on scientific evidence produced by the disaster risk assessment studies by 2027.
- (iv) Jointly action research between local communities, research and academic institutions dealing with DRM conducted by 2027.
- (v) DRM applied research platform and network established by 2027.
- (vi) Platforms and networks for DRM information sharing at all levels established by 2024.
- (vii) Reliable and affordable up-to-date DRR information to all stakeholders available by June 2025.
- (viii)Relevant regional and international agreements on accessibility of ICT and geospatial information adhered to by 2027.
- (ix) Use of earth observation data in disaster risk reduction improved by 2027
- (x) Guidelines on the usage of ICT and geospatial services and applications in DRRM in place by 2027.
- (xi) Disaster risk awareness campaign rolled out at all levels focusing on potential disaster risk scenarios by 2027.
- (xii) DRR advocacy strategy developed and advocacy conducted to decision makers based on sector risk scenarios by 2027.

### 4.2 Disaster prevention, mitigation and preparedness

### (a) Objective

To enhance disaster prevention, mitigation and preparedness capacity at all levels for community resilience.

### (b) Strategies

- (i) Develop guidelines for mainstreaming DRM issues into sectoral development plans, strategies, budgets and programmes at all levels.
- (ii) Promote use of insurance and reinsurance products for DRM.
- (iii) Conduct regular training, exercises and drills at all levels.
- (iv) Strengthen capacity for application of one health approach for relevant health related disasters at all levels for community resilience.
- (v) Map and establish evacuation centres in disaster risk areas.
- (vi) Build capacity for damage and need assessment at all levels.
- (vii) Facilitate review and develop buildings codes, regulations and safety guidelines.
- (viii)Strengthen preventive health care for diseases outbreaks.
- (ix) Promote zoning and land use plan and management in urban and rural areas.
- (x) Promote best practices in DRM.
- (xi) Develop multi-hazard or hazard specific DRR strategies, preparedness and response plans based on scientific disaster risk assessment whenever possible at all levels.
- (xii) Strengthen capacity of institutions responsible for search and rescue with modern equipments.

(xiii)Establish emergency medical services at region level.

- Guidelines for mainstreaming DRM issues in sector development plans, strategies and programmes in place by 2025.
- (ii) Sectors capacity building in DRM mainstreaming in planning process enhanced by 2027.
- (iii) The use of insurance and reinsurance products for DRM promoted by 2027.
- (iv) Regular, multi-hazard and multi-sectoral training, exercises and drills conducted at all levels by 2027.
- (v) Trans-boundary risk management training, exercise and drills advocated by 2027.
- (vi) Capacity for application of one health approach for relevant disasters at all levels for community resilience strengthened by 2027.
- (vii) Evacuation centres in disaster risk areas mapped and established by 2027.
- (viii)Capacity for damage and needs assessment at all levels built by 2027.
- (ix) Buildings codes, regulations and safety guidelines developed and reviewed by 2027.
- (x) Preventive health care guidelines developed and reviewed by 2027.
- (xi) Zoning and land use plan and management in urban and rural areas promote by 2027.
- (xii) Best practices in DRM documented and shared with stakeholders by 2027
- (xiii)Multi-hazard or hazard specific DRR strategies, preparedness and response plans developed based on scientific disaster risk assessment whenever possible at all levels by 2027.

- (xiv)Capacity of institutions responsible for search and rescue with modern equipment's strengthened by 2027.
- (xv) Emergency medical services strengthen in regions by 2027.

### 4.3 Multi-hazard early warning system

### (a) Objective

To improve multi-hazard, end-to-end and people-centred early warning systems.

### (b) Strategies

- (i) Empower institutions responsible for early warning and emergency operations to develop and adhere to a common multisectoral communication platform.
- Enhance the capacity of EOCC to be fully operational 24/7 by equipping it with modern equipment and technology with well trained staff.
- (iii) Ensure the use of ICTs and geospatial technologies in forecasting, monitoring and dissemination of warning information to the general public and the vulnerable population in a timely and clear manner.
- (iv) Integrate local knowledge in formal early warning systems
- (v) Develop of standard operating procedures and protocols for multi-hazard early warning systems.
- (vi) Raise awareness on early warning information to target groups.

- (i) Capacity of institutions responsible for early warning and emergency operations enhanced by 2027.
- (ii) Establish a common technological platform for risk information and data exchange to support all early

warning institutions in connection with the national Emergency Operations and Communications Centre and harmonise issuing of public warnings by 2027.

- (iii) The use of ICTs and geospatial technologies strengthened and incorporated in forecasting, monitoring and dissemination of warnings by 2027.
- (iv) Research and validation of traditional, citizen science and local early warning knowledge facilitated by 2027.
- (v) Standard operating procedures and protocols for multi-hazard early warnings communication developed by 2027.
- (vi) Customised impact based and end user warning messages (including use of specialised functions such as the Common Alerting protocol (CAP)) designed to trigger early actions to targeted groups though mass media (radio, TV, social media, newspapers, etc) developed by 2027.

### 4.4 Disaster response capacity and relief services

### (a) Objective

To strengthen disaster response capacity and relief services at all levels.

### (b) Strategies

- (i) Establish and strengthen national and local multisector disaster rapid response teams and volunteers.
- (ii) Develop and operationalize national and sector specific contingency plan.
- (iii) Develop guidelines, procedures and criteria for national disaster response interventions.
- (iv) Develop guidelines and procedures for coordination of cross-border disaster response.
- (v) Ensure effective logistical capacity including

preposition of essential humanitarian relief items in strategic warehouses for timely and efficient relief assistance provision.

- (vi) Conduct regular monitoring and inventory of capacity for response to disasters at all levels.
- (vii) Enhance appropriate nutritional care and support to communities during emergencies and disasters.

### (c) Targets

- (i) National and local multi-sectoral disaster rapid response teams and volunteers strengthen, established and capacitated by 2025.
- (ii) National and sector specific contingency plan develop and operationalize based on the risk knowledge acquired through the disaster risk assessment studies where possible in quantitative terms by 2024.
- (iii) Minimum national humanitarian standards for relief provision developed by 2024.
- (iv) Guidelines, procedures and criteria for national crossborder disaster response developed and coordination in place by 2027.
- (v) Disaster strategic warehouses budget and stocking plan in place and implemented by 2027.
- (vi) Monitoring and inventory for response capacity conducted by 2027.
- (vii) Appropriate nutritional care and support to communities during emergencies and disasters enhanced by 2027.

# 4.5 Build back better in recovery, rehabilitation and reconstruction

(a) Objective

To strengthen capacity for build back better in recovery for community resilience.

### (b) Strategies

- (i) Develop guidelines and standards for disaster recovery.
- (ii) Conduct immediate post disaster review and develop lessons learnt for incorporation into future disaster management measures.
- (iii) Incorporate provision of psychosocial support and mental health and rehabilitation services for all people in need during emergency and recovery processes.
- (iv) Ensure provision of social protection to vulnerable groups including cash transfers for recovery wherever possible.
- (v) Conduct post disaster needs assessments for major disasters to inform recovery and reconstruction process.

- (i) Guidelines and standards for disaster recovery (rehabilitation and reconstruction) developed by 2024.
- (ii) Guidelines for mainstreaming disaster risk issues in sector recovery (rehabilitation and reconstruction) possibly in a cost benefit framework favouring and adaptive and transformative approach developed by 2024.
- (iii) Resources for conducting post disaster review mobilised by 2027.
- (iv) Disaster management plans reviewed to incorporate post disaster lessons learned by 2027.
- (v) Provision of psychosocial support and mental health and rehabilitation services for all people in need during emergency and recovery processes maintained by 2027.

- (vi) Guidelines developed and provision of social protection to vulnerable groups including cash transfers for recovery wherever possible undertaken by 2027.
- (vii) Post disaster need assessment for major disasters conducted by 2027.
- (viii) Resources mobilization guideline for recovery developed by 2024.
- (ix) National Disaster Recovery Framework development by 2023.

# 4.6 Public and private financing and investments in disaster risk management

### (a) Objective

To increase public and private financing and investments in disaster risk management.

### (b) Strategies

- (i) Establish the national disaster risk reduction investment and financing framework and resources mobilization strategy.
- (ii) Establish operational framework for disaster risk transfer, insurance, risk-sharing and financial protection for public and private investment based on quantitative risk estimates.
- (iii) Facilitate enhancement of social safety nets and volunteerism as DRM measures.
- (iv) Formulate incentive measures for encouragement of investment in DRM.

### (c) Targets

(i) National disaster risk reduction investment and financing framework including resources mobilization strategy developed by 2024.

- (ii) Operational framework for disaster risk transfer, insurance, risk-sharing and financial protection for public and private investment based on quantitative risk estimates established by 2027.
- (iii) Social safety nets and volunteerism within local communities enhanced for effective DRM by 2027.
- (iv) Incentive measures for encouragement of investment in DRM established by 2024.

### 4.7 Disaster risk governance

### (a) Objective

To strengthen governance on disaster risk management at all levels.

### (b) Strategies

- (i) Institutionalize mechanisms, polices and legal framework to guide, coordinate and oversee DRM at all administrative levels.
- (ii) Ensure the construction and equip the National Disaster Management Centre.
- (iii) Inculcate culture of compliance with principles, laws and regulations regarding disaster risk management from primary school to higher learning institutions.
- (iv) Empower local authorities to undertake their responsibilities in DRM.
- (v) Develop national framework for application of ICT facilities for DRM governance.

- (i) Regulations, procedures and guidelines on accountability and transparency in disaster risk management developed by 2027.
- (ii) Disaster risk management issues in national plan and budget guideline within and across all sectors mainstreamed by 2027.

- (iii) National Disaster Management Centre constructed and equipped by 2027.
- (iv) National Disaster Management Policy of 2004 reviewed by 2024.
- (v) Advocacy for incorporating DRM in the government scheme of service by 2027.
- (vi) Culture of compliance with principles, laws and regulation regarding disasters risk management from primary school to higher learning institutions enhanced by 2027.
- (vii) Capacity building programs on disaster risk management governance developed and executed by 2027.
- (viii) Capacity of disaster management committees at all levels built by 2027.
- (ix) Law enforcement in all sectors related to disaster management strengthened by 2027.
- (x) Private sector alliance for disaster resilience in line with the global Private Alliance for Disaster Resilient Societies (ARISE) established by 2024.
- (xi) National framework for application of ICT facilities for DRM governance developed by 2024.

# 4.8 Gender, youth, person with disabilities and other vulnerable groups' needs and cultural diversity

### (a) Objective

To improve integration of gender, youth, person with disabilities and other vulnerable groups' needs and cultural diversity in disaster risk management.

### (b) Strategies

(i) Ensure prioritization and participation of person with disabilities and other vulnerable groups in disaster risk management.

- (ii) Ensure availability and implementation of tailormade programs for building capacity on safety and resilience to vulnerable groups.
- (iii) Incorporate gender, youth, person with disabilities and other vulnerable groups' needs in DRM policies, programs, standard operating procedures and protocols, plans and interventions.
- (iv) Ensure considerations of cultural diversity into disaster risk management issues.

### (c) Targets

- (i) Guidelines on prioritization and participation of person with disabilities and other vulnerable groups in disaster risk management developed by 2027.
- (ii) Tailor made programs for building capacity on safety and resilience to vulnerable groups developed and implemented by 2027.
- (iii) Guidelines on mainstreaming of gender, youth, person with disabilities and other vulnerable groups' needs in disaster risk management policies, programs, plans and interventions developed by 2027.
- (iv) The need of vulnerable groups including refugees, elders, children and displaced people incorporated in all phases of DRM by 2027.
- (v) Cultural diversity issues aligned into all disaster risk management programs and interventions by 2027.

### 4.9 Regional and international cooperation

### (a) Objective

To strengthened implementation of recognised regional and international disaster risk management practices.

### (b) Strategies

(i) Implement bilateral, regional and international agreements and conventions in all aspects of disaster risk management.

- (ii) Ensure participation in regional and international meetings, trainings, workshops and simulation exercise on DRM.
- (iii) Promote development of national, regional and international cost-effective user-friendly systems and services for exchange of information on good practices in DRM and humanitarian services.
- (iv) Promote regional and international cooperation in academic and scientific research entities and networks for disaster risk reduction and management.
- (v) Put in place or participate in existing mechanisms for monitoring the level of implementation of bilateral, regional and international agreements and conventions in all aspects of disaster risk management.

- (i) Bilateral, regional and international agreements and conventions in all aspects of disaster risk management implemented by 2027.
- (ii) Regional and international conventions on DRM and other conventions of relevance to address transboundary disaster problems domesticated by 2027.
- (iii) Attendance to regional and international meeting, training and workshops and simulation exercise on DRM promoted by 2027.
- (iv) Participation in regional and global DRM and humanitarian initiatives promoted by 2027.
- (v) Mechanism for bilateral, regional and international cost-effective user-friendly systems and services for exchange of information on good practices in DRR and humanitarian services in place by 2027.
- (vi) Regional and international cooperation in academic and scientific research entities and networks for disaster risk management promoted by 2027.

(vii) Mechanisms for monitoring the level of implementation of bilateral, regional and international agreements and conventions in all aspects of DRM in place by 2027.

### 4.10 Environmental conservation and climate change

### (a) Objective

To increase multi-sectoral approach in managing environmental degradation and climate change for disaster resilience.

### (b) Strategies

- (i) Promote the integration of DRR initiatives in climate change adaptation, environmental conservation and sustainable development.
- (ii) Promote coherent implementation of DRR and climate change strategies.
- (iii) Promote mainstreaming of DRR issues in environmental impact assessments and recommendations.
- (iv) Conduct advocacy, awareness and programs on ecosystem-based DRM for community resilience.
- (v) Promote technologies and innovation for managing climate change related disaster risks.
- (vi) Promote knowledge and exchange of information for disaster risk management and climate change resilience.

- (i) Capacity on coherent between DRR, climate change adaptation, environmental conservation and sustainable development at all levels built by 2027.
- (ii) Ecosystems and environmental considerations in undertaking national disaster risk assessments incorporated by 2027.

- (iii) Good practices on investments in green and blue infrastructure that contribute to strengthening disaster resilience documented by 2027.
- (iv) DRR and climate change strategies implemented coherently by 2027.
- (v) Initiatives to invest in ecosystem protection and restoration for enhancing disaster and climate resilience promoted by 2027.
- (vi) DRR issues in environmental impact assessments and recommendation mainstreamed by 2027.
- (vii) Advocacy, awareness and programs on ecosystembased DRM for community resilience facilitated by 2027.
- (viii) Technologies and innovation for managing climate change related disaster risks promote by 2027.
- (ix) DRM and climate change resilience Policy Programme Framework and Peer Review Mechanism developed and implemented for knowledge and information exchange.

CHAPTER FIVE

# 5.0 STRATEGY IMPLEMENTATION MATRIX

Table 2: The NDMS Matrix

Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
	(iii) Integrating DRR into higher and technical education systems and curricula, and into national research agenda.	<ul> <li>(iii) DRM curricula and training kits developed and incorporated into higher and technical educational system based on scientific evidence produced by the disaster risk assessment studies by 2027.</li> </ul>	200,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
·	(iv) Advocate DRM research with disaster management stakeholders	<ul> <li>(iv) Jointly action</li> <li>research between</li> <li>local communities,</li> <li>research and</li> <li>academic institutions</li> <li>dealing with DRM</li> <li>conducted by 2027</li> <li>(v)DRM applied</li> <li>research platform and</li> <li>research platform and</li> </ul>	120,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>

ime Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>	MDAs     LGAs     DPs
F	20	200	202
Amount (TZS)	50,000,000	200,000,000	20,000,000
Targets	<ul> <li>(vi) Platforms and networks for DRM information sharing at all levels established by 2024.</li> <li>(vii) Reliable and affordable up-to-date DRR information to all stakeholders available by June 2025.</li> </ul>	<ul> <li>(viii) Relevant regional and international agreements on accessibility of ICT and geospatial information adhered to by 2027.</li> </ul>	<ul><li>(ix) Use of earth observation data in disaster risk reduction</li></ul>
Strategies	(v)Facilitate creation of stakeholders' platforms, networks and mechanisms for DRM information sharing.	(vi) Promote the usage of ICT and geospatial services in DRM	
Objective			

Responsible Institutions	<ul> <li>Academic and Research institutions</li> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2027	2027
Amount (TZS)	50,000,000	600,000,000	200,000,000
Targets	<ul> <li>(x) Guideline on the usage of ICT and geospatial services and applications in Disaster Risk Reduction and Management in place by 2027.</li> </ul>	<ul> <li>(xi) Disaster risk awareness campaign rolled out at all levels focusing on potential disaster risk scenarios by 2027</li> </ul>	(xii) DRR advocacy strategy developed and advocacy conducted to decision makers based on sector risk scenarios by 2027.
Strategies		(vii) Roll out disaster risk awareness campaign focusing on potential disaster risk scenarios and taking into account specific needs of person with disabilities	(viii) Develop DRR advocacy strategy and conduct advocacy to decision makers based on sector risk scenarios.
Objective			

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2027	2027
Amount (TZS)	000'000'02	200,000,000	100,000,000
Targets	<ul> <li>(i) Guidelines for mainstreaming DRM issues in sector development plans, strategies and programmes in place by 2025.</li> </ul>	<ul><li>(ii) Sector capacity building in DRM mainstreaming in planning process enhanced by 2027.</li></ul>	(iii) The use of insurance and reinsurance products for DRM promoted by 2027.
Strategies	<ul> <li>(i) Developing guidelines for mainstreaming DRM issues into sectoral development plans, strategies, budgets and programmes to enhance mitigation, prevention</li> </ul>	and preparedness measures at all levels.	<ul><li>(ii) Promoting use of insurance and reinsurance products for DRM.</li></ul>
Objective	ii. To enhance disaster prevention, mitigation and preparedness capacity at all levels for	community resilience.	

Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
	(iii) Conducting regular training, exercises and drills at all levels	<ul> <li>(iv) Regular, mult- hazard and mult- sectoral training, exercise and drills conducted at all levels by 2027</li> <li>(v) Trans-boundary risk management training, exercise and drills advocated by 2027</li> </ul>	500,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
	<ul> <li>(iv) Strengthen capacity for application of one health approach for relevant health related disasters at all levels for community resilience.</li> </ul>	<ul> <li>(vi) Capacity for application of one health approach for relevant health related disasters at all levels for community resilience strengthened by 2027.</li> </ul>	700,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Non- state actors and Research institutions</li> </ul>

ojective	Strategies	Targets	Amount (TZS)	Time	<b>Responsible</b> <b>Institutions</b>
	<ul> <li>(v) Map and establish evacuation centres in disaster risk areas.</li> </ul>	<ul> <li>(vii) Evacuation</li> <li>centres in disaster</li> <li>risk areas mapped</li> <li>and established by</li> <li>2027.</li> </ul>	500,000,000	2027	<ul> <li>MDAs</li> <li>DPs</li> <li>LGAs</li> <li>LGAs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
	(vi) Build capacity for damage and need assessment at all level.	(viii) Capacity for damage and needs assessment at all levels built by 2027	300,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
	(vii) Facilitate review and develop buildings codes, regulations and safety guidelines.	(ix) Buildings codes and standards, regulations and safety guidelines developed and reviewed by 2027	200,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>

Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
	(viii) Strengthen preventive health care for diseases outbreaks.	<ul> <li>(x) Preventive health care guidelines developed and reviewed by 2027.</li> </ul>	450,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
	(ix) Promote zoning and land use planning and management in urban and rural areas.	(xi) Zoning and land use planning and management in urban and rural areas promote by 2027.	300,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
	(x) Promote best practices in DRM.	(xii) Best practices in DRM documented and shared with stakeholders by 2027.	150,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>DNon- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>RS</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2027	2027
Amount (TZS)	750,000,000	397,399,483,360	1,000,000,000
Targets	(xiii) Multi-hazard or hazard specific DRR strategies, preparedness and response plans developed based on scientific disaster risk assessment whenever possible at all levels by 2027.	(xiv) Capacity of institutions responsible for search and rescue with modern equipments strengthened by 2027.	(xv) Emergency medical services strengthened in regions by 2027
Strategies	(xi) Develop multi-hazard or hazard specific DRR strategies, preparedness and response plans based on scientific disaster risk assessment whenever possible at all levels.	(xii) Strengthen capacity of institutions responsible for search and rescue with modern equipments.	(xiii) Establish emergency medical services at region level.
Objective			

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>DPs</li> <li>LGAs</li> <li>LGAs</li> <li>Non- state actors and Research institutions</li> </ul>
Time	2027	2027
Amount (TZS)	1,000,000,000	5,000,000
Targets	<ul> <li>(i) Capacity of institutions responsible for early warning and emergency operations enhanced by 2027.</li> </ul>	<ul> <li>(ii) Establish</li> <li>a common technological</li> <li>platform for risk information and data exchange to support all early warning institutions in connection with the national Emergency</li> <li>Operations and Communications</li> <li>Centre and harmonise issuing of public warnings by 2027.</li> </ul>
Strategies	(i) Empower institutions responsible for early warning and emergency operations to develop and adhere to a common multisectoral communication platform.	(ii) Enhance the capacity of EOCC to be fully operational 24/7 by equipping it with modern equipment and technology with well trained staff.
Objective	iii. To improve multi-hazard, end-to-end and people-centred early warning system.	

Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
	<ul> <li>(iii) Ensure use of ICTs and geospatial technologies in forecasting, monitoring and dissemination of warning information to the general public and the vulnerable population in a timely and clear manner.</li> </ul>	(iii) The use of ICTs and geospatial technologies strengthened and incorporated in forecasting, monitoring and dissemination of warning by 2027.	5,000,000,000	2027	<ul> <li>MDAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
	<ul> <li>Integrate local knowledge in formal early warning systems.</li> </ul>	<ul> <li>(iv) Research and validation of traditional and local early warning knowledge facilitated by 2027</li> </ul>	100,000,000	2027	<ul><li>MDAs</li><li>LGAs</li><li>Non- state actors</li></ul>
	<ul> <li>(v) Development of standard operating procedures and protocols for early warnings systems.</li> </ul>	<ul> <li>(v) Standard operating procedures and protocols for early warnings communication developed by 2027</li> </ul>	100,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>

Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
	(vi) Raise awareness on early warning information to target groups.	<ul> <li>(vi) Customised impact – based and end user warning messages (including use of specialised functions such as the Common Alerting protocol (CAP)) designed to trigger early actions to targeted groups though mass media (radio, TV, social media, newspapers, etc) implemented by 2027</li> </ul>	150,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
iv. To strengthen disaster response capacity and relief services at all levels.	<ul> <li>(i) Establish and strengthen national and local multi-sector disaster rapid response teams.</li> </ul>	<ul> <li>(i) National and local multi-sector disaster rapid response teams established and capacitated by 2025.</li> </ul>	100,000,000	2024	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>

e Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>DNon-state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>DNon- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
Tim	2027	2024	2027
Amount (TZS)	500,000,000	50,000,000	150,000,000
Targets	(ii) National and sector specific contingency plan developed and operationalized based on the risk knowledge acquired through the disaster risk assessment studies where possible in quantitative terms by 2027.	(iii) Minimum national humanitarian standards for relief provision developed by 2024.	<ul> <li>(iv) Guidelines, procedures and criteria for national cross-border disaster response and coordination in place by 2027</li> </ul>
Strategies	<ul> <li>(ii) Develop and operationalize national and sector specific contingency plan.</li> </ul>	(iii) Develop guidelines, procedures and criteria for national disaster response interventions.	<ul> <li>(iv) Develop guidelines and procedures for coordination of cross- border disaster response.</li> </ul>
Objective			

Responsible Institutions	<ul> <li>MDAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2027	2027
Amount (TZS)	1,000,000,000	170,000,000	250,000,000
Targets	(v) Disaster strategic warehouses budget and stocking plan in place and implemented by 2027.	<ul> <li>(vi) Monitoring and inventory for response capacity conducted by 2027</li> </ul>	(vii) Appropriate nutritional care and support to communities during emergencies and disasters enhanced by 2027.
Strategies	(v) Ensure effective logistical capacity including preposition of essential humanitarian relief items in strategic warehouses for timely and efficient relief assistance provision.	<ul><li>(vi) Conduct regular monitoring and inventory of capacity for response to disasters at all levels.</li></ul>	(vii) Enhance appropriate nutritional care and support to communities during emergencies and disasters.
Objective			

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>			
Time	2024	2024			
Amount (TZS)	50,000,000	50,000,000			
Targets	<ul> <li>(i) Guidelines and standards for disaster recovery (rehabilitation and reconstruction) developed by 2024.</li> </ul>	(ii) Guidelines for mainstreaming disaster risk issues in sector recovery (rehabilitation and reconstruction) possibly in a cost benefit framework favouring and adaptive and transformative approach developed by 2024.			
Strategies	<ul> <li>(i) Develop guidelines and standards for disaster recovery.</li> </ul>				
Objective	<ul> <li>v. To strengthen capacity for build back better in recovery for community resilience.</li> </ul>				
Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
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	<ul> <li>(II) Conduct immediate post disaster review and develop lesson learned for incorporation into future disaster management measures.</li> </ul>	(III) Resources for conducting post disaster review mobilised by 2027.	100,000,000	2027	<ul> <li>MDAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
		<ul> <li>(iv) Disaster management plans reviewed to incorporate post disaster lessons learned by 2027.</li> </ul>	100,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
	(iii) Incorporate provision of psychosocial support and mental health and rehabilitation services for all people in need during emergency and recovery processes.	(v) Provision of psychosocial support and mental health and rehabilitation services for all people in need during emergency and recovery processes maintained by 2027.	300,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>DNon- state actors</li> <li>Academic and Research institutions</li> </ul>

<b>Objective</b>	Strategies	Targets	Amount (TZS)	Time	<b>Responsible</b> <b>Institutions</b>
	<ul> <li>(iv) Ensure provision of social protection to vulnerable groups including cash transfers for recovery wherever possible.</li> </ul>	<ul> <li>(vi) Guidelines developed and provision of social protection to vulnerable groups including cash transfers for recovery wherever possible undertaken by 2027.</li> </ul>	50,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Non-state actors and Research institutions</li> </ul>
	(v) Conduct post disaster needs assessments to inform recovery and reconstruction process.	(vii) Post disaster need assessment for major disasters conducted by 2027.	150,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
		(viii) Resources mobilization guideline for recovery developed by 2023	20,000,000	2024	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>

<b>Responsible</b> <b>Institutions</b>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2024	2024	2027
Amount (TZS)	50,000,000	50,000,000	50,000,000
Targets	(ix) National Disaster Recovery Framework development by 2024.	<ul> <li>(i) National disaster risk reduction investment and financing framework including resources mobilization strategy developed by 2024.</li> </ul>	(ii) Operational firamework for disaster risk transfer, insurance, risk- sharing and financial protection for public and private investment based on quantitative risk estimates established by 2027
Strategies		<ul> <li>(i) Establish the national disaster risk reduction investment and financing framework and resources mobilization strategy.</li> </ul>	(ii) Establish operational framework for disaster risk transfer, insurance, risk-sharing and financial protection for public and private investment based on quantitative risk estimates.
Objective		vi. To increase public and private financing and investments in disaster risk management.	

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2024	2027
Amount (TZS)	50,000,000	50,000,000	100,000,000
Targets	<ul> <li>(iii) Social safety nets and volunteerism within local communities enhanced for effective DRM by 2027.</li> </ul>	<ul> <li>(iv) Incentive measures for encouragement of investment in DRM established by 2024.</li> </ul>	(i) Regulations, procedures and guidelines on accountability and transparency in disaster risk management developed by 2027.
Strategies	(iii) Facilitate enhancement of social safety nets and volunteerism as disaster risk reduction measures.	<ul><li>(iv) Formulate</li><li>incentive measures</li><li>for encouragement of</li><li>investment in DRM.</li></ul>	(i) Institutionalize mechanisms, polices and legal framework to guide, coordinate and oversee DRM at all administrative levels.
Objective			vii. To strengthen governance on disaster risk management at all levels.

Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
		<ul> <li>(ii) Disaster risk management issues in national plan and budget guideline within and across all sectors mainstreamed by 2027.</li> </ul>	100,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>ON- state actors</li> <li>Academic and Research institutions</li> </ul>
		(iii) National Disaster Management Policy of 2004 reviewed by 2024.	300,000,000	2024	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
		<ul> <li>(iv) Advocacy for incorporating DRM in the government scheme of service by 2027.</li> </ul>	100,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>On- state actors</li> <li>Academic and Research institutions</li> </ul>

	Strategies	Targets	Amount (TZS)	Time	<b>Responsible</b> <b>Institutions</b>
(ii) Inc of c prir regr dise man prir lear	culcate culture ompliance with iciples, laws and ilation regarding tsters risk agement from nary school to higher ning institutions.	<ul> <li>(v) Culture of compliance with principles, laws and regulation regarding disasters risk management from primary school to higher learning institutions enhanced by 2027.</li> </ul>	100,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
(iii) aut the DR	Empower local horities to undertake ir responsibilities in cM.	<ul> <li>(vi) Capacity building programs on disaster risk management governance developed and executed by 2027.</li> </ul>	300,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
		(vii) Capacity of disaster management committees at all levels built by 2027.	800,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>

Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
		(viii) Law enforcement in all sectors related to disaster management strengthened by 2027.	75,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
		<ul> <li>(ix) Private sector</li> <li>alliance for disaster</li> <li>resilience in line with</li> <li>the global Private</li> <li>Alliance for Disaster</li> <li>Resilient Societies</li> <li>(ARISE) established</li> <li>by 2024.</li> </ul>	50,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
·	<ul> <li>(iv) Develop</li> <li>national framework</li> <li>for application of ICT</li> <li>facilities for DRM</li> <li>governance.</li> </ul>	(x)National framework for application of ICT facilities for DRM governance developed by 2024.	150,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2027	2027
Amount (TZS)	58,000,000,000	50,000,000	100,000,000
Targets	(xi) National Disaster Management Centre constructed and equipped by 2027.	<ul> <li>(i) Guidelines on prioritization and participation of person with disabilities and other vulnerable groups in disaster risk management developed by 2027.</li> </ul>	<ul> <li>Tailor made programs for building capacity on safety and resilience to vulnerable groups developed and implemented by 2027.</li> </ul>
Strategies	(v)Ensure the construction and equip the National Disaster Management Centre.	<ul> <li>(i) Ensure prioritization and participation of person with disabilities and other vulnerable groups in disaster risk management.</li> </ul>	(ii) Ensure availability and implementation of tailor-made programs for building capacity on safety and resilience to vulnerable groups.
Objective		viii. To improve integration of gender, youth, person with disabilities and other vulnerable groups' needs	and cultural diversity in disaster risk management.

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2027	2027
Amount (TZS)	50,000,000	100,000,000	50,000,000
Targets	<ul> <li>(iii) Guidelines         <ul> <li>on mainstreaming gender, youth, person with disabilities and</li> <li>other vulnerable</li> <li>groups' needs issues in</li> <li>disaster risk reduction</li> <li>policies, programs,</li> <li>plans and interventions</li> <li>developed by 2027.</li> </ul> </li> </ul>	<ul> <li>The need of vulnerable groups including elders, children, refugees and displaced people incorporate in all phases of DRM by 2027.</li> </ul>	<ul> <li>(v) Cultural diversity issues aligned into all disaster risk management programs and interventions by 2027.</li> </ul>
Strategies	(iii) Incorporate gender, youth, person with disabilities and other vulnerable groups' needs in DRM policies, programs, standard operating procedures and protocols, plans and interventions.		<ul><li>(iv) Ensure considerations of cultural diversity into disaster risk management issues.</li></ul>
Objective			

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2027	2027
Amount (TZS)	100,000,000	200,000,000	100,000,000
Targets	<ul> <li>(i) Bilateral, regional and international agreements and conventions in all aspects of disaster risk management implemented by 2027.</li> </ul>	<ul> <li>(ii) Regional and international conventions on disaster risk reduction and other conventions of relevance to address trans-boundary disaster problems domesticated by 2027.</li> </ul>	(iii) Attendance to regional and international meeting, training, workshops and simulation exercise on DRM promoted by 2027.
Strategies	<ul> <li>(i) Implementing bilateral, regional and international agreements and conventions in all aspects of disaster risk management.</li> </ul>		<ul> <li>(ii) Ensure participation in regional and international meeting, training, workshops and simulation exercise on DRM.</li> </ul>
Objective	ix. To strengthened implementation of recognised regional and international disaster risk	management practices.	

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non-state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2027	2027
Amount (TZS)	50,000,000	200,000,000	50,000,000
Targets	<ul> <li>(iv) Participation in regional and global humanitarian initiatives promoted by 2027.</li> </ul>	(v) Mechanism for bilateral, regional and international cost- effective user-friendly systems and services for exchange of information on good practices in DRR and humanitarian services in place by 2027.	(vi) Regional and international cooperation in academic and scientific research entities and networks for disaster risk reduction and management promoted by 2027.
Strategies		(iii) Promote development of national, regional and international cost- effective user-friendly systems and services for exchange of information on good practices in DRR and humanitarian services.	<ul> <li>(iv) Promote regional and international cooperation in academic and scientific research entities and networks for disaster risk reduction and management.</li> </ul>
Objective			

Responsible Institutions	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>DN- state actors</li> <li>Academic and Research institutions</li> </ul>
Time	2027	2027	2027
Amount (TZS)	50°000°000	100,000,000	50,000,000
Targets	(vii) Mechanisms for monitoring the level of implementation of bilateral, regional and international agreements and conventions in all aspects of DRM in place by 2027.	<ul> <li>(i) Capacity on coherent between DRR, climate change adaptation, environmental conservation and sustainable development at all levels built by 2027.</li> </ul>	<ul> <li>(ii) Ecosystems and environmental considerations in undertaking national disaster risk assessments incorporated by 2027.</li> </ul>
Strategies	(v) Put in place or participate in existing mechanisms for monitoring the level of implementation of bilateral, regional and international agreements and conventions in all aspects of disaster risk management.	(i) Promote the integration of DRR initiatives in climate change adaptation, environmental conservation and sustainable development.	
Objective		<ul> <li>x. To increase multi-sector approach in managing environmental degradation and climate change for disaster</li> </ul>	resultence.

Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
		(iii) Good practices on investments in green and blue infrastructure that contribute to strengthening disaster resilience documented by 2027.	50,000,000	2027	<ul> <li>MDAs</li> <li>LGAs</li> <li>LDPs</li> <li>DNon-state actors</li> <li>Academic and Research institutions</li> </ul>
	<ul> <li>(ii) Promote coherent</li> <li>implementation of</li> <li>DRR and climate</li> <li>change strategies.</li> </ul>	<ul> <li>(iv) DRR and climate change strategies implemented coherently by 2027.</li> </ul>	50,000,000	2027	<ul> <li>MDAs , LGAs, DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
		(v) Initiatives to invest in ecosystem protection and restoration for enhancing disaster and climate resilience promoted by 2027.	75,000,000	2027	<ul> <li>MDAs,</li> <li>LGAs</li> <li>LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>

Objective	Strategies	Targets	Amount (TZS)	Time	Responsible Institutions
	(iii) Promote mainstreaming of DRR issues in environmental impact assessments and recommendations.	<ul> <li>(vi) DRR issues in environmental impact assessments and recommendations mainstreamed by 2027.</li> </ul>	200,000,000	2027	<ul> <li>MDAs, LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
	(iv) Conduct advocacy, awareness and programs on ecosystem- based DRM for community resilience.	<ul> <li>(vii) Advocacy, awareness and programs on ecosystem-based DRM for community resilience facilitated by 2027.</li> </ul>	100,000,000	2027	<ul> <li>MDAs, LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>
	<ul> <li>(v) Promote technologies and innovation for managing climate change related disaster risks.</li> </ul>	(viii) Technologies and innovation for managing climate change related disaster risks promote by 2027	200,000,000	2027	<ul> <li>MDAs, LGAs</li> <li>DPs</li> <li>Non- state actors</li> <li>Academic and Research institutions</li> </ul>

## 6.0 NATIONAL DISASTER MANAGEMENT FRAMEWORK

## 6.1 Policy framework

The National Disaster Management Policy of 2004 is the overall policy framework for disaster risk management activities in Tanzania mainland. The policy recognizes disaster as a cross – cutting issue that requires a whole of society approach for comprehensive and integrated implementation of disaster risk management. In this perspective, the policy addresses disaster risks by involving different sectors at national and local government authorities, independency agencies and their respective stakeholders including UN and international agencies, media, NGOs, FBOs, CBOs, academic and research institutions and private sector.

## 6.2 Legal framework

The legal framework for DRR in Tanzania is guided by the Disaster Management Act No. 6 of 2022. The Act established DRR governing framework from national to local level. The Act is a legal framework for the enforcement of disaster risk management in Tanzania. It requires different sectors to address disaster risks through mainstreaming DRR in their policy, strategy, plan, program and budget. It empowers the sectors to undertake various disaster risk management roles and responsibilities that are relevant to their core functions according to existing sectoral legislations.

## 6.3 Institutional arrangement

Disaster risk management in Tanzania mainland is under the Prime Minister's Office (PMO) which is responsible for coordination of disaster risk management and humanitarian services. The institutional arrangement involves various stakeholders ranging from government ministries, departments and agencies (MDAs), Regional Secretariats (RSs), Local Government Authorities (LGAs) and Public Institutions, Academic and Research institutions, UN and International Agencies, Private Sector, Non – Governmental Organisations, Faith and Community Based Organisations, Media and influential persons. The summarised institutional framework is explained in Figure 7.



Figure 7: Tanzania disaster risk management organogram

Source: Prime Minister's Office

## i. The Prime Minister's Office

The Prime Minister's Office is the Ministry responsible for coordination of disaster risk reduction and management at the national level. The Office guides and formulates policy, strategy, plans regulations and guidelines on disaster risk management. The ministry act as the central core for planning, coordinating and monitoring institution for the prevention, mitigation, preparedness, response and post- disaster recovery, taking into account all potential disaster risks. It also promotes education, knowledge and use of information communication technology in disaster management for public awareness.

## ii. National Steering Committee for Disaster Management

The Ministerial National Steering Committee for Disaster Management (NSCDM) is responsible for making important decisions, setting priorities and assigning responsibilities before, during and after a disaster at the national level. The committee is responsible for managing, giving instructions and setting priorities for disaster management and humanitarian services activities at the national level including approving the Disaster Management Plan and the Service Continuity Plan during National Emergencies

#### iii. National Technical Committee for Disaster Management

The National Technical Committee for Disaster Management (NTCDM) function as the technical arm for the Steering Committee to propose measures on all matters related to disaster risk management which emerge from sectors and agencies in the country. The committee is responsible for advising the National Steering Committee on measures to strengthen disaster risk management in the country and to implement the directives of the National Steering Committee

#### iv. National Stakeholders Platform for Disaster Management

The platform has been established with the aim of bringing together various stakeholders from the government and outside the government to discuss the best ways to strengthen disaster risk management through joint participation. The platform is an important tool for raising challenges and discussing the best ways they can be resolved by having collaborative strategies and quick access to resources as well as effective performance by reducing the overlap of responsibilities. The platform shall discuss strategic issues involved in disaster risk management and advise the government accordingly.

## v. Regional Steering Committee for Disaster Management

The Regional Steering Committee for Disaster Management (RSCDM) is mandated on decisions and directives for measures to be taken in disaster risk management at the Regional level. The committee is responsible for planning, coordinating and providing directives on all matters related to DRM in the Region and overseeing the responsibilities of the RSCDM. The Chairman of the Regional Steering Committee for Disaster Management will be the spokesperson of the Government during disaster events at the Regional level.

#### vi. Regional Technical Committee for Disaster Management

The Regional Technical Committee for Disaster Management (RTCDM) shall be responsible for advising the RSCDM on disaster

risk management issues and any other matters directed by the Regional Commissioner. The committee will be accountable in monitoring and coordinating disaster mitigation and management activities and emergency services among the Government sectoral institutions, local governments, communities and other stakeholders involved in disaster risk management.

#### vii. District Steering Committee for Disaster Management

The District Steering Committee for Disaster Management (DSCDM) will have the authority to issue decisions and directives on measures to strengthen and address DRM issues in the District. The Committee will be responsible for planning, coordinating and giving directives on all matters related to DRM in the relevant Council and overseeing the duties of the Council Disaster Management Technical Committee.

# viii. City, Municipal, Town and District Technical Committee for Disaster Management

City, Municipal, Town and District Technical Committee for Disaster Management (CTCDM) shall be responsible for implementing and coordinating disaster risk management activities and conducting emergency operations at the Council level. The committee will recommend technical measures on all issues related to DRM, coordinate, manage and monitor the implementation of DRM and emergency services in the Council as directed by the DSCDM.

#### ix. Ward Committee for Disaster Management

The Village or Mtaa Committee for Disaster Management (V/ MCDM) shall be responsible for ensuring the participation of all stakeholders in measures to prevent or mitigate the impacts of disasters as well as providing humanitarian services during emergencies. The committee will be liable for monitoring and coordinating DRM and emergency operations at the Ward level, including resource mobilization for DRM issues.

#### x. Village or Mtaa Committee for Disaster Management

The Village or Mtaa Committee for Disaster Management (V/MCDM) will have the initial responsibility to ensure that the community is safe from disasters as well as involving the community in finding

quick solutions for humanitarian services for disaster victims. The committee shall be responsible for monitoring and coordinating DRM activities and emergency operations at the Village or Street level including resource mobilization for DRM issues.

## 6.4 Roles and responsibilities of different actors

### i. Ministries, Departments and Agencies (MDAs)

MDAs should have a unit or desk officer(s) appointed specifically for disaster risks management issues related to the NDMS. The Disaster Focal Points from each respective MDAs will take a leading role in coordinating all sectors related disaster risk management efforts. Sector DRM measures include hazard identification, risk assessment and monitoring, follow up, advice on mitigation and prevention measures through planning and budgeting and preparedness for response and recovery. The sector DRM TWG shall provide technical expertise to a sector specific disaster risk management measures, develop disaster risk management and contingency plans and Standard Operational Procedures (SOPs) related to sector specific hazards and its impact and integrate DRM issues in sector developments plans.

## ii. Disaster Response Teams

Disaster response teams and volunteers established at all levels are responsible to counter react disasters and emergencies. Their reports are crucial for assessment reports which can be used to design prevention and mitigation measures and preparedness plan for effective response in similar events in the future.

## iii. The Private Sector

The Private Sector is endowed with expertise, equipment and funds to supplement Government efforts. The sector has a role to protect their business through various measures including disaster risk prevention and mitigation; and transfer as indicated in the NDMS. All investments undertaken should be based on disaster risk assessment for effective mainstreaming of disaster risk reduction for sustainability in all sectors.

## iv. Fire and Rescue Force

The Fire and Rescue Force has the central role of fire inspection,

prevention, mitigation, protection, preparedness and response in fire fighting and rescue operations in case of fire and other calamities. The Fire and Rescue Force has technical knowhow on fire hazards and other emergency search and rescue related issues. They shall ensure quality and optimum utilization of fire agents both in urban and the countryside. The Force shall be required to harmonise mechanism for their participation in all prevention and mitigation measures in all public and private sectors planning and operation in implementation of this strategy.

#### v. Police Force

The Police Force has specific roles in mitigation, preparedness and response in the areas of security, evacuation, crowd management, emergency medical support, communication and causality bureau services. They shall have to conduct relevant disaster risk assessment for planning, training and exercises to keep abreast with the new techniques under this field.

## vi. Tanzania Red Cross Society and Tanzania Scout Association

The society and association have mandated to play specific voluntary humanitarian roles in disasters and emergencies as an auxiliary to public authorities. They have international and national-wide networks, which provide valuable source of skilled manpower and funding. They shall be engaged in sensitization and mobilization of the community as a first line in disaster prevention, mitigation, preparedness and response for effective implantation of this strategy.

#### vii. Tanzania Communications Regulatory Authority

Among other responsibilities, TCRA oversees the development of communication infrastructure and services in Tanzania that considers issues such as disaster risk assessment and EWS for sustainable economic and social development. TCRA shall ensure the use of information and communications technology (ICT) in disaster prevention, mitigation, response and recovery. Furthermore, it shall ensure ICTs are used as a conduit for disseminating and exchanging of information among different users such as public and private institutions, professionals and general public on an impending disaster risk.

### viii. NGOs, CBOs and FBOs

NGOs, CBOs and FBOs have ability to mobilise additional resources, which are useful in supplementing government efforts in the implementation of NDMS. They have an advantage of being effective at community levels. Therefore, they shall identify hazards, conduct disaster risk assessment, develop proposal and plans for implementation of community-based disaster risk management measures for resilience. These might involve economic empowerment programs, livelihood resilience capacity building, promoting public awareness, training, provide assistance and fund self-help activities.

#### ix. International Agencies and Development Partners

United Nations, Regional and International Agencies are crucial stakeholders in implementation of NDMS because they complement government efforts by providing financial, material and technical support. Cooperation should be strengthened to enhance partnership for more resources and expertise requirements for disaster risk reduction and humanitarian services measures.

#### x. The Media

The Media has a unique and vital supporting role to play for successful disaster risk reduction and management. The capacity to properly communicate and inform all stakeholders is crucial in prevention, mitigation, preparedness and response. Media should enhance public awareness for warning and resources mobilization to support DRR and during emergency situation. All departments and media training institutes have to mainstream disaster issues in their curriculum and routine activities. The media is called upon to be more responsible in disaster incident reporting as disaster information are sensitive and require extra care beyond call of duty when reporting.

#### xi. Government Chemist Laboratory Agency

The agency is mandated with among other responsibilities for laboratory analysis of various types of samples which are important in various DRR and humanitarian measures. These include samples related to disaster victim identification, the quality of products for various social and economic uses, societal issues such as identification of disintegrated human remains from disasters such as fire, marine, air and motor accidents, collapsed buildings, bomb explosion and drowning and environmental pollution control and human (workers') health such as samples of waste.

#### xii. Local Community and Individual Families

Communities and individuals have a role of using their own capacities to safeguard their lives and property against disasters. Their actions form an integral part in disaster risk reduction initiatives for implementation of this strategy. It should be clear that they are the first ones to identify, face the disaster risk and have great role during initial response. Community groups for mitigation and livelihood protection, early warning, communication, first aid and social network are key in all society.

# xiii. Ministry responsible for finance and planning and financial institutions

The ministry responsible for finance and planning and financial institutions will be responsible for provision of accessibility of funds for disaster risk management; oversee mainstreaming of DRR into national development policies, plans, programmes and projects; mobilize resources for implementation of various hazard mitigation programmes; facilitate and promote the provision of micro-finance services i.e. loans and savings to support hazard mitigation programmes. Furthermore, ministry will be responsible for facilitation of re-establishment of the economic activities (commercial and industrial).

#### xiv. The Ministry responsible for Regional Administration and Local Government Authorities

The ministry responsibilities will be to relocate and resettle people living in disaster prone areas (e.g., floods, landslides); Conduct multi-hazard disaster risk assessment and risk mapping; Develop integrated district Disaster Risk Management plans; Develop and implement public awareness campaigns on various disaster risks; Mainstream Disaster Risk Reduction issues into district development plans; Develop mechanism for enforcement of building guidelines and codes; Develop and enforce bylaws which address disaster risk management measures; Encourage agro-forestry and promote planting of tree; Develop and enforce bylaws on settlement planning.

#### 6.5 Financial arrangements

Addressing Disaster Risk Management in Tanzania will largely depend on availability and accessibility of DRM financing from both international and domestic sources. Available international DRM financing mechanisms include multilateral sources as well as bilateral institutions including development partners (DPs) and international private companies. Training and capacity building on project proposal development will be emphasized in order to enhance Tanzania's accessibility to various funding sources and opportunities.

The domestic DRM financing may be accessed from government budget, private sector, CSOs, as well as individual contributions through various mechanisms in local levels (Regional and District). The financial sector such as banks and social protection funds will be encouraged to play an important role in facilitating mobilization of financing for the implementation of this Strategy. In view of this, an integrated approach and coordinated working system is highly required to ensure that funds to address DRM are effectively mobilized, allocated, and tracked to achieve the objectives presented in this Strategy.

A balance of financing according to DRM cycle will be emphasized based on the objectives of the Strategy in line with global and regional frameworks and agreements. Such balance is also important in financing other areas such as capacity building, research and development (R&D), technology development and transfer as well as awareness creation.

Generally, it is envisaged that, international communities will honour their commitments and responsibilities in view of addressing national, global and regional DRM frameworks by providing the required support. The envisaged financial support from foreign sources in most cases will be in terms of grants. Such supports shall adhere to the national/ local rules and regulations specific to the Loans, Guarantee and Grant Acts, CAP 134 and VAT Act 2014 in Tanzania.

## 7.0 MONITORING AND EVALUATION

## 7.1 Introduction

The monitoring and evaluation (M&E) framework have been designed to track progress and assess implementation of the NDMS. The overall responsibility for the monitoring and evaluation of the NDMS implementation lies with the Prime Minister's Office working in close collaboration with other stakeholders. Each stakeholder will establish a monitoring and evaluation system that will be linked to the PMO and other national monitoring and evaluation systems under National Five-Year Development Plan and Tanzania Long Term Perspective Plan (TLTPP). The aim is to ensure that different monitoring and evaluation systems at different levels inform each other. The emphasis will be on generating, using and linking relevant data to meet the needs of different stakeholders. Monitoring shall be done through meetings, specific and general reports, supervision and inspections.

The purposes of M&E framework are to: -

- i. Keep track of progress of the strategy by facilitating review of the performance of the NDMS implementation both at the input and output levels, using quantitative and qualitative indicators. This includes regular internal reviews done by all ministries, regions, districts, wards/villages and entry/exit points.
- ii. To track efficiency and effectiveness of measures undertaken and provide feedback that will enable updating of the management and implementation of NDMS.
- iii. Provide a detailed and regularly updated picture of the status of the implementation of NDMS to the general public.
- iv. Better understand implementation and coordination mechanism and provide insight to guide future strategy objectives, directions and strategies.
- v. Provide early warning information about the required development and subsequent change and/or review; and
- vi. Provide reports to all stakeholders that have necessary and sufficient data and information as needed at different levels by different government institutions and Non State Actors.

## 7.2 Objectives of monitoring and evaluation system

The overall objective of this Monitoring and Evaluation System is to guide implementation of the Strategy and the specific objectives of the system are to: -

- i. Establish benchmark of indicators for strategy monitoring and assessment;
- ii. Set output indicators for strategy implementation and measure expected outcome;
- iii. Guide actors' participation in implementation, monitoring and evaluation activities; and
- iv. Control the use of resources during implementation and identify opportunities for improvement.

The specific strategies for Monitoring System consist of a multi-pronged approach of special institutional arrangements. It targets at data collection, analysis, storage, dissemination, communication, and strategic linkages with other monitoring systems.

## 7.3 Institutional arrangements for monitoring and evaluation system

The institutional arrangements for M&E of the NDMS will consist of the existing M&E systems in place at MDAs, extending to all levels responsible for DRR. Additionally, there will be customized indicators that will be included through the Sendai Framework Monitor Process. This is important because the relevance of indicators may differ by levels and locations for the generation of accurate and relevant data and information.

Internal and external M&E will be undertaken to review the implementation of the strategy. The external M&E system will include Parliamentary Committees, and other oversight institutions. The internal M&E System constitutes internal MDAs organizational structures. These will assess systematically and objectively the relevance, processes and performance of the strategy.

Technical working groups involving various stakeholders will be established by PMO to manage development and assessment of M&E reports and provide technical or professional opinions and guidance.

## 7.4 Monitoring and evaluation indicators

A list of both quantitative and qualitative indicators has been developed to track the progress towards achieving the strategy objectives. These will be reviewed annually to meet additional information requirements necessitated by the new developments. Specifically, baseline data will be collected and updated as benchmark of the strategy implementation monitoring.

At each particular implementation period, internal and external evaluation will be undertaken to review the implementation of the strategy. The internal evaluation system assesses systematically and objectively the relevance, processes and performance of the NDMS. The general objective of evaluation is to determine the relevance, effectiveness and impact of strategy on the physical environment, social, political and economic development of the country.

## 7.5 Monitoring and evaluation tools and deliverables

Output and deliverables of M&E system of the NDMS will be as follows:

- (i) Progress reports using monitoring system output, thus making the strategy a living document;
- (ii) Analytical reports of different studies to be undertaken; and
- (iii) Updates through Client Service Charter implementation reports.

These will indicate progress on the implementation of the strategy objectives and their targets.

## 7.6 Monitoring and evaluation reports

## Table 3: Types of M&E reports

Ту	pes of reports	Contents	Frequency
I.	Project and programs progress reports	Consolidated report covering all the activities undertaken at the project level	Quarterly and Annually
II.	Disaster Risk Reduction comprehensive progress report	Consolidated report covering all the activities undertaken at the organization level in terms of physical and financial resources.	Quarterly and Annually

III. Evaluation Report	Internal and external evaluation reports of various implementation programs	Annually, Three and Five years
IV. Strategy Review	Review of Disaster Management Strategy	After Five years

At the PMO, reports to be prepared will be as follows:

- (i) MDAs, Regional, LGAs and independent institutions Evaluation Reports;
- (ii) Departmental weekly reports;
- (iii) PMO Management monthly reports;
- (iv) PMO quarterly, mid -year and annual reports;
- (v) Development Partners annual reports; and
- (vi) Reviews and survey reports.

Strategic Objectives	Output Indicators	Outcome/Impact Indicators
I. To increase understanding of disaster risks at all levels	<ul> <li>Number of comprehensive disaster risks assessment conducted</li> <li>Disaster risk information mainstreamed into sectoral policies</li> <li>Number of local and technical platforms established</li> <li>Number of kits/tools for training, advocacy and public awareness materials developed</li> <li>Number of studies using earth observation data and information in risk identification and hazard mappings conducted</li> </ul>	Disaster Risks understood at all levels.
II. To enhance disaster prevention, mitigation and preparedness capacity at all levels for community resilience	<ul> <li>Number of guidelines for mainstreaming DRR issues into sectoral development plans developed</li> <li>Number of training, exercises and drills programs for key stakeholders conducted</li> <li>Number of resources mobilization initiatives implemented</li> <li>Number of preparedness and response plans in place</li> </ul>	Community resilience enhanced
III. To improve multi-hazard, end- to-end and people-centred early warning systems	<ul> <li>Evidence of multi-hazard early warning systems functioning.</li> <li>Number of sectors and institutions EWS linked with EOCC.</li> <li>Number of sectors and institutions receiving early warning information and acting upon.</li> </ul>	Functional multi- hazard EWS in place

Table 4: Performance indicators for the DRM monitoring and evaluation framework

Strategic Objectives	Output Indicators	Outcome/Impact Indicators
	<ul> <li>Number of sectoral stakeholders' platforms for sharing early warning alerts established</li> <li>Evidence of traditional knowledge contributing to early warning and recognized at community level</li> <li>Number of SOPs and protocols for early warning communication developed</li> <li>Percentage of LGAs having a plan to act on early warning</li> <li>Percentage of population exposed to or at risk from disaster protected through pre-emptive evacuation following early warning</li> <li>Number of LGAs that have accessible, understandable, usable and relevant disaster risk information available to the general public</li> <li>Number of emergency plans activated by EWS (food security, water resources management)</li> </ul>	
IV. To strengthen disaster response capacity and relief services at all levels.	<ul> <li>Number of rapid response teams established and capacitated</li> <li>Number of networks, volunteer and platforms for disaster responders established</li> <li>Number of contingency plans for multi-hazard and hazard specific developed</li> </ul>	Disaster response capacity and relief services improved

Strategic Objectives	Output Indicators	Outcome/Impact Indicators
	<ul> <li>Number of minimum humanitarian standards for relief provision developed</li> <li>Number national and cross-border guidelines, procedures and criteria for disaster response intervention developed and adopted</li> </ul>	
V. To strengthen build back better in recovery, rehabilitation and reconstruction for community resilience.	<ul> <li>Document to guide provision of social protection</li> <li>Document to guide provision of psychosocial support and mental health services</li> <li>Amount of funds for conducting post disaster review mobilized</li> <li>Number of disaster damage and need assessment conducted</li> <li>Number of post disaster assessment conducted and lessons learnt incorporated</li> </ul>	Community resilience enhanced through building back better approach.
VI. To increase public and private financing and investments in disaster risk management	<ul> <li>document on DRR investment and financing framework</li> <li>Operational framework for disaster risk transfer, risk sharing and protection of public and private investments document(s)</li> <li>Number of sectors which mainstreamed DRR issues into national budget at all levels</li> </ul>	Improved financing and investments in DRM.

Strategic Objectives	Output Indicators	Outcome/Impact Indicators
VII. To improve governance on disaster risk management at all levels.	<ul> <li>Number of regulations procedures and guidelines on various hazards developed</li> <li>Number of capacity building programs on DRM governance for committees developed</li> <li>Number of cases related to non-compliance with principles, laws and regulation reduced</li> </ul>	Improved DRM governance mechanisms at all levels
VIII. To strengthen integration of gender, youth, person with disabilities and other vulnerable groups' needs and cultural diversity in disaster risk management.	<ul> <li>Number of guidelines for integration of person with disabilities and other vulnerable groups in disaster risk reduction developed</li> <li>Number of tailor-made programmes for capacity building on person with disabilities and other vulnerable groups developed</li> <li>Number of Disaster risk management programmes and interventions aligned with cultural diversity issues</li> </ul>	Improved integration of gender, vulnerable groups' needs and cultural diversity in DRM
IX. To strengthen implementation of recognised regional and international disaster risk reduction practices.	<ul> <li>Number of bilateral, regional and international conventions and agreements to address trans-boundary disaster problems domesticated and implemented</li> <li>Number of international meeting, training and workshops on DRR attended</li> <li>Number of bilateral, regional and international mission participated</li> </ul>	Regional and international DRR practices implemented

Strategic Objectives	Output Indicators	Outcome/Impact Indicators
X. To increase multisectoral	• Number of awareness programs for community resilience	Multisectoral
approach in managing	conducted	approach in
environmental degradation	Number of different actors in DRR mapped	managing
and climate change for disaster	Number of disaster Management committees capacitated at	environmental
resilience	all levels	degradation and
	Number of environmental impact assessments which	climate change for
	considered climate and disaster risk	disaster resilience
		strengthened

0		1	
C	X	0	
	1	-	

#### 7.7 Reporting and feedback mechanism

The reporting flow in the implementation of this strategy will follow the established government reporting system. The reporting flow starts from groups of individuals, LGAs and regional secretariats through relevant committees at respective levels. Reports from regional secretariats, MDAs and independent institutions are consolidated and submitted to PMO. The PMO integrates the information from all levels on implementation of various activities to produce quarterly and annual performance reports. These reports will be shared to DRR stakeholders for review, discussions, re-planning and implementation. Feedback mechanism provides a two-way flow of information between report producers and end-users.

- African Union. (2015). Agenda 2063: The Africa We Want. Framework Document. Addis Ababa: AUC. [online]. Available at: https://au.int/ agenda2063/priorities
- African Union. (2016). Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Africa: In line with African Regional Strategy for Disaster Risk Reduction. [online]. Available at: https://www.preventionweb.net/files/67054\_ poaimplementationofthesendaiframewo[1].pdf
- Ardhi University. (2001). Vulnerability Assessment Report. Prime Minister's Office. Dar es Salaam.
- Ardhi University. (2003). Vulnerability Assessment Report. Prime Minister's Office. Dar es Salaam.
- Ardhi University. (2008). Disaster Risks and Capacity Needs for Tanzania Mainland. Disaster Management Training Centre. Dar es Salaam.
- Benson, C. (2009), Mainstreaming of Disaster Risk Reduction into Development: Challenges and Experience in the Philippines. ProVention Consortium.
- Bündnis Entwicklung Hilft and IHFV (2019). World Risk Report 2019. *Focus: Water Supply*. [online]. Available at: https://reliefweb.int/sites/ reliefweb.int/files/resources/WorldRiskReport-2019\_Online\_english. pdf
- Climate & Development Knowledge Network (2014). *The IPCC's Fifth Assessment Report: What's in it for Africa?* Available at https://cdkn. org/wp-content/uploads/2014/04/AR5\_IPCC\_Whats\_in\_it\_for\_ Africa.pdf
- EM-DAT: The International Disaster Database CRED. D. Guha-Sapir, Université Catholique de Louvain (UCL), Brussels. [online]. Available at: http://www.emdat.be. Accessed on 05 October, 2019.
- Global Earthquake Model. (2018). Country Profile: Tanzania. [online]. Available at: https://downloads.openquake.org/countryprofiles/
- INFORM. (2019). Tanzania Risk Profile. [online]. Available at: https://drmkc. jrc.ec.europa.eu/inform-index/Countries/Country-Profile-Map#

Msangi, C. E. (2016). Economic implications of natural disasters: the case

of 2011 and 2014 floods in Dar es Salaam. Dar es Salaam. Ardhi University (A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Disaster Risk Management of Ardhi University).

- Örtengren, K. (2003). Logical framework approach a summary of the theory behind the LFA method. Stockholm: Sida.
- PMO, UNDRR and CIMA (2019). United Republic of Tanzania Disaster Risk Profile: Flood and Drought. [online]. Available at: https://www. undrr.org/publication/disaster-risk-profile-tanzania
- Poggi, V., Durrheim, R., Mavonga Tuluka, G., Weatherill, G., Gee, R., Pagani, M., Nyblade, A., Delvaux, D. (2017). Assessing Seismic Hazard of the East African Rift: a pilot study from GEM and AfricaArray. Bulletin of Earthquake Engineering. Volume 15, Issue 11, 4499–4529, DOI: 10.1007/s10518-017-0152-4. [online]. Available at: https://maps. meteor-project.org/map/eq-pga-tza/#6/-6.137/35.701.
- Schulz, K., Gustafsson, I., & Illes, E. (2005). *Manual for capacity development*. Stockholm: Sida.
- UNDRR (2020), Multiple benefits of DRR investments Reducing Risk and Building Resilience against floods and droughts in (Country). Available at: https://www.undrr.org/publication/multiple-benefits-drrinvestment
- UNDRR. (2015). Sendai framework for disaster risk reduction 2015-2030. [online]. Available from: http://www.unisdr.org/files/43291\_sendaiframeworkfordrren.pdf.
- UNDRR. (2018). DesInventar disaster database. [online]. Available at: https://www.desinventar.net/DesInventar/profiletab. jsp?countrycode=tza&continue=y
- UNDRR. (2019). Words into Action guidelines: Developing national disaster risk reduction strategies. [online]. Available at: https://www.undrr.org/ publication/words-action-guidelines-developing-national-disasterrisk-reduction-strategies
- UNDRR. (2020). *Tanzania: Risk-sensitive Budget Review*. Available at: https://reliefweb.int/report/united-republic-tanzania/united-republic-tanzania-risk-sensitive-budget-review

- United Nations University (UNU). (2019). World Risk Report. [online]. Available from: http://ehs.unu.edu/news/news/world-risk-report-2014. html#info.
- United Nations. (2015). Paris Agreement on Climate Change. [online]. Available from: https://unfccc.int/files/essential\_background/ convention/application/pdf/english\_paris\_agreement.pdf
- United Nations. (2015). The 2030 Agenda for Sustainable Development. [online]. Available at: https://sustainabledevelopment.un.org/content/ documents/21252030%20Agenda%20for%20Sustainable%20 Development%20web.pdf
- United Nations. (2017). General Assembly: Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction. [online]. Available at: https://reliefweb.int/report/world/report-open-ended-intergovernmental-expert-working-group-indicators-and-terminology.
- United Nations. (2017). The New Urban Agenda. [online]. Available at: http://habitat3.org/wp-content/uploads/NUA-English.pdf
- United Republic of Tanzania (1990), *Disaster Relief Coordination Act No. 9* of 1990. Government Printer. Dar es Salaam
- United Republic of Tanzania (2004). Disaster Management Policy of 2004. Government Printer, Dar es Salaam.
- United Republic of Tanzania (2012). Tanzania Disaster Communication Strategy (TDCS), Prime Minister's Office, Dar es Salaam.
- United Republic of Tanzania (2012). Tanzania Emergency Preparedness and Response Plan (TEPRP), Prime Minister's Office, Dar es Salaam.
- United Republic of Tanzania (2012). Tanzania Long Term Perspective Plan 2011/12 – 2025/26: The Roadmap to a Middle-income Country. President's Office, Planning Commission. Dar es Salaam.
- United Republic of Tanzania (2014). National Operational Guidelines for Disaster Management of 201, Prime Minister's Office, Dar es Salaam.
- United Republic of Tanzania (2015), *The Disaster Management Act, 2015* No. 7. Government Printer. Dar es Salaam.
- United Republic of Tanzania. (2000). Tanzania Development Vision 2025. Planning Commission. Dar es Salaam
- United Republic of Tanzania. (2016). Five Year National Development Plans. Ministry of Finance and Planning. Dar es Salaam
- United Republic of Tanzania. (2017). *Disaster Management Regulations of 2017*. Government Printer. Dar es Salaam
- United Republic of Tanzania. (2018). Tanzania National Nutrition Survey of 2018. [online]. Available at: https://www.tfnc.go.tz/uploads/files/ Leaflet\_Tanzania%20National%20Nutrition%20Survey%202018\_ Printed.pdf
- UN-OCHA. (2016). World Humanitarian Summit: Commitments to Action. [online]. Available at: https://reliefweb.int/sites/ reliefweb.int/files/resources/WHS%20Commitment%20to%20 Action\_8September2016.pdf
- Winson, A., Smith, K., Jordan, C., Mee, K., Huyck, C., Silva, V., Paul, N., Wagle, S., Evans, W., Kombe, E., Maholi, I., Jimee, G., Dashwood, C., Ciurean, R., Boon, D., Sampson, C., Henshaw, P., Msangi, C., Petrarulo, L., and Pradhan, S. and the METEOR: *METEOR: A methodology for assessing the potential for multi-hazard impacts on building exposure in developing nations*. Available online at: https://meteor-project.org/