



THE REVOLUTIONARY GOVERNMENT OF ZANZIBAR

ZANZIBAR DISASTER MANAGEMENT COMMISSION  
SECOND VICE PRESIDENT'S OFFICE

# ZANZIBAR DISASTER RISK FINANCING STRATEGY AND IMPLEMENTATION PLAN (2025 - 2030)



APRIL 2025

ZANZIBAR DISASTER RISK FINANCING STRATEGY  
AND  
IMPLEMENTATION PLAN  
(2025-2030)

## APPROVAL OF THE STRATEGY

---

The Zanzibar disaster risk financing strategy and implementation plan (2025-2030) was approved by:

.....  
**Dr Islam Seif Salum**  
Principal Secretary  
Second Vice President's Office

.....  
Date

.....  
**Hon. Hamza Hassan Juma**  
Minister  
Minister of State  
Second Vice President's Office  
Policy, Coordination and House of Representatives

.....  
Date

## ACKNOWLEDGEMENTS

---

The Disaster Management Commission hereby extends its formal gratitude for the invaluable contributions made by various individuals and organizations in the development of this Disaster Risk Financial Strategy and Implementation Plan. We convey our sincere appreciation for the unwavering commitment demonstrated by the Technical Working Group under the esteemed leadership of the Director, National Disaster Management Commission (DMC). Their joint efforts have been instrumental in the fruition of this critical document.

We express our profound indebtedness to the Tanzanian Meteorological Authority (TMA), Environmental Management Authority, and Tanzania Insurance Regulatory Authority (TIRA), Ministries such as the President's Office Finance and Planning, Zanzibar Planning Commission, Ministry of Agriculture, Irrigation, Natural Resources and Livestock, Ministry of Blue Economy and Fisheries, Ministry of Tourism and Antiquities, and Ministry of Health. Their collective expertise and support have been pivotal in this endeavor.

The Commission is grateful for financial and technical assistance rendered by UNDP. The generous support extended by all parties has been integral to our efforts, and we convey our deepest gratitude.

## LIST OF ABBREVIATIONS

---

|              |  |
|--------------|--|
| <b>AAL</b>   | Annual Average Losses                                  |
| <b>ARC</b>   | African Risk Capacity                                  |
| <b>CCA</b>   | Climate Change Adaptation                              |
| <b>CSIS</b>  | Centre for Strategic and International Studies         |
| <b>DMC</b>   | Disaster Management Commission                         |
| <b>DMD</b>   | Disaster Management Department                         |
| <b>DREF</b>  | Disaster Response Emergency Fund                       |
| <b>DRF</b>   | Disaster Risk Financing                                |
| <b>DRF</b>   | Disaster Risk Financing                                |
| <b>DRM</b>   | Disaster Risk Management                               |
| <b>DRR</b>   | Disaster Risk Reduction                                |
| <b>FSDMP</b> | Financial Sector Development Master Plan               |
| <b>GDP</b>   | Gross Domestic Product                                 |
| <b>GWP</b>   | Global Warming Potential                               |
| <b>IDA</b>   | International Development Association                  |
| <b>IIT</b>   | Insurance Institute of Tanzania                        |
| <b>IMF</b>   | International Monetary Fund                            |
| <b>IRFF</b>  | Insurance and Risk Finance Facility                    |
| <b>ISAP</b>  | Insurance Subsector Action Plan                        |
| <b>KMKM</b>  | Kikosi Maalum cha Kuzuia Magendo Zanzibar              |
| <b>LIC</b>   | Low Income Countries                                   |
| <b>LMICS</b> | Lower Middle-Income Countries                          |
| <b>NFRA</b>  | National Food Reserve Agency                           |
| <b>NGO</b>   | Non-Governmental Organizations                         |
| <b>OECD</b>  | Organization for Economic Co-operation and Development |
| <b>PEFF</b>  | Pandemic Emergency Financing Facility                  |
| <b>PFM</b>   | Public Finance Management                              |
| <b>PSIP</b>  | Public Sector Investment Program                       |

|                  |   |
|------------------|---|
| <b>RGoZ</b>      | Revolutionary Government of Zanzibar                            |
| <b>RP</b>        | Return Period   |
| <b>SGR</b>       | Strategic Grain Reserve   |
| <b>SPI</b>       | Standard Precipitation Index                                    |
| <b>SWIO RAFI</b> | Southwest Indian Ocean Risk Assessment and Financing Initiative |
| <b>TAIS</b>      | Tanzania Agriculture Insurance Scheme                           |
| <b>TASAF</b>     | Tanzania Social Action Fund                                     |
| <b>TIRA</b>      | Tanzania Insurance Regulatory Authority                         |
| <b>TMA</b>       | Tanzania Meteorological Authority                               |
| <b>TPDF</b>      | Tanzania People's Defence Force                                 |
| <b>TZS</b>       | Tanzania Shilling   |
| <b>UNDP</b>      | United Nations Development Program                              |
| <b>UNDP-IRFF</b> | Insurance and Risk Finance Facility                             |
| <b>UNEP</b>      | United Nations Environment Programme                            |
| <b>UNISDR</b>    | United Nations Office for Disaster Reduction                    |
| <b>USD</b>       | United States Dollar (\$)                                       |
| <b>VfM</b>       | Value for Money   |
| <b>WB</b>        | World Bank  |
| <b>WB-IRFF</b>   | Infrastructure Reconstruction Financing Facility                |
| <b>WHO</b>       | World Health Organization                                       |
| <b>ZDMC</b>      | Zanzibar Disaster Management Commission                         |
| <b>ZDMF</b>      | National Disaster Management Fund                               |
| <b>ZECO</b>      | Zanzibar Electricity Corporation                                |
| <b>ZEMA</b>      | Zanzibar Environmental Management Authority                     |
| <b>ZIC</b>       | Zanzibar Insurance Company                                      |
| <b>ZCT</b>       | Zanzibar Commission for Tourism                                 |
| <b>ZPC</b>       | Zanzibar Planning Commission                                    |
| <b>ZSSF</b>      | Zanzibar Social Security Funds                                  |
| <b>ZURA</b>      | Zanzibar Utility and Regulatory Authority                       |

## TABLE OF CONTENTS

|  |            |
|--|------------|
| <b>Acknowledgements</b>  | <b>i</b>   |
| <b>List of Abbreviations</b>   | <b>ii</b>  |
| <b>Table of Contents</b>   | <b>iii</b> |
| <b>Forewords</b>   | <b>iv</b>  |
| <b>Preface</b>   | <b>v</b>   |
| <b>1. Introduction</b>   | <b>1</b>   |
| 1.1 <i>Country Context and Vulnerability</i>   | 1          |
| <b>2. Zanzibar Disaster Risk Profile</b>   | <b>1</b>   |
| 2.1 <i>Pandemics</i>   | 1          |
| 2.2 <i>Flooding</i>  | 2          |
| 2.3 <i>Strong Winds</i>  | 2          |
| 2.4 <i>Tropical Cyclones</i>   | 3          |
| 2.5 <i>Earthquakes and Tsunamis</i>  | 3          |
| 2.6 <i>Marine Accidents</i>  | 3          |
| <b>3. Rationale for Disaster Risk Financing Strategy</b>   | <b>4</b>   |
| <b>4. Existing Legal and Institutional Framework for Disaster Risk Management and Financing</b>      | <b>6</b>   |
| 4.1 <i>Policy framework for disaster risk management</i>   | 6          |
| 4.2 <i>Policy framework for public financial management of disasters</i>                             | 7          |
| 4.3 <i>Institutional Framework for Disaster Risk Management</i>                                      | 7          |
| <b>5. Vision, Mission Statement, Core Values and Principles</b>                                      | <b>9</b>   |
| 5.1 <i>Vision</i>  | 9          |
| 5.2 <i>Mission statement</i>   | 9          |
| 5.3 <i>Core values</i>   | 9          |
| 5.4 <i>Core principles guiding the development and execution of Disaster Risk Financing strategy</i> | 9          |
| 5.4.1 <i>Timelines of funding</i>  | 9          |
| 5.4.2 <i>Timely disbursement of funds</i>  | 10         |
| 5.4.3 <i>Strategic layering of financial instruments against risks of varying magnitude</i>          | 10         |
| 5.4.4 <i>Data and analytics principle</i>  | 11         |
| 5.4.5 <i>Adaptive Capacity Building</i>  | 12         |
| 5.4.6 <i>Multi-stakeholder engagement</i>  | 12         |
| 5.4.7 <i>Continuous Evaluation and Improvement</i>   | 12         |
| <b>6. Strategic Priorities</b>   | <b>12</b>  |

|  |  |           |
|--|--|-----------|
| 6.1  | <i>Assess and measure the economic and fiscal impacts of disasters, particularly those intensified by climate change.</i>  | 12        |
| 6.2  | <i>Establish a comprehensive and innovative portfolio of Sovereign disaster risk financing instruments.</i>  | 13        |
| 6.2.1  | <i>Ex-post Disaster Risk Financing instruments (post-disaster):</i>  | 14        |
| 6.2.2  | <i>Ex-ante Disaster Risk Financing instruments (pre-disaster).</i>   | 14        |
| 6.3  | <i>Evaluate Risk Transfer options to the Private Sector and Strengthen the Domestic Insurance Market</i>   | 16        |
| 6.3.1  | <i>Catastrophe Insurance</i>   | 16        |
| 6.3.2  | <i>Sovereign Catastrophic Insurance for Public Assets</i>  | 17        |
| 6.3.3  | <i>Property Catastrophe Insurance</i>  | 17        |
| 6.3.4  | <i>Private Catastrophe Insurance for Households and Businesses</i>   | 17        |
| 6.3.5  | <i>Reinsurance</i>   | 17        |
| 6.3.6  | <i>Agricultural Insurance</i>  | 17        |
| 6.3.7  | <i>Nature Capital and Biodiversity Financing</i>   | 18        |
| 6.3.8  | <i>Tourism Insurance</i>   | 18        |
| 6.4  | <i>Strengthen disaster related public financial management.</i>  | 20        |
| 6.5  | <i>Incorporate disaster risk analysis in the planning of public and private investments.</i>   | 21        |
| 6.6  | <i>Strengthen coordination and institutional capacity for disaster risk financing and management.</i>  | 21        |
| 6.7  | <i>Promote investments in national DRR priorities to mitigate and minimize the effect of future disaster shocks, including those exacerbated by climate change</i> | 22        |
| <b>7. Institutional Arrangements for Implementing the Strategy</b> |  | <b>22</b> |
| <b>8. Implementation Plan</b>                                      |  | <b>24</b> |
| <b>9. Critical Success Factors</b>                                 |  | <b>24</b> |
| 9.1  | <i>Political Support</i>   | 24        |
| 9.2  | <i>Strategic Leadership</i>  | 24        |
| 9.3  | <i>Support from Key Stakeholders</i>   | 24        |
| 9.4  | <i>Staff Capacity</i>  | 24        |
| <b>10. Monitoring and Evaluation</b>                               |  | <b>25</b> |
| <b>11. ANNEXURES</b>   |  | <b>25</b> |
| 11.1   | <i>FIVE-YEAR ZANZIBAR DRF STRATEGY IMPLEMENTATION PLAN</i>   | 26        |
| 11.2   | <i>LIST OF TECHNICAL AND CO-CREATION TEAM</i>  | 31        |
| <b>12. References</b>  |  | <b>32</b> |

## FOREWORD

---

The multifaceted nature of disasters manifests in significant social, economic, fiscal, and environmental repercussions, often with profound and enduring intergenerational consequences. The human and economic toll of such events is substantial and escalating, exacerbated by growing population, climate change, environmental degradation, and increased urbanization. The fiscal management of disaster impacts poses a formidable challenge, frequently necessitating the reallocation of resources intended for developmental investments to address immediate humanitarian relief and recovery needs. It is, therefore, essential that a proper mechanism is put in place to manage the fiscal impacts of disasters.

This Disaster Risk Financing (DRF) Strategy is an integral component for the country's broader risk mitigation and preparedness framework. It is a testament to our commitment to multi-sectoral coordination among Ministries, Departments, and Agencies (MDAs). The strategy is intended to ensure quick availability of financial resources after disasters. This preparedness will improve the efficiency of fund transfers, minimize the opportunity costs associated with such transfers, foster greater fiscal discipline, and improve the management of risk information. Collectively, these measures aim to alleviate the fiscal burden of disasters in our country's economy, and on the most impoverished and vulnerable populations.

Further, the strategy highlights financial options that will be pursued over the next five years to reduce fiscal vulnerabilities arising from disasters. This will, among others, involve the implementation of ex-ante (anticipatory) and ex-post (reactive) financial instruments embracing the principle of prompt (timeliness) availability of funds, layering of disaster instruments, efficacious disbursement of funds and utilization of accurate data for informed decision making. Effective and diligent implementation of this strategy will significantly mitigate the fiscal impacts of disasters.

**Dr Islam Seif Salum**

Principal Secretary

Second Vice President's Office

## PREFACE

---

In Zanzibar, disastrous events with huge fiscal losses have been observed and are expected to increase in frequency and severity due to rapid urbanization, population growth, climate change, and environmental degradation. Therefore, the Disaster Risk Financing (DRF) Strategy has been developed to manage fiscal impacts of disasters. The Strategy sets forth a vision that aims to address the liquidity challenges faced in the aftermath of disasters by developing a portfolio of financial instruments and combining them according to the magnitude of the disaster in a more cost-effectively manner.

This strategy complements the mitigation, risk reduction and preparedness measures that are already being coordinated by the DMC and implemented by MDAs. The strategy is designed to ensure timeliness of funding when catastrophic events occurs, funds are layered according to disaster risks, funds are disbursed promptly and efficiently, and decisions are robustly made with right information.

We would like to thank all those who have contributed to the development of this strategy. In particular, let me acknowledge UNDP through it's Insurance and Risk Finance Facility (IRFF) for technical and financial support, the task force comprising of officers from Tanzanian Meteorological Authority (TMA), Environmental Management Authority, Tanzania Insurance Regulatory Authority (TIRA), Ministries such as the President's Office Finance and Planning, Zanzibar Planning Commission, Ministry of Agriculture, Irrigation, Natural Resources and Livestock, Ministry of Blue Economy and Fisheries, Ministry of Tourism and Antiquities, and Ministry of Health for guiding the process and drafting the strategy. Special thanks should further go to all stakeholders for contributing in the development process of this strategy.

It is our expectation that this Strategy, if fully implemented, will result in a more pro-active response to disasters in the next five years.

**Makame Khatib Makame**

**Executive Director**

Disaster Management Commission -Zanzibar

The Second Vice President's Office

# INTRODUCTION

---

## 1.1 Country Context and Vulnerability

Zanzibar is a country which united with Tanganyika in 1964 to form the United Republic of Tanzania. It has two major Islands namely Unguja and Pemba and 54 other small islets surrounded by the Indian Ocean. The climate of Zanzibar is warm and humid tropical type with a strong maritime influence divided into four main seasons ' namely the warmest season (December to early March), the long rain season (March and lasts mid-June), the coolest season (June, July, August and early September), and the short rainy season called Vuli (October to December and sometimes early January). According to the 2012 and 2022 Population and Housing Census, Zanzibar's population increased by 30% to 1,889,773 in 2022 from 1,303,569 and its population growth rate was 3.7 in 2022 higher than 2.8 recorded in 2012 . Also, population density (people/km<sup>2</sup>) increased by 31% to 768 in 2022 from 530 in 2012.

In 2020, the growth of Zanzibar's economy decreased to 1.3% from 7% in 2019 mostly due to the COVID-19 pandemic which led to a decrease in the number of tourists to 260,644 and 394,185 in 2020 and 2021 from 520,809 and 538,264 in 2018 and 2019, respectively. Zanzibar's 2022 GDP at market price was reported to be TZS 3,499 billion in which the service sector which included trade and tourism was the most important contributing 46.3% of the GDP . This was followed by the agriculture sector (including fisheries, livestock, crops, and forestry), industry and tax on products, contributing 25.9%, 19.4% and 8.4% respectively.

According to Zanzibar's hazards risk profile for 2021 , Zanzibar's economy is exposed and vulnerable to hazards and disaster risks. These risks include hydro-meteorological events (floods, droughts, and strong winds), biological hazards (pandemics like COVID-19, cholera outbreaks, measles, and pest infestations), geological hazards (tsunamis, earthquakes, and landslides), and human-induced-hazards (road and marine accidents, fire outbreaks, food poisoning, oil spills, and building collapses). These events may result in severe impacts such as loss of lives, destruction of properties, environmental degradation, and infrastructural damage.

## ZANZIBAR DISASTER RISK PROFILE

---

A number of disastrous events such as extremely strong winds accompanied by heavy rain and flooding and pandemics with devastating impacts on the livelihoods of the local community and national economy have been reported in Zanzibar. What follows is an illustration of these disastrous events.

### 2.1 Pandemics

The COVID-19 pandemic had profound impacts in Zanzibar where 970 people were affected and 37 deaths were reported (Zanzibar Ministry of Health, 2024). Also, it significantly impacted

the tourism and hospitality industry, which in 2022 contributed 29.2% to the national economy. Due to COVID-19, the number of tourists decreased from 538,264 tourists recorded in 2019 to 260,644 in 2020 resulting in a decrease in the growth of the economy from 7% in 2019 to 1.3% in 2020. This is a huge decrease in the country in which the tourism and hospitality industry is one of the major sources of employment, tax revenue, and foreign exchange earnings. Tourism accounts for about 80% of Zanzibar's revenue and remains the biggest employer on the island. Further, an assessment of the EM-DAT epidemic problems recorded in Zanzibar between 2000 and 2023 shows that cholera outbreaks in Zanzibar were many and were mainly contributed to poor living conditions of many people. More than 70% of the people in urban areas of Zanzibar live in unplanned settlements characterized by lack and/or inadequate infrastructural services such as clean and safe water supply and liquid and solid waste management.

## 2.2 Flooding

Flooding is by far the most significant risk in Zanzibar compounded by the country's geography and geology and changes in rainfall variability and increased intensity of higher-rainfall events as has been recorded in the recent past years. For example, in May 2015, April 2016, April 2017 and April 2020 the island of Unguja received heavy rainfall with an average of 172, 212.4, 205 and 202.6 millimetres between 6 hours and a day. Also, Pemba which is another Island of Zanzibar, in May 2015, April 2016, May 2017 and April 2020 received heavy rain which reached 74.2, 98.3, 164.5 and 124.2 millimetres between 6 hours and a day. The 2017 and 2020 rains for example caused substantial damage to 6,005 and 10,043 houses respectively. Specifically, the floods of 2017 caused 12 fatalities and destroyed crops, infrastructures such as roads, bridges and electricity, and about 6,005 residential houses were damaged. Direct losses to road infrastructure were estimated to be about TZS 4,800,000,000 while on agriculture, 2,822.5 acres of various crops worth TZS 5,444,750,500/= were destroyed. Also, the 2018 floods in Unguja Island caused 15 fatalities and 11 injuries and affected 15,873 people; while the 2020 floods led to 8 fatalities, destroyed 10,043 houses, and affected 19,323 people. Further, the strong wind accompanied with heavy rain in 2023 between 1st and 7th April, destroyed 132 houses, two mosques and electricity infrastructure. The 2016 Zanzibar disaster risk profile report shows that floods in Zanzibar causes an average of around \$1.9 million direct losses each year which amounts to nearly 90% of the country's total annual direct losses from earthquakes, tropical cyclones and floods. Nearly 90% of the estimated direct losses from floods are in the residential sector and just over 10% are in the commercial sector. Also, the assessment shows that the annual relief costs for floods are estimated at an average of over \$440,000. Estimates of the 10-years, 100-years, and 250-years probable return period (RP) losses for floods are around \$ 6, \$12 and \$17 million respectively and would require approximately US\$ 2.9 million in emergency response costs.

## 2.3 Strong Winds

Zanzibar has also been experiencing trends of increasing wind speeds, with an increasing tendency of extreme wind events. Between 1st and 7th April 2023, strong wind accompanied by heavy rain affected a total of six (6) Shehia, an event that caused damage and collapse to the

residential houses, and collapse of the houses of worship, damage to electricity infrastructure as well as trees and crops . A total of 132 houses, two (2) mosques and electricity infrastructures were damaged to varying degrees. Among the affected houses, 40 houses were severely damaged requiring their residents to move to relatives. This suggests there is considerable potential of extreme wind events to cause loss of lives and livelihoods, limiting economic development, and harming public finances.

## **2.4 Tropical Cyclones**

The Zanzibar Disaster Risk Profile of (2016) estimates that the tropical cyclones which generate wind, flood, and storm surge hazards can cause an average annual direct loss of around \$89,000 in Zanzibar. This is about 5% of the country's total annual direct losses from earthquakes, floods and tropical cyclones. Nearly 80% of the losses originate from the residential sector and over 10% from the commercial sector. Losses to infrastructure, industry and public assets are expected to contribute approximately 2 to 3% each to the total of direct losses. Annual emergency costs due to tropical cyclones are estimated at over \$20,000 on average. Regions with the highest risk of flood and storm surge hazards associated with tropical cyclones are the southern and southeast regions. It is further established that wind from tropical cyclones unlike floods and storm surges causes over 95% of the losses. Areas likely to experience winds of almost 100 kph from a 500-year return period tropical cyclone event are the southern Zanzibar.

## **2.5 Earthquakes and Tsunamis**

Although earthquakes and tsunamis have occurred less frequently in Zanzibar, they can have devastating effects when they occur. Usually, tsunamis are the result of high-magnitude subduction zone earthquakes of which the Southwest Indian Ocean region does not experience many high magnitude earthquakes, nor does it contain major subduction zones . However, the entire region is considered to be at risk of tsunamis because tsunamis generated by subduction zones elsewhere in the Indian Ocean can have devastating effect in Zanzibar. While Zanzibar is considered to be far from the major seismic sources in the regions , historical records report 11 earthquakes within a 200-kilometer radius of Stone Town . Two earthquakes of magnitude 5.2 and 5 which occurred near Zanzibar in 1977 and 2005 respectively did not cause damage. However, while the country has a remote possibility of earthquakes that would produce significant damage to structures, the disaster risk profile report shows that earthquakes are possible and can account for almost 7% of Zanzibar's total annual direct losses from earthquake, flood and tropical cyclones, amounting to an estimated direct loss of about \$140,000 on average annually. This suggests that earthquakes and tsunamis should not be considered negligible because an extreme event, even if only very localized, can generate high disruptions, damages and casualties.

## **2.6 Marine Accidents**

Several marine accidents have been reported in Zanzibar. Some of the major maritime incidents include the sinking of Mv. Spice Islander 10th September, 2011 and Mv. Skagit, 18th July 2012

causing 1,529 and 293 fatalities respectively . Others include the capsizing of the cargo ship (MV Fat-hi) at the Zanzibar main port of Malindi in May 2009 resulting in the death of six people, and the sinking of the MV Burudan in May 2008 in which 18 people were reported dead or missing. The most cited causes of the reported marine accidents were overloading of cargo and passengers, bad weather especially extreme weather events such as strong wind and heavy rain, lack of adequate safety gears for passengers (i.e. enough lifejackets), inadequate maintenance and survey of vessels, complacency of harbor supervisors, lack of safety officers and inadequate inspectors to survey the vessels operating in the Indian Ocean and unethical practice of ship owners and operators, inadequate rescue response, and lack of communication . These issues suggest that most marine accidents are caused by regulatory and compliance issues which implies that the issue of safety and security is of paramount importance in Zanzibar.

## **RATIONALE FOR DISASTER RISK FINANCING STRATEGY**

---

Disastrous events in Zanzibar are expected to increase in frequency and severity due to rapid urbanization, population growth, climate change, and environmental degradation. As such, the government will assess the economic and fiscal impacts of disasters to reduce disaster risks and ensure timely availability of financial resources for disaster preparedness, response, recovery, and reconstruction which can reduce financial distress, and ultimately the human and economic cost of disasters. Currently, the Government of Zanzibar relies to a substantial extent on budget reallocation and assistance from national and international organizations, companies, government institutions and individual citizens to finance disaster response. In most cases, these financing mechanisms are unpredictable and untimely. Delays in effective response to disasters can compromise livelihoods of communities and reverse development progress. Further, there is no record of the percentage allocation of the government budget for disaster risk preparedness and responses.

Given the increasing frequency and severity of disastrous events, over reliance on budget reallocation and external assistance to manage disaster events, necessitates the Government of Zanzibar to arrange for ex-ante and ex-post disaster risk financing instruments to cover costs of disaster mitigation, response, recovery and reconstruction. These should include combination of risk retention and risk transfer financing instruments. It is in this context that this Disaster Risk Financing (DRF) Strategy has been developed, which outlines strategic priorities and financial instruments to be adopted. DRF Strategy is expected to enhance Zanzibar's financial resilience to hazards and disasters through comprehensive risk assessments; a range of adequate and suitable disaster risk financing instruments such as contingency funds and insurance mechanisms; well defined processes and clear rules which ensures resources are channelled efficiently to intended beneficiaries; and continued disaster risk reduction efforts.

In addition to complementing existing measures taken by the Revolutionary Government of Zanzibar, such as the establishment of COVID-19 recovery plans, biodiversity financing plans , Zanzibar Health Insurance, and the Government Emergency Fund, the DRF Strategy

will provide a holistic approach to disaster risk management. It will encompass mitigation, preparedness, response, and recovery efforts, ensuring a more coordinated and efficient response to disasters. Further, the development of the DRF Strategy aligns with key legislation and policies, including the Zanzibar Disaster Management Act No. 1 of 2015, the Zanzibar Emergency Preparedness and Response Plan of 2021, and the Zanzibar Disaster Management Policy of 2011. Additionally, it supports both national and international plans, such as the Sustainable Development Goals, the Sendai Framework for Disaster Risk Reduction of 2015, Zanzibar Development Vision of 2050, the CCM Manifesto of 2020-2025, and Climate Adaption Plans.

The DRF Strategy will serve as a critical reference document for all relevant stakeholders, including government agencies both in the Tanzania Mainland Government and Zanzibar including the Tanzanian Meteorological Authority (TMA), Environmental Management Authority, Second Vice's President Office - Disaster Management Commission (DMC); Tanzania Insurance Regulatory Authority (TIRA), Ministries such as the President's Office Finance and Planning, Zanzibar Planning Commission, Ministry of Agriculture, Irrigation, Natural Resources and Livestock, Ministry of Blue Economy and Fisheries, Ministry of Tourism and Antiquities, and Ministry of Health as well as financing institutions, insurance corporations, Social Security funds, Local Government Authorities and other key players. The strategy will enable stakeholders to make informed decisions and allocate resources more effectively.

## EXISTING LEGAL AND INSTITUTIONAL FRAMEWORK FOR DISASTER RISK MANAGEMENT AND FINANCING

---

### 4.1 Policy framework for disaster risk management

This DRF Strategy is developed as a policy document to address disaster risk financing in Zanzibar in alignment with existing national, regional and international disaster risk management agreements and frameworks such as the Sendai Framework for Disaster Risk Reduction of 2015, the African Strategy for Disaster Risk Reduction of 2004, National Disaster Management Strategy of 2022-2027, Tanzania Disaster Management Policy of 2012, National Operational Guidelines for Disaster Management of 2003, Disaster Relief Coordination Act 1990, East African Community (EAC) Disaster Risk Reduction and Management Strategy, Southern African Development Community (SADC) Disaster Risk Reduction Strategic Plan, United Nations Framework Convention on Climate Change (UNFCCC), Hyogo Framework for Action of 2005-2015. These have informed Zanzibar's overarching development policy and planning documents. The Vision 2050 which is now being implemented through five-year medium-term strategies, sector policies and annual plans, beginning with the current Zanzibar Strategy for Growth and Reduction of Poverty (ZSGRP) IV for 2020-2025 ensures adequate preparedness for and rapid response to natural and other hazardous events and strengthening of the early warning systems. Overall, the vision is geared toward reinforcing transformation of the economy and society to be resilient not only to crisis situations but also to future threats such as climate change.

The framework for disaster management in Zanzibar includes.

- The Zanzibar Disaster Management Policy of 2011 which provides strategic and coordinated guidance for minimizing negative consequences and impacts of disasters on the lives and property of the people of Zanzibar by taking effective preparedness, mitigation, response and recovery measures thus ensuring the maximum level of safety.
- The Zanzibar Disaster, Damage, Loss and Needs Assessment Guidelines of 2019 which supports the DMC to carry out post-disaster recovery assessments and planning through a more coordinated approach. The Guide provides practical, action-oriented and easy-to-follow step by step process for carrying out the damage, loss and needs assessment. The ultimate goal of the assessment is to measure in monetary terms the impact of disasters on society, economy and the environment and to come up with more informed disaster recovery strategies.
- The Emergency Preparedness and Response Plan (ZEPRP) of 2011 which sets forth appropriate actions to be taken to prepare for response to an emergency or major disaster including potential or imminent threat of any event. The ZEPRP aims to facilitate the coordination for the delivery of resources and services necessary to deal with the consequences of an emergency or major disaster. The ZEPRP further describes the disaster situation and planning assumptions, concept of operations, response and early recovery

actions, organizational and specific assignments of responsibilities to various departments and government agencies, NGOs, CBOs, and private sector.

- The Zanzibar Disaster Communication Strategy (ZDCS) of 2011 which ensures operability, interoperability and continuity of communications to allow emergency responders to communicate as needed, on demand, and as authorized at all levels of the government. The ZDCS is specifically designed to support the Zanzibar Emergency Preparedness and Response Plan (ZEPRP). It outlines the organization, operational concepts, responsibilities, and procedures to accomplish emergency communications requirements. To strengthen emergency communications capabilities nationwide, the plan focuses on the use of technology, coordination, planning, training and exercises at all levels of the government.
- The Monitoring and Evaluation Framework for Disaster Management in Zanzibar of 2013 which provides guidance for tracking results of the implementation of EPRP for all eleven districts in Unguja and Pemba. Also, the M&E framework guide staff and stakeholders on how to monitor and evaluate implementation of the EPRP and determine to what extent its goals and objectives have been met.

#### **4.2 Policy framework for public financial management of disasters**

The Public Financial Management Act of 2016 provides the overall financial governance framework for the government of Zanzibar. The Act mandates the Ministry of Finance to manage public finances and be the principal financial advisor to the Ministries, Departments and Agencies in the country. It further establishes the contingency fund to cater for unforeseen and unavoidable expenditures. The contingency fund shall consist of monies appropriated from the Consolidated Fund by an Appropriation Act in a financial year. The permanent capital of the contingency fund shall not exceed 2.5 percent of the most recently audited revenues, or such other amount as may be prescribed by the Minister with approval of the Revolutionary Council. However, to date the government of Zanzibar does not have clearly established budget line specifically designated as a contingent fund for disaster related issues. This makes it difficult to know specific amount of budget allocated for contingent fund as this fund is used for any unforeseen and unavoidable expenditure.

#### **4.3 Institutional Framework for Disaster Risk Management**

The primary legal document guiding DRM in Zanzibar is the Disaster Management Act No. 1 of 2015 which has provisions for coordinating and implementing disaster risk management initiatives in the country. The act established the Commission for Disaster Management responsible for defining, promoting and coordinating policy implementation of the Government for managing disasters. It defines the composition, functions, and powers of the Commission. The Disaster Management Commission (DMC) under the Second Vice President Office coordinates and implements the Disaster Management Policy of 2011 in collaboration with the relevant stakeholders and the communities to reduce disaster risks and ensure a resilient community.

DMC is responsible for coordinating all disaster management issues in Zanzibar; including disaster emergency preparedness and response operations. It is also responsible for performing other roles as stipulated in the Disaster Risk Reduction and Management Act of 2015 and the Disaster Management Policy of 2011.

Further, the Act establishes and specifies responsibilities of the Disaster Management Committees and Technical Committees at the National, District and Shehia levels. These Committees are required to generally coordinate, guide, direct, approve and control disaster management activities at their respective levels and become the front-line structure of disaster management.

- The National Disaster Management Committee is responsible for advising the DMC on all matters regarding the disaster management, and performs all directives issued by the Commission. The overall responsibility of this Committee is to oversee and coordinate the management activities designed to secure the effective mitigation of disasters, the preparedness and operation of affairs during disasters.
- The District Disaster Management Committee is established to administer and supervise disaster management programs and their implementation at District level. Under this committee is the District Disaster Management Technical Committee responsible for implementing the decisions of the District Disaster Management Committee on all matters regarding disaster management for their locality. Also, this Committee is responsible for advising the District Disaster Management Committee on all matters regarding disaster management.
- Shehia Disaster Management Committee has among other functions responsibility to prepare plans and procedures for disaster management programs; take operational control in the event of a disaster or emergency to ensure support is provided to the affected households; and mobilize financial and material resources needed for disaster management.

# VISION, MISSION STATEMENT, CORE VALUES AND PRINCIPLES

---

## 5.1 Vision

“Sustainable, resilient, equitable, innovative, responsive, and inclusive disaster risk financing”

## 5.2 Mission statement

“To proactively manage and minimize economic, social, and environmental losses caused by disaster impacts, by building sustainable, effective, and innovative risk financing mechanisms.”

## 5.3 Core values

- i. Innovativeness: Encouraging creative solutions for evolving risks.
- ii. Shared Responsibility: Recognizing collective efforts in disaster risk management.
- iii. Flexibility: Adapting to changing circumstances.
- iv. Professionalism: Conducting risk financing activities with expertise.
- v. Comprehensiveness and Sensitivity: Considering diverse factors and local contexts.
- vi. Transparency and Accountability: Ensuring transparent risk financing processes.
- vii. Integrity: Upholding ethical standards and honesty.
- viii. Inclusiveness: Engaging all stakeholders in risk financing decisions.

## 5.4 Core principles guiding the development and execution of Disaster Risk Financing Strategy

The objective of this DRF Strategy is to provide strategic guidance and direction to reduce the economic and fiscal effect of disasters by combining instruments that address identified risks in Zanzibar. It shows that combination of financial instruments for responding to disasters is cost-effective and that rapid liquidity is essential for meeting surge demand for emergency assistance to ensure cost efficiencies generated by early response. The goal of a DRF Strategy is to identify a cost-effective combination of financial instruments to invest for DRR and preparedness and to increase the capacity to respond quickly and effectively. Ultimately, a DRF Strategy should enhance the sustainability of public finances for DRM. A DRF Strategy is integral to a comprehensive, proactive approach to disaster resilience which also includes investments in DRR and preparedness (e.g., resilient infrastructure and multi-hazard early warning systems), and adequate DRM policies and institutions. The following are core principles expected to guide execution of this DRF Strategy which include timeliness of funding, disaster risk layering, disbursement of funds, data and analytics, adaptive capacity building, multi-stakeholder engagement and continuous evaluation and improvement.

### 5.4.1 Timelines of funding

The strategy is built on the recognition that there are differing financing needs at different phases after a disaster and therefore different financial instruments will be suited to these differing needs. Therefore the financing instruments are divided across three key phases (Figure 1).

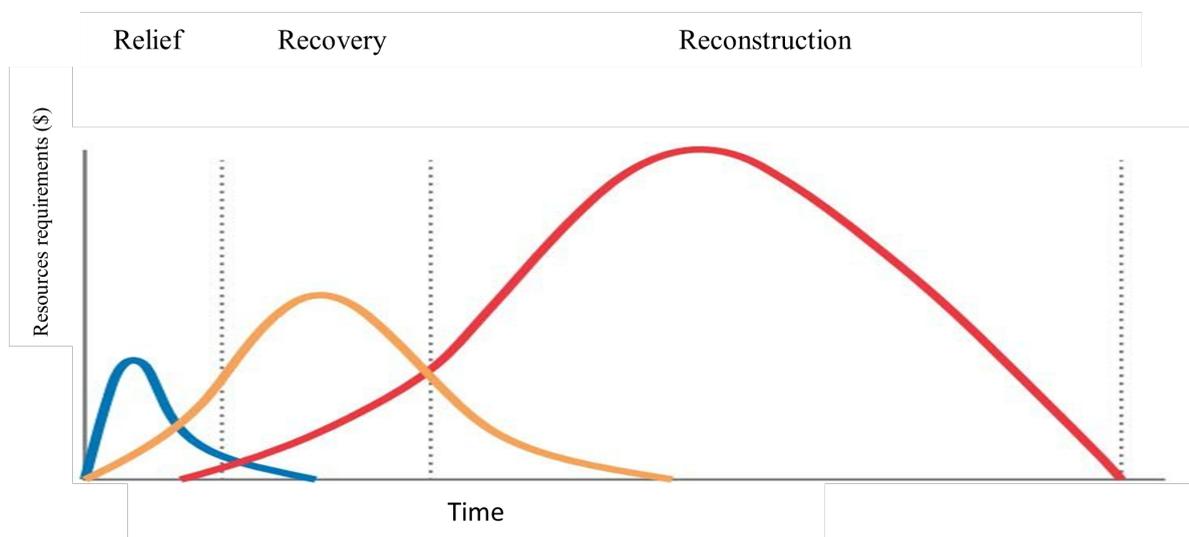


Figure 1: Post-disaster resource/funding requirements in a country.

Source: World Bank Group (2014)

During disaster response phase, rapid mobilization of funds will be made for the affected population to limit the negative impacts of disasters and limit the overall response costs and provide much needed support to the population. Pre-arranged financing will be made to provide quick liquidity after the disaster strikes to support relief and early recovery efforts. This shall give the government time to mobilize resources required for the other DRM phases including reconstruction. This variation in the timing of needs has clear implications for the design of cost-effective financial management of disasters.

#### 5.4.2 Timely disbursement of funds

The government will ensure timely, targeted and pre-arranged funds disbursement mechanisms to support the fast and efficient distribution of funds to clusters and beneficiaries. To achieve this, the government will use the existing institutional frameworks, programs, and expertise to effectively allocate, disburse, and monitor response, recovery, and reconstruction funds. Further, the mechanism will involve strong collaboration between the Ministry of Finance and other government ministries and/or agencies tasked with spending of post-disaster funds (such as state-owned enterprises). The disbursement system will take into consideration timeliness, transparency and the accountability requirement of public and donors/development partners providing the funds.

#### 5.4.3 Strategic layering of financial instruments against risks of varying magnitude

The government will employ a combination of different disaster risk financing instruments to protect against events of different frequency and severity to ensure optimal resource allocation, prioritizing cost-effective financing. Figure 2 provides a general overview of financial tools for disaster risk management for different risk layers and response phases. This approach, known as risk layering, is part of a comprehensive financial protection strategy that mobilizes different

instruments, either before or after a disaster strike, to address the evolving need for funds. Risk layering will ensure cheaper sources of money are used first and most expensive instruments are used only in exceptional circumstance . For example, for recurrent events particularly relatively small events like flooding, a disaster reserve fund will provide quick liquidity to finance preparedness and emergency response most cost-effectively, while for medium-sized events, contingent credits and grants will complement reserves to finance long-term reconstruction. Further, for more extreme but rare disaster events, risk transfer instruments will be used to provide additional protection to the government and private sector (businesses, households, farmers) most cost-effectively. Implementing risk transfer mechanisms involves shifting the financial burden of disasters from the government and local communities to external entities, such as insurance companies or international financial markets that are designed to absorb these risks effectively. This will be achieved through instruments like insurance policies, catastrophe bonds, and reinsurance. Utilizing these mechanisms will ensure rapid financial response and recovery without heavily relying on limited local resources.

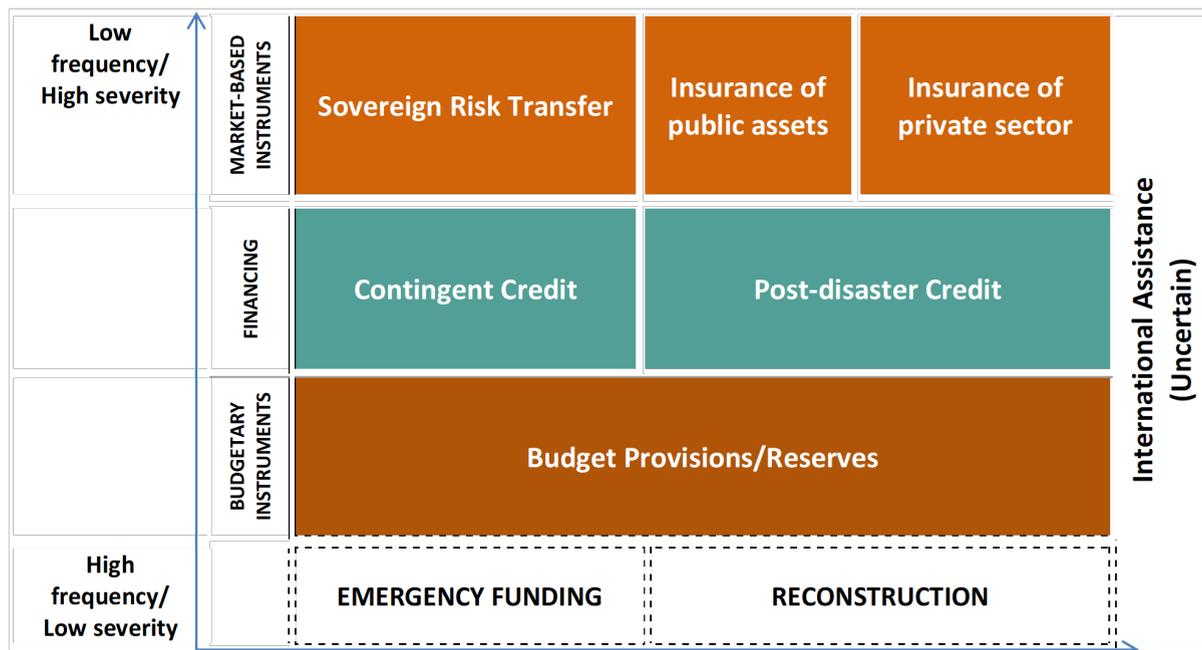


Figure 2: Financial Instruments for Disaster Response: A Framework

Source: MicroSave Consulting, 2024

#### 5.4.4 Data and analytics principle

The government will ensure that the right information is available from relevant data generating institutions including TMA, NBS, TIRA, and DMC database for sound financial decisions about financial protection against disasters. Sound financial decision-making will utilize actuarial analysis and tools to help in understanding and evaluating alternative financial instruments and strategies; user-friendly interfaces to bridge the gap between policymakers and underlying technical models, and quantitative analysis to leverage financial markets and private sector solutions. Thus, investing in risk information, models, and tools to assess hazards, exposures,

and potential impact of losses is critical. Disaster risk information will be continuously updated to support decision-making regarding investments in disaster risk management.

#### **5.4.5 Adaptive Capacity Building**

For effective disaster risk management, the government will strengthen the adaptive capacity of institutions, communities, and individuals. This will involve enhancement of skills, knowledge, and resources to anticipate, prepare for, and respond to disasters. Continuous training and education programs, technical assistance, and resource allocation will be prioritised to build resilience against future risks.

#### **5.4.6 Multi-stakeholder engagement**

The government will ensure this disaster risk financing strategy is holistic and effective by engaging a diverse range of stakeholders, including government agencies, private sector entities, non-governmental organizations, and local communities. This collaborative approach will ensure all perspectives are considered, and that resources and expertise are pooled. Fostering strong partnerships and communication channels among stakeholders will enhance coordination and resource mobilization.

#### **5.4.7 Continuous Evaluation and Improvement**

The government will ensure this disaster risk financing strategy is dynamic and continuously evolving based on lessons learned from past events, emerging risks, and new opportunities. Thus, regular monitoring, evaluation, and feedback mechanisms will be prioritised to identify areas for improvement and adapt the strategy accordingly. This will involve periodic reviews of the DRF strategy, incorporating stakeholder feedback, and updating plans and instruments as needed.

## **STRATEGIC PRIORITIES**

---

This DRF Strategy has defined six strategic priorities to measure and reduce the economic and financial costs associated with disaster events in Zanzibar:

### **6.1 Assess and measure the economic and fiscal impacts of disasters, particularly those intensified by climate change.**

The first and critical step for adequate and timely management of potential impacts of disasters including planning and adoption of cost-effective financial instruments is to identify and quantify economic and fiscal risks associated with disasters. This requires development and continuous update of the disaster risk profile like the current Zanzibar Disaster Risk Profile report produced in 2016 by the Southwest Indian Ocean Risk Assessment and Financing Initiative (SWIO RAFI) which is quite old about 8 years and partial, and thus do not form

a sound basis for financial planning. Among others, this report provides risk assessment for Zanzibar using exposure data which included information on building construction for a variety of occupancy classes including residential; commercial; industrial; and public facilities such as educational facilities and emergency facilities; and infrastructure such as roads, and airports, and utilities.

This highlights the need to update these estimates to produce risk maps that will provide information on economic and financial impacts of various hazards. These maps are typically based on probabilistic catastrophe models which use key inputs like information on hazards and estimates of their likely occurrence at different magnitudes, exposures of people and economic assets, and vulnerability of such assets and populations to the impact of a given disaster.

Assessment of fiscal risks will strengthen the management of public finances and ensure the nations macroeconomic stability. Therefore, the government will prioritize the following activities to improve disaster-related economic and fiscal risk information:

- i. Develop comprehensive risk profiles and ensure risk-related data are regularly updated and utilized in strategic planning.
- ii. Develop probabilistic disaster risk assessment models to better understand fiscal and developmental implications of different risks to inform risk-informed budget planning.
- iii. Strengthen the existing system to record and update disaster losses annually (disaster loss database), collect data for historical disaster loss as available, and generate disaster loss report.
- iv. Establish a system to record, collect, manage, and update disaster damage data and produce annual reports to inform recovery and reconstruction efforts.
- v. Develop and populate a national public assets database to improve information on the exposure of public assets to disasters, including infrastructure and public buildings. This will improve the understanding of the country's disaster-related contingent liability;
- vi. Build capacity of the relevant Government Ministries and departments to understand economic and fiscal risks to inform policy decisions on risk retention and risk transfer to the market; and
- vii. Incorporate updated disaster risk information into economic and fiscal planning to increase financial preparedness for disasters. This will support decision-making regarding investments in disaster risk management.

## **6.2 Establish a comprehensive and innovative portfolio of sovereign disaster risk financing instruments.**

The Zanzibar Government will develop a comprehensive portfolio of disaster risk financing mechanisms and review them annually to ensure they effectively meet government objectives and are cost-effective. A review of the historical landscape of disaster risk financing shows that several mechanisms have been used to respond to and recover from the impacts of natural or human-induced disasters in Zanzibar. The following are the ex-ante and ex-post financial instruments that Zanzibar has designed and used to finance disaster mitigation, preparedness, response, recovery, and reconstruction:

### 6.2.1 Ex-post Disaster Risk Financing instruments (post-disaster):

- Budget reallocations: the Government of Zanzibar has financed most of the disaster response and recovery costs through budget reallocation of line ministries. Among others, this approach was used during the 2011 and 2012 emergency of two large ferry disasters in which after the MV Skygate ferry disaster, the Government spent about TZS 571 million or USD 350,000 mainly for supporting rescue efforts and providing assistance . Although well intentioned, the approach is not effective because it results in reducing line ministries' budgets to respond to immediate costs of the disasters thus causing underperformance in the affected ministries.
- External assistance: assistance from national and international Non-Governmental Organizations, companies and individuals as well as government agencies/institutions have been sought to provide assistance to the victims of disasters during disaster emergencies. For examples, following the effects of strong wind and rain happened between 01st and 07th April 2023 affecting 6 Shehia in North A and West A districts in Unguja, various Government and non-Government Institutions contributed TZS 84,794,000 in form of cash, iron sheets, bricks, foods, cement, and tree. Also, during the 2005 severe floods, the International Federation of the Red Cross supported the victims with relief goods worth USD 110,000 (source: Tanzania Red Cross Society- DREF bulletin 16 March 2007). This is, however, an inefficient approach of financing disaster emergencies as it depends on the discretion of the support provider and funds may not come on time as may be required. Immediate liquidity is crucial to support relief and early recovery operations. This approach is often unpredictable and untimely, hindering effective disaster management efforts.
- Post-Disaster Support: In the aftermath of disasters, government provides a standard food basket to affected households to support their livelihoods. For farmers, Government, Non-Governmental Organizations and humanitarian organizations assist with agricultural inputs. Nonetheless, the support is often not adequate to meet households' livelihood needs.

### 6.2.2 Ex-ante Disaster Risk Financing instruments (pre-disaster):

- Zanzibar Disaster Fund: being the bearer of the majority of the recovery costs from disasters, the Government of Zanzibar has established a special account for the Zanzibar Disaster Fund (the disaster risk relief account) - established following the catastrophic sinking of the cargo ship in 2011. The account receives financial support from private individuals and non-governmental organizations through voluntary contributions and the fund is managed by the DMC. Nevertheless, this account is often underfunded and many times with no funds for financing immediate disaster emergencies.
- Contingency Fund: the Government of Zanzibar as per the Public Finance Management Act of 2016 established a contingency fund pursuant to section 108 of the Constitution . The contingency fund is established to cater for unforeseen and unavoidable expenditures. It consists of monies appropriated from the Consolidated Fund by an Appropriation Act in the financial year. The act states that the permanent capital of the contingency fund shall not exceed 2.5 percent of the most recently audited revenues, or such other amount as may be prescribed by the Minister with the approval of the Revolutionary Council. However, this fund is not specific for disaster emergencies.

- National Disaster Management Fund (ZDMF): the Zanzibar's Disaster Management Policy (2011) and the Disaster Management Act of 2015 requires establishment of the ZDMF. However, this ex-ante disaster funding mechanism has not been established. Its establishment is expected to ensure access to resources for disaster preparedness, mitigation, response and recovery. Sources of the ZDMF are expected to come from; any monies voted to it by the House of Representatives for that purpose (budget provisions/reserve), any monies made by way of donations or grants made within and outside Zanzibar, subscriptions by the public and any monies as a result of fines imposed as penalties under this Act
- Strategic Grain Reserve (SGR): The government allocates resources to the National Food Reserve Agency (NFRA) to stock the SGR with staple grains. The drawdown is done as and when necessary to mitigate the impact of potential disaster related shocks. Nonetheless, the resources are not always adequate and are not provided on time and most of the time SGR are without reserves.
- Insurance: insurance is another risk financing mechanism in Zanzibar . However, the insurance market in Zanzibar is relatively underdeveloped, particularly for insurance packages for severe disasters like earthquakes, floods and droughts. Thus, Zanzibar has neither sovereign risk transfer solutions in place and most public assets are not insured. Existing market-based financing mechanism include a number of private and public owned insurance companies operating in the market and some of these are connected to companies in the mainland Tanzania. The assessment of the Zanzibar insurance market shows that there is considerable need for the government to prepare enabling procedures for low-income citizens to insure their properties and buildings against various disasters to reduce the high costs for the Government and themselves when major disasters occur.
- Social Protection Schemes: RGoZ is implementing social protection programmes such as the Tanzania Social Action Fund (TASAF) to uplift the lives of poor and vulnerable households and the Zanzibar Universal Pension Scheme (ZUPS) for old age people above 70 years. TASAF for example has been implementing projects that target the poor, among others through cash transfers as well as labour intensive public works such as rural roads construction, reforestation and public buildings. Communities are directly engaged in the selection of programs and beneficiaries. In Zanzibar, TASAF is managed under the Second Vice Presidents' Office.

The varieties of risk financing mechanisms that have been used in Zanzibar have been employed in silos and their use has not been based on rigorous analysis of their relative cost effectiveness. Therefore, the government of Zanzibar will undertake the following actions to establish a comprehensive and innovative portfolio of sovereign disaster risk financing instruments:

- Determine specific objectives for disaster risk financing, such as the types of events to cover and the costs to be addressed in disaster risk preparedness, relief, recovery, and reconstruction.
- Conduct a financial gap analysis annually, compare available funding against the required needs for various disaster scenarios. It will provide the basis to identify funding shortfalls and inform strategic decisions on the adoption of additional or new financing instruments.
- Assess the cost-efficiency of existing and potential disaster risk financing instruments to inform strategic decision-making. This evaluation will ensure that the best value for money

is achieved by addressing identified financial gaps for different events and aligning with policy priorities. By thoroughly analysing the cost-benefit ratios of various instruments, the government can prioritize those that offer the most effective financial protection against disasters.

- Explore and evaluate available contingent credit instruments, such as the World Bank's Development Policy Loan with a Catastrophe Deferred Draw Down Option. These instruments will be adopted in alignment with the government's fiscal and disaster risk management objectives. By securing contingent credit lines, Zanzibar can ensure rapid access to funds in the aftermath of a disaster, thereby enhancing its financial resilience.
- Evaluate sovereign risk transfer products which are currently being offered and the potential development of new products. This assessment will include a rigorous review of the use of such instruments in other regions to understand both their benefits and risks. The government of Zanzibar will ensure that the benefits of combining any risk transfer products with other disaster risk financing instruments are thoroughly considered and understood by all relevant stakeholders. This comprehensive evaluation will help in selecting the most appropriate and effective risk transfer solutions, establish and operationalize the National Disaster Risk Management Fund, which will act as a central resource for disaster risk management activities. The Fund will require clear rules for allocating resources and specific guidelines regarding eligible expenditures to ensure transparency and efficiency.
- Conduct a comprehensive analysis to identify and address the social and economic vulnerabilities of its population to disaster risks, informing the development of an integrated approach to shock-sensitive social protection. Existing social protection programs such as the TASAF and the ZUPS will be key examples, employing shock-sensitive measures to help poor households and the elderly better manage predictable risks and shocks through a more institutionalized and coordinated system. The government will analyse the costs of implementing these scalable components and evaluate different ex-ante financing options, including the establishment of a Social Support Fund, to ensure timely and effective support during crises.
- Enhance coordination among development partners to ensure timely disbursements of humanitarian assistance and reduce related transaction costs.

### **6.3 Evaluate Risk Transfer options to the Private Sector and Strengthen the Domestic Insurance Market**

The Government will evaluate options to transfer disaster risks to the private sector and enhance the domestic insurance market. This strategy will involve identifying and promoting risk transfer mechanisms such as insurance and reinsurance and fostering a competitive and resilient insurance sector. Strengthening the domestic insurance market will provide more robust financial protection against disasters, reduce the fiscal burden on the government, and support overall economic stability. Below are examples and options to be considered:

#### **6.3.1 Catastrophe Insurance**

Catastrophe insurance policies provide pay-outs when a disaster exceeds a certain predefined threshold, such as a specific magnitude of an earthquake or a particular level of flood damage.

These policies cover major structural damage to buildings, infrastructure damage, and large-scale property losses from events like earthquakes, hurricanes, and floods. For instance, the Caribbean Catastrophe Risk Insurance Facility (CCRIF SPC) offers parametric insurance policies to Caribbean and Central American countries, enabling quick pay-outs to address immediate post-disaster needs. Considering there is a low level of risk transfer to the private sector, the RGoZ will assess the feasibility of catastrophe insurance for public assets, property catastrophe insurance, private catastrophe insurance for households and businesses, and agricultural insurance schemes for farmers.

### **6.3.2 Sovereign Catastrophic Insurance for Public Assets**

Public asset insurance is considered a cost-effective way to transfer the risk of extreme disasters to the private sector within the country and internationally. Developing such schemes requires adequate private sector capacity and government capability to manage them. Therefore, the government will conduct a feasibility study to establish a basis for informed decisions regarding the pursuit of insurance for public assets.

### **6.3.3 Property Catastrophe Insurance**

Uninsured households represent a contingent liability for the government, as it may feel obligated (for legal, moral, or political reasons) to provide relief and reconstruction support to households with damaged properties. Property catastrophe insurance reduces this liability by allowing private insurers to assume the risk in exchange for premium payments. Consequently, the government will review experiences with property insurance to potentially pilot property catastrophe insurance schemes.

### **6.3.4 Private Catastrophe Insurance for Households and Businesses**

Increased private catastrophe risk transfer can significantly reduce the country's disaster-related contingent liabilities. Therefore, the government will encourage and promote the development, penetration, and uptake of private catastrophe insurance for households and businesses. This will provide reliable and timely financial relief for the recovery of livelihoods and businesses, preventing people from falling into destitution during disaster events.

### **6.3.5 Reinsurance**

Reinsurance agreements allow primary insurance companies to transfer portions of their risk portfolios to other insurance companies, spreading the risk and reducing the likelihood that a single insurer will face large financial obligations following a disaster. Reinsurance is crucial for managing large, aggregated losses from multiple claims resulting from a single catastrophic event, such as a major hurricane causing widespread damage across a region.

### **6.3.6 Agricultural Insurance**

Agricultural insurance provides financial protection to farmers against losses due to adverse weather conditions, pests, diseases, and other agricultural risks. This type of insurance helps

stabilize farmers' incomes and ensures the continuity of agricultural production, which is vital for food security and economic stability. As such, the Tanzania Insurance Regulatory Authority (TIRA) has established the Tanzania Agriculture Insurance Scheme (TAIS) to mitigate financial losses suffered by farmers due to perils such as climate change, weather variables, pests, and diseases. TAIS categorizes agricultural insurance into four types: crop insurance, livestock insurance, aquaculture insurance, and forestry insurance. This scheme is a public-private partnership between the government, the insurance industry, and other stakeholders. The government's role in TAIS includes ensuring the designed agricultural insurance products meet farmers' requirements, raising awareness about the insurance products and their benefits, providing subsidies on premiums, and managing data (meteorological, yield, disease incidences, and extension services). There are various types of agricultural insurance, including:

- i. Crop Insurance:** Protects farmers against losses due to crop failure caused by natural calamities such as droughts, floods, pests, and diseases. Types of cover include area-yield insurance, which provides coverage based on the average yield of a specific area rather than individual farm yields, reducing the risk of moral hazard and adverse selection. For example, India's Pradhan Mantri Fasal Bima Yojana (PMFBY) scheme includes area-yield insurance, compensating farmers when the actual yield in their area falls below the historical average yield. Parametric insurance provides payouts based on predefined parameters such as rainfall levels, rather than the actual loss incurred, as seen in India's Weather-Based Crop Insurance Scheme (WBCIS), which helps farmers manage risks and sustain their livelihoods despite climate challenges. Multi-Peril Crop Insurance (MPCI) covers a range of risks including weather-related events, pests, and diseases, providing comprehensive protection for farmers, exemplified by the United States Federal Crop Insurance Program.
- ii. Livestock Insurance:** Covers losses due to the death or illness of livestock caused by natural disasters, diseases, or accidents. Types of cover include mortality insurance, which provides coverage for the death of livestock due to accidents, diseases, or natural disasters, as seen in Ethiopia's Livestock Insurance Program offering financial protection against the loss of cattle due to drought conditions. Parametric insurance provides payouts based on predefined parameters such as drought indices or satellite data on vegetation health, as demonstrated by Kenya's Index-Based Livestock Insurance (IBLI) program, which uses satellite data to monitor grazing conditions and trigger payouts during drought conditions to help pastoralists maintain their herds. Comprehensive livestock insurance covers a range of risks including diseases, theft, accidents, and natural disasters, as offered by South Africa's Livestock Insurance Scheme.
- iii. Aquaculture Insurance:** Provides coverage against risks specific to aquaculture, such as water quality issues, diseases, and adverse weather events. Types of cover include mortality insurance, which covers the death of fish or other aquaculture stock due to diseases, water quality issues, or adverse weather conditions. Example of this is implemented in Vietnam to protect shrimp and fish farmers against losses due to diseases and adverse environmental conditions. Parametric insurance provides payouts based on predefined parameters such as water temperature or salinity levels, which can affect aquaculture operations, explored in Indonesia's parametric insurance options for its aquaculture sector. Comprehensive aquaculture insurance covers a range of risks including diseases, theft, accidents, and natural disasters affecting aquaculture operations, as demonstrated by Norway's aquaculture insurance schemes.

**iv. Forestry Insurance:** Protects forests against losses due to forest fires, storms, pests, and diseases affecting forest plantations. Types of cover include fire insurance, which provides coverage for losses due to forest fires, protecting both commercial and natural forests. Example of this is the Mexico's forestry insurance covering commercial plantations against fire risks. Multi-peril insurance covers a range of risks including fires, storms, pests, and diseases affecting forest plantations, as demonstrated by Finland's forestry insurance programs. Parametric insurance provides pay-outs based on predefined parameters such as drought indices or wind speeds, impacting forest health, as demonstrated by Australia's parametric insurance options for its forestry sector.

### 6.3.7 Nature Capital and Biodiversity Financing

Nature capital and biodiversity financing involve investments in natural resources and ecosystems to preserve biodiversity and enhance ecosystem services. These financing mechanisms support conservation efforts, sustainable resource management, and climate resilience. Green bonds are fixed-income securities designed to raise funds for projects that have positive environmental benefits. For instance, the Seychelles issued a Blue Bond to finance sustainable marine and fisheries projects, promoting conservation and resilience in the fisheries sector. Payments for Ecosystem Services (PES) schemes provide financial incentives to landowners or communities in exchange for managing their land to provide ecological services. Costa Rica's PES program compensates landowners for reforestation, sustainable forest management, and conservation, enhancing biodiversity and climate resilience. Biodiversity offsetting involves compensating for biodiversity loss from development projects by ensuring equivalent biodiversity gains elsewhere, exemplified by Madagascar's biodiversity offsetting program, which requires mining companies to restore habitats and support conservation efforts to offset their environmental impact.

### 6.3.8 Tourism Insurance

Tourism is a major economic activity for Zanzibar, and tourism insurance can provide financial protection against risks that impact the tourism sector, such as natural disasters, health emergencies, and political instability. Business interruption insurance covers the loss of income that a business suffers after a disaster, ensuring that tourism operators can recover quickly. For example, the Bahamas has implemented business interruption insurance for hotels to cover income lost due to natural disasters, ensuring the continuity of operations and quicker recovery for the tourism sector perils.

As a first step, the Government will conduct an analysis of the current constraints, including legal and capacity gaps, in the insurance sector. Based on the findings, the Government will develop actions to alleviate identified constraints including building the capacity of the existing insurance companies and enhance awareness and/or demand of the catastrophic insurance products on the part of private households and companies and agriculture insurance for farmers. This will be done in close collaboration with the Ministry of Finance, TIRA, the private sector, and development partners. Briefly, the Government will undertake the following activities to enhance supply and uptake of insurance:

**a) Assess the feasibility of a public asset insurance program**

- Review and understand the current public asset registers considering
  - o where these assets are insured;
  - o historical premiums and claims on these assets;
  - o who are the decision makers around the insurance of these assets;
  - o what is the policy for building back better
- determine key risks and hazards of concern to public assets
- make decision as to whether this type of public asset insurance program would be of benefit to Zanzibar. If yes, engineers to be commissioned to provide detailed operation exposure assessment to determine vulnerability curves.

**b) Review experiences with property and agriculture insurance with a view of piloting property catastrophe and agriculture insurance scheme in Zanzibar**

- Work with relevant stakeholders to develop tailor-made options to increase insurance penetration in Zanzibar;
- Evaluate and create conducive police and regulatory framework for insurance;
- Build capacity of private insurance companies on catastrophic and agricultural insurance;
- Sensitize private households, companies and farmers on catastrophic insurance including agricultural insurance; and
- Enhance access to public sector data (e.g., weather and production data) for insurance companies.

#### **6.4 Strengthen disaster related public financial management.**

The government will strengthen the public financial management systems and practices for efficient, transparent emergency response and recovery process to deploy available financial resources quickly to achieve intended objectives with the greatest value for money. In this regard, the government will do the following.

- a. strengthen contingency planning and preparedness for effective disaster response, starting with the most critical risks.
- b. continue to improve the post disaster needs assessment and disaster-specific response and recovery planning. A post disaster needs assessment estimates damages and losses and identifies the needs of the affected population.
- c. develop, strengthen and harmonize reporting and auditing of post disaster spending. The urgency of needs and chaotic nature of disaster situations increase the risks of waste and misappropriation of resources.
- d. develop, review and improve procurement of goods, services, and projects required for emergency response and early recovery.
- e. introduce harmonized rules on post disaster grant making using parametric insurance and grants to provide post disaster relief and recovery support to uninsured poor people through existing social security schemes like TASAF and ZUPS by;
  - i. developing and putting in place clear and standard criteria, efficient and auditable fund disbursement channels for post disaster grants.
  - i. preparing guidelines and training for government staff and beneficiaries on eligible expenditures, model agreements, and accountability requirements.
  - i. auditing post disaster grant programs.

## **6.5 Incorporate disaster risk analysis in the planning of public and private investments.**

The inclusion of disaster risk in public investment planning requires commitment from stakeholders in charge of the identification, formulation, prioritization, and implementation of investment projects. Disaster risk informed public investment will reduce the disaster-related contingent liability of the government compared with a scenario where risk information is not considered. Therefore, the government will ensure that public sector investment projects integrate disaster risk considerations in all stages of the project cycle to protect them from potential damage emanating from disasters. In addition to considering risks in investments, the government will ensure that there are efforts to apply risk understanding and de-risk investments.

## **6.6 Strengthen coordination and institutional capacity for disaster risk financing and management.**

Effective coordination and institutional capacity of all relevant stakeholders will be ensured for successful implementation of this DRF Strategy. This will be achieved by integrating the DRF strategy into government DRM plans and policies, and ensuring an enabling environment is created for DRF at all levels across ministries, departments, and vertically with subnational and local governments, with the private sector and with communities and civil society. Therefore, programme of activities will be designed to strengthen the institutional capacity of national MDAs including the Ministry of Finance and DMC. Relevant organizations including UNDP, World Bank, African Development Bank will be approached to provide national-level technical assistance for disaster risk management, on activities such as (i) the development of disaster risk financing tools; (ii) the development of fiscal and actuarial models to help assess the fiscal exposures of natural disasters; and (iii) post disaster public financial management including post disaster budget execution, mobilization and reporting, as described below:

- Strengthen capacity for post-disaster public financial management (contingency planning) to improve capacity on public financial management of natural disasters and in implementing disaster risk financing solutions. This will include reinforcing the legal environment to support the development of risk financing and insurance solutions, strengthening of risk information and risk analytics for evidence-based decision making. Further, Government's capacity improvement will include dedicated mechanisms to effectively allocate, disburse, and monitor post-disaster financing.
- Develop capacity for fiscal and actuarial models to assess the fiscal exposure to disasters. This is vital for understanding contingent liabilities from disasters by establishing what disaster events have cost the government in the past and how much they are expected to cost the government in the future. Being able to identify the fiscal impact of disasters in this way would establish how much funding is required and at what point in time and what tools are best suited to ensure rapid budget mobilization and execution.
- Strengthen capacity through regional partnerships and collaboration, and the development of disaster risk financing tools. This is vital for innovative thinking, knowledge sharing and production of analytical tools for new products and human capacity. Further, it will create an enabling environment for the transfer and application of disaster risk financing instrument approaches in disaster risk management, national planning and public financial

management to ensure quick and efficient disbursement and access of funds in the immediate aftermath of a disaster.

### 6.7 Promote investments in national DRR priorities to mitigate and minimize the effect of future disaster shocks, including those exacerbated by climate change

Government will continue to take actions to prevent, mitigate and prepare for disaster events by investing in DRR activities potential for reducing disaster costs by minimizing potential casualties, direct costs of damage to infrastructure and assets, and disruption to basic services and livelihoods. The three strategic actions that are essential to contribute to financial resilience through effective DRR include;

- i. Continuing efforts to design, prioritize and implement DRR activities based on available risk information;
- ii. Strengthening the evidence base for identifying effective, value-for-money DRR interventions; and
- iii. Identifying and access national and international resources (i.e. GCF, GF, GEF) to fund national DRR priorities and systematically monitor their implementation.

## INSTITUTIONAL ARRANGEMENTS FOR IMPLEMENTING THE STRATEGY

This strategy is a practical framework that sets out the strategic direction that will guide Disaster Risk Financing for the next five years in Zanzibar. As it requires effective coordination of all relevant stakeholders for its successful implementation, this strategy will make use of the existing disaster management structures as stipulated in the Disaster Management Act of 2015. As such, at the national level the Commission for Disaster Management established under and chaired by the Second Vice-President will be the lead responsible for the overall coordination of the stakeholders in the implementation of this Disaster Risk Financing Strategy in close collaboration with the Ministry of Finance and Planning (Figure 3).

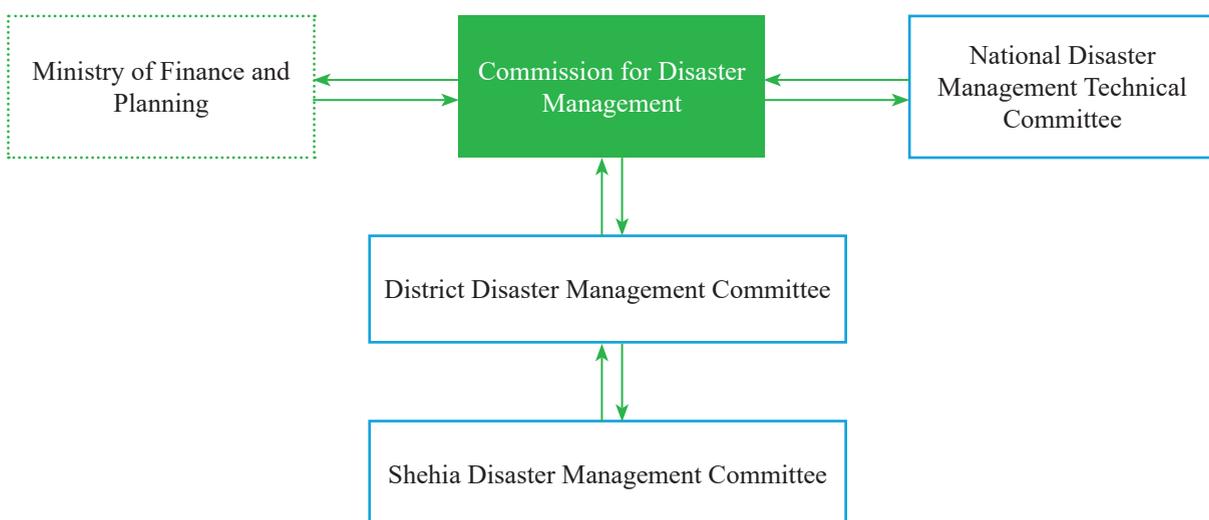


Figure 3: Institutional arrangements for implementing the strategy

The Commission for Disaster Management is the highest decision-making body on disaster management and related matters in Zanzibar. The Commission is responsible for defining, promoting and coordinating policy implementation of the Government for managing the disasters. It receives advice from the National Disaster Management Technical Committee responsible for performing all directives issued by the Commission and advising the same on all matters regarding the disaster management for Zanzibar. Among other functions of the Commission as stipulated in part II of the Act section five are to:

- a. establish appropriate disaster management policies, regulations, plans, strategies and guidelines for ensuring timely and effective response to disaster;
- b. facilitate immediate disbursement of funds and other resources during emergency and disaster;
- c. recommend the provisions of funds for the purpose of Disaster Management;
- d. Mobilize availability of resources within and outside Zanzibar for effective disaster management.

At the local level, coordination will be through Local Disaster Management Committees which include the District Disaster Management Committee chaired by the District Commissioner (the Officer responsible for disaster management in the district is the Secretary of the District Disaster Management Committee) and the Shehia Disaster Management Committee in which Sheha is the chairperson (the secretary of Shehia is the Secretary of the Shehia Disaster Management Committee). To ensure inclusiveness and sustainability, the already established structures will be used to reach out to the people who might have been affected by disastrous event.

These structures will be responsible for the facilitation of a coordinated effort in among others data collection, risk assessment, funds mobilization and disbursement and information sharing between government and communities. Therefore, on implementing this strategy, the Disaster Management Commission will be committed to:

- Coordinate DRF stakeholders;
- Report on progress made in the implementation of the plan;
- Build the capacity of stakeholders;
- Review financial instruments;
- Information on disasters is shared;
- Promote professionalism, transparency, and accountability;

Local Authorities, on their part, will ensure that: -

- Decentralized structures are followed in the implementation of the strategy; and
- Already established mechanisms are used to respond to disasters such as public works programs, and e- cash transfers.

The Ministry of Finance particularly the Secretary to the Treasury will be committed to

- Technical expertise is provided;
- Input is provided in the review of the financial instruments.
- Technical guidance to Disaster Management Commission on the implementation of the strategy is provided; and
- Disaster response and recovery interventions are coordinated.

## **IMPLEMENTATION PLAN**

---

In achieving this DRF strategy, a detailed implementation plan has been prepared with timings as a road map on each of the identified strategic priority and targets as shown in Annex 11.1.

## **CRITICAL SUCCESS FACTORS**

---

Critical Success Factors (CSF) may change over time hence the need for all relevant stakeholders to regularly observe these and make adjustments where necessary. The following are the CSF that are assumed to be already in place for the stakeholders to meet the targets.

### **9.1 Political Support**

The importance of creating an enabling environment for continued political support for the strategy as well as the implementation plan cannot be over-emphasized. This would largely indicate the level of Government's willingness to venture into market-oriented financing instruments.

### **9.2 Strategic Leadership**

Leadership is the driving force in the accomplishment of any organization's expected outcomes. It is therefore imperative that the guidance of the Ministry of Finance and Planning in the implementation of the strategy is proactive, visionary, inspiring and accommodative.

### **9.3 Support from Key Stakeholders**

For the successful implementation of this strategy, all stakeholders, including development partners, will give adequate and requisite support.

### **9.4 Staff Capacity**

The Ministry will build the necessary capacity in disaster risk financing to effectively implement the strategy and monitor its progress.

## **MONITORING AND EVALUATION**

---

The development of this Strategy is the first critical step in disaster risk financing in Zanzibar. However, this cannot be achieved unless there is a framework for assessing progress in the implementation of the strategy and taking remedial measures where appropriate. Thus, on-going monitoring will form an integral part in the strategy implementation in order to realize the intended results. The on-going routine monitoring and reports that will be produced will enable the Ministry to assess whether the strategy is being implemented according to plan, and address any challenges being encountered. A mid-term evaluation will enable the implementing units to determine whether the plan has achieved its intended outcomes. A monitoring and evaluation framework for this strategy will be developed in the first year and a task team will be established across key departments to monitor and report on the implementation of the strategy.

## **ANNEXURES**

---

## 11.1 FIVE YEAR ZANZIBAR DRF STRATEGY IMPLEMENTATION PLAN

| Strategic Priority  | Objective  | Actions  | Responsible Parties                        | Resources Required      | Milestones Indicators  | 2025/2026   | 2026/2027  | 2027/2028  | 2028/2029  | 2029/2030  |  |
|---|--|--|--|-------------------------|--|---|--|--|--|--|--|
| I. Identify and quantify disaster related economic and fiscal risks, including those aggravated by climate change | to establish adequate and timely management of potential impacts of disasters including planning and adoption of cost-effective financial instrument | strengthen an existing system to record and update disaster losses and damage annually (disaster loss and damage database)   | DMC/TMA/VPO/Fire as Rescue department/KMKM | Technical and financial | disaster loss and damage database established                            | collect data for historical disaster loss and damage as available, update the database and generate a disaster loss and damage report               | update the disaster loss and damage database, and generate a disaster loss and damage report   | update the disaster loss and damage database, and generate a disaster loss and damage report   | update the disaster loss and damage database, and generate a disaster loss and damage report   | update the disaster loss and damage database, and generate a disaster loss and damage report   |  |
|   |  | Develop and populate a national public assets database to improve information on the exposure of public assets to disasters, including infrastructure and public buildings (i.e. schools and health facilities).     | MoF/DMC/TAMISEMI                           | Technical and financial | national public assets database established                              | develop and populate a national public assets database/public assets register (i.e. their condition, vulnerability and exposure to natural hazards) | update the national public assets database/public assets register                              | update the national public assets database/public assets register                              | update the national public assets database/public assets register                              | update the national public assets database/public assets register                              | update the national public assets database/public assets register                              |
|   |  | Develop and update probabilistic disaster risk assessment models to better understand fiscal and developmental implications of different risks and to have risk-informed budget planning                             | MoF/DMC/TMA                                | Technical and financial | probabilistic disaster risk assessment report produced                   | Develop and conduct probabilistic disaster risk assessment to better understand fiscal and developmental implications of different risks            | Update probabilistic disaster risk assessment and use the assessment to inform budget planning | Update probabilistic disaster risk assessment and use the assessment to inform budget planning | Update probabilistic disaster risk assessment and use the assessment to inform budget planning | Update probabilistic disaster risk assessment and use the assessment to inform budget planning | Update probabilistic disaster risk assessment and use the assessment to inform budget planning |
|   |  | Build capacity of key institutions (i.e. all line ministries starting with MoF and DMC) to understand economic and fiscal risks of disasters to inform policy decisions on retention and risk transfer to the market | DMC/MoF/TMA                                | Technical and financial | Capacity building training programs established and conducted            | Establish and conduct capacity building training programs   | conduct capacity building training programs  | conduct capacity building training programs  | conduct capacity building training programs  | conduct capacity building training programs  | conduct capacity building training programs  |
|   |  | Incorporate disaster risk information into economic and fiscal planning to increase financial preparedness for disasters   | MoF/DMC                                    | Technical and financial | Disaster risk information incorporated into economic and fiscal planning | Assess impact of disasters on key economic and fiscal variables and produce report  | Assess impact of disasters on key economic and fiscal variables and produce report             | Assess impact of disasters on key economic and fiscal variables and produce report             | Assess impact of disasters on key economic and fiscal variables and produce report             | Assess impact of disasters on key economic and fiscal variables and produce report             |  |
|   |  | Assess the potential impact of disaster on the financial system  | MoF  | Technical and financial | Potential impact of disasters on the financial system conducted          | Develop work plan for the assessment  | conduct and disseminate the assessment findings to key stakeholders                            | conduct and disseminate the assessment findings to key stakeholders                            | conduct and disseminate the assessment findings to key stakeholders                            | conduct and disseminate the assessment findings to key stakeholders                            |  |

|  |  |                   |                         |   |  |  |  |
|--|--|-------------------|-------------------------|---|--|--|--|
|  | <p>set disaster risk loss funding objectives</p>   | MoF/DMC           | Technical and financial | disaster risk loss funding objectives set and updated annually  | government to determine for what type of event and to cover what type of cost (i.e. preparedness, relief, recovery, and reconstruction)        | review and update the set funding objectives   | review and update the set funding objectives   |
|  | Conduct a financial gap analysis and update it annually  | MoF/DMC           | Technical and financial | financial gap analysis conducted and updated annually   | conduct gap analysis by comparing the available funding after events of different sizes with required needs                                    | review and update the gap analysis   | review and update the gap analysis   |
|  | assess the relative cost-efficiency of different disaster risk financing instruments both ex-ante and ex-post to ensure the best value for money based on identified financial gaps for different events and policy priorities | MoF/DMC           | Technical and financial | relative cost-efficiency of different disaster risk financing instruments assessed and updated annually | assess the relative cost-efficiency of each financial instrument based on identified financing gap for given disaster event                    | review the instruments to ensure they are relevant to meet government set objectives   | review the instruments to ensure they are relevant to meet government set objectives |
|  | Evaluate sovereign risk transfer products (excess rainfall and drought) which are currently being offered and the potential development of new products  | MoF/DMC           | Technical and financial | sovereign risk transfer products evaluated, reviewed and updated annually                               | review and seek to learn from the use of sovereign risk transfer products (excess rainfall and drought) elsewhere                              | development of new sovereign risk transfer products  | pilot new sovereign risk transfer instrument   |
|  | Operationalize the National Disaster Risk Management Fund  | MoF/DMC           | Technical and financial | National Disaster Risk Management Fund operational  | establish clear rules for determining allocation of resources to the fund, its minimum size, and specifications regarding eligible expenditure | allocate budget for NDRMF  | allocate budget for NDRMF, conduct audit of the fund and produce annual reports      |
|  | Enhance coordination among development partners to ensure timely disbursements of humanitarian assistance and reduce related transaction costs   | MoF/DMC/POFP/VPO/ | Technical and financial | coordination of development partners conducted  | coordinate development partners to ensure timely disbursement of humanitarian assistance and reduce related transaction costs                  | coordinate development partners to ensure timely disbursements of humanitarian assistance and reduce related transaction costs |  |

to have comprehensive and innovative portfolio of sovereign disaster risk financing instruments to timely and effectively respond to disasters

**2. Establish a portfolio of disaster risk financing instruments and review them annually to ensure they meet government objectives cost-effectively**

| 3. Assess options to transfer risks to private sector and strengthen domestic insurance market                          | to enhance timely and effective response to disasters through risk transfer mechanisms |                         |   |   |   |   |   |   |   |   |
|---|--|-------------------------|---|---|---|---|---|---|---|---|
| Assess the feasibility of a public asset insurance program  | MoF, TIRA, the private sector  | Technical and financial | feasibility of a public asset insurance conducted   | Conduct feasibility study of a public assets insurance and make decision on whether such issuance would be of benefit         | conduct vulnerability and exposure curves of the public assets  | Public asset management policy registry system developed  | Public assets insured   | Assess the feasibility of a public asset insurance program  | Review experiences with property insurance with a view to scale up property catastrophe insurance scheme in Zanzibar          | Review existing property and domestic catastrophic insurance scheme for households and determine strategies of enhancing them |
| Review experiences with property insurance with a view to scale up property catastrophe insurance scheme in Zanzibar    | MoF/TIRA/DMC   | Technical and financial | property and domestic catastrophic insurance scheme for households reviewed and scaled up   | Review existing property and domestic catastrophic insurance scheme for households and determine strategies of enhancing them | property and domestic catastrophic insurance scheme for households up scaled  | up-scale, monitor and evaluate property and domestic catastrophic insurance scheme for households | Public assets insured   | Review experiences with property insurance with a view to scale up property catastrophe insurance scheme in Zanzibar    | Review existing property and domestic catastrophic insurance scheme for households and determine strategies of enhancing them | up-scale, monitor and evaluate property and domestic catastrophic insurance scheme for households                             |
| Review experiences with agriculture insurance with a view to potentially pilot agriculture insurance scheme in Zanzibar | MoF/TIRA   | Technical and financial | experiences with agriculture insurance reviewed   | Review schemes that are implemented in the country and determine feasibility of agriculture insurance in Zanzibar             | Conduct agriculture insurance market overview study and design an appropriate insurance product for agriculture in Zanzibar | Study Recommendations reviewed and pilot parametric Agriculture Insurance negotiated              | Agriculture insurance scheme piloted in Zanzibar                  | Review experiences with agriculture insurance with a view to potentially pilot agriculture insurance scheme in Zanzibar | Review schemes that are implemented in the country and determine feasibility of agriculture insurance in Zanzibar             | Study Recommendations reviewed and pilot parametric Agriculture Insurance negotiated  |
| Review and update Insurance Act   | TIRA/DMC   | Technical and financial | Insurance Act reviewed and updated  | Insurance Act reviewed and updated  | Insurance Act reviewed  | Insurance Act reviewed and updated  | Insurance Act reviewed and updated                                | Review and update Insurance Act   | Insurance Act reviewed and updated  | Insurance Act reviewed and updated  |
| Review and update Insurance regulations   | TIRA/DMC   |                         | Insurance regulations reviewed and updated  | Insurance regulations reviewed and updated  |   | Insurance regulations reviewed and updated  |   | Review and update Insurance regulations   | Insurance regulations reviewed and updated  | Insurance regulations reviewed and updated  |
| Evaluate and create conducive policy and regulatory framework for insurance   | MoF/TIRA   |                         | policy and regulatory framework for insurance evaluated                                     | Evaluate insurance policy and regulatory frameworks for conducive insurance environment                                       |   |   |   | Evaluate and create conducive policy and regulatory framework for insurance   |   |   |
| Build capacity of insurance companies on catastrophic and agricultural insurance  | MoF/TIRA   | Technical and financial | capacity of private insurance companies on catastrophic and agricultural insurance enhanced | Training program on catastrophic insurance including property and agriculture established                                     | conduct training on catastrophic insurance to insurance companies   | conduct training on catastrophic insurance to insurance companies                                 | conduct training on catastrophic insurance to insurance companies | Build capacity of insurance companies on catastrophic and agricultural insurance  | Training program on catastrophic insurance including property and agriculture established                                     | conduct training on catastrophic insurance to insurance companies   |
| Sensitize private households, companies and farmers on catastrophic insurance including agricultural insurance          | MoF/TIRA   | Technical and financial | private households, companies and farmers sensitized on catastrophic insurance              | Training program and campaign on catastrophic insurance including property and agriculture established                        | Annual sensitization campaign and training report   | Annual sensitization campaign and training report   | Annual sensitization campaign and training report                 | Sensitize private households, companies and farmers on catastrophic insurance including agricultural insurance          | Training program and campaign on catastrophic insurance including property and agriculture established                        | Annual sensitization campaign and training report   |
| Enhance access to public sector data (e.g., weather and production data) for insurance companies                        | MoF/TIRA   | Technical and financial | public sector data (e.g., weather and production data) for insurance companies accessible   | Regulations to access public sector data (e.g., weather and production data) established                                      |   |   |   | Enhance access to public sector data (e.g., weather and production data) for insurance companies                        | Regulations to access public sector data (e.g., weather and production data) established                                      |   |

|   |  |              |                         |  |   |  |  |  |
|---|--|--------------|-------------------------|--|---|--|--|--|
| <p><b>4. Strengthen disaster related public financial management</b></p> <p>to have an efficient and transparent process to deploy available financial resources quickly and achieve intended objectives with the greatest value for money.</p>   | Develop contingency plan for implementation of risk finance solutions  | Planning/DMC | Technical               | contingency plan and preparedness for effective disaster response developed  | review and update the contingency plan  | review and update the contingency plan   |  |  |
|   | improve the post disaster needs assessment and disaster-specific response and recovery planning  | DMC          | Technical and financial | post disaster needs assessment and disaster-specific response and recovery planning improved                                     | carry out coordination within and across clusters, and implement standardized and multi-sectorial needs assessment                |  |  |  |
|   | develop, strengthen and harmonize reporting and auditing of post disaster spending   | MoF          | Technical and financial | harmonized reporting and auditing of post disaster spending developed  | Review current post-disaster expenditure monitoring and reporting practices   | Develop guidance and a template for financial and narrative reporting for disaster spending  | Issue harmonized reports and account of expenditures after future disasters                      |  |
|   | develop, review and improve procurement of goods, services, and projects required for emergency response and early recovery  | MoF/DMC      | Technical               | procurement of goods, services, and projects required for emergency response and early recovery developed, reviewed and improved | Assess the adequacy of current practices for acquisition and storage of emergency goods   | improve procurement planning of emergency situation identify the most suitable procurement approach for emergency goods and services               | monitor, evaluate and update the procurement planning of emergency situation, goods and services |  |
| <p><b>5. Incorporate disaster risk analysis in the planning of public and private investments</b></p> <p>reduce the disaster-related contingent liability of the government compared with a scenario where risk information is not considered</p> | introduce harmonized rules on post disaster grant making (i.e. through parametric insurance that ensures government have quick liquidity in the event of a disaster)   | MoF/DMC      | Technical               | harmonized rules on post disaster grant making introduced  | develop and put in place clear and standard criteria, efficient and auditable fund disbursement channels for post disaster grants | Prepare guidelines and training for government staff and beneficiaries on eligible expenditures, model agreements, and accountability requirements | Audit post disaster grant programs   |  |
|   | develop guidelines and ensure public and private sector investment projects integrate disaster risk considerations in all stages of the project cycle to protect them from potential damage emanating from disasters | MoF/DMC      | Technical and financial | Guidelines for incorporating DRF in the planning of public and private investments developed                                     | Develop guidelines for incorporating DRF in the planning of public and private investments  | Disaster risk incorporated in the planning of public and private investments   | Disaster risk incorporated in the planning of public and private investments                     | Disaster risk incorporated in the planning of public and private investments |
|   |  |              |                         |  |   |  |  |  |
|   |  |              |                         |  |   |  |  |  |



## 11.2 LIST OF TECHNICAL TEAM MEMBERS

| NO | NAME                     | INSTITUTION                            |
|----|--------------------------|--|
| 1  | Makame KH Makame         | ZDMC                                   |
| 2  | Hamida Said Mattar       | ZDMC                                   |
| 3  | Omar A Moh'd             | DMC                                    |
| 4  | Hamisa Ali Mohamed       | Zanzibar Planning Commission           |
| 5  | Fatma Haji Abdallah      | Zanzibar Insurance Corporation         |
| 6  | Hassan Khatib Ame        | TMA                                    |
| 7  | Ally Mussa Ahmad         | OMPN                                   |
| 8  | Sabra Khamis Ngwau       | ARKUU(USHIRIKA)                        |
| 9  | Mwalimu Nahoda Issa      | Ministry of Blue Economy and Fisheries |
| 10 | Maryam Mohamed Othman    | OR – Finance and Planning              |
| 11 | Fakih Kombo Faki         | OR – Fedha na Mipango                  |
| 12 | Rashid A Said            | PoF                                    |
| 13 | Saum S Yahya             | DE                                     |
| 14 | Hamad Abdalla Ali        | SMIDA                                  |
| 15 | Mwalim A Mwalim          | ZDMC                                   |
| 16 | Rauhna Saud Hamed        | ZSSF                                   |
| 17 | Hamdu Ibrahim Makame     | ZEMA                                   |
| 18 | Dr. Emmanuel Kwayu       | DUCE                                   |
| 19 | Emmanuel Nnko            | UNDP                                   |
| 20 | Josephine Douglas Laswai | UNDP                                   |
| 21 | Awanje Natenda           | TIRA                                   |

## REFERENCES

---

1. Kai, K. , Kijazi, A. and Osima, S. (2020) An Assessment of the Seasonal Rainfall and Its Societal Implications in Zanzibar Islands during the Season of October to December, 2019. *Atmospheric and Climate Sciences*, 10, 509-529. doi: 10.4236/acs.2020.104026.
2. Said, T., Muzaini, H., & Duim, R. V. D. (2018). Case Study Zanzibar: Climate change and tourism in Zanzibar: interrogating impacts and interventions. In *Global climate change and coastal tourism: recognizing problems, managing solutions and future expectations* (pp. 300-311). Wallingford UK: CABI.
3. URT, 2022, Administration Units Population Distribution Report Volume 1C, Tanzania Zanzibar. National Bureau of Statistics.
4. RGoZ, 2023, Mapitio ya hali ya uchumii 2022 na utekelezaji wa mpango wa maendeleo 2022/2023. Kitabu cha kwanza. Tume ya Mipango Zanzibar.
5. Disaster Management Commission (2023). Multi-Hazards Risk Assessment and Mapping of Zanzibar. Disaster Management Commission, First President's Office, Zanzibar.
6. Tume ya Mipango Zanzibar (2023), Mapitio ya hali ya uchumi 2022 na utekelezaji wa mpango wa maendeleo 2022/2023.
7. EM-DAT, CRED / UCLouvain, Brussels, Belgium: <https://www.emdat.be>; File creation - Mon, 08 Jan 2024 17:23:57 UTC
8. RGoZ (2020). Effects of the 2020 Monsoon Rainfall Report in Zanzibar. Disaster Management Commission, Zanzibar
9. Serikali ya Mapinduzi Zanzibar, 2020, Taarifa ya athari za mvua za masika za mwaka 2020 Zanzibar.
10. Serikali ya Mapinduzi Zanzibar, 2023, Taarifa ya athari za upepo mkali uliotokea kuanzia tarehe 01 hadi 7 Aprili 2023 na hatua zilichokukuliwa. Kamisheni ya Kukabiliana na Mafa, Zanzibar.
11. RGoZ (2023). Report on the effects of the strong wind that occurred from 01 to 07 April 2023 and the measures taken. Disaster Management Commission, Zanzibar.
12. RGoZ (2023). Report on the effects of the strong wind that occurred from 01 to 07 April 2023 and the measures taken. Disaster Management Commission, Zanzibar.
13. World Bank (2016). Disaster Risk Profile: Zanzibar. The International Bank for Reconstruction and Development, The World Bank Group. Washington, DC
14. World Bank (2016). Disaster Risk Profile: Zanzibar. The International Bank for Reconstruction and Development, The World Bank Group. Washington, DC
15. World Bank (2016). Disaster Risk Profile: Zanzibar. The International Bank for Reconstruction and Development, The World Bank Group. Washington, DC
16. World Bank (2016). Disaster Risk Profile: Zanzibar. The International Bank for Reconstruction and Development, The World Bank Group. Washington, DC
17. RGoZ (2012), Ripoti ya Tume ya kuchunguza ajali ya kuzama kwa meli ya mv. skagit (online). [http://www.ikuluzanzibar.go.tz/uploads/Ripoti\\_ya\\_MV\\_Skagit\\_\(final\).pdf](http://www.ikuluzanzibar.go.tz/uploads/Ripoti_ya_MV_Skagit_(final).pdf)
18. RGoZ (2012), Ripoti ya Tume ya kuchunguza ajali ya kuzama kwa meli ya mv. skagit (online). [http://www.ikuluzanzibar.go.tz/uploads/Ripoti\\_ya\\_MV\\_Skagit\\_\(final\).pdf](http://www.ikuluzanzibar.go.tz/uploads/Ripoti_ya_MV_Skagit_(final).pdf)
19. Temba, G. (2012). Ferry passenger's satisfaction: An empirical assessment of the influence of ferry route type (online), Accessed 2nd December, 2015 at: [http://brage.bibsys.no/xmlui/bitstream/handle/11250/153674/master\\_temba.pdf?sequence=1](http://brage.bibsys.no/xmlui/bitstream/handle/11250/153674/master_temba.pdf?sequence=1).
20. RGoZ (2023). Biodiversity Finance Plan (BFP) Zanzibar, Tanzania 2022 -2026. The Biodiversity Finance Initiative, First President's Office.
21. RGoZ (2019). Zanzibar Disaster, Damage, Loss and Needs Assessment Guidelines. Zanzibar Disaster Management Commission, Second Vice President's Office, Zanzibar.
22. RGoZ (2021). Zanzibar Emergency Preparedness and Response Plan (ZEPRP). Second Edition. Zanzibar Disaster Management Commission, Second Vice President's Office, Policy, Coordination and House of Representatives. Zanzibar.

23. RGoZ (2011). Zanzibar Disaster Communication Strategy. Second Edition. Zanzibar Disaster Management Commission, Second Vice President's Office, Policy, Coordination and House of Representatives. Zanzibar.
24. RGoZ (2020). Monitoring and evaluation framework to track implementation of emergency preparedness and response plan for all eleven districts in Zanzibar, 2019 – 2024. Zanzibar Disaster Management Commission, Second Vice President's Office, Zanzibar.
25. RGoZ (2016). Public Finance Management Act of 2016. Zanzibar
26. Schäfer, Laura, and Eleanor Waters (2016), "Climate Risk Insurance for the Poor & Vulnerable: How to Effectively Implement the Pro-Poor Focus of InsuResilience." [https://i.unu.edu/media/ehs.unu.edu/news/11862/RZ\\_G7\\_MCCI\\_DinA4\\_6Seiter151201.pdf](https://i.unu.edu/media/ehs.unu.edu/news/11862/RZ_G7_MCCI_DinA4_6Seiter151201.pdf).
27. World Bank Group, (2014), "Financial Protection Against Natural Disasters: An Operational Framework for Disaster Risk Financing and Insurance." Washington, DC. <https://openknowledge.worldbank.org/handle/10986/21725>.
28. World Bank (2016). Disaster Risk Profile: Zanzibar. The International Bank for Reconstruction and Development, The World Bank Group. Washington, DC
29. RGoZ (2012), Ripoti ya Tume ya kuchunguza ajali ya kuzama kwa meli ya mv. skagit (online). [http://www.ikuluzanzibar.go.tz/uploads/Ripoti\\_ya\\_MV\\_Skagit\\_\(final\).pdf](http://www.ikuluzanzibar.go.tz/uploads/Ripoti_ya_MV_Skagit_(final).pdf)
30. RGoZ (2016). Public Finance Management Act of 2016. Zanzibar
31. UNDP (2023). Inclusive insurance and risk financing in the United Republic of Tanzania: Snapshot and way forward 2023.
32. URT (2023). Annual Insurance Market Performance Report for the Year that Ended 31 December 2022. Tanzania Insurance Regulatory Authority, Ministry of Finance Tanzania

