

**Government of Sierra Leone**  
**National Disaster Preparedness, Response, and Recovery Plan**  
**National Disaster Management Agency, 2024**

# National Disaster Preparedness, Response and Recovery Plan

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## Legislative Issuance

As Director-General of the Sierra Leone National Disaster Management Agency, I am pleased to present our comprehensive plans. Over the past decades, Sierra Leone has faced numerous significant natural and human-induced hazards. The resilience of our people has always enabled us to overcome the negative impacts of such disasters.

However, the challenges posed by climate change, rapid urbanization, and increasing risks necessitate a more proactive approach to disaster prevention, preparedness, response and recovery. In November 2020, His Excellency, President Dr. Julius Maada Bio launched the National Disaster Management Agency, expressing his that would leverage science, innovation and data to predict, anticipate, plan for, and effectively report on the entire disaster management cycle. As an agency, we are committed to fostering partnerships -both domestically and globally- to ensure that Sierra Leone is well-equipped to cope with, survive, and thrive aimed emerging and existing risks.

In alignment with the new law emphasizing gender and climate action considerations, the agency is committed to integrating gender-responsive strategies into our disaster management plans. We recognize the unique vulnerabilities and strengths of various community members and are dedicated to ensuring that women, youth, and marginalized groups are actively involved in all stages of disaster management-from planning and implementation to evaluation. This inclusive approach is essential for enhancing our resilience and ensuring that our responses are equitable and effective. By fostering participation from diverse groups, we aim to create a comprehensive disaster framework that addresses the needs of all.

These plans are fundamental to a legislative framework structure established by the National Disaster Management Act of 2020, which designates our Agency to coordinate and implement all facets of disaster management. This includes governance, policy development, planning, inter-agency collaboration, training and response efforts. The National and Regional Disaster Preparedness and Response Plans represent a timely and essential resource, providing expert guidance to agencies, communities, organisations, and businesses.

I would like to express my gratitude for the support of the World Bank funded of former Freetown Emergency Recovery Project and now Resilient Urban Sierra Leone Project, which has been instrumental in our efforts I look forward to leading the National Disaster Management Agency as we work toward establishing a safer and more resilient Sierra Leone, where gender and climate considerations are at the forefront of our disaster management strategies.

**Lt. General (Rtd.) Brima Bureh Sesay**

**Director-General,  
National Disaster Management Agency.**



## Foreword

The Disaster Preparedness and Response Plan must be a dynamic and actionable document, inherently designed for periodic review and continuous improvement. I firmly believe that the new plans we are introducing will be impactful and effective in addressing the complex challenges of disaster risk management confronting ministries, departments, and agencies of the National Government, as well as regional, district, Chiefdom, and community levels.

The catalyst for establishing the National Plan, alongside three regional plans for Bo, Kenema and Makeni, originated from the 2017 Regent Landslide and subsequent initiatives under the Freetown Emergency Recovery project, generously funded and supported by the World Bank. These plans are a vital component of the enacted National Disaster Management Agency Act 2020, aiming to create a user-friendly and functional framework that empowers all stakeholders to manage disaster risk successfully.

Sierra Leone possesses a notable hazard and vulnerability profile, with our communities facing multiple disaster threats exacerbated by climate change. The enactment of the National Disaster Management Act of 2020 has established enhanced institutional arrangements and disaster risk mechanisms to effectively respond to these threats. Importantly, our approach places special emphasis on the inclusion of gender considerations and climate action in our preparedness and response strategies. We recognize that the impacts of disasters disproportionately affect certain segments of the population, and it is imperative to integrate gender-responsive approaches that acknowledge and address these differential vulnerabilities and capacities. By doing so, we can build a more equitable and inclusive framework that enhances the resilience of all community members.

The efficacy of these plans hinges on our collective commitment to implement them with conviction, confidence, and a national culture of disaster risk management. It is essential to mainstream disaster risk measures into the Medium-Term National Development Plan (2024 – 2030), ensuring that all MDAs and stakeholder organisations across Sierra Leone incorporate these strategies into their development policies. Our commitment to an All/Multiple Hazards Approach and Inclusiveness will guide our efforts, recognizing that disaster impacts are felt more keenly by those who are already vulnerable.

I sincerely hope these plans will serve as a various resource for all stakeholders in their endeavour to strengthen community resilience against disasters. The planning process itself is paramount; the collaboration between people, effective planning, and rehearsing preparedness and response initiatives will ultimately determine our success in managing disaster risks. I welcome all suggestions and comments as we embark on this critical journey together.

**John Vandy Rogers Deputy**

**Director General,  
National Disaster Management Agency.**



## Acknowledgement

The development of the National Disaster Preparedness, Response and Recovery Plan (NDPRRP) for Sierra Leone has been a collaborative effort involving numerous stakeholders dedicated to enhancing the country's disaster resilience. We extend our deepest gratitude to all individuals and organizations who contributed their time, expertise, and resources to this important initiative.

Special acknowledgement is given to Braima Koroma, whose expertise in disaster risk management, policy development, and coordination mechanisms has been invaluable. His dedication to integrating gender-responsive and climate adaptation metrics into the disaster management framework has significantly enriched the NDPRRP. Braima's leadership in conducting regional consultation workshop and validation workshops has ensured that the plan is comprehensive, inclusive, and reflective of the needs of all Sierra Leoneans.

We also express our sincere appreciation to the World Bank and the Project Management Unit of the Resilient Urban Sierra Leone Project for their financial and technical support. Their contribution have been crucial in the development and implementation of this plan, providing the necessary resources and expertise to enhance disaster preparedness and resilience. Additionally, we thank the NDMA, NGOs, community-based organisations, and private sector partners for their unwavering support and collaboration. Their collective efforts have been instrumental in the successful development of this plan.

Together, we are committed to building a more resilient and prepared Sierra Leone, capable of effectively managing and mitigating the impacts of disasters.



## Executive Summary

### Introduction

The National Disaster Preparedness and Response Plan (NDPRP) for Sierra Leone represents a significant advancement in the nation's approach to disaster risk management and response capabilities. Developed under the auspices of the National Disaster Management Agency (NDMA) and in accordance with the National Disaster Management Act of 2020, this comprehensive document reflects the government's commitment to proactive disaster prevention, preparedness, response, and recovery. Sierra Leone has a history of experiencing both natural and man-made hazards, including floods, landslides, droughts, and epidemics. The resilience of the Sierra Leonean people has been tested by these challenges, necessitating a more integrated and collaborative approach to disaster management.

The NDPRP aims to enhance the country's capacity to manage disasters effectively by establishing a clear framework that emphasizes prevention, preparedness, response, recovery, and mitigation. This plan incorporates lessons learned from past disasters, such as the devastating mudslides in Freetown in 2017 and the Ebola outbreak from 2014 to 2016 and recognizes the multifaceted nature of risks faced by the country, providing a comprehensive approach to disaster management.

### Scope and Applicability

The NDPRP establishes a robust framework for disaster management in Sierra Leone, focusing on the entire disaster management cycle: prevention, preparedness, response, recovery, and mitigation. It is intended to be inclusive, addressing the unique vulnerabilities and needs of diverse regions and communities throughout the country. The plan encourages the development of complementary disaster management strategies at all levels of government and society, ensuring that every stakeholder is equipped to contribute effectively to disaster risk reduction and management efforts.

The NDPRP is applicable to all levels of government, non-governmental organizations (NGOs), community-based organizations, and the private sector. It serves as a guiding document for the coordination of disaster management activities, ensuring that all stakeholders are aligned in their efforts to enhance disaster resilience. This alignment is essential for fostering a collaborative environment where resources can be pooled, and expertise shared to address the complex challenges posed by disasters.

### Prevention

Prevention is a critical component of the NDPRP, aimed at reducing the likelihood and impact of disasters before they occur. This proactive approach involves identifying and mitigating risks associated with both natural and man-made hazards. The plan emphasizes the need for comprehensive risk assessments to understand vulnerabilities and inform decision-making processes. By implementing preventive measures such as land-use planning, infrastructure improvements, and environmental conservation, the NDPRP seeks to minimize the potential for disasters and enhance community resilience.



Key prevention strategies include:

1. **Risk Assessments:** Conducting thorough assessments to identify vulnerabilities in communities and infrastructure. This involves mapping hazard-prone areas and understanding the socio-economic factors that contribute to vulnerability.
2. **Land-Use Planning:** Implementing zoning laws and land-use policies that discourage development in high-risk areas. This includes enforcing regulations that prevent construction on floodplains and unstable slopes.
3. **Environmental Protection:** Promoting sustainable practices that protect ecosystems, such as reforestation and wetland preservation. Healthy ecosystems can mitigate the impacts of disasters by acting as natural buffers against floods and landslides.
4. **Public Awareness Campaigns:** Educating communities about risks and the importance of disaster preparedness. These campaigns can include workshops, community meetings, and the distribution of informational materials.
5. **Infrastructure Development:** Investing in resilient infrastructure that can withstand extreme weather events. This includes reinforcing roads, bridges, and drainage systems to reduce the risk of damage during disasters.

Community engagement in prevention efforts is crucial, as local knowledge and practices can significantly contribute to effective risk reduction strategies. The NDPRP also advocates for the inclusion of traditional knowledge and practices in disaster prevention efforts, recognizing the value of local expertise in understanding and mitigating risks.

## **Preparedness**

Preparedness involves planning and preparing for potential disasters to ensure a swift and effective response to emergencies. The NDPRP emphasizes the importance of developing emergency plans, conducting regular drills, ensuring that communities are equipped with the necessary resources and knowledge to respond to disasters, early warning systems, public education program, and stockpiling supplies. This is achieved through the establishment of clear communication channels, coordination of resources, and implementation of standardized procedures.

Preparedness initiatives include:

1. **Training and Drills:** Developing and regular training sessions and simulation exercise to ensure readiness among responders, community leaders, and volunteers to enhance their skills in disaster management. This training should cover topics such as emergency response protocols, first aid, and search and rescue operations.
2. **Emergency Planning:** developing and regularly updating emergency response plans that outline procedures for various disaster scenarios at all levels of government and within communities. These plans should be tailored to the specific needs of communities and regularly updated based on new information and experiences.
3. **Resource Allocation:** Ensuring that necessary resources, such as emergency supplies, personnel, equipment, and financial support, are readily available and strategically positioned. This system should ensure that resources are available where they are needed most during emergencies.
4. **Early Warning Systems:** implementing and maintaining robust early warning systems to provide timely alerts to communities about impending disasters.
5. **Public Awareness Campaigns:** Conducting ongoing public education programs to raise awareness about disaster risks and preparedness measures. These exercises can help



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- identify gaps in preparedness and improve coordination among responders.
6. Stockpiling supplies: ensuring that essential supplies such as food, water, medical kits, and emergency shelters are stockpiled and easily accessible.

## Response

In the event of a disaster, the NDPRP outlines a structured response plan based on predetermined incident levels. This structured approach defines the roles and responsibilities across various levels of incident management: Gold Command (Strategic), Silver Command (Tactical), and Bronze Command (Operational). Emergency Operations Centers (EOCs) are activated to coordinate resources, facilitate communication, and manage response operations effectively. The clear delineation of command levels ensures that all responders can operate cohesively, minimizing confusion and maximizing efficiency during critical response phases.

Key components of the response plan include:

1. Incident Command System (ICS): Establishing an Incident Command System to coordinate response efforts efficiently and effectively. This system allows for rapid mobilization of resources and personnel.
2. Coordination and Communication: Establishing lines of communication and coordination among all responders, including government agencies, NGOs, and community organizations to ensure a unified response. This coordination is vital for effective communication and resource sharing during emergencies.
3. Use of Technology: Leveraging technology for communication, data collection, and situational awareness during disasters. Tools such as Geographic Information Systems (GIS) can enhance the mapping of affected areas and the planning of response efforts.
4. Rapid Assessment Teams: Deploying teams to assess the situation on the ground immediately after a disaster. These teams can provide critical information that informs quick mobilization of emergency services and resources to affected areas.
5. Public Information: Providing timely and accurate information to the public to ensure safety and wellbeing.
6. Search and Rescue Operations: Training and equipping search and rescue teams to respond quickly to emergencies.
7. Medical Response Teams: Deploying specialized medical response teams to provide immediate care to affected populations.

The plan also emphasizes the importance of integrating local knowledge and practices into response strategies. By leveraging the expertise of community members, the NDPRP aims to develop context-specific solutions that are both effective and sustainable. This community-based approach not only enhances the efficacy of disaster response but also fosters a sense of ownership and responsibility among local populations.

## Recovery and Rehabilitation

Recovery and rehabilitation involve restoring affected communities to normalcy and rebuilding infrastructure and services. Post-disaster recovery and rehabilitation efforts are crucial to restoring livelihoods, infrastructure, and community well-being. The NDPRP emphasizes the principle of “building back better,” advocating for recovery initiatives that enhance resilience to future hazards. By learning from past disasters, the plan aims to foster continuous improvement in disaster management practices and promote sustainable recovery initiatives. Recovery efforts will focus on restoring essential services, rehabilitating infrastructure, and supporting the affected populations in regaining their livelihoods.



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Key recovery and rehabilitation strategies include:

1. **Damage Assessment:** Conducting thorough assessments of damage to inform recovery efforts.
2. **Long-Term Planning:** Developing recovery plans that prioritize resilience and sustainability in rebuilding efforts. This includes assessing the needs of affected communities and incorporating disaster risk reduction measures into the recovery process.
3. **Support services:** providing support services to affected individuals and communities, including mental health services and economic assistance.
4. **Community Involvement:** Engaging affected communities in the recovery process to ensure their needs and priorities are addressed. Community participation can enhance the effectiveness of recovery efforts and foster a sense of ownership.
5. **Psychosocial Support:** Providing psychosocial support services to help individuals and communities to cope with the trauma of disasters.
6. **Livelihood Restoration:** Implementing programs to restore and improve livelihoods of affected individuals and businesses, including job training, economic and technical support to help communities rebuild their livelihoods.
7. **Infrastructure Resilience:** Rebuilding infrastructure with enhanced resilience to withstand future disasters. This may involve using more resilient construction materials and techniques.

The NDPRP recognizes that recovery is not merely about returning to the pre-disaster state but involves implementing measures that mitigate future risks and enhance community resilience. This forward-thinking approach ensures that recovery efforts contribute to long-term sustainability and preparedness, reducing vulnerability to future disasters.

### **Mitigation:**

Mitigation involves taking steps to reduce the impact of future disasters. The NDPRP promotes the integration of mitigation measures into all aspects of disaster management to minimize risks and enhance resilience.

Key mitigation strategies include:

- **Building Codes and Standards:** implementing and enforcing building codes and standards that enhance the resilience of structures.
- **Risk Reduction Projects:** Undertaking projects that reduce risks, such as flood control measures and landslide prevention.
- **Community Engagement:** involving communities in mitigation efforts to ensure that measures are locally appropriate and effective.
- **Hazard Mapping:** Continuously updating hazard maps to reflect new data and inform mitigation efforts.
- **Retrofitting Buildings:** Retrofitting existing buildings and infrastructure to ,make them more resilient to disasters.
- **Natural Barriers:** Creating or restoring natural barrier such as mangroves and dunes to protect against coastal hazards.



## Community-Based Preparedness

A cornerstone of the NDPRP is its emphasis on community engagement and the recognition of local knowledge in effective disaster management. The plan prioritizes the involvement of community members in preparedness activities, ensuring that their voices and experiences shape disaster management strategies. By fostering community-based preparedness initiatives, the NDPRP aims to empower individuals and groups to take proactive steps in mitigating risks and responding to emergencies.

Engaging communities in disaster management processes not only enhances the effectiveness of preparedness efforts but also builds trust and fosters collaboration among stakeholders. The NDPRP encourages the establishment of local disaster management committees and training programs that equip communities with the skills and knowledge needed to respond effectively to disasters.

Key elements of community-based preparedness include:

1. Community Emergency Response Teams (CERTs): Establishing and training CERTs to lead local disaster response efforts.
2. Local Disaster Management Committees: Forming committees that represent diverse community interests and can lead local preparedness efforts. These committees can serve as a bridge between communities and government agencies.
3. Community training: providing training and resources to community members to enhance their preparedness and response capabilities.
4. Local Plans: Developing and implementing local disaster management plans that reflect the unique needs and capacities of communities.
5. Local Risk Assessments: Conducting local risk assessments with community participation to identify specific vulnerabilities and strengths.
6. Community Drills: Organizing regular drills and simulations to practice emergency response procedures. These exercises can help identify gaps in preparedness and improve coordination among responders.
7. Resource Mobilization: Encouraging communities to identify and mobilize local resources for disaster preparedness and response. This can include leveraging local organizations, businesses, and volunteers.
8. Volunteer Programs: Encouraging volunteerism and the formation of local response teams.
9. Feedback Mechanisms: Establishing channels for community members to provide feedback on disaster management strategies and initiatives. This feedback can help improve the effectiveness of programs and ensure they meet community needs.

## Resources and Allocation

Effective resource management is critical to the success of the NDPRP. The plan outlines the allocation and coordination of resources during disaster response and recovery operations, emphasizing the importance of efficient management of personnel, equipment, and financial support. To optimize resource utilization, the NDPRP underscores the need for collaboration among government agencies, non-governmental organizations (NGOs), community-based organizations, and the private sector.

By establishing clear protocols for resource allocation and coordination, the NDPRP aims to ensure that all stakeholders can respond effectively and efficiently during emergencies. This collaborative approach enhances the overall capacity of the disaster management system,



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enabling a more coordinated and comprehensive response to crises.

Key aspects of resource management include:

1. **Resource Inventory:** Maintaining an inventory of available resources, including personnel, equipment, and supplies. This inventory should be regularly updated to reflect current capabilities.
2. **Financial Management:** Establishing a transparent system for managing financial resources allocated for disaster preparedness and response. This includes tracking expenditures and ensuring funds are used effectively.
3. **Partnerships:** Building partnerships with NGOs, private sector entities, and international organizations to enhance resource mobilization and support. Collaborative efforts can leverage additional resources and expertise.
4. **Partnerships with Private Sector:** forming partnerships with private sector entities to leverage additional resources and expertise.
5. **Equitable Distribution:** Ensuring that resources are distributed equitably, prioritizing the most vulnerable populations.
6. **Resource Tracking Systems:** Implementing systems to track the allocation and distribution of resources in real-time.
7. **Logistical Coordination:** Developing logistical plans for the efficient distribution of resources during emergencies. This includes identifying transportation routes and storage facilities.
8. **Training for Resource Management:** Providing training for personnel involved in resource management to ensure they have the skills needed to effectively allocate and utilize resources.

### **Gender in All DRM Cycle**

The NDPRP integrates gender-responsive strategies throughout the disaster risk management cycle to ensure that women, youth, and marginalized groups actively participate in decision-making process. By addressing the specific needs and challenges faced by diverse community members, the plan aims to create a more equitable and effective disaster response framework.

Key strategies include:

1. **Inclusive Decision-Making:** Ensuring that women and marginalized groups are represented in disaster management committees and decision-making bodies.
2. **Gender-Sensitive Risk Assessments:** Conducting risk assessments that consider the different vulnerabilities and capacities of men and women.
3. **Targeted Communication:** Developing communication strategies that reach and engage all community members, including those who may be less accessible through traditional channels.
4. **Tailored Programs:** Designing disaster risk reduction programs that address the unique needs of women and marginalized groups, such as access to resources and information.
5. **Capacity Building:** Providing training and capacity-building initiatives to empower women and marginalized groups to take active roles in disaster management.
6. **Support Services:** Offering support services such as childcare and mental health resources to enable full participation in disaster preparedness and response activities.
7. **Monitoring Gender Impact:** Establishing mechanisms to monitor the impact of disaster management efforts on different genders, ensuring that strategies are effective and equitable.

### **Climate Adaptation Strategies**

The NDPRP incorporates climate adaptation strategies to address the increasing threat posed by climate change to Sierra Leone. By providing sustainable practices in agriculture, infrastructure development, and urban planning, the plan aims to reduce vulnerability to climate-



related disasters and enhance community resilience.

Key strategies include:

1. **Ecosystem-Based Adaptation:** Implementing measures that use natural systems to reduce vulnerability, such as reforestation and wetland restoration.
2. **Infrastructure Resilience:** designing and constructing infrastructure that can withstand extreme weather events and changing climate conditions, including flood-resistant roads, bridges, and drainage systems.
3. **Sustainable Agriculture:** Promoting agricultural practices that are resilient to climate change, such as drought-resilient crops, crop diversification and efficient water management techniques.
4. **Community Engagement:** Involving communities in climate adaptation planning and implementation to ensure that measures are locally appropriate and effective.
5. **Monitoring Environmental Changes:** Establishing systems to monitor environmental changes and their impacts on communities, enabling timely and adaptive responses.

## Monitoring and Evaluation

A robust framework for monitoring and evaluating disaster management efforts is outline in the NDPRRP. Specific, measurable indicators track progress and evaluate the impact of interventions. By regularly reviewing and assessing disaster preparedness, response, and recovery activities, the NDPRP aims to improve outcomes and enhance overall disaster resilience in Sierra Leone.

Establishing a transparent and accountable monitoring and evaluation system ensures that disaster management efforts are effective and responsive to community needs. Stakeholder feedback is crucial in informing evaluations and refining future disaster management strategies. Regular evaluations help identify best practices and and lessons learned for future initiatives.

Key elements of monitoring and evaluation include:

1. **Performance Indicators:** Developing specific, measurable indicators to assess the effectiveness of disaster management initiatives.
2. **Regular Reporting:** Establishing a system for regular reporting on progress toward disaster management goals and objectives.
3. **Impact Assessment:** Conducting impact assessments to evaluate the effectiveness of disaster interventions and identify areas for improvement.
4. **Real-Time Monitoring:** Utilizing technology for real-time monitoring of disaster management activities and outcomes.
5. **Feedback Mechanisms:** Establishing feedback mechanisms to gather input from affected communities and stakeholders to inform future planning.
6. **Knowledge Sharing:** Creating platforms for sharing lessons learned and best practices among stakeholders to enhance collective knowledge and improve disaster management efforts.

## Conclusion

The National Disaster Preparedness and Response Plan (NDPRP) represents a comprehensive and forward-thinking framework designed to enhance the nation's resilience against a wide range of natural and man-made hazards. By integrating gender-responsive strategies and climate adaptation measures, the NDPRRP ensures that all communities, especially the most vulnerable, are included in disaster management efforts. The plan's emphasis on prevention, preparedness, response, recovery and rehabilitation, and mitigation reflects a holistic approach to disaster risk management, adopting an all-hazards approach, and emphasizing community engagement. The commitment to continuous improvement, capacity building, and collaboration



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ensures that the country is well-equipped to face the evolving challenges of disaster management.

The NDPRRP's robust framework for monitoring and evaluation, coupled with its focus on community-based preparedness and effective resource allocation, ensures that disaster management efforts are both efficient and responsive to the needs of the population. By learning from past experiences and incorporating best practices, Sierra Leone is better equipped to handle future disasters and build a more resilient society.

Through the collaborative efforts of government agencies, non-governmental organisations, community-based organisations, and the private sector, the NDPRRP aims to foster a culture of preparedness and resilience. The plan not only address immediate disaster risks but also lays the groundwork for sustainable development and long-term resilient, ensuring a safer and more secure future for all Sierra Leoneans.





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## Abbreviations and Acronyms<sup>1</sup>

AfDB	African Development Bank
Can	Capacity Needs Assessment
CBDRM	Community Based Disaster Risk Management
DaLA	Damage and Loss Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DDMC/ O	District Disaster Management Committee/ Officer
EOP	Emergency Operations Plan
ESF	Emergency Support Function
EWS	Early Warning System
FERP	Freetown Emergency Recovery Project
GoSL	Government of Sierra Leone
IAEM	International Association of Emergency Managers
ICS	Incident Command System
IEMS	Integrated Emergency Management System
MoU	Memorandum of Understanding
NCSA	National Commission for Social Action
NDMA	National Disaster Management Agency
NP	National Plan(s)
ONS	Office of National Security
PAD	Project Appraisal Document
PDNA	Post Disaster Needs Assessment
PIU	Project Implementation Unit
RHP	Regional Hub Plan (s)
SLIMS	Sierra Leone Incident Management System
SLRCS	Sierra Leone Red Cross Society
SOP	Standard Operating Procedure
TED	Training, Exercises and Drills
TNA	Training Needs Assessment
TTX	Table Top Exercise

<sup>1</sup> This list is not exhaustive. Additional agencies, acronyms and abbreviations are contained within.

## Disaster and Emergency Terminology<sup>2</sup>

<b>Crisis</b>	A disruptive and unexpected event that threatens to harm the organization or its stakeholders.
<b>Disaster</b>	A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts.
<b>Disaster Risk Governance</b>	The system of institutions, mechanisms, policy and legal frameworks and other arrangements to guide, coordinate and oversee disaster risk reduction and related areas of policy.
<b>Disaster Risk Management</b>	Disaster risk management is the application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.
<b>Disaster Risk Reduction</b>	Preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.
<b>Emergency</b>	Used interchangeably with the term disaster, as, for example, in the context of biological and technological hazards or health emergencies, which can also relate to hazardous events that do not result in the serious disruption of the functioning of a community or society.
<b>Exposure</b>	The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas.
<b>Hazard</b>	A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.
<b>Major Incident</b>	An event or situation with a range of serious consequences which requires special arrangements to be implemented by one or more emergency response agency. <sup>3</sup>
<b>Mitigation</b>	The lessening or minimizing of the adverse impacts of a hazardous event.
<b>Preparedness</b>	The knowledge and capacities developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters.
<b>Recovery</b>	The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and “build back better”/ “build to last” to avoid or reduce future disaster risk.
<b>Resilience</b>	The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.
<b>Response</b>	Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.
<b>Vulnerability</b>	The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

<sup>2</sup> <https://www.undrr.org/terminology>

<sup>3</sup> <https://www.jesip.org.uk/definitions>

# **Section One Essential Information**

## 1. Introduction

### 1.1 Purpose

The National Disaster Preparedness and Response Plan (NDPRP) for Sierra Leone 2021 has undergone a comprehensive review and upgrade to enhance its effectiveness in addressing the evolving landscape of disaster management. The primary purpose of the updated plan is to establish a robust framework that not only reinforces Sierra Leone's capacity to prepare for, respond to, and recover from disasters but also incorporates the lessons learned from past experiences. Given the increasing frequency and intensity of disasters – both natural and man-made – this updated NDPRP seeks to ensure that all stakeholders are equipped with the necessary tools, knowledge, and strategies to mitigate risks and enhance community resilience.

The review process highlighted the need for a more integrated approach to disaster management, emphasizing the importance of collaboration among government entities, non-governmental organizations (NGOs), community-based organizations, and the private sector. The upgraded plan reflects these insights, aiming to foster a culture of preparedness and resilience at all levels of society. By building on the foundation laid in 2021, the NDPRP is positioned better to serve the needs of the Sierra Leonean population in the face of emerging challenges.

#### 1.1.1. Scope

The NDPRP encompasses a wide range of disaster types, recognizing that both natural hazards – such as floods, landslides, droughts, and epidemics – and man-made hazards – such as industrial accidents, civil unrest, and terrorism – pose significant risks to the population and infrastructure of Sierra Leone. The upgraded plan reflects insights from a thorough review, which emphasized the necessity of adopting a multi-hazard approach to disaster management. This approach ensures that strategies are tailored not only to specific hazards but also to the interconnected nature of various risks.

The scope of the NDPRP is designed to be inclusive, addressing the unique vulnerabilities and needs of all regions and communities within Sierra Leone. The review process actively engaged a diverse range of stakeholders to gather insights and feedback, ensuring that the updated plan reflects the collective knowledge and experiences of those actively involved in disaster management. This inclusive approach is particularly crucial in a country characterized by diverse geographical landscapes, socioeconomic disparities, and varying levels of access to resources.

Furthermore, the NDPRP prioritizes community engagement, recognizing that local knowledge and practices are vital for effective disaster management. By leveraging the expertise of communities, the upgraded plan aims to promote context-specific solutions that are both effective and sustainable, while aligning with the broader national objectives.

The NDPRP specifically focuses on preparedness and response phases of the disaster management cycle. This focus is intentional, as these phases are critical for minimizing the impact of disasters when they occur. However, it is also important to acknowledge that the



prevention, mitigation, and recovery phases are essential components that require separate and dedicated attention. The NDPRP encourages local governments and organizations to develop complementary plans that address these phases, ensuring a holistic approach to disaster management. Such Plans should adhere to similar guidelines and be supported and approved by the NDMA.

*Everyone involved in disaster and emergency management in Sierra Leone has a role to play in understanding, communicating and implementing the National Plan for the safety, security and resilience of the nation.*

### **1.1.2. Intended Audience**

Whilst the NP is aimed principally at disaster and emergency management professionals at government and community levels, this guidance is likely to be useful to any personnel involved in preparedness, response and recovery; senior officers or managers who may become involved in response and recovery work. It is intended to be a stand-alone document that can be used for training purposes in advance of emergencies and for reference purposes during emergencies. Both national and international stakeholders should be appraised and trained on the NP.

### **1.1.3. Objectives**

The objective of the NDPRP is designed to create a robust framework for disaster management in Sierra Leone. They include:

- To enhance the capacity of communities and institutions to prepare for and respond to disasters.
- The need for timely and effective response to emergencies involves establishing clear communication channels, coordinating resources and implementing standardized procedures for disaster response. By streamlining response efforts, the NDPRP aims to minimize the impact of disasters on lives, property, and the environment, ultimately reducing the need for extensive recovery efforts.
- Recognizing that disasters disproportionately affect vulnerable populations, the NDPRP seeks to integrate gender considerations and climate action into disaster risk management practices. This involves engaging women, youth, marginalized groups in the planning and implementation of disaster preparedness initiatives. By promoting inclusivity and sustainability, the NDPRP aims to create a more equitable approach to disaster management that addresses the unique needs of all community members.
- Focuses on promoting recovery and rehabilitation efforts that build back better after a disaster. This means not only restoring communities to their pre-disaster state but also implementing measures that enhance resilience to future hazards. By incorporating lessons learned from past disasters, the NDPRP aims to foster a culture of continuous improvement in disaster management practices.

### **1.1.4. Guiding Principles**

What constitutes an appropriate response to and recovery from an emergency will be determined by a range of factors which include: the nature and demands of the emergency; specific context; geographical extent, duration, complexity and potential impacts; local experience and the designated lead agency; local circumstances, priorities and experience;

and whether or not there is sub-national, national or international involvement in the response and recovery effort.

Similarly, there are eight guiding principles that underpin the response to every emergency or disaster. These principles apply equally to each tier (local, district and national). In the interests of achieving coherent arrangements for emergency response and recovery, these principles should be applied at the local, sub-national and national levels.

<b>ANTICIPATION</b>	<b>INFORMATION</b>
<b>PREPAREDNESS</b>	<b>INTEGRATION</b>
<b>DECISION- MAKING</b>	<b>COOPERATION</b>
<b>DIRECTION</b>	<b>CONTINUITY</b>

Figure 1. Guiding Principles of Response.

#### **1.1.5. Anticipation**

Anticipation is crucial in both the pre-emergency and post-emergency phases. It describes the initial phase of the Integrated Emergency Management (IEM) process, where organizations actively scan for risks and potential emergencies. As a principle of effective response and recovery, the risk focus must be forward-looking, encompassing broader strategic considerations while addressing more operational risks at lower levels.

Emergencies have disparate direct and indirect impacts that may not be immediately apparent amid the pressures, uncertainties, and demands of the situation. Two critical factors in planning are training and exercising. In emergencies, risks are dynamic; new risks can emerge, previously identified risks may recede, and the balance between risks can change continuously. Therefore, active risk assessment and management should be ongoing processes that enable effective operations by providing analysis and solutions to anticipated problems before they arise.

Emergencies create business continuity challenges, significantly taxing staff time, resources, and management attention. Maintaining the response and recovery effort alongside an organization’s day-to-day functions can pose a major challenge. The risk of senior management discontinuity during prolonged periods of pressure may not be immediately apparent but can be significant. This risk can be managed through good organization, thorough planning, and comprehensive training, including preparing deputies and teams at every level.

An essential aspect of anticipation is addressing recovery issues as early as possible, ensuring that the response and recovery efforts are fully integrated. This integration ensures that recovery priorities are factored into the initial response, fostering coherence between the two streams of activity. Ideally, response and recovery activities should progress in tandem

from the outset, although capacity constraints may necessitate a degree of separation, with the recovery effort gaining momentum once the immediate risk to life has been addressed.

### 1.1.6. Preparedness

All individuals and organisations involved in the response and recovery effort should be appropriately prepared. This preparation requires a clear understanding of the national or district plan, their roles and responsibilities and how they fit into the broader multi-agency framework.

The NDMA Act 2020 mandates that organizations likely to be at the core of an emergency response collaborate to ensure preparedness for emergencies identified through national to local risk assessment processes.

### 1.1.7. Decision-making

Decision making is a fundamental emergency management skill with far-reaching consequences. Like any complex skill, it requires practice and understanding. Emergency and disaster agencies should ensure that incident managers receive ample opportunity to practice and develop this critical skill. The ability to make sound decisions based on the elements that constitute an incident, as well as an accurate overall interpretation of the situation, is essential for effective incident management.

Incident managers can employ various processes to reach decisions, broadly categorized into two main types: **Intuitive decision-making**, which includes conditioned processes and recognition-primed decision-making and **analytical decision-making**, which involve rule selection, option comparison, and creating new solutions. While analytical decision-making takes more time and mental effort, it can be more susceptible to the effects of excessive pressure that reduce mental processing capacity.

### Decision Traps

A decision trap is a thought process that can lead to incorrect decisions, potentially exacerbating the situation. Decision-makers should be aware of these traps and apply decision controls, such as peer reviews or second opinions, to guard against unintended consequences.

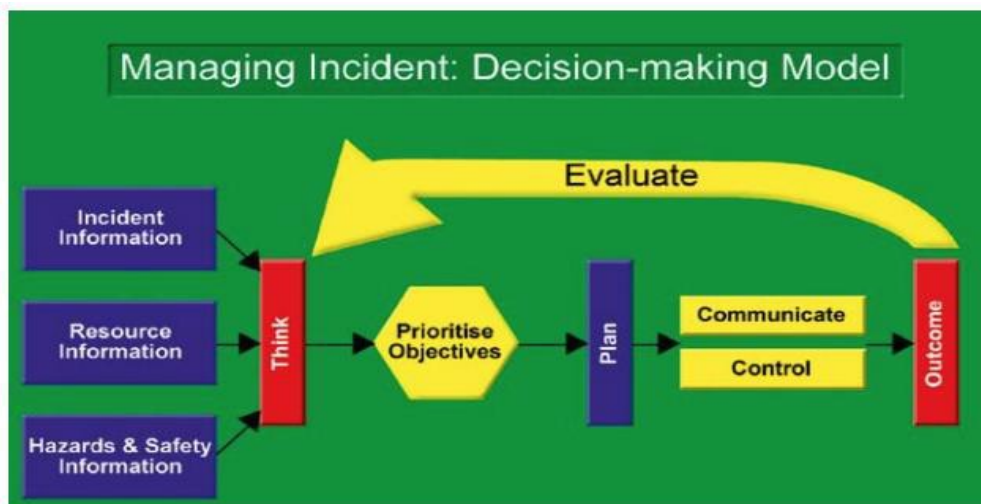


Figure 2. The UK Decision-Making Model.

### 1.1.8. Direction

When an emergency occurs, those managing the response and recovery effort will face a range of competing demands and pressures. These pressures will vary according to the event, its speed of onset, the affected geographical area, concurrent or interdependent events, and other factors. The information available will often be incomplete, inaccurate or ambiguous, and perceptions of the situation may differ within and between organizations. The response and recovery efforts may involve many organizations across the public, private and voluntary sectors, each with its own responsibilities, capabilities and priorities that require coordination.

To negotiate these pressures, it is essential to establish a clear and unambiguous strategic aim and objectives, primarily executed by the National Strategic Situation Group. This clearly helps establish shared priorities and focus efforts and resources where they are most needed. The determination and communication of the aim and objectives are fundamental to the success of the multi-agency effort.

In sudden-impact emergencies (e.g. fires or transport accidents) local responders will immediately strive to save lives, alleviate suffering, and contain the emergency's impacts. However, in most cases, the response phase is relatively short, lasting only a few hours. The strategic aim should extend beyond immediate response demands to encompass longer-term priorities for restoring essential services and facilitating community recovery.

Common objectives for responders include:

- Saving and protecting human life
- Relieving suffering
- Containing the emergency – limiting its escalation or spread and mitigating its impacts
- Providing the public and businesses with warnings, advice and information
- Protecting the health and safety of responding personnel
- Safeguarding the environment
- Protecting property as far as reasonably practicable
- Maintaining public confidence in the response and recovery efforts

Effective direction requires regular evaluation and adaptation of the strategic aims and objectives to align with the evolving situation. As more information becomes available and the response operation progresses, it may be necessary to adjust the approach to ensure that it remains effective and relevant.

In slow-onset emergencies, such as disruptions to fuel supply or spread of infectious disease, the strategic aim may be more challenging to identify and formulate, particularly when emergency services do not necessarily lead the response. Despite these challenges, it remains essential to establish a clear strategic aim and realistic objectives. This clarity provides direction and coherence to the activities of multiple agencies operating under sustained pressure, complexity, and potential hazards.

In certain limited circumstances, the Government may need to take on the role of setting the strategic direction, especially when it is uniquely positioned to deliver among various

stakeholders and ensure that responses are well-aligned, ultimately enhancing the effectiveness of the overall emergency management efforts.

### **1.1.9. Information**

Information is critical to emergency response and recovery; however, maintaining a steady flow of information within agencies, among partners, and to the wider public is extremely challenging under emergency conditions. The significance of information for emergency responders and those affected by events cannot be underestimated. Effective information management relies on appropriate preparatory measures that build situational awareness and develop a Common Recognised Information Picture (CRIP) at local, sub-national, and national levels, as needed.

Such measures must support the transmission and collation of potentially high volumes of information from multiple sources. They should also facilitate the assessment of this information to ensure its relevance, accuracy, timeliness, accessibility, interpretability, and transparency. Furthermore, available information must be translated into appropriate products, such as briefings for the National Strategic Situation Group, national groups, or releases to the media for public information.

Several challenges may arise in realizing the collation, assessment, validation, and dissemination of information during emergencies, including:

- **Variability in Information Management Procedures:** Different agencies may have distinct procedures, complicating coordination.
- **Diverse Perspectives:** Differing interpretations of the event or situation can lead to confusion.
- **Pressure-Induced Errors:** Mistakes and misunderstandings are more likely to occur under pressure.
- **Overloaded Communications:** High demand for information can overwhelm communication channels.

Striking a balance between ensuring that decisions are well-informed and acting swiftly and decisively is crucial. Establishing systematic information management systems and embedding them within multi-agency emergency management arrangements will enable this balance to be achieved. It is important to include voluntary and private sector organizations in the multi-agency response, ensuring they are integrated into the established information management structures and processes.

In particular, the sharing of information must be responsive to the needs of emergency responders while complying with data protection and other relevant legislation. To effectively establish information management systems and processes, responders should heed the following guidance:

- **Standardized Terminology:** Terms and definitions should derive from international and national standards rather than local initiatives. Local terminology may hinder interoperability and cooperation with partners and neighboring areas, complicating coordination at sub-national and national levels. The same principle applies to concepts of operation, doctrine, and structures. A lexicon of terminology for multi-agency local strategic operations is included on page 11 of this plan.
- **Established Templates:** When likely information requirements are defined, local responders should utilize established templates for information products, whether locally determined or supplied from sub-national or national levels. The use of these templates and broader information management practices should be embedded and evaluated through regular training and exercises.

Given that any emergency will generate widespread media interest and public concern, it is essential to have structures and processes in place to manage media demands and ensure consistent messaging. Additionally, the public must receive appropriate advice, warnings, and information to provide reassurance and guidance for necessary actions.

The flow of authoritative information, adhering to the principles outlined above, underpins community resilience to disruptive challenges, supports business continuity management arrangements, and facilitates a quicker recovery.

### 1.1.10. Integration

Preparing for, responding to, and recovering from emergencies is inherently a multi-agency activity that often involves various organizations. The roles and prominence of these organizations may shift depending on the phase of the emergency. Therefore, it is essential that the contributions of each organization are effectively integrated.

Challenges arise due to the range of organizations involved in emergency response and recovery, underlining the need for clearly defined structures. Such structures should facilitate:

- Collaboration among key agencies to operate as a coherent multi-agency group.
- Consultation and agreement on critical issues and priorities.
- Issuance of clear instructions and guidance to which all emergency response partners will adhere.

Achieving effective integration requires thorough planning, regular training, and the embedding of these processes within day-to-day operations. As emergencies frequently cross geographic and organizational boundaries, this integrated approach is vital for cohesive and efficient response efforts.

### 1.1.11. Cooperation

Cooperation among multiple agencies is essential for successful emergency response and recovery operations. These organizations often operate without hierarchical relationships, leading to a necessity for collaborative decision-making.

While one agency may assume a leadership role in a specific emergency, decision-making should be inclusive to ensure all perspectives are integrated. The following elements are crucial for fostering a cooperative environment:

- **Mutual Trust:** Building trust among agencies enhances collaboration and facilitates open dialogue essential for establishing common aims and objectives.
- **Understanding:** Agencies must comprehend each other's functions, operational methods, priorities, and constraints. This understanding promotes effective communication and collaboration.
- **Confidentiality:** Openness between agencies must be paired with a commitment to confidentiality regarding shared information. Unauthorized disclosures can impair cohesion and operational effectiveness.

Through fostering a cooperative spirit, emergency management agencies can enhance their capability to respond effectively to emergencies.

### 1.1.12. Continuity

Emergency preparedness, response, and recovery arrangements are based on the premise that those who regularly perform functions are best equipped to carry them out in emergency situations. The experience, expertise, resources, and relationships built during day-to-day operations are integral to effective response and recovery efforts.

To ensure continuity during emergencies, organizations should:

- Preserve established structures and methods that personnel are familiar with, enhancing the efficacy of response arrangements.
- Encourage the integration of emergency roles, responsibilities, and organizational arrangements through thorough training and exercises.

Special deployments of personnel and resources may be necessary in emergency situations, but maintaining established operational familiarity will provide a solid foundation for effective management.

## 1.2. Legislative Requirements

The National Disaster Preparedness, Response and Recovery Plan (NDPRP) is firmly anchored in a robust legal and policy framework that aligns with national laws and policies, notably the National Disaster Risk Management Policy 2024, which serves as the cornerstone for disaster management in Sierra Leone.

According to the NDMA Act, specifically Part 3, Section 11, 2(a)(ii), the functional role of the National Disaster Management Agency (NDMA) includes the responsibility to implement disaster management plans at the national, regional, district, and chiefdom levels. Furthermore, Part 3, Section 11, 2(b) mandates the NDMA to prepare, coordinate, monitor, evaluate, and update these disaster management plans.

The 2020 Act further details requirements in PART VIII – MISCELLANEOUS PROVISIONS, stating:

- 1) **Annual Simulation and Revision:** The Chairman of each Disaster Management Committee is responsible for ensuring that a disaster management plan is prepared, simulated, and revised annually in accordance with the national policy on disaster management.
- 2) **Submission for Review:** The Chairman of each Disaster Management Committee must submit their respective disaster management plans to the National Platform for Disaster Risk Reduction for review within 30 days of the approval of the national budget.

In addition to these national mandates, the NDPRP is designed to be consistent with international frameworks such as the Sendai Framework for Disaster Risk Reduction, which emphasizes the importance of risk-informed development, and the Paris Agreement on Climate Change, which underscores the need for climate adaptation and mitigation strategies.

The legal framework also encompasses relevant statutes and regulations governing disaster management, public health, environmental protection, and community engagement. By adhering to these guidelines, the NDPRP aims to foster a cohesive and coordinated approach to disaster risk reduction and response across all levels of government and society.

Through this comprehensive integration of legal, policy, and regulatory elements, the NDPRP seeks to enhance Sierra Leone's resilience to disasters, ensure effective preparedness and response, and promote sustainable development in the face of emerging challenges.

## 1.3. Country Situation Analysis

### 1.3.1. National Overview

The civil war in Sierra Leone, which lasted from 1991 to 2002, and its subsequent second-order impacts severely weakened the country's economy and growth. In the aftermath of the conflict, Sierra Leone faced significant challenges in economic, social and political recovery; however, considerable progress has been made. The first Ebola case was recorded on May 24, 2014, leading to a devastating outbreak that infected 8,704 individuals and resulted in 3,589 deaths, including 221 healthcare workers. The economic toll was substantial, particularly affecting the agricultural sector. Fortunately, by November 2015, Sierra Leone was declared Ebola-free, paving the way for recovery.

Regarding natural hazards, flooding is the most prevalent risk in Sierra Leone, attributed to intense rainfall, a tropical monsoon climate, an interior jungle environment, steep slopes, and the impacts of coastal erosion and climate change. Other hazards include severe heat, urbanization-induced risks such as fires, and human-centric incidents, with landslides being particularly significant.

The tragic collapse of Regent Mountain in 2017 triggered a landslide, resulting in flooding that claimed 1,141 lives and affected 6,000 people. This disaster decimated livelihoods, infrastructure, and health facilities, leading to a multi-sectoral crisis. In response, President Ernest Koroma declared a Level Three emergency on August 16<sup>4</sup> 2017. The day before, an emergency meeting was convened with donors to explore immediate support options for Sierra Leone. The Office of National Security (ONS) deployed personnel and resources throughout the city to respond to emergency calls and manage the disaster, activating the Pillar Working Groups to coordinate the response involving government counterparts, development partners, and other key stakeholders.

It is important to address the socio-economic status of Sierra Leone, particularly in relation to poverty. Approximately 60% of Sierra Leoneans live below the national poverty line. The country remains one of the world's poorest nations, ranking 184 out of 193 countries on the Human Development Index (HDI) with a score of 0.458<sup>1</sup>, with many Sierra Leoneans surviving on less than \$1.25 a day. This places the country in the low human development category. Despite this, there have been some improvements in areas such as life expectancy and education, although challenges remain in terms of economic growth and overall development<sup>2</sup>. It is well-documented that the severity, complexity and impact of natural hazards are significantly heightened in impoverished populations<sup>3</sup>.

### 1.3.2. National Data

Much of the risk assessment literature in Sierra Leone primarily focuses on the analysis of natural hazard such as **flooding, landslides, coastal erosion and sea level rise**<sup>4,5 6</sup>. Given the historical significance of these hazards and the ongoing impacts of climate change, it is

<sup>1</sup> UNDP Human Development Report, 2022.

<sup>2</sup> UNDP, 2022. Uncertain Times, Unsettled Lives: Shaping our Future in a Transforming World. Human Development Report 2021/22.

<sup>3</sup> Hallegatte, S., Vogt-Schilb, A., Rozenberg, J. *et al.* From Poverty to Disaster and Back: a Review of the Literature. *EconDisCliCha* 4, 223–247 (2020). <https://doi.org/10.1007/s41885-020-00060-5>

<sup>4</sup> <https://www.gfdrr.org/en/sierra-leone-rapid-damage-and-loss-assessment-august-2017-landslides-and-floods>

<sup>5</sup> <https://www.harpis-sl.website/index.php/country-background>



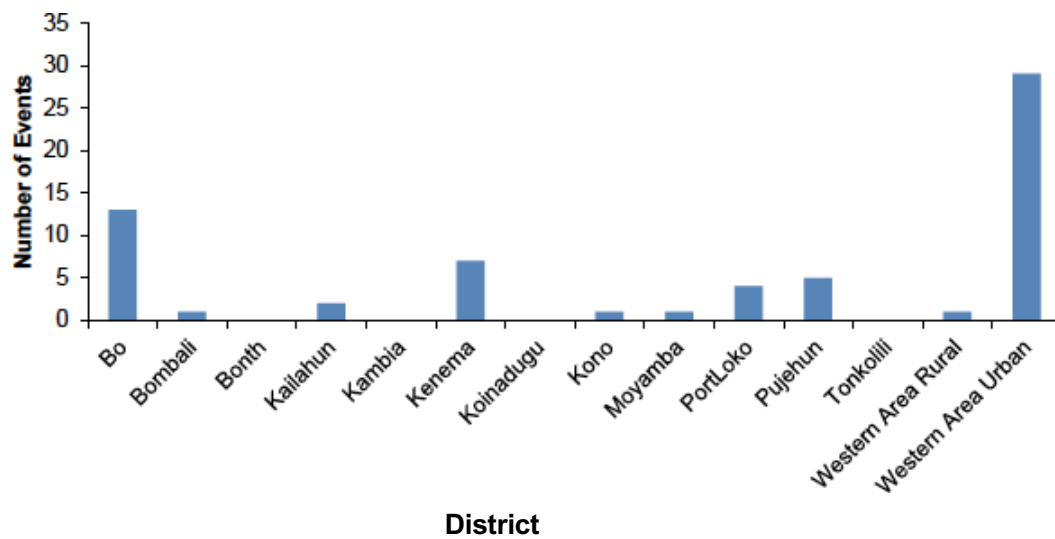
sensible to prioritize them. However, urban-based, human-induced hazards, along with issues of vulnerability and exposure, must not be overlooked. An analysis example of all-hazards scenario is the Susan's Bay fire of 2021, which occurred during the Covid-19 pandemic. Conducting comprehensive assessments of hazards, vulnerability, exposure, and risk is essential for developing effective prevention, mitigation, and preparedness strategies.

There is a clear correlation between highly populated areas and increased exposure and vulnerability to hazards, a situation further exacerbated by widespread socio-economic poverty. Table 1 illustrates the number of Sierra Leoneans exposed to flooding. The Western Areas are particularly susceptible to flooding, coastal erosion, and landslides, creating a complex interplay among hazards, vulnerability, and exposure, and risk.

Table 1. Population exposed to flood (Harpis SL, 2017).

<b>District</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>	<b>Percentage</b>	<b>District Population</b>
Bo	19,641	21,451	41,092	7.1	575,478
Bombali	21,162	21,356	42,518	7.0	606,544
Bonthe	11, 538	11,452	22,990	11.5	200,781
Kailahun	12,983	12,856	25,839	4.9	526,739
Kambia	16,849	18,756	35,605	10.3	345,474
Kenema	23,199	23,451	46,850	7.6	609,891
Koinadugu	2,819	2,901	5,720	1.4	409,372
Kono	22,508	22,209	44,717	8.8	506,100
Moyamba	7,149	7,889	15,038	4.7	318,588
Port Loko	15,385	17,000	32,385	5.3	675, 376
Pujehun	10,683	11,361	22,044	6.4	346,461
Tonkolli	8,152	8,465	16,617	3.1	531,435
Western Area Rural	60, 527	62, 748	123,275	27.7	444,270
Western Area Urban	180,470	180, 139	360,609	34.1	1,055,964
<b>National</b>	<b>413,065</b>	<b>422,034</b>	<b>835,099</b>	<b>10.0</b>	<b>7,092,113</b>

Figure 4. Number of reported flood events 2009-2017. (Harpis SL, 2017).



The studies and profiling of Harpis SL, the World Bank and other organisations have significantly enhanced our understanding of disaster risk in Sierra Leone. It is essential to leverage these at both the national government and community levels. The issues and risks are well recognized and documented, now it is time to focus on management and mitigation to achieve improved risk reduction- actions. The Harpis SL Geographic Information System (GIS) can be accessed [here](#).

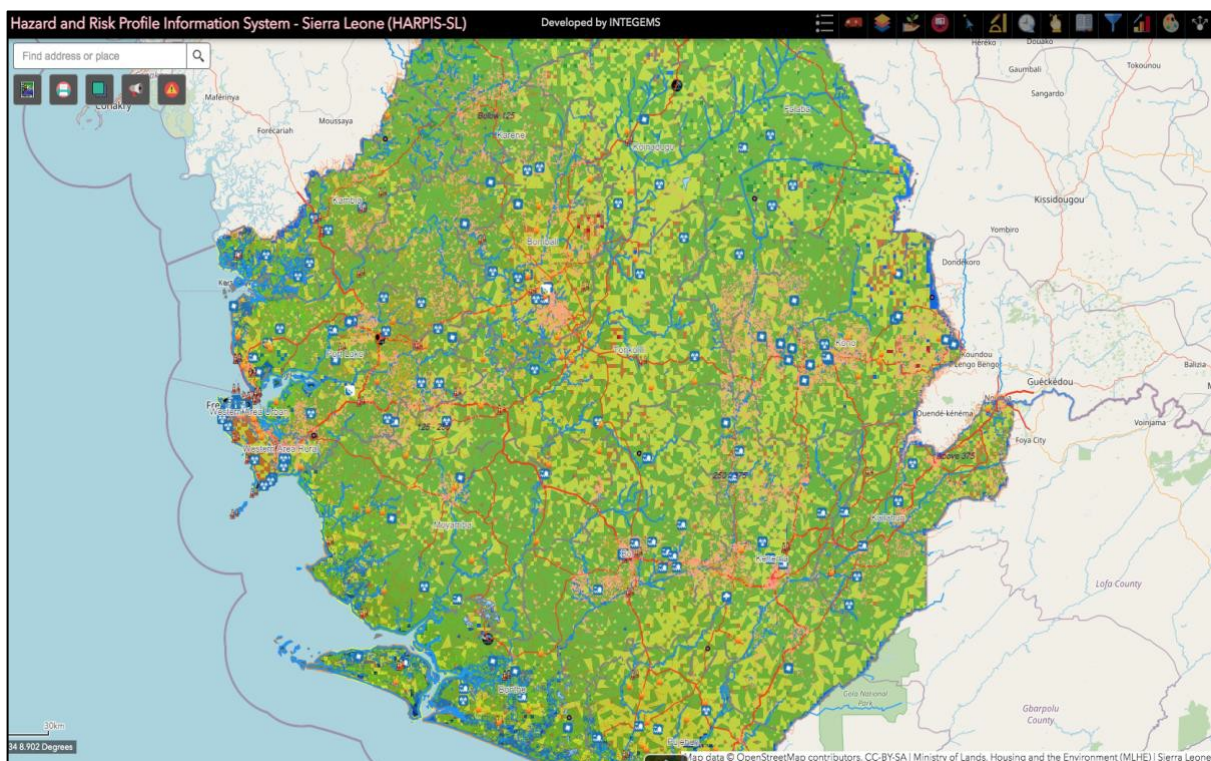


Figure 5. Example Geographic Information Systems Map of Sierra Leone.

### 1.3.3. National Hazard, Vulnerability and Risk Analysis

National Hazard, Vulnerability, and Risk Analysis reveals that Sierra Leone is highly susceptible to hazards, such as floods, landslides, coastal erosion, tropical storms, and sea level risk. The high level of population exposure to these hazards is particularly evident in the hilly and low-lying areas of the Western Area, as well as along the coastal regions of both the Northern and Southern Provinces. For landslide hazards, the elements at risk include the population, buildings, educational facilities, healthcare facilities, and transportation infrastructure (roads). In terms of flood hazards, the identified elements at risk encompass the population, buildings, the agricultural sector (including cultivated areas and livestock), educational facilities, healthcare facilities, and transportation infrastructure (roads).

Landslide hazard, vulnerability, and risk assessments indicate that the hilly and steep-slope areas in the Western Area—especially in locations such as Leicester, Regent, Granville Brook, Cline Town, Moa Wharf, Hill Court Road, Kissy Brook, Dworzark, and Charlotte—are particularly prone to landslides due to their moderate to very high slope susceptibility and the heavy precipitation received during the wet season.

A flood hazard, vulnerability, and risk assessment revealed that floods are most likely to occur in areas surrounding the ten catchments analyzed near the estuaries and along the entire coastline of Sierra Leone, based on a ten-year return period. Furthermore, data from historical flood events suggests that flood hazards can occur in various locations throughout the country. Specific parts of Freetown City, including Karningo, Kamayama, Dworzark, Kroo Bay, Congo Town, Kissy Brook, and the Culvert community in Granville Brook, are also prone to flooding due to their moderate to very high slope susceptibility and the heavy precipitation experienced during the wet season.

While the primary focus is on flooding and landslides, it is important to recognize that urbanization and human-induced hazards are prevalent in cities and large towns. Fires, transportation accidents, and structural damage are among the most significant incidents. Vulnerability and exposure to these hazards are compounded by a lack of emergency services capacity and resources.



Figure 3. Stages of a holistic risk management process.



## Understanding Disaster Risk

Video 1. Understanding Disaster Risk.

### 1.3.4. Assessment

Section Two of this document will outline the assessment process for analysing and implementing national, district and local level hazards, risks and vulnerable populations. This assessment process is essential to the effectiveness of the plans as it provides knowledge and operational intelligence for preparedness, response and recovery.

### 1.3.5. All Hazards Approach

To aid smooth operations in emergency and disaster management, an All or Multiple hazards approach is hugely beneficial. This method ensures pre-planned *and tested* structures that are put in place from national to local level can manage various types of and/ or simultaneous hazards.

An all-hazards approach is an integrated approach to emergency preparedness and response planning that focuses on **capacities and capabilities** that are critical to preparedness for a full spectrum of emergencies or disasters, including internal emergencies and a man-made emergency or natural hazard event.

The UNDRR Hazard Definition and Classification Technical Report (2021) recommends using this hazard list to actively engage policymakers and scientists in evidence-based national risk assessment processes, disaster risk reduction and risk-informed sustainable development, and other actions aimed at managing risks of emergencies and disasters. The UNDRR list builds on the accurate work of the 2014 Integrated Research on Disaster Risk (IRDR) Peril Classification (Appendix A). The new UNDRR list follows a similar theme with 302 identified hazards sectioned across hazard clusters and types. Access to the report is available [here](#).



Figure 6. Illustration of All-Hazards Approach.

### 1.3.6. Climate Change

Sierra Leone, like many other nations, is grappling with profound impacts of climate change. The country has witnessed significant changes in weather patterns over the years, with increasing severity and frequency of weather-related hazards. Despite the best efforts of people to adapt, the challenges posed by climate change continue to escalate, affecting various sectors and the overall well-being of its population.

One of the most noticeable impacts of climate change in Sierra Leone is the increase in weather-related hazards. Floods have become more frequent and intense, causing widespread damage to infrastructure and communities. Storms, particularly African thunderstorms, are among the most intense globally and have become more destructive. Coastal erosion is accelerating, leading to the loss of land and damage to coastal structures. These primary hazards often trigger secondary shocks, further straining the capabilities of the government and local communities.

The rural populations in Sierra Leone are particularly vulnerable to the impacts of climate change. These communities rely heavily on rain-fed agriculture and natural resource-based

livelihoods, making them highly susceptible to changes in weather patterns. The adaptive capacity of these populations is low due to limited resources and infrastructure, exacerbating their vulnerability. As a result, the rural poor are likely to bear the brunt of climate change impacts, facing increased poverty and food insecurity.

Climate change has had a detrimental effect on agriculture in Sierra Leone. Changing rainfall patterns and extreme weather events disrupt planting seasons, leading to decreased agricultural productivity. This, in turn, results in food and nutrition insecurity, as poor food production exacerbates poverty and malnutrition. Water stress is another significant issue, with increased variability in rainfall affecting water availability for both agriculture and drinking. The degradation of the coastline and damage to coastal structures further compound these challenges, threatening the livelihoods of those dependent on coastal resources.

The health impacts of climate change in Sierra Leone are also severe. Flooding and poor sanitation have led to outbreaks of water-borne diseases such as typhoid, dysentery, cholera, and diarrhea. These health issues are particularly prevalent in areas with inadequate access to safe drinking water, further aggravating the suffering of affected communities. The increased frequency and intensity of extreme weather events also pose direct risks to human health and safety, with incidents of fishermen losing their lives in storms and weather-related accidents involving passenger boats.

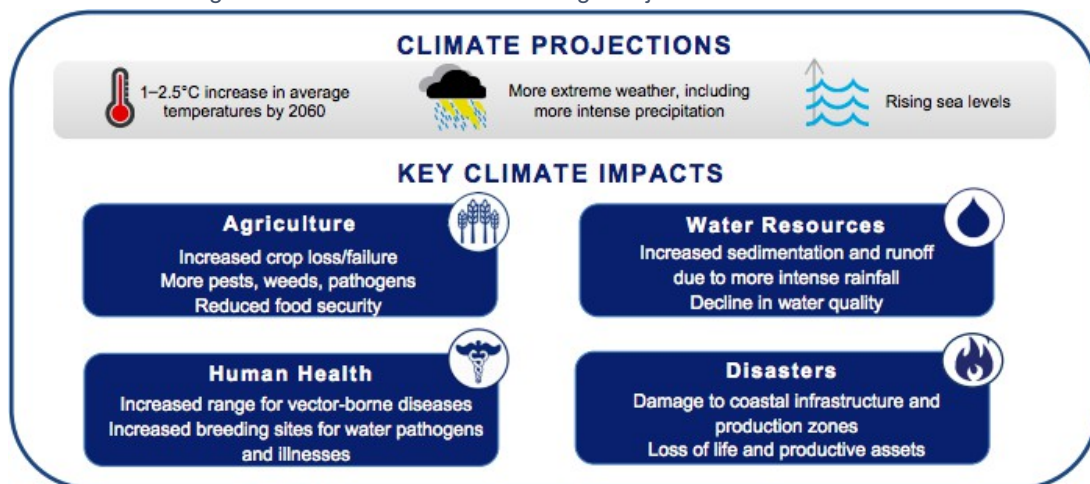
The economic impacts of climate change in Sierra Leone are profound. The country faces severe economic losses due to damage to infrastructure, reduced agricultural output, and increased healthcare costs. These economic challenges undermine decades of development gains, threatening the progress made in various sectors. The compounded effects of climate change pose a significant risk to the country's overall development and stability, necessitating urgent and effective adaptation measures.

In response to the adverse effects of climate change, Sierra Leone has developed various adaptation projects and strategies. These efforts are based on existing coping mechanisms and practices, aiming to enhance the resilience of vulnerable communities.

- **Policy and Regulatory Measures:** The government has implemented policies and regulations to support sustainable development and resilience in coastal areas. Urban growth planning now integrates climate resilience to mitigate the impacts of extreme weather events. These measures are crucial for protecting vulnerable communities and ensuring sustainable development.
- **Ecosystem Preservation:** Efforts to preserve and restore critical coastal ecosystems are underway. These ecosystems act as natural buffers against storm surges and erosion, providing essential protection for coastal communities. The preservation of these ecosystems is vital for maintaining biodiversity and supporting the livelihoods of those dependent on coastal resources.
- **Monitoring and Early Warning Systems:** Sierra Leone has established a National Sea-Level Observing System to monitor sea-level changes and provide early warnings for coastal hazards. Enhanced climate information systems support informed decision-making by collecting and disseminating climate data. These systems are essential for improving preparedness and response to climate-related hazards.

- **Community-Based Adaptation:** Building on existing community practices, Sierra Leone is developing effective adaptation strategies at the local level. Capacity-building initiatives provide training and resources to empower communities to better respond to climate risks. These efforts are crucial for enhancing the resilience of vulnerable populations and ensuring sustainable development.
- **International Collaboration:** Sierra Leone collaborates with international organizations and receives funding from entities like the World Bank to support adaptation projects. These global partnerships are essential for accessing the resources and expertise needed to address the complex challenges posed by climate change.

Figure 7. Sierra Leone Climate Change Projections.<sup>7</sup>



## 1.4. Concept of Operations

The Government of Sierra Leone, through this National Plan, aims to effectively prepare for, respond to, and recover from significant emergencies and disasters. This plan will be activated at the discretion of the National Disaster Management Agency (NDMA) typically prior to or during a Level Two or Level Three situation.

Upon activation, the plan serves as a decision-making tool and a comprehensive resource for information, communication, coordination, and other guiding principles for effective response and recovery efforts.

### 1.4.1. Pre-determined Incident Levels

The National threat level will be determined by the severity, complexity and anticipated duration of the incident. Specific incidents may be managed under a steady state (Level Zero), or escalate through Level One or Level Two Emergency classifications.

In a Level One emergency, the relevant District Disaster Management Committees (DDMCs) will lead the response efforts. In the case of a Level Two emergency, the National Strategic Situation Group (NSSG) may be activated to facilitate coordination among multiple agencies involved in the response. For Level Three emergencies, the NDMA will take direct control, ensuring a coordinated national response.



Figure 8. Current Incident Management Levels in Sierra Leone (2015).

#### 1.4.2. Organizational Structures

##### Level One

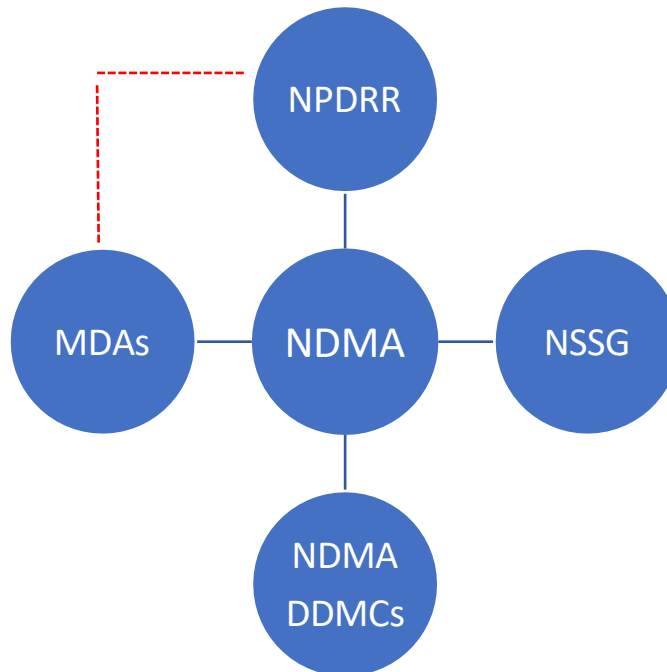


Figure 9. Normal/ Level One Operational Structure.



## Levels Two and Three

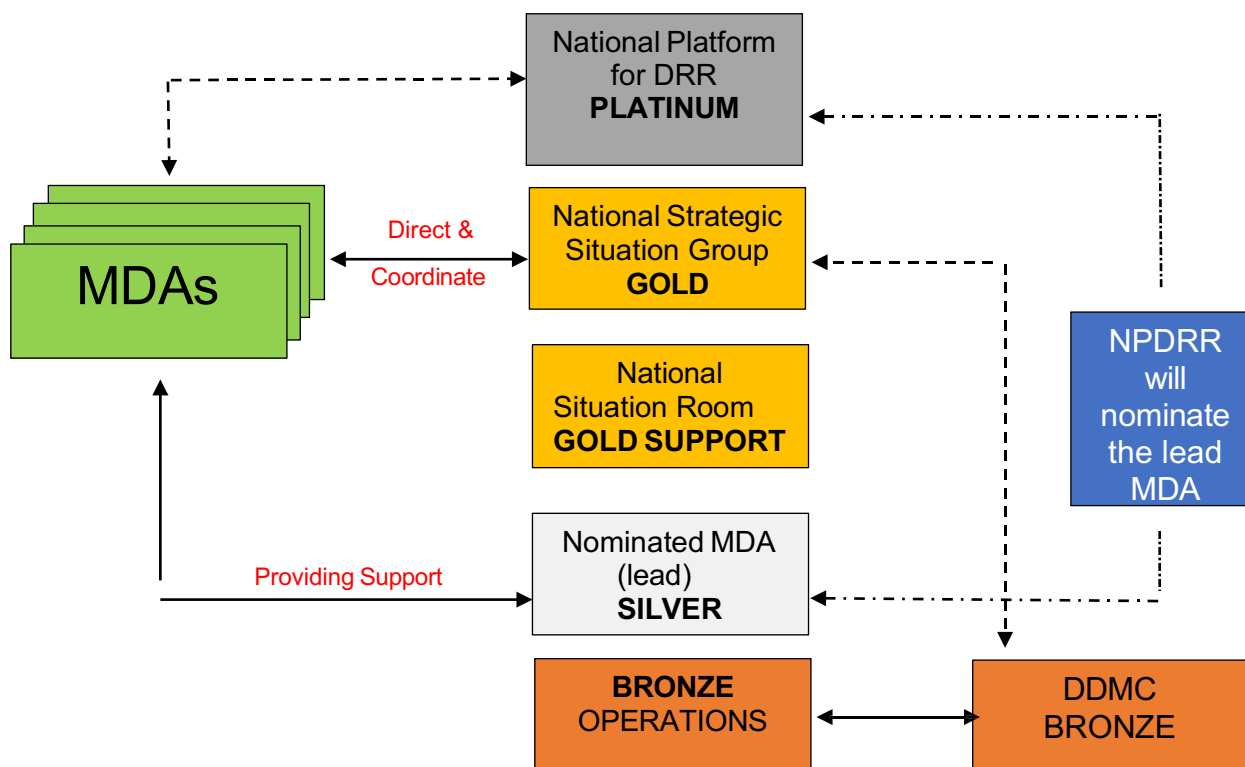


Figure 10. GoSL existing Level Two and Three Coordination.

## 1.5. Direction, Coordination and Control

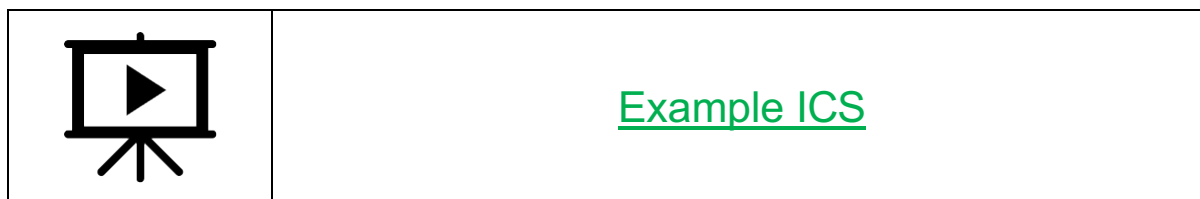
### 1.5.1. The NDMA Model- Sierra Leone Incident Management System (SLIMS)

Across Sierra Leone, communities face incidents and disasters that necessitate effective responses from local agencies collaborating across districts and utilizing common processes and systems. The Sierra Leone Incident Management System (SLIMS) provides the principles, structures, and processes that connect the nation's multi-agency planners and responders, enabling them to tackle challenges that exceed the capacity of any single district, chiefdom or organization.

The effectiveness of SLIMS relies heavily on the understanding of roles and responsibilities by incident personnel at all levels. **Training is essential** to foster this common understanding and ensure that responders consistently apply SLIMS concepts across local villages, wards, chiefdoms and districts.

SLIMS offers stakeholders throughout Sierra Leone a shared vocabulary, systems, and processes necessary for delivering the capabilities outlined in the National Disaster Management Act of 2020. It defines the systems and structures involved, including the Incident Command System (ICS) and the establishments of Emergency Operations Centers (EOCs). Successful, coordinated efforts require qualified incident personnel who are well-versed in their respective roles within these systems. Incident personnel encompass all individuals

involved in incident management or support, whether on-scene or operating from an EOC.



Video 2. An example of Incident Command (Canada).

**Standard Operating Procedure 1/2021- Sierra Leone Incident Management System contains a detailed description of SLIMS and the necessary operational requirements.**

1.5.2. SLIMS Structure Overview

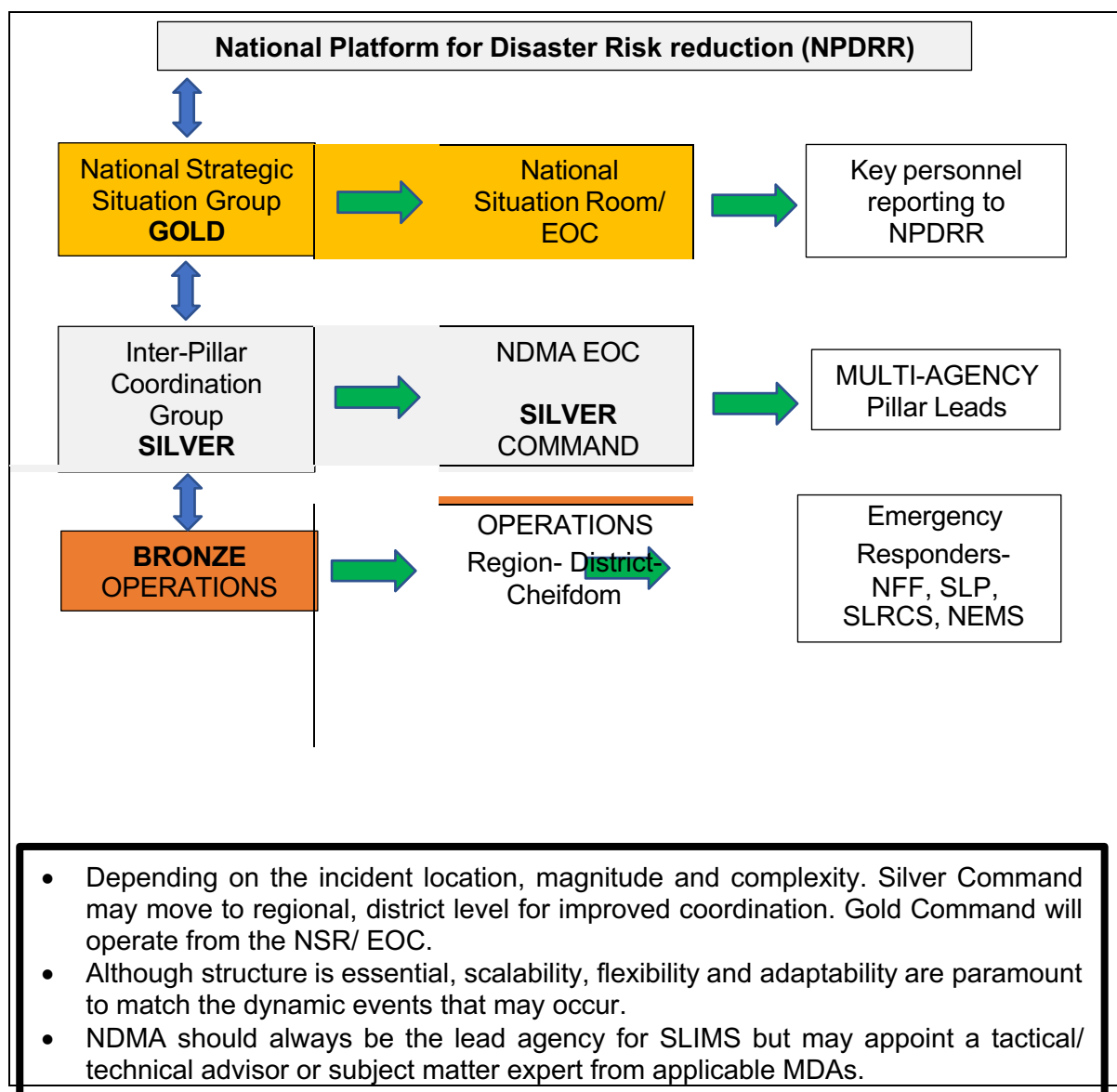


Figure 11. SLIMS Proposed Incident Management Structure.

### 1.5.3. SLIMS Structure Overview

#### Strategic- Gold Command

The term 'strategic' refers to the role of individuals who hold overall executive command or management within their respective organizations (such as health, WASH, police, fire services, etc.). These strategic commanders, known as Gold Incident Managers, are responsible for formulating the strategy for responding to incidents in collaboration with other leaders. While each Gold Commander manages the resources of their own organization, they delegate tactical decisions to their respective Tactical Commanders or Managers. Strategic command plays a crucial role in the ongoing strategic monitoring of the response to any incident.

#### Tactical Command- Silver Command

'Tactical' (or Silver) refers to those who are typically present at or near the incident scene, providing overall management of the emergency response. Tactical managers are responsible for determining priorities in resource allocation, acquiring additional resources as needed, planning, and coordinating tasks. They formulate the tactical plan for implementation by their organization, ensuring alignment with the strategic direction set by Gold Command. While Tactical Command oversees the response, it is not directly involved in executing the operational response to the incidents.

#### Operational- Bronze Command

'Operational' refers to those who execute the main operational response during an incident, being the closest to the scene and managing the resources of their respective organizations within the specific area of the incident. Operational commanders implement the tactical plans defined by Silver Command.

### 1.5.4. Activation and Implementation of SLIMS

#### Gold Command- Strategic

The National Strategic Situation Group (NSSG) serves as the national Gold level of response coordination. Its responsibilities include:

- Coordinating all national preparations to mitigate the impact of disasters.
- Overseeing national test exercises, including programs at the district level.
- Providing national support to lead MDA's during their response operations.
- Coordinating support from the international community.
- Ensuring that the NPDRR is understood and can effectively guide the national response.

#### Silver Command- Tactical

The National Disaster Management Agency (NDMA) operates at the Silver level of response coordination. Its responsibilities include:

- Ensuring that all Pillars/ MDAs are fully aware of, their

responsibilities for major incidents and have regularly practiced their roles through exercises.

- providing Gold Command with comprehensive oversight of national preparations and insights into ongoing national risk or threats
- Ensuring the international community is informed about regional and district planning and any significant capability gaps.
- Coordinating strategic communications in support of the Ministry of Communications, Technology and Innovation (MoCTI).
- Preparing DDMCs to fulfil their roles in the event of a significant incident.

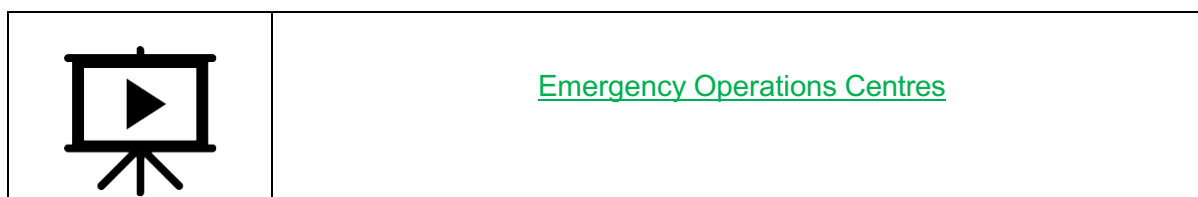
### Bronze Command- Operational

The Bronze response may involve emergency services such as the National Fire Force (NFF), Sierra Leone Police (SLP), the Ministry of Health (MOH), or voluntary organisations like the Sierra Leone Red Cross Society (SLRCS). The officer in charge (OiC) from the lead agency at the Bronze (incident) Commander, ensuring effective operational management during the response.

#### 1.5.5. Emergency Operation Centres (EOCs)

EOCs must be aligned with the levels of incident management established by the GoSL. EOCs are activated based on the declared level of an incident. For Level Two or Level Three incidents. The National Situation Room (NSR) is established, which functions as the National Emergency Operations Centre (NEOC).

District EOCs (DEOCs) should align with Silver command where appropriate; alternatively, Silver Command may be managed by the NDMA at its headquarters. This flexibility and adaptability within the EOC operational procedures are essential for effective response.



Video 3. Example of an EOC.

#### 1.5.6. EOC Structuring and Roles

The National Situation Room EOC serves as the central point for coordinating community emergency management and response activities. It maintains situational awareness regarding the emergency situation and facilitates resource deployment requests.

The Deputy Director General of the NDMA typically serves as the EOC Manager, holding the responsibility and authority to manage the EOC and the community's emergency management organization during an emergencies or disasters. The EOC Manager has the authority to make routine decisions and advises District/ MDA officials when major decisions are required. Additionally, the EOC Manager acts as a liaison with Sierra Leone's government emergency agencies.

### 1.5.7. EOC Goals

The following general goals guide the operations of the Emergency Operations Centre. These goals may be adjusted by the EOC Manager in coordination with strategic government officials and the incident commander upon activation.

- Obtain and maintain situational awareness of the incident to ensure responders have a common operating picture
- Establish an incident planning cycle
- Mobilize and deploy resources and assets to support emergency response, guided by established priorities
- Facilitate a seamless transition into recovery operations
- Provide emergency notifications and warning to responders and residents
- Assess and document impacts from events for the recovery process.

### 1.5.8. EOC Activation Levels- Staffing

The EOC has three designated activation levels that reflect increasing intensity, from modest emergency effects associated with Level 1 to catastrophic emergency effects associated with Level 3.

- **Level 0:** EOC not required.
- **Level 1:** EOC minimally staffed with key personnel to monitoring the situation
- **Level 2:** EOC partially staffed to monitor the situation, facilitate occasional resource requests, and maintain situational awareness
- **Level 3:** Fully staffed to monitor the situation, facilitate larger volumes of resources requests, and maintain situational awareness.

### 1.5.9. EOC Equipment

The Emergency Management Director (EMD) or designee is responsible for ensuring that EOC equipment is functional and ready for activation. Essential equipment includes:

- Laptops
- Phones
- Monitors
- Smart Boards
- Radios/ Base Stations
- Maps and documentation
- Identification tabards
- Breakout rooms
- Health, safety and welfare facilities
- Back-up generators
- Emergency lighting
- Staff register

This equipment is tested monthly to ensure readiness, and EOC exercises are conducted at least bi-annually.

#### 1.5.10. EOC Organisation

The EOC is traditionally organized based on the US model, with incident command/ management overseen by a commander/ manager, assisted by a public information officer, safety officer, and liaison officer. The main functional areas include:

<b>Operations</b>	<b>Planning</b>	<b>Logistics</b>	<b>Finance/ Administration</b>
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An Emergency Operations Centre (EOC) should be structured to facilitate effective operations for the incident and the district or jurisdiction. The National EOC follows an Incident Management model to ensure the ability to acquire, analyze, and act on information while coordinating resources to support emergency response operations efficiently and timely.

Key incident management positions and sections within the EOC include:

- 1) **EOC Manager:** Oversees all EOC activities, **directs operations**, and provides policy, guidance. The EOC Manager coordinates with incident command and response partners to identify necessary resources for emergency response. **Typically, the NDMA Deputy Director General or Deputy Officer serves in this role.**
- 2) **Public Information Officer:** Responsible for disseminating public information regarding the incident's cause, size, current situation, and the type and volume of resources deployed. The PIO communicates with government agencies, the media, and the public using traditional and social media platforms.
- 3) **Liaison Officer:** **Coordinates** with agencies, organizations, and departments **outside the EOC during** response and recovery operations, **acting as** the primary point of contact for local, district and national officials.
- 4) **Operations Section Chief:** EOC activities focused on mitigating the immediate hazard, saving lives, **establishing** situational control, and restoring normal operations. This **role** includes activating the EOC, **prioritizing** resource requests, **supporting** situational awareness. The Operations Section is typically supported by designated Emergency Support Functions staffed **by** representatives from police, fire, emergency medical services, public works, public health, MDAs and organizations responsible for shelter operations.
- 5) **Planning Section Chief:** Oversees the collection and evaluation of incident information and intelligence, disseminating this information to the EOC manager and other incident management personnel. The Planning Section Chief coordinates with the Operations Section Chief to develop Incident Action Plans (IAP) and situation reports (Sit-Reps).
- 6) **Logistics Section Officer:** Manages the coordination and provision of all service support requirements needed for effective emergency response operations and EOC operations and EOC functions, including tracking resource status and coordinating with staging area and distribution points.
- 7) **Finance and Administration Section Officer:** Responsible for tracking expenditures related to incident response, including personnel time, resource procurement, vendor

contracts management, compensation administration, and overall cost analysis for the incident.

#### 1.5.11. EOC Staffing

The Emergency Management Director or designee maintains a current list of EOC positions and coordinates with department heads to identify and train staff for these roles. Department heads or their designees will develop and maintain a contact list of personnel available to fill needed positions within the EOC.

#### 1.5.12. EOC Activation/ Stand-up

When a decision to activate the EOC is made, staff needed to support EOC operations will be notified via the primary notification system for EOC activations. This system will be activated by the EMD or designee. Each EOC member will be notified of the activation, provided with reporting times, and given methods to verify receipt of the notification. If necessary, a back-up notification system will be employed.

#### 1.5.13. EOC Deactivation/ Stand-down

The EOC Manager or EMD, in consultation with the Incident Commander, is responsible for deciding when to deactivate the EOC. As response operations wind down, EOC personnel and other staff will be released when they are no longer needed to support response efforts.

#### 1.5.14. Staging Area

A staging or holding area is designated for aggregating resources needed to support emergency response operations, ensuring they are ready for deployment. This area should be located close enough to the incident to allow a timely assets deployment, yet far enough away to remain outside the immediate impact zone.

### 1.6. Information Collection, Analysis and Dissemination

#### 1.6.1. Situational Awareness

Situational Awareness (SA) may be defined as:

'Developing and maintaining a dynamic awareness of the situation and the risks present in an activity, based on gathering information from multiple sources from the task environment, understanding what the information means and using it to think ahead about what may happen next.'

In simpler terms, SA involves understanding and appreciating your environment - whether at the incident site in the EOC – as well as being aware of the people around you and the potential decisions, hazards, risks, and events that may arise.

Five elements contribute to effective situational awareness:

1. Define your information requirements

2. Determine how to gather information
3. Decide who will analyze that information
4. Establish how that information will be shared
5. Select the technology that will facilitate communication and information management.

During the initial period of an emergency, efforts should focus on understanding the situation and establishing incident priorities. A well-defined operational information collection capability is crucial, as it provides situational awareness to leadership and promotes informed decision-making.

#### 1.6.2. Information Collection

Information will be collected from a variety of sources. The EOC Manager or their designee will be responsible for gathering this information. Potential sources of operational information include:

- On-scene responders
- Community departments and agencies
- EOC Reports
- Public agencies and non-governmental partners
- Television, radio and print media
- Social media
- Victims of the emergency and the general public
- Technical experts

#### 1.6.3. Information Analysis

Information analysis is the process of evaluating the collected data to derive meaningful insights that can guide decision-making and response efforts. This involves synthesizing information from various sources to identify patterns, assess risks, and determine the most effective actions to take in response to the emergency.

Effective analysis requires clear criteria for evaluating the relevance and reliability of the information, as well as the ability to communicate findings succinctly to decision-makers. The goal is to ensure that all stakeholders have access to accurate and timely information, enabling them to make informed decisions that enhance the overall response to the incident.

#### 1.6.4. Dissemination

Message dissemination is categorized into internal messaging and public messaging. Internal messaging refers to messages crafted for responders and partners, while public messaging refers to messages crafted for public dissemination.

#### 1.6.5. Internal Messaging

EOC Manager or his/ her designee in the EOC will assist in conveying information as necessary to responders, community departments and agencies and other partners. Additionally, EOC Manager or his/ her designee will maintain and update the Incident Action Plan (IAP), which will contain critical information and intelligence updates.



#### 1.6.6. Public Messaging

Various methods of public information dissemination are available. The decision to use a particular medium will be based on the urgency and the intended audience. Some methods of distribution include:

- Press releases
- Press conferences
- Website updates
- Print, radio or televised announcements
- Social media updates
- Local or regional public information systems and web/ application-based notification systems

To ensure one consistent and accurate voice, all public information releases will be coordinated through EOC Manager or his/ her designee.

#### 1.7. Communications strategies

Effective communications is a crucial element of response and recovery operations. The success of emergency management and response efforts relies heavily on the ability of personnel from various disciplines, districts, organizations, and agencies to communicate effectively with one another. To facilitate the timely transmission and reception of information, emergency response partners must have access to a wide range of communication tools and systems. This section outlines the types of equipment and systems available for internal, external, and public communication. Operational communications systems and capabilities, and effective communications, emphasizing the importance of operational communication systems and capabilities in ensuring the success of any emergency operation.

Communications among community agencies is facilitated through various types of equipment including radios, cellular phones, and landline telephones.

##### 1.7.1. Alert and Notification

Timely emergency notification of MDAs is critical during emergencies. Proper notification ensures that response partners have adequate time to prepare and assemble for an effective response. The GoSL employs several methods for notifying emergency response partners, primarily using telephone and messaging systems.

##### 1.7.2. Notification of Key Officials

In situations requiring the notification of key community officials, a designated contact roster should be utilized. This roster should include the following methods of communication to ensure prompt notification:

- Email Alerts: Detailed information can be sent via email for record keeping and clarity
- Telephone Calls: Direct calls to key officials for immediate communication
- Text messaging: Quick and efficient messaging for urgent notifications

- Radio Communication: Utilization of radios for real-time updates, especially in areas with limited cellular service.
- Public Address Systems: Announcements can be made in critical areas to reach larger audience quickly
- Dispatch a vehicle for in-person notification

By implementing these communication strategies, emergency management personnel can ensure that all relevant parties are informed and prepared to respond effectively to emergencies. The integration of various communication methods enhances coordination among response partners, ultimately leading to more successful outcomes in emergency situations.

## **Section Two: Preparedness Planning**

## 2.1 Introduction

The foundation step in Sierra Leone's national preparedness strategy is to thoroughly read, comprehend, and implement the procedures, processes, and systems outlined in **Section One: Key Information**.

The primary goal of preparedness is to prevent the loss of lives and assets in the face of threats and emergencies. Preparedness involves the knowledge and capacities developed by governments, professional response and recovery organizations, communities, and individuals to effectively anticipate, respond to, and recover from the impacts of anticipated, imminent or ongoing hazard events or conditions. While the implementation of preparedness measures occurs before any hazard or disasters strikes, the outcomes of preparedness encompass pre-disaster, disaster, and post-disaster phases, as defined by existing frameworks.

A critical aspect of preparedness is the establishment and enhancement of community capacities to anticipate, cope with, and recover from the adverse effects of hazards and potential cascading disasters. This resilience is characterized by the following capacities:

1. Enhanced awareness and knowledge within communities regarding threats and impacts associated with various hazards
2. Empowered communities equipped with the necessary skills and capabilities to manage the impacts of disasters effectively.
3. Strengthened disaster risk management capacities among national and local MDAs, DDMCs, Councils, Offices and Emergency Operation Centres across all levels
4. Development and implementation of comprehensive national and local preparedness and response policies, plans, and systems
5. Strengthened partnership and coordination among all key players and stakeholders involved in disaster risk management.

## 2.2 Key Components of Preparedness

The key components of preparedness include:

- Preparedness
- Response
- Preparation
- Localization
- Risk assessment
- Capacity building
- Continuity of services
- Partnerships
- Inform and educate



Figure 12. Key components of Preparedness.

### 2.2.1 Inform and Educate

Developing annual and seasonal campaigns that reflect national hazards and risks is essential for proactive disaster risk management. An inclusive approach that considers and involves all community members is crucial for achieving success. Targeted and consistent programs can effectively alter perceptions, behaviours, and attitudes towards various aspects of disaster risk management.

Awareness campaigns are typically organized and delivered by relevant agencies; however fostering **partnerships** is encouraged because they:

- Promote uniformity in the GoSL approach to managing disaster risk
- Enhance communication and awareness-raising efforts
- Help reduce costs for participating agencies
- Expand outreach to a broader audience and demographic
- Facilitate the development of a comprehensive, community-wide culture of preparedness in Sierra Leone.

### 2.2.1.1 Example Preparedness Campaigns

Preparedness campaigns can be tailored to various demographics and sectors, ranging from schoolchildren to private industry. While the specifics of each campaign may vary according to the target audience, the underlying principles generally remain consistent.

For effective preparedness campaigns, it is essential to establish clear aim and objectives. Engaging in self-reflection and questioning can be a valuable tool in campaign development process. By ensuring coherence and consistency in messaging and approach, these campaigns can significantly enhance community preparedness and resilience.

Example question	ideas
<b>What do we want to achieve with this preparedness campaign</b>	<ul style="list-style-type: none"> <li>• Early warning</li> <li>• Raise hazard and safety awareness</li> <li>• Risk/ hazard assessment</li> <li>• Target specific groups</li> <li>• Address recurring issues (eg. fire, road traffic accident)</li> <li>• Prepare communities for wet season</li> <li>• General, periodic meeting/ workshop</li> </ul>
<b>Who will we communicate with? (Demographic)</b>	<ul style="list-style-type: none"> <li>• Drivers, workers, farmers, miners</li> <li>• Children and schools/ teachers</li> <li>• Government officials</li> <li>• Healthcare workers</li> <li>• Parents</li> <li>• Female specific</li> <li>• Elderly</li> <li>• Physically disabled</li> <li>• Vulnerable populations</li> <li>• Exposed populations</li> <li>• Combination</li> </ul>
<b>How and when will we do it?</b>	<ul style="list-style-type: none"> <li>• Posters and leaflets</li> <li>• Physical meetings/ Town Halls</li> <li>• Home visits</li> <li>• Work visits</li> <li>• Public gatherings- Church/ Prayer, market, community event (Independence Day)</li> <li>• Repeated announcements</li> <li>• By conducting a drill/ exercise</li> <li>• Local radio/ newspaper</li> <li>• Social media</li> <li>• Games</li> <li>• Public announcements (car and loudspeaker)</li> <li>• Specific resources- children's workbook,</li> <li>• resources for vulnerable populations</li> </ul>
<b>Who will do it?</b>	<ul style="list-style-type: none"> <li>• All</li> <li>• NDMA/ SLRCS</li> <li>• DDMC personnel</li> <li>• Community volunteers</li> </ul>

	<ul style="list-style-type: none"> <li>Professional/respected community members- health, religion, teachers</li> <li>Children (accompanied)</li> </ul>
<b>Additional considerations?</b>	<ul style="list-style-type: none"> <li>Cost and available budget</li> <li>Think of real impact</li> <li>Conduct a short survey to measure impact and obtain feedback</li> </ul>

2.2.1.2 Early Warning and Forecasting

As part of the ‘Inform and Educate’ component, it is crucial for the public to be informed about the actions they should take during early warning process, whether it is holistic or specific to particular hazards.

In the context of flooding, effective weather and river level forecasting are vital elements of an early warning system. The Sierra Leone Meteorological Agency (SL-MET) is the government body tasked with delivering accurate climate information related to early warnings. This includes the use of specific sensing technologies and communication equipment located at Automatic Weather Stations (AWS) to ensure timely dissemination of information. The AWS are strategically positioned in the following locations:

- Bo
- Kabala
- Kenema
- Koidu
- Makeni
- Rogberi Junction
- Wilberforce

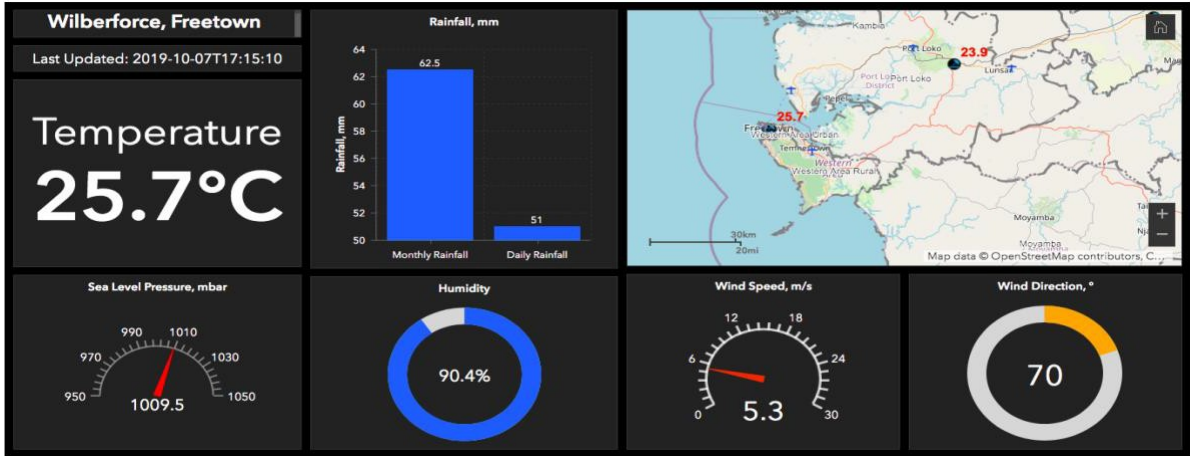


Figure 13. SLMet website dashboard with weather forecast.

In collaboration with the National Water Resources Management Agency (NWRMA), the SL-MET operates a network of automated hydrological and meteorological monitoring stations across the country. This integrated network, known as Hydromet, employs advanced communications and computer systems to facilitate real-time data collection. Remote data collection platforms transmit water and environmental data via radio and satellite providing

a cost-effective, near-real-time capability for water management.

The Hydro-Met system not only transmit water and environmental data but also integrates additional available information to provide timely updates on water supply status for river and reservoir operations. A key operational goal of the NWRMA is to develop climate-related information that supports flood forecasting and early warning systems. This includes collaboration with other relevant government institutions and environmental organizations to address climate change mitigation and adaptation strategies.

### 2.2.1.3 Climate Information, Disaster Management and Early Warning Systems

The CIDMEWS project, funded by UNDP, aims to establish a functional network of meteorological and hydrological monitoring stations. Its primary objective is to enhance the understanding of weather and climatic changes over time and to provide timely information that can help avert disasters related to weather and climate change.

Local communities can access information from their nearest weather station and track emergency incidents through an interactive interface, allowing them to stay informed and prepared for potential hazards. This system fosters greater community resilience by ensuring that individuals are equipped with the knowledge and tools necessary to respond effectively to emerging threats.

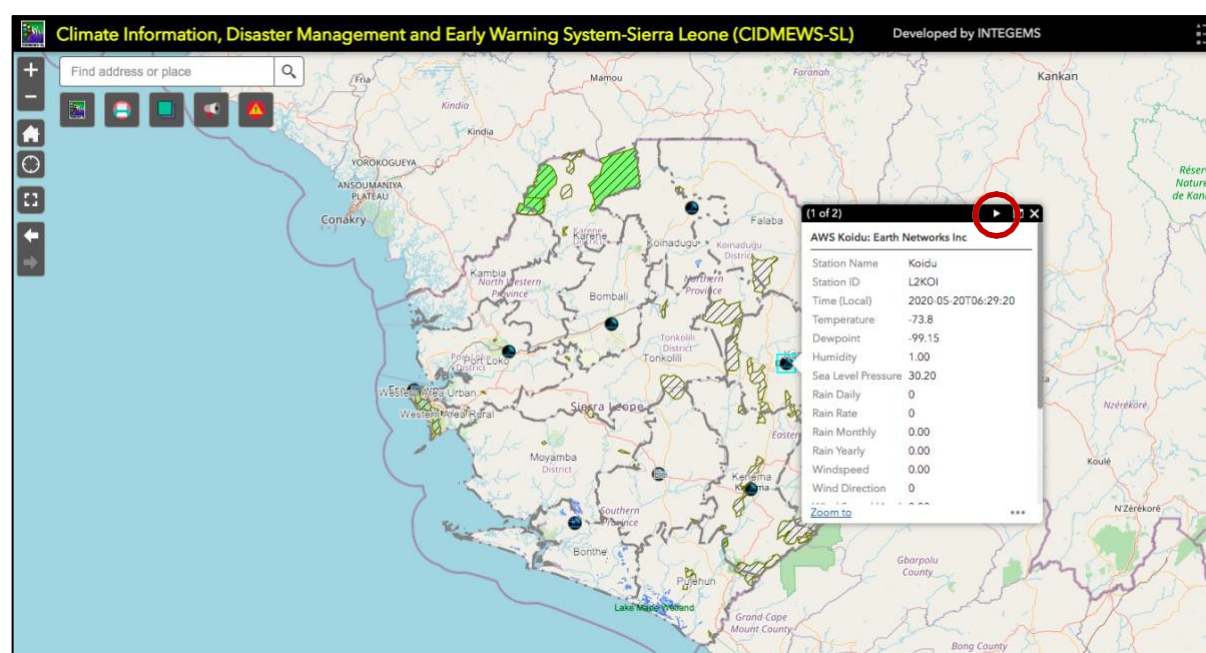


Figure 14. CIDMEWS data example Sierra Leone (INTEGEMS).

The advantages of early warning systems consist of:

- Provides lead-times for local communities at risk – of floods and severe storms (hail, thunder, lightning, intense rains and violent winds) – to prepare and undertake risk reduction measures, including moving assets to safer locations and implementing flood resilience measures
- The systems provide interpretation, packaging and transfer of climate information for relevant user-agencies to minimize risk to life and livelihoods including evacuating vulnerable groups, assisting local communities implement risk reduction, and implementing flood control and re-routing structures
- Accurate and timely information for agricultural and hydro-meteorological information



for informing integrated farm management and water resources management

- Provides integration of climate information into planning and policy making processes
- Packaging of weather and climate data and information for a range of other service providers including applications related to building and management of infrastructure, land and air transport, and the private sector.

The next steps are equally essential and using the information quickly and purposefully for hazardous areas should be pre-planned and tested. The recommended flow of information is illustrated below:

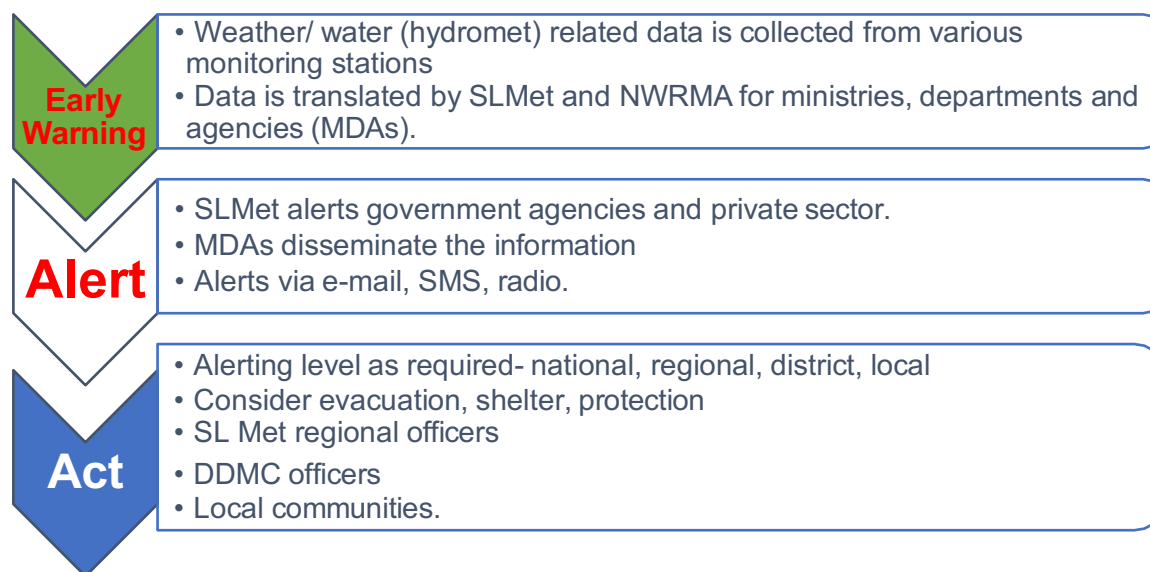


Figure 15. Early Warning Process, Sierra Leone.

Early warning must be communicated to all members of the public and made specific where relevant. For example, stockpiling, livelihood protection, resource deployment and community protection may all be put in place well before a hazard occurs. Timely, fully inclusive information should be communicated through a variety of means including:

- Radio bulletins
- Television
- Social media
- Mobile 'phone SMS
- Community announcements
- SL Police/ RSLAF mobile announcements
- Public displays and signage.

Early warning must focus on an end-to-end process where systems are in place for people to receive an alert, prepare/ evacuate and return safely. The public must know what to do and when to do it.

## NDMA Key Points

SLMet utilises Windy.com as one of its main forecasting resources. Windy.com uses the European Centre for Medium Range Forecasting (ECMRF) which is globally recognised for accurate international forecasting. Download the Android App [here](#).

The use of ministry and agency social media platforms is fully encouraged alongside traditional communications including radio and local announcements.

### 2.2.2 Training and Capacity Building

Capacity Building is defined as the systematic process through which individuals, organizations, and society enhance their capabilities over time to achieve social and economic objectives. In the context of preparedness, capacity development should encompass a variety of initiatives, including campaigns, training, research, simulations, and drills. These activities are designed to cultivate the knowledge, skills, attitudes, systems, and mechanisms necessary to reduce vulnerabilities and empower stakeholders to effectively cope with hazards.

Examples of capacity building initiatives:

- Conducting evacuation drills
- Raising awareness within communities
- Organizing flood tabletop exercises and simulations
- Providing personnel training courses
- Developing a regular capacity building plan.

Within the framework of capacity building, it is essential to also consider capability. While capacity pertains to the actual events – such as training sessions or workshops – capability focuses on the functional quality of these initiatives. The critical question is whether the capacity building efforts yield practical outputs that will benefit communities. Therefore, capacity building should be informed by a Capacity Needs Assessment (CNA) that identifies priority areas for development.

it is equally important for capacity building initiatives to address resources, logistics, and communications, as these elements play a vital role in effective disaster management. The capacity building assessment should be aligned with hazard, risk, and vulnerability assessment. In summary, the process involves:

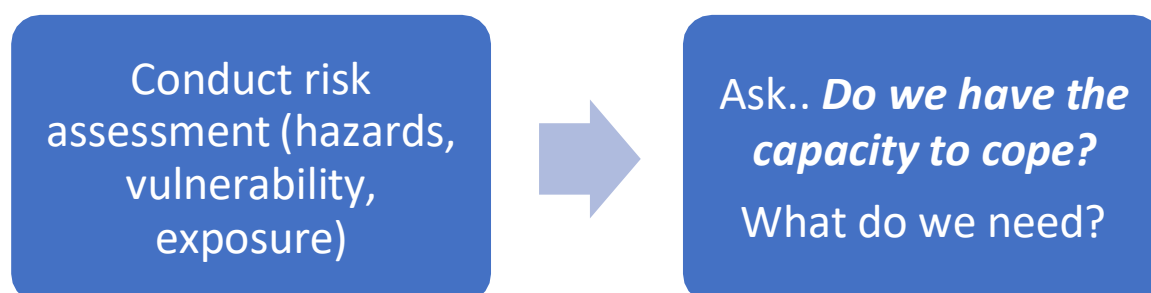


Figure 16. Capacity Assessment.

Decentralizing capacity for disaster preparedness and response is an immediate priority, particularly given the high levels of poverty and vulnerability prevalent in many communities. A timely and adequate response is essential to saving lives and minimizing suffering during emergencies. By focusing on building local capacities, we can enhance community resilience and ensure that stakeholders are better equipped to manage disasters effectively.

### 2.2.3 Disaster Risk Management Localization

It is essential to recognize that different districts face unique hazards at varying times and process a diverse range of resources for preparedness, response and recovery. As part of the preparedness plan, it is crucial to conduct a comprehensive inventory of available resources, which should include:

- Physical Resources: shelter, food stockpiles, equipment,
- Human Resources: Trained emergency responders and volunteers,
- Transport Resources: Vehicles, boats, and trucks.
- Financial Resources: Local funds and distribution mechanisms, and
- Technological Resources: Communications, data, and information systems.

Furthermore, the preparedness plan should incorporate mechanisms for central government requests, integrating these into the early warning process. This ensures that resources are pre-planned and readily available, even if they are not utilized during an emergency.

### 2.2.4 Hazard and Risk Assessment

When individuals are aware of and understand the hazards and risks that could adversely affect their families, livelihoods, businesses, or communities, they are better equipped to implement control measures or interventions that mitigate or eliminate negative impacts.

While primary hazards, such as flooding, are commonly recognized, it is equally important to acknowledge secondary hazards and their potential follow-on effects. For instance significant flooding may lead to secondary hazards such as cholera outbreaks, building collapses, road damage, and financial burdens due to the loss of stock or crops. By identifying and planning for all potential hazards and risks, communities can more effectively implement control measures.

Hazard and risk assessment can either isolate hazards, vulnerabilities, and exposure or group them together in a comprehensive evaluation. While templates are available, organizations are encouraged to develop customized assessments tailored to their specific areas or premises. Including a broad range of stakeholders in the assessment process is beneficial, and open discussions can foster greater understanding and collaboration.

Moreover, children can serve as valuable hazard identifiers, and promoting disaster risk management education from an early age is vital. Through messaging, artwork, and play, children can positively influence their parents and communities regarding disaster risk

awareness and preparedness. Be engaging children in these discussions, we can cultivate a culture of preparedness that extends throughout families and communities.

## 2.2.4.1 Sierra Leone National Hazard Analysis

**Hazard:** A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

Natural Hazards	Environmental Hazards	Biological Hazards	Human-Induced Hazards
<ul style="list-style-type: none"> <li>• Drought</li> <li>• Earthquake</li> <li>• Flood</li> <li>• Hurricane</li> <li>• Landslide</li> <li>• Monsoon</li> <li>• Tornado</li> <li>• Tsunami</li> <li>• Wildfire</li> <li>• Severe Storm</li> </ul>	<ul style="list-style-type: none"> <li>• Coastal erosion/ Sea level rise</li> <li>• Land erosion</li> <li>• Deforestation</li> <li>• Salinization</li> <li>• Desertification</li> <li>• Dust clouds</li> <li>• Wetland loss/ degradation</li> </ul>	<ul style="list-style-type: none"> <li>• Disease outbreak</li> <li>• Epidemic</li> <li>• Pandemic</li> <li>• Epizootics</li> <li>• Pest infestation</li> <li>• Insect infestation</li> <li>• Animal incidents</li> <li>• Pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Conflict</li> <li>• Industrial incidents</li> <li>• Structural collapse</li> <li>• Critical infrastructure damage</li> <li>• Utilities outage</li> <li>• Fire/ explosion</li> <li>• Hazardous/ chemical incident</li> <li>• Pollution (Air and Water)</li> <li>• Radiological incident</li> <li>• Terrorism</li> <li>• Transport incidents</li> <li>• Urbanization</li> <li>• Waste</li> </ul>

Recent hazard assessment and mapping of Sierra Leone revealed that the country is highly prone to flood, landslide and coastal erosion, tropical storms and sea level rise hazards. The high level of population exposure to flooding, landslides, coastal erosion and sea level rise hazards is clear in the hilly and low-lying areas of the Western Areas and along the coastal areas in the Western Area and the Northern and Southern Provinces of Sierra Leone. For landslide hazards, the identified elements at risk are population, buildings, education facilities, health facilities and transportation (roads). For flood hazards, the identified elements at risk are population, buildings, agriculture sector (cultivated area and livestock), education facilities, health facilities and transportation (roads).

The landslide hazard assessment showed that the hilly and steep-sided slope areas in the Western Area, especially in Leicester, Regent, Granville Brook, Cline Town, Moa Wharf, Hill Court Road, Kissy Brook, Dworzark, and Charlotte in the Mountain Rural District of the Western Area are prone to landslides due to their moderate to very high slope susceptibility and heavy precipitation received in the Wet Season.

Floods are more likely in areas around the ten catchments close to the estuaries and along the entire coastline of Sierra Leone. Areas of Freetown City, including Kanningo, Kamayama, Dworzark, Kroo Bay, Congo Town, Kissy Brook, Looking Town, and Granville Brook are prone to floods due to their moderate to very high slope susceptibility and heavy precipitation received in the Wet Season. The impact of climate change ensures anywhere in the country is susceptible to hazards, and flooding in particular.

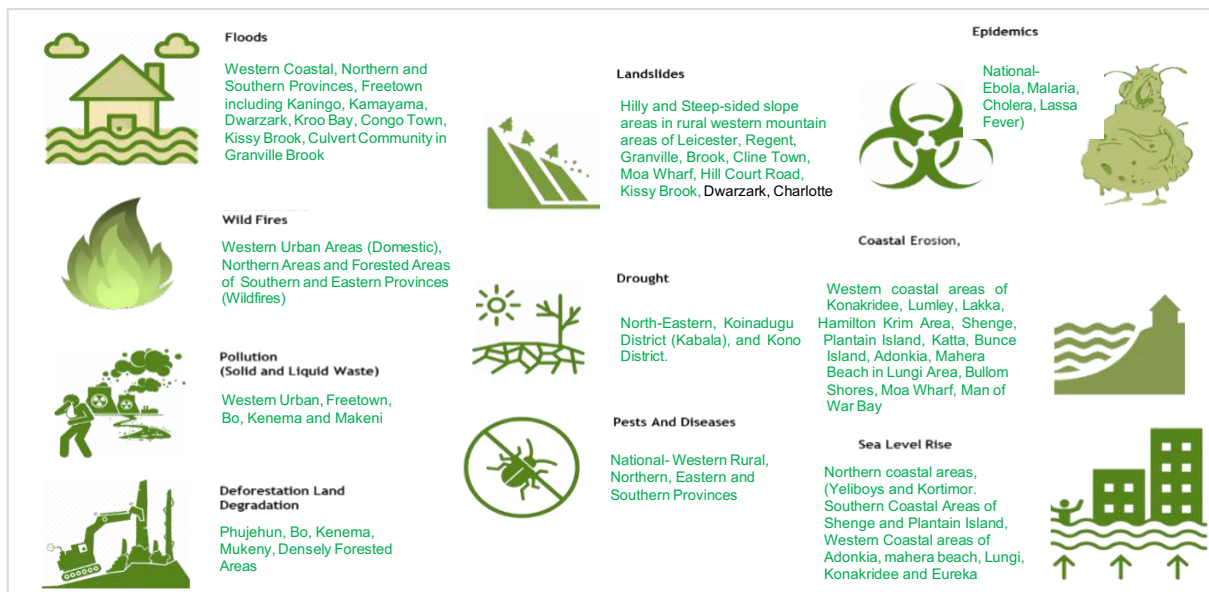


Figure 17. Overview of National Hazard Locations in Sierra Leone.

## 2.2.4.2 Sierra Leone National Vulnerability and Exposure Analysis

**Vulnerability:** The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

**Exposure:** The situation of people, infrastructure, housing, production capacities and other tangible human assets located in a hazard-prone area.

Cities with the largest population densities have more people exposed to hazards and flooding in particular. The percentage of population exposed to flood ranges from 1.4 percent (Koinadugu district) to 39 percent (Western Area Rural District).

At a national scale, 10 percent of the total population is exposed to flood as recorded during the Population Housing Census, 2015. (Table 1).

Urbanization exacerbates vulnerability and exposure meaning preparedness, especially early warning and communication, is vital to increase safety and reduce impacts on communities. The importance of risk assessment cannot be overstated. The risk assessment brings all of the hazard, vulnerability and exposure analysis together.



Appendix C illustrates the risk assessment process and documentation requirements. Additional tools for risk assessment, if safe to do, include taking photographs and videos to highlight hazards.

The risk of hazards occurring, and their severity can be scored in numbers or words and for Sierra Leone national standards, wording and colour coding is preferred. Risk assessment terminology for personnel to understand consists of:

Table 2. Risk Assessment terminology.

Term	Details	Information/ Rating
Those Affected	The <b>who</b> (and what, if necessary) may be impacted by the hazard and its consequences	People, places, areas, towns.
Likelihood	The <b>probability</b> that an event (hazard) which may lead to injury, ill-health or damage.	Low 1
		Medium 2
		High 3
Severity	<b>Level of damage</b> possible of a particular hazard	Low 1
		Medium 2
		High 3
Control Measures	Control measures are the <b>interventions</b> you put in place to reduce risk and prevent harm.	Elimination Substitution Mitigation Limitations Reduction Additional rules Extra resources

<b>NDMA Key Point</b>
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Inclusively, raise awareness through assessment of hazard, vulnerability and exposure. Think All/ Multiple-Hazards Approach!
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### 2.2.5 Emergency and Disaster Response Preparedness

With the information, knowledge and training gained from early warning systems, risk assessments, and capacity building, emergency preparedness must ensure the establishment of functional and responsive systems that are well resourced and ready to act in the event of hazards and emergencies. This involves securing the necessary resources to facilitate effective response efforts.

Emergency response is a collaborative whole-community approach that includes statutory and voluntary services such as the National Fire Force, Sierra Leone Police, National Disaster Management Agency, Sierra Leone Red Cross Society, National Emergency Medical Services, Health Services, National Public Health Authority, the RSLAF and voluntary groups. Non-Governmental Organisations (NGOs), both national and international, play a crucial role in the preparedness and response process, as do voluntary and civil society organisations.

Under the Sierra Leone Pillar System, specific agencies and organisations are designated to focus on particular focal areas of emergency response. The shaded areas in the accompanying documentation denote those that interrelate with the UN cluster system.





Table 3. Pillars and accountable MDAs (June 2021).

#	Pillars	Pillar Lead	Co – Lead	Membership	
1	Coordination/ Inter-pillar	<b>National Disaster Management Agency (NDMA)</b>	WFP	<ul style="list-style-type: none"> <li>FCC</li> <li>International Security Advisory Team (ISAT)</li> <li>Office of National Security (ONS)</li> <li>International Organization for Migration (IOM)</li> <li>Pillar leads</li> </ul>	<ul style="list-style-type: none"> <li>SLRCS</li> <li>UNAIDS (Joint United Nations Programme on AIDS)</li> <li>UNDP</li> <li>UNICEF</li> <li>WFP</li> </ul>
2	Health and Burial	<b>Ministry of Health &amp; Sanitation (MoHS) CMO</b>	WHO	<ul style="list-style-type: none"> <li>Centre for Disease Control (CDC)</li> <li>Action Against Hunger</li> <li>UNFPA</li> <li>Ministry of Environment</li> <li>UNICEF</li> <li>IRC</li> </ul>	<ul style="list-style-type: none"> <li>Republic of Sierra Leone Armed Forces (RSLAF)</li> <li>Sierra Leone Red Cross Society (SLRC) Freetown City Council (FCC)</li> <li>World Health Organization (WHO)</li> <li>World Vision</li> </ul>
3	Logistics	<b>National Disaster Management Agency (NDMA)</b>	WFP	<ul style="list-style-type: none"> <li>Bollore</li> <li>DSTI</li> <li>Ministry of Finance</li> <li>Ministry of Transport &amp; Aviation (MTA)</li> <li>NaTCA</li> <li>Republic of Sierra Leone Armed Forces (RSLAF)</li> <li>Sierra Leone Police (SLP)</li> </ul>	<ul style="list-style-type: none"> <li>Sierra Leone Red Cross Society (SLRC)</li> <li>National Commission for Social Action (NaCSA)</li> <li>SLNSC</li> <li>United Nations Children Educational Fund (UNICEF)</li> <li>United Nations Development Programme (UNDP)</li> <li>World Food Programme (WFP)</li> </ul>
4	Social Mobilization and Communication	<b>Ministry of Information &amp; Communication (MIC) and NDMA</b>  <b>The Permanent Secretary</b>	UNICEF	<ul style="list-style-type: none"> <li>eHealth Africa</li> <li>Environmental Protection Agency (EPA)</li> <li>Focus 1000</li> <li>Freetown City Council (FCC)</li> <li>GOAL Sierra Leone</li> <li>Ministry of Environment and Climate Change</li> <li>Ministry of Local Government and Community Affairs</li> <li>Ministry of Social Welfare</li> </ul>	<ul style="list-style-type: none"> <li>NATCOM</li> <li>Office of National Security (ONS)</li> <li>Sierra Leone Red Cross Society (SLRC) United Nations Children Educational Fund (UNICEF)</li> <li>United Nation Development Program (UNDP)</li> </ul>

5	Assessment and Registration	<b>National Civil Registration Agency (NCRA)</b> <b>The Director General</b>	WFP	<ul style="list-style-type: none"> <li>• Caritas</li> <li>• CWW</li> <li>• Evangelical Lutheran Church in Sierra Leone (ELCSL)</li> <li>• FCC</li> <li>• Goal</li> <li>• Handicap International</li> <li>• Ministry of Information &amp; Communication (MIC)</li> <li>• Ministry of Lands, Housing and Country Planning (MLHCP)</li> <li>• National Civil Registration Authority (NCRA)</li> <li>• National Commission for Social Action (NaCSA)</li> </ul>	<ul style="list-style-type: none"> <li>• Office of National Security (ONS)</li> <li>• Pillar leads</li> <li>• Sierra Leone Police (SLP)</li> <li>• Sierra Leone Red Cross Society (SLRC)</li> <li>• SLMET</li> <li>• Statistic Sierra Leone (SSL)</li> <li>• UNFPA</li> <li>• UNFPA</li> <li>• UNICEF</li> <li>• United Nation Development Program (UNDP)</li> </ul>
6	WASH	<b>Ministry of Water Resources (MoWR)</b> <b>The Permanent Secretary</b>	UNICEF	<ul style="list-style-type: none"> <li>• Action Against Hunger</li> <li>• Care</li> <li>• CRS</li> <li>• CWW</li> <li>• Disaster Alert Network Sierra Leone</li> <li>• Freetown City Council (FCC)</li> <li>• Goal</li> <li>• Guma Valley Water Company (GVWC)</li> <li>• International Organization for Migration</li> <li>• Ministry of Environment and Climate Change</li> <li>• Ministry of Health (MoH)</li> <li>• Oxfam</li> <li>• Save the Children</li> </ul>	<ul style="list-style-type: none"> <li>• Sierra Leone Water Company (SaLWaCo)</li> <li>• SLRCS</li> <li>• United Nation Children Educational Fund</li> <li>• United Nations Development Program (UNDP)</li> <li>• VSO</li> <li>• WASH Net</li> <li>• World Health Organisation (WHO)</li> <li>• World Hope International</li> <li>• World Vision</li> </ul>
7	Protection and Psychosocial	<b>Ministry of Social Welfare</b> <b>Director of Social Welfare</b>	UNICEF	<ul style="list-style-type: none"> <li>• Caritas</li> <li>• Child Fund</li> <li>• DCI</li> <li>• DFID</li> <li>• Disaster Alert Network Sierra Leone</li> <li>• Don Bosco</li> <li>• Family homes movement</li> <li>• Freetown City Council (FCC)</li> <li>• GOAL Sierra Leone</li> <li>• Handicap International</li> <li>• IRC</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Gender</li> <li>• Plan International</li> <li>• Restless Development</li> <li>• Save the Children</li> <li>• SLRCS</li> <li>• Social Workers of Sierra Leone</li> <li>• Trocaire</li> <li>• UN WOMEN</li> <li>• United Nation Educational Fund (UNICEF) UNFPA</li> <li>• World Hope</li> </ul>

8	Food and Nutrition	<b>Ministry of MoHS Director of Food &amp; Nutrition</b>	WFP /UNICEF	<ul style="list-style-type: none"> <li>• Action Against Hunger</li> <li>• BRAC-SL</li> <li>• Caritas</li> <li>• Centre for Disease Control (CDC)</li> <li>• COOPI</li> <li>• CWW</li> <li>• Evangelical Lutheran Church in Sierra Leone (ELCSL)</li> <li>• Goal</li> <li>• MBSSE</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Agriculture (MAFF)</li> <li>• Plan International</li> <li>• Sierra Leone Muslim Missionaries Union (SLMMU)</li> <li>• SLRCS</li> <li>• UNICEF</li> <li>• Welt Hunger Hilfe (WHH)</li> <li>• World Food Program (WFP)</li> <li>• World Health Organization (WHO)</li> </ul>
9	Security and Safety	<b>Office of National Security (ONS)</b>	RSLAF SLP	<ul style="list-style-type: none"> <li>• International Federation for Red Cross (IFRC)</li> <li>• International Organization for Migration (IOM)</li> <li>• Ministry of Environment and Climate Change</li> <li>• Ministry of Internal Affairs (MIA)</li> <li>• National Fire Force (NFF)</li> <li>• NaCRA</li> </ul>	<ul style="list-style-type: none"> <li>• Office of National Security (ONS)</li> <li>• Republic of Sierra Leone Armed Forces (RSLAF)</li> <li>• Sierra Leone Correctional Service (SLCS)</li> <li>• SLP</li> <li>• UNDSS</li> </ul>
10	Shelter and Camp Management	<b>Ministry of Works</b>	IOM/SLRCS	<ul style="list-style-type: none"> <li>• Caritas</li> <li>• Concern Worldwide</li> <li>• CRS</li> <li>• Don Bosco</li> <li>• FCC</li> <li>• Home Leone</li> <li>• IOM</li> <li>• Ministry of Lands, Housing and Country Planning</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Sport</li> <li>• Ministry of SW</li> <li>• NaCSA</li> <li>• RSLAF</li> <li>• SALHOC</li> <li>• Sierra Leone Institute of Engineers</li> <li>• SLRCS</li> </ul>
11	Education	<b>Ministry of Basic and Senior Secondary Education (MBSSE)</b>	UNICEF/SCI		
12	Technical	<b>DSTI (lead dependent on need)</b>	UNOPS	<ul style="list-style-type: none"> <li>• EPA</li> <li>• Geologists</li> <li>• SLIE</li> </ul>	<ul style="list-style-type: none"> <li>• SLMET</li> <li>• Track Your Build</li> </ul>
13	Emergency Response Pillar	<b>National Fire Force</b>	SLRCS NDMA (Volunteers)	<ul style="list-style-type: none"> <li>• EPA</li> <li>• MoH</li> <li>• ONS</li> <li>• RSLAF</li> </ul>	<ul style="list-style-type: none"> <li>• SLMET</li> <li>• SLP</li> <li>• SLRCS</li> </ul>

14	Forecasting and Warning Pillar	<b>SL Met</b>	NWRMA	DSTI EPA FCC Ministry of Lands, Housing and Country Planning	NDMA RSLAF SL Roads Authority
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## 2.2.6 Business and Services Continuity

To the greatest extent possible and in a safe manner, businesses and services should strive to maintain operations while preparing for, enduring, and recovering from the impacts of shocks and hazards. Local economies are largely driven by small businesses, public or private services – such as transportation and government offices – are essential for citizens to continue their daily lives. Businesses are integral to their communities, and it is vital that they remain operational to protect livelihoods and ensure access to necessary goods and services. Effective preparedness and planning are key to achieving successful continuity.

Establishing a Business Continuity Management System (BCMS) is essential and can be scaled to suit organizations of varying sizes. A BCMS is comprised of interrelated elements that organizations utilized to establish, implement, operate, monitor, review, maintain, and enhance their business continuity capabilities. These elements include people, policies, plans, procedures, processes, structures, and resources. Together, they enable organisations to recover, restore, and resume the delivery of products and services at acceptable predefined capacities within acceptable time frames whenever serious business disruptions occur.

Various international standards for business continuity can be found at [www.iso.org](http://www.iso.org). along with guidelines that fall under the collective term of **organizational resilience**. By adhering to these standards, organizations can strengthen their ability to withstand and recover from disruptions, thereby enhancing overall community resilience.



### [Business Continuity \(ISO 22301\)](#)

Video 4. Introduction to Business Continuity.

Table 4. Business Continuity Checklist.

#	Action	Description	Check ✓	Business Owner Notes
1	PLAN	<ul style="list-style-type: none"> <li>Emergency contact list of employees (relations), supply chain and emergency service</li> <li>Insurance?</li> </ul>		
2	HAZARD ID	<ul style="list-style-type: none"> <li>What shocks or events can possibly impact on your business?</li> </ul>		
3	BUSINESS RISK	<ul style="list-style-type: none"> <li>Which part of business is most vulnerable?</li> <li>List key products/ services and estimate impact in time and severity.</li> <li>IT and data</li> </ul>		
4	FINANCE	<ul style="list-style-type: none"> <li>What support is in place?</li> <li>Internal/ external</li> <li>Emergency cash vouchers- can I utilize funding and accept vouchers?</li> <li>Have I made calculations and forecasting?</li> </ul>		
5	TEST	<ul style="list-style-type: none"> <li>Make and test plans with staff and suppliers. What if?</li> </ul>		
6	PROTECT	<ul style="list-style-type: none"> <li>Fresh goods</li> <li>Perishables</li> <li>Livestock</li> <li>Reposition stock</li> <li>Additional location?</li> </ul>		
7	COMMUNICATE	<ul style="list-style-type: none"> <li>Customers</li> <li>Employees</li> <li>Supply chain</li> <li>Other businesses</li> </ul>		
8	RECOVER	<ul style="list-style-type: none"> <li>Plan for recovery</li> <li>Damage survey</li> <li>Prioritize services/ business</li> <li>Utilize reserves</li> <li>Emergency cash</li> </ul>		

### 2.2.7 Partnership Working

Effective inter-agency, coordination, collaboration, and interoperability are essential to successful disaster preparedness, response and recovery. The National Disaster Management Agency (NDMA) plays a pivotal role in enhancing coordination and complementing disaster risk management practice by implementing integrated approaches, such as the Sierra Leone Incident Management System. This ensures that stakeholders incorporate emergency and disaster planning into their policies and operations.

As the central coordinating body for disaster preparedness, the NDMA is mandated to bring together various agencies to focus on risk reduction and management. The NDMA's preparedness lead will facilitate the integration of scientific assessments and other evaluation methods as part of disaster prevention and mitigation efforts. This comprehensive guidance on preparedness actions spans several critical phases:

1. before a hazard: proactive measures to reduce risk
2. when there is threat from an imminent hazard: timely actions to prepare for potential impacts.
3. when an emergency is developing due to a hazard threat: coordinated response as situations escalate.
4. the phase prior to the impact of a hazard: final preparations to mitigate effects.

The overarching goal is to avert potential loss of lives and assets through effective preparedness actions. In the event of a hazard impact, the interoperable system designed to inform preparedness aims to ensure the continuity of essential services, thereby minimizing cascading impacts from hazards or impending disasters.

The creating an integrated risk assessment and incident management platform for all types of hazards is crucial for informing preparedness actions. This platform will test the level of interoperability among various government institutions and stakeholders, requiring them to work together in a coordinated and strategic manner. By identifying hazards, exposures, vulnerabilities, and capacities within Sierra Leone, the platform will help enhance the resilience and preparedness of communities to anticipate, cope with, and survive potential hazards.

### 2.2.8 Mapping and Planning

Statistics Sierra Leone (Stats SL) is the agency responsible for mapping, shapefiles, and Geographic Information Systems (GIS) data. Stats SL can provide various maps and plans that should be utilized by relevant agencies as part of their preparedness and response strategies at national, regional, district, and chiefdom levels.

It is essential that relevant personnel have the skills to comprehend and interpret maps, plans, and GIS files effectively. This capability is critical for informed decision making and effective planning in disaster risk management, ensuring that all stakeholders can leverage geographic data to enhance their preparedness and response efforts.

## 2.2.9. Community-Based Preparedness

Community-Based Preparedness (CBP) is a vital strategy for strengthening resilience and reducing vulnerabilities at the local level in Sierra Leone. Given the country's susceptibility to various disasters, including floods, landslides, and epidemics, it is essential to engage communities in disaster risk management activities. This approach empowers local populations to effectively prepare for, respond to, and recover from disasters, ultimately contributing to national disaster resilience. CBP emphasizes the active involvement of local communities in disaster risk reduction, preparedness, and response efforts. By leveraging local knowledge, resources, and capacities, this strategy enhances resilience and ensures that interventions are tailored to meet the specific needs of each community.

### Objectives of Community-Based Preparedness

1. **Empower Local Communities:** Foster a sense of ownership and responsibility among community members regarding disaster preparedness and response.
2. **Enhance Local Capacity:** Build the skills and knowledge of community members to effectively prepare for, respond to, and recover from disasters.
3. **Promote Inclusivity:** Ensure that all segments of the community, including women, youth, and marginalized groups, are actively engaged in preparedness activities.
4. **Strengthen Local Networks:** Facilitate the establishment of community networks and partnerships that enhance collaboration and resource sharing during disasters.

### Current Approach in Sierra Leone

1. **National Disaster Management Agency (NDMA):** The NDMA is responsible for coordinating disaster preparedness and response efforts. The agency has been working to strengthen Community-Based Disaster Risk Reduction (CBDRR) initiatives by engaging local communities in risk assessments, training, and preparedness planning.
2. **Community-Based Disaster Risk Reduction (CBDRR) Initiatives:** Various NGOs, such as the Sierra Leone Red Cross Society, CRS and YMCA, have implemented CBDRR programs that focus on building local capacities, raising awareness about disaster risks, and developing community action plans.
3. **Integration of Traditional Practices:** Sierra Leone's approach to disaster preparedness recognizes the value of traditional knowledge and practices, which are increasingly being integrated into formal disaster preparedness frameworks.

### Key Strategies for Implementation

1. **Community Training and Education:** Conduct regular training sessions and workshops to educate community members about disaster risks, preparedness measures, and response protocols.
2. **Risk Assessment and Planning:** Involve communities in conducting local risk assessments to identify vulnerabilities and develop tailored disaster preparedness plans.
3. **Establishment of Early Warning Systems:** Collaborate with communities to develop and implement early warning systems that provide timely information about impending disasters.
4. **Resource Mobilization at the Community Level:** Encourage communities to identify and mobilize local resources for disaster preparedness.
5. **Integration of Traditional Knowledge:** Recognize and incorporate traditional knowledge and practices related to disaster preparedness and response.
6. **Monitoring and Evaluation:** Establish mechanisms for monitoring and evaluating the effectiveness of community-based preparedness initiatives.

### Key components of community-based disaster preparedness

1. **Community risk assessment.** The objective of these assessments is to identify and analyze local hazards, vulnerabilities, and capacities. By implementing participatory risk



assessments that involve community members, local knowledge and insights can be leveraged effectively. Tools such as hazard mapping and vulnerability assessments can help visualize risks and prioritize actions. For example, in Freetown, participatory urban risk assessments have been successfully conducted to identify flood and landslide risks. Community members actively participate in mapping hazards, which informed local disaster preparedness initiatives and highlighted the importance of local insights in risk management.

2. **Capacity building and training:** enhancing the skills and knowledge of community members in disaster preparedness and response is essential for effective local management of disasters. Training programs should focus on essential skills such as first aid, search and rescue techniques, early warning systems, and emergency response protocols. The Sierra Leone Red Cross Society has implemented training programs for local communities equipping them with the necessary skills to respond effectively in emergencies. This training has enabled community members to take proactive roles during disasters, reducing reliance on external assistance.
3. **Early warning systems:** these systems provide timely alerts to communities at risk, allowing them to take necessary precautions. Community-based early warning systems should utilize local communication channels such as radio announcements, mobile phones, and community meetings to disseminate alerts. In flood-prone areas, communities have been educated on river and flood safety. Local volunteers have been trained to monitor water levels and disseminate alerts to residents, significantly improving community preparedness and response capabilities.
4. **Community emergency plans:** these plans should be tailored to local needs and involve community members in creating comprehensive strategies that outline evacuation routes, safe shelters, and designated roles and responsibilities during a disaster. For instance, communities living downstream of dams have collaborated to develop emergency plans that detail their response to potential dam failures and flooding. These plans include clear evacuation routes and designate safe zones, ensuring that residents are prepared for emergencies.
5. **Public awareness and education campaigns:** to raise awareness about disaster risks and preparedness measures among community members. Conducting public awareness campaigns, workshops, and educational programs can inform residents about disaster risks and how to prepare effectively. Awareness campaigns in urban areas like Freetown have educated residents about flood risks and preparedness measures including safe evacuation routes and emergency contact information. These campaigns have fostered a culture of preparedness within the community.
6. **Community-based organizations:** supporting the formation and capacity-building of CBOs can empower them to lead disaster preparedness and response activities at the local level. CBOs have been established in various communities across Sierra Leone to coordinate disaster risk management activities. These organisations serve as a vital link between the community and external agencies, facilitating resource mobilization and information sharing.

Successful lessons learned from other countries can also inform Sierra Leone's CBDRP efforts. For example, community-based flood management programmes in Bangladesh have effectively reduced flood risks by involving local communities in planning and decision-making processes. The active participation of women in these programs has been particularly successful in ensuring inclusive and comprehensive preparedness measures.

Similarly, integrating gender considerations into disaster risk reduction efforts in Vietnam has improved the efficiency and effectiveness of disaster response. Gender-sensitive approaches ensure that the specific needs of both women and men are addressed, leading to more resilient communities. Indonesia's community-based disaster risk reduction projects have empowered local communities to take proactive measures in disaster preparedness and response, emphasizing the importance of community ownership in building resilience. By fostering a sense of ownership among community members, Sierra Leone can enhance the effectiveness of its disaster

preparedness strategies.

## 2.2.9. Resource Mobilization and Allocation

Effective resource mobilization and allocation are essential for the successful implementation of the NDPRP in Sierra Leone. The objectives of resource mobilization include ensuring adequate funding for disaster preparedness initiatives, optimizing resource allocation to support vulnerable communities, and enhancing partnerships among government agencies, NGOs, international partners, and the private sector. Key strategies for resource mobilization involve advocating for the inclusion of disaster preparedness funding in government budgets, engaging with donors and international agencies for funding and technical assistance, and promoting public-private partnerships to mobilize resources.

Resource allocation mechanisms should focus on developing a transparent, needs-based framework that prioritizes funding for high-risk areas and vulnerable populations. Establishing monitoring and accountability mechanisms will ensure transparency in resource allocation, while capacity building for local authorities will enhance their ability to manage disaster preparedness resources effectively. By learning from successful community engagement strategies in countries like Bangladesh and the Philippines, integrating traditional knowledge into formal disaster management frameworks, and building partnerships with NGOs and international organizations, Sierra Leone can strengthen its disaster preparedness and response capabilities.

### 7.2.9 Resource Mobilization and Allocation for Disaster Preparedness

Effective resource mobilization and allocation are essential for the successful implementation of the National Disaster Preparedness and Response Plan (NDPRP) in Sierra Leone. This section outlines strategies for securing and allocating the necessary resources to enhance disaster preparedness and response efforts, ensuring that communities are equipped to handle emergencies effectively.

#### Objectives of Resource Mobilization and Allocation

1. **Ensure Adequate Funding:** Secure sufficient financial resources to support disaster preparedness initiatives, response operations, and recovery efforts. This involves advocating for dedicated funding streams that can be accessed quickly during emergencies.
2. **Optimize Resource Allocation:** Allocate resources efficiently and equitably to ensure that the most vulnerable communities receive the support they need. This requires a systematic approach to identify areas of greatest need and prioritize funding accordingly.
3. **Enhance Partnerships:** Foster collaboration between government agencies, non-governmental organizations (NGOs), international partners, and the private sector to mobilize resources for disaster preparedness. Building strong partnerships can lead to shared resources, expertise, and innovative solutions.

#### Key Strategies for Resource Mobilization

1. **Government Budget Allocation:** Advocating for the inclusion of disaster preparedness funding in national and local government budgets is a fundamental strategy. This can be achieved through policy advocacy, awareness campaigns, and engaging decisionmakers to recognize the importance of disaster preparedness as a priority area. For instance, in Japan, the government allocates a significant portion of its budget to disaster preparedness

and recovery, reflecting the country's commitment to minimizing disaster impacts.

2. **Engagement with Donors and International Agencies:** Actively seeking funding and technical assistance from international donors, development partners, and humanitarian organizations is crucial. Successful examples include the collaboration between United Nations Development Programme (UNDP), the World Bank, and the Sierra Leone Government, which has led to increased funding for disaster risk reduction initiatives. Additionally, following the mudslides in Freetown, international donors mobilized substantial resources for rebuilding efforts, highlighting the importance of global partnerships in disaster response.
3. **Public-Private Partnerships:** Encouraging collaboration between the government and the private sector can significantly enhance resource mobilization for disaster preparedness. For instance, companies can contribute through financial support, in-kind donations or expertise. For instance, NDMA should explore possibilities of partnering with private telecommunications companies to provide essential communication services and support for disaster response efforts.
4. **Community Contributions:** Promoting community involvement in resource mobilization by encouraging local fundraising initiatives and volunteer efforts is essential. Encouraging local fundraising initiatives and volunteer efforts can help build a sense of ownership and responsibility within communities. An example of this is the community-led fundraising efforts in Bangladesh, where local groups mobilized resources to support flood preparedness initiatives. The committee established successfully raised funds for constructing embankments to protect against flooding.
5. **Utilization of Technology:** Leveraging technology can enhance resource mobilization efforts. Online crowdfunding platforms and social media campaigns can be effective tools for raising awareness and securing funds. For example, the use of platforms like GoFundMe and Kickstarter has enabled communities worldwide to raise funds quickly for disaster relief efforts.

### **Resource Allocation Mechanisms**

1. **Needs-Based Allocation:** Develop a transparent and needs-based resource allocation framework is vital. This framework should prioritize funding for high-risk areas and vulnerable populations, ensuring that resources are directed where they are most needed. The use of data-driven assessments can inform these decisions, as demonstrated by the World Bank's disaster risk management programs that allocate resources based on vulnerability assessments. In Indonesia, the government utilizes a needs-based approach to allocate resource for disaster risk reduction, focusing on regions most at risk from natural disasters.
2. **Monitoring and Accountability:** Establishing robust mechanisms for monitoring resource allocation and utilization is essential to ensure transparency and accountability. This can include regular audits, public reporting, and community feedback mechanisms. An example of effective monitoring can be seen in Philippines, where the government has implemented a disaster response tracking system that allows stakeholders to track the allocation and use of resources in real-time. Other countries are using 'Open Contracting' initiative to improve transparency in government spending related to disaster response.
3. **Capacity Building for Local Authorities:** Providing training and support to local authorities in resource mobilization and allocation processes is critical. This can involve workshops, mentorship programs, and the development of resource mobilization toolkits. Successful initiatives, such as those implemented by the International Federation of Red Cross and Red Crescent Societies (IFRC), have helped local governments in various

countries to improve their capacity to mobilize resources. In Kenya, local authorities have been trained in disaster risk management, enabling them to better allocate resources and respond to emergencies.

## **Section 3: Response Planning**

### 3. Introduction

For too long, the response phase of emergencies and disasters has been the primary focus of resources and funding among donor governments, disaster professionals, and the general public. However, research, evidence, and the impacts of climate change have shifted this paradigm. Response is increasingly recognized not as a stand-alone phase, but as an integral part of a holistic disaster management process. Government, non-government, and voluntary agencies recognize now emphasize the importance of a comprehensive disaster risk management approach that spans all phases of an emergency.

Emergency response remains critically important, serving as the frontline of operations that include life-saving tasks and activities aimed at minimizing negative impacts on livelihoods and communities. Moreover, strategies and operations during the response phase significantly influence how quickly and effectively communities can transition to the recovery phase.

<b>NDMA Key Point</b>
During the response phase, stakeholders should anticipate recovery and designate a recovery phase officer to facilitate pre-planning.

#### 3.1 Interoperability

Effective emergency response involves several common themes that apply across all stakeholder organizations and responders. To ensure a collaborative approach, all personnel must be familiar with the essential elements of inter-agency collaboration to develop an integrated response.

#### 3.2 Interoperability and Principles

Table 5. Principles of Interoperability

<b>CO-LOCATE</b>
Agencies should be grouped together at various levels (e.g. in EOCs) to facilitate planning and deliver an effective response.
<b>COMMUNICATE</b>
Communication networks and resources must be pre-planned, easily understood, and standardized among responders.
<b>COORDINATE</b>
Coordination involves designing a lead agency (if not the NDMA), and identifying available resources, capabilities and priorities.
<b>JOINTLY UNDERSTAND RISK</b>
Stakeholders should collaborate to understand risk by sharing information regarding the likelihood and potential impacts of threats and hazards, allowing for the establishment of effective control measures.
<b>SHARED SITUATIONAL AWARENESS</b>
It is crucial to maintain a common understanding of the situation among all stakeholders to ensure a unified and effective response.

### 3.3. Joint Decision-Making Model for Incident Management

The Joint Decision Making Model (JDMM) provides a framework for incident managers to navigate the complexities of multi-agency responses effectively. By fostering collaboration and shared understanding, this model enhances the capability of stakeholders to respond to emergencies in a coordinated manner.

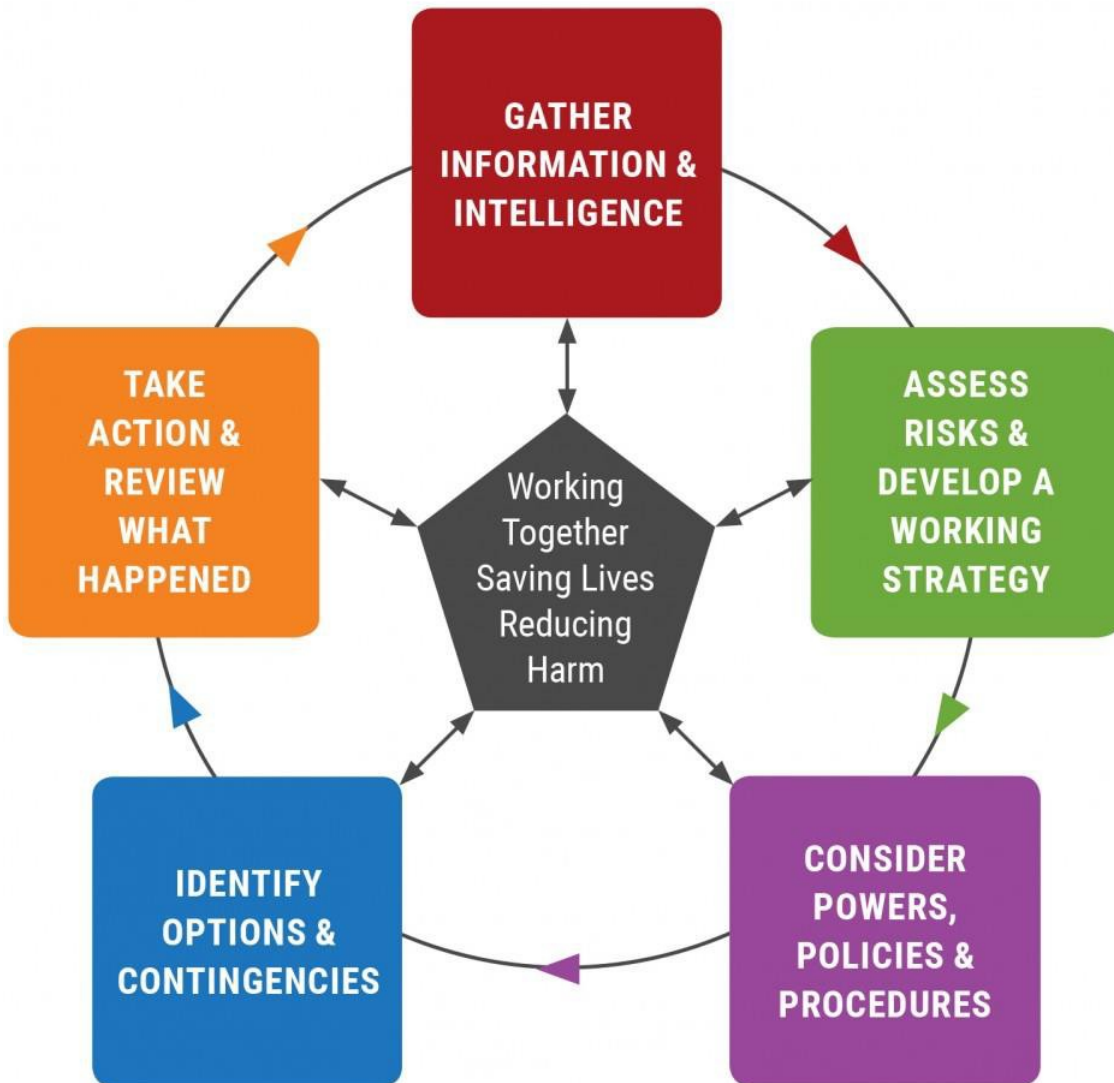


Figure 12. Joint Decision Model.

One of the primary challenges facing commanders from different responder agencies is how to consolidate available information, reconcile potentially differing priorities, and make effective decisions collaboratively.

The Joint Decision Model (Figure 12) was developed to address this issue. Responder agencies can utilize various supporting processes and sources to provide incident managers with relevant information, including any planned intentions. This collaborative approach supports joint decision making.

#### Key steps in the Joint Decision-Making Model

1. Gather and assess information: the first priority is to collect and evaluate information and intelligence. Responders should work together to build shared situational awareness, recognizing that this requires continuous effort, as both the situation and the responders' understanding will evolve over time. Understanding the risks is crucial for establishing shared situational awareness, as it enables responders to answer the three fundamental questions: 'What?', and 'What might happen?'.
2. Establish shared situational awareness: once shared situational awareness is established, the preferred 'end state' should be agreed upon as a central component of the joint working strategy. This strategy should outline what the team aims to achieve and the methods by which they will accomplish it.
3. Agreed joint strategy: if the GoSL National Strategic Situation Group is convened, they will agree upon and share the joint strategy for the multi-agency response. The strategic command teams from each MDAs should then review and amend their single-agency strategies to ensure consistency with the joint strategy and support the achievement of the jointly defined and state or overarching aim.
4. Assess capabilities and constraints: deciding how all agencies will work towards the preferred end state reflects the available capabilities, powers, policies, and procedures (means), as well as the arising options, constraints, and contingencies (ways). The relationship between ways and means is critical – some options may not be viable due to implementation challenges, while others may be technically and logistically feasible but illegal or ethically indefensible.
5. Decision-making process: the Joint Decision-Making Model assists incident managers in exploring these considerations and outlines the various stages of reaching joint decisions. A guiding principle of the model is that decision-makers should use their professional judgment and experience to determine any additional questions to ask and considerations to consider, ensuring they reach a jointly agreed decision.
6. Adaptability in implementation: incident managers should feel empowered to interpret the Joint Decision Model based on the specific circumstances they face at any given time. Achieving desired outcomes should always take precedence over strict adherence to the stepped process outlined in the model, particularly in time-sensitive situations.

A detailed and well-practiced understanding of the Joint Decision-Making Model will enable commanders to think clearly and systematically under stress. The model can be applied to both acute and chronic emergencies and disasters.



### 3.3 Sierra Leone Pillar Structure

The existing pillar structure recognized by the GoSL facilitates instant interoperability through its established coordination mechanisms. Key principles include co-location, communication, and coordination. Upon the activation of level two or level three incidents, all pillar leads should be mobilized as standard practice. In conjunction with this, a Sierra Leone Incident Management System (SLIMS) must be implemented at the necessary levels.

The purpose of SLIMS is to create a more procedurally unified approach to all aspects of incident management, complementing the existing pillar structure. **While the NDMA has partially adopted elements of the UK Incident Command System, it has become clear that a more Sierra Leone specific model is required, incorporating aspects of global best practices.**

### 3.4 SLIMS during the Emergency Response

The SLIMS plays a crucial role during emergency response operations. SLIMS provides a structured approach to managing incidents, ensuring that all responders operate with a common framework. Key components of SLIMS during an emergency response include:

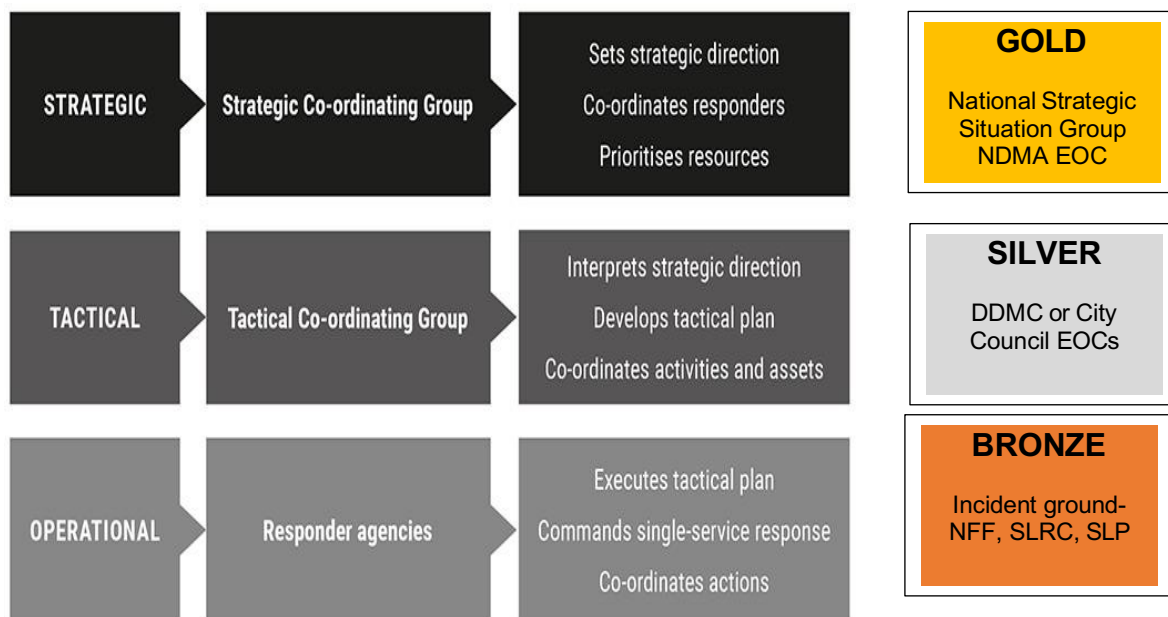


Figure 19. Sierra Leone Incident Management System.

#### Strategic Incident Management- Gold

The senior official from each agency holds overall authority on behalf of their agency, during an incident. They are responsible for managing their agency's resources and formulating a comprehensive agency strategy for the incident. Each strategic commander has the option to delegate implementation decisions to their respective tactical level commanders.

At the earliest opportunity, the Strategic Situation Group will determine or confirm a specific response strategy and document a strategy statement. The role and responsibilities of the Strategic Coordinating Group are detailed in Appendix E.

To minimize the negative consequences of the developing incident as much as reasonably possible, the structures and responsibilities outlined above must be activated and put into place as quickly as feasible. It is acknowledged that this process may take some time; therefore, first responders and commanders at the scene must identify and implement initial tactics while also communicating the need for additional support.

**Note- it is not always necessary to implement Gold Command if Silver Command suffices. The complexity, duration, and scale of the incident will determine the appropriate level of command.**

### **Tactical Incident Management- Silver**

In the initial stages of an incident, first responders are responsible for tactical decision-making. Once the scale and nature of the incident are understood and the level of response is increased, agencies will appoint officers to act as tactical level incident managers for their organizations. Other responder agencies may also designate individuals to serve as tactical managers or coordinators on behalf of their organizations as needed.

Effective communication and coordination between commanders are critical. Tactical and DDMC incident managers should convene at a mutually agreed location to maintain effective joint command of the operation. This includes collaborating with other services and ensuring access to communications systems. Once the Tactical Coordinating Group is formed, its members will either attend in person or nominate a liaison officer to participate. Essentially, this group mirrors the Strategic Coordinating Group.

If circumstances hinder co-location of commanders at any level, robust communication arrangements must be established using interoperable communication systems. The tactical commander is likely to be in place before the strategic commander and will often be the first senior manager to take control of the incident. During the early stages, the tactical commander will likely set priorities before the strategic commander has established a formal strategy.

The roles and responsibilities of tactical commanders can be found in Appendix F.

### **Operational Incident Manager- Bronze**

Operational commanders will work alongside colleagues from other responder agencies, typically at or near the scene of the incident. They will control and deploy the resources of their respective service or agencies within a designated functional or geographical area and will implement the tactical plan as directed by the tactical (Silver) incident manager.

Clear communications must be established and maintained to ensure that all individuals can work together in a coordinated manner. Detailed operational requirements for Bronze Command can be found in Appendix G.

By adhering to these structured command levels – Gold, Silver, and Bronze – agencies can ensure an organized and effective response to incidents, facilitating collaboration and coordination among all involved parties.

### 3.5 Civil-Military Coordination

The Civil-Military Coordination (CMCoord) is essential for fostering dialogue and interaction between civilian and military actors during humanitarian emergencies. This coordination is necessary to protect and promote humanitarian principles, avoid competition, minimize inconsistencies, and pursue common goals. CMCoord enhances the understanding of humanitarian action and guides political and military actors on how best to support these efforts. It also helps develop specific policies based on internationally agreed guidelines and establishes humanitarian civil- military coordination structures.

#### 3.5.1 Military Aid to the Civil Authority (MACA) Sierra Leone

Military operations in Sierra Leone that support other agencies or governmental departments fall under the overarching title of MACA. MACA is subdivided into three categories:

1. Military Aid to other Government Departments (MAGD)
2. Military Aid to the Civil Power (MACP)
3. Military Aid to the Civil Community (MACC).

These operations are distinct from one another in legal, political, and military terms.

**Military Aid to the Civil Community (MACC)** involves the provision of unarmed military assistance, categorized as follows:

Category A. Emergency assistance to civil authorities during natural disasters or major emergencies.

Category B. Routine assistance for special projects or events of significant value to the civil community.

Category C. Attachment of volunteers to appropriate organizations.

The responsibility for managing civil emergencies and projects benefiting the civil community lies with civil authorities. Requests for military support should come from governmental departments to the NSCCG for consideration, which may then task the Ministry of Defence (MOD).

Key principles to consider include:

- Armed Forces do not maintain standing forces for MACC tasks.
- Assistance is provided on an availability basis, the Armed Forces cannot guarantee assistance for specific emergencies.
- MACC tasks must have a defined timeline.
- The use of the military during a sudden major emergency is often viewed positively.

Category A (Emergency Assistance) can be invoked under exceptional circumstances without recourse to the NSC/ NSCCG for authorization, but only if immediate action is required to protect life.

When a civil emergency arises due to a disaster or malicious threat, the responsibility for immediate response lies with emergency services. The NSC/ NSCCG may request military assistance if civil resources are deemed inadequate or unavailable within a timeline that would assist in saving lives or alleviating distress. Under the National Security and Central

Intelligence Act (NaSCIA) 2002, support can exceptionally be provided by individual military units without higher authority, provided that the local military commander has the capacity to respond urgently.

### 3.6 Coordinating Response at National Level

At the national level, the Central Government has assigned specific ministries with nodal responsibilities for coordinating disaster-specific responses. As outlined in Section One, the NDMA will coordinate response efforts in the event of any threatening emergency situation or disaster. The government will activate disaster management committees and ensure coordination with the NDMA. The NDMA, which will provide the necessary technical support to strengthen the response system.

It is essential for first responders and relief teams to reach affected areas as quickly as possible. Delays can often occur due to logistical constraints, the nature of the hazard, and, regrettably, inadequate preparedness. In many cases, a delay of six to twelve hours can be unacceptable and detrimental.

Implementing the NDMA's SLIMS guidelines at the district level will help standardize operations and clarify the roles of various departments and agencies involved in disaster response. District administrations must identify sites for establishing various facilities outlined in the SLIMS guidelines, such as Incident Command Posts, relief camps, staging areas, and helipads, to provide essential services during the response.

Given the multi-faceted, time-sensitive, and unpredictable nature of disaster response operations, rapid assessment, close coordination among several departments, quick decision-making, prompt deployment of human resources and machinery, and continuous monitoring are essential. To prevent delays and eliminate ambiguities regarding the chain of command, the NDMA and DDMC must clearly outline the response organizations and incident management structure as per SLIMS. These plans should specify personnel assigned various responsibilities at different levels of administration, along with a clear framework for accountability.

### 3.7 International Assistance

In the event of a disaster that necessitates external support or specialist resources, the GoSL may request international assistance. This process will involve engagement between the Office of the President, resident ambassadors, and the UN Resident Coordinator's Office, amongst others.

The GoSL is responsible for ensuring that plans are in place to receive foreign assistance, drawing on lessons learned from the Ebola response. These plans should cover travel logistics, internal transport, visa processing, and operational contexts to facilitate a smooth transition for foreign representatives. It is important that these plans are rehearsed and established as standard operating procedures.

### 3.8 Emergency Response Functions and Responsibilities

Emergency response functions are generally common across all types of disasters, with specific ministries, departments, or agencies (MDAs) designated to provide that response. Given the likelihood of multiple hazards and secondary impacts following a major event, a multi-hazard approach is essential. Therefore, all response activities are summarized in a unified responsibility framework that encompasses an all-hazards approach. This framework specifies the major themes of response, and all responsible agencies should adhere to the SLIMS guidelines to ensure accountability and a clear division of responsibilities.

Certain agencies of the Government of Sierra Leone will play lead roles, while others will provide support. The NDMA will serve as the lead agency at the national level for coordinating response efforts, while the DDMC will take the lead at the district level, following the incident management system. Various central ministries, departments, and district governments must prepare their own hazard-specific response plans in accordance with NDMA guidelines and the National Disaster Management Agency Act. They must ensure preparedness for response, conduct regular mock drills, and periodically test readiness, with ministries and departments reporting their status to the NDMA. Agencies responsible for disaster response should develop individual scenario-based plans and Standard Operating Procedures (SOPs) that account for multiple hazards and envision various scenarios ranging from least to the worst-case outcomes.

The major tasks of disaster response, as outlined in the responsibility framework, are listed alphabetically for easier reference:

- 1) Communications
- 2) Cultural Heritage Sites, their Precincts, and Museums — Protection & Preservation
- 3) Data Collection and Management
- 4) Disposal of animal carcasses
- 5) Drinking Water, Dewatering Pumps, and Sanitation Facilities
- 6) Early Warning, Mapping, Satellite inputs, and Information Dissemination
- 7) Evacuation of people and animals
- 8) Fatality management (temporary morgues)
- 9) Firefighting
- 10) Flood Response
- 11) Fodder for livestock
- 12) Food and Essential Supplies
- 13) Fuel
- 14) Housing and Temporary Shelters
- 15) Incident Management
- 16) Media Relations
- 17) Medical Care
- 18) Power Restoration
- 19) Public Health
- 20) Rehabilitation and Ensuring Safety of Livestock and other Animals, including Veterinary Care
- 21) Relief Employment
- 22) Relief Logistics and Supply Chain Management

- 23) Search and Rescue
- 24) Transportation

By following these guidelines and frameworks, the country can enhance its disaster response capabilities and ensure a more coordinated and effective approach to managing emergencies.

#	Emergency Response Function	National Level Responsibilities	District/ Local Level Responsibilities
1	<b>Communications</b>	<ul style="list-style-type: none"> <li>• Implement and coordinate SLIMS and interoperability via effective communications- channels and equipment</li> <li>• Detailed plans for fail-safe communication with all the early warning agencies and Control Rooms (National/ District) for getting accurate information at regular intervals</li> <li>• Restoration of emergency communication disaster affected areas</li> <li>• Emergency response teams to be in place with detailed technical plans to restore communication as soon as possible/ after the occurrence of a disaster</li> <li>• Provide a dedicated radio frequency for disaster communications- and alternatives if required.</li> <li>• Mobile communication units fitted with V-SAT terminals, VHF repeaters, reserve WT VHF Sets, portable mobile towers.</li> <li>• Contingency plans including pre-disaster contracts with suppliers – government and private– for easy availability of resources at the time of emergency</li> <li>• Operational plan for establishing temporary telecommunication facilities in the affected areas jointly with the National government</li> <li>• Secure, fail-safe communication network among National, District and other channels/ EOCs for exchanging reliable and authentic information about the affected areas, and resource mobilisation</li> <li>• Prepare, update and maintain a National list of technical experts (engineers, comms. experts) who could be contacted and deployed at the site of emergency</li> <li>• Spares and replacements of essential equipment is made ready (batteries, chargers, boards, messaging facilities).</li> </ul>	<ul style="list-style-type: none"> <li>• Comply with all operational requirements of interoperability and SLIMS via effective communications- channels and equipment</li> <li>• Fail-safe communication plan is prepared with all early warning agencies</li> <li>• Logistics section of the District level incident management team coordinates with central agencies to provide effective communication support to the field level for response.</li> <li>• National and district EOCs are equipped with satellite phones/ VHF/ HF as a backup to the landline</li> <li>• All communication equipment, especially the satellite phones are in good working condition 24x7 on all days through regular testing</li> <li>• Plans for communication are prepared for smooth coordination with the field level incident management teams</li> <li>• Establish protocols and responsibilities for coordinating with central agencies and various service providers</li> <li>• Prepare a list of technical experts (engineers, comms. experts) who could be contacted and deployed at the site of emergency</li> <li>• Spares and replacements of essential equipment is made ready (batteries, chargers, boards, messaging facilities).</li> </ul>

#	Emergency Response Function	National Level Responsibilities	District/ Local Level Responsibilities
2	<b>Cultural Heritage Sites</b>	<ul style="list-style-type: none"> <li>• Facilitate the development of comprehensive plans for emergency response including evacuation, immediate response protocols and procedures, etc.</li> <li>• Mobilizing specialized support.</li> <li>• Assist in cataloguing, photographing and documenting damages.</li> </ul>	<ul style="list-style-type: none"> <li>• Safety of the people who engage with the Cultural Heritage sites.</li> <li>• Comprehensive response including evacuation, immediate response protocols and procedures, considering the specific challenges presented by the site.</li> <li>• Creating an emergency team that includes the management, administrators and staff of the site or precinct as well as representatives from local stakeholders.</li> <li>• Coordination of evacuation routes and spaces that may act as temporary refuge areas and displaying these routes and spaces in a clear manner as signage, maps, printed literature, for wide distribution.</li> <li>• Identification of various kinds of emergency supplies and equipment and their storage for ease of access should be undertaken.</li> </ul>
3	<b>Data Collection and Management</b>	<ul style="list-style-type: none"> <li>• Maintain proper records of all the essential services needed for rescue, response and relief phases, both by the National Government and by the MDAs.</li> <li>• Establish a sound reporting mechanism to meet the information needs of National Government about the disaster response.</li> </ul>	<ul style="list-style-type: none"> <li>• Representative of NDMA/ DDMC works with the planning section at district level for response plan and dissemination of information.</li> <li>• Creation of a specific cell at the District level (as part of D/EOC) and place dedicated resources to collect/ update data on all essential services which will help during the response phase for effective reporting and compilation.</li> </ul>



#	Emergency Response Function	National Level Responsibilities	District/ Local Level Responsibilities
4	<b>Disposal of Animal Carcasses</b>	<ul style="list-style-type: none"> <li>• Provide clarity when required in following the national guidelines and international norms.</li> <li>• Facilitate the support from various national laboratories and institutions relevant for recording evidence and compiling data on the dead such as forensic, genetic studies.</li> <li>• If necessary, assist the district government to contain any public health challenges beyond the capabilities of the district administration.</li> </ul>	<ul style="list-style-type: none"> <li>• Adopt standard operating procedures as per National guidelines implement properly</li> <li>• Assist the staff in carcass removal/ disposal at pre-identified sites to ensure that no other health hazard is created both for the staff as well as the public</li> <li>• Use of recommended safety kits and personal protection by the staff deployed in carcass disposal so that they are not infected</li> <li>• Take measures for dispersal of financial relief as per norms</li> </ul>
5	<b>Drinking Water/ Dewatering Pumps/ Sanitation Facilities (WASH)</b>	<ul style="list-style-type: none"> <li>• Promote strict compliance with minimum standards of relief</li> <li>• Assist the respective district (s) in providing disaster-affected areas with clean drinking water and to prevent the spread of water borne diseases.</li> <li>• Assist affected district to address the public health needs to prevent and mitigate a sudden outbreak of epidemic, water and food contamination as well as other public health- related problems in the aftermath of a disaster.</li> <li>• Arrangements with vehicle manufacturers for vehicle mounted/ towed treatment systems with integrated power source and pouch facility with a condition that system should be in place usually within 6 hours.</li> <li>• Easy availability of chlorine tablets to the Government on demand.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure strict compliance with minimum standards of relief</li> <li>• Provide disaster-affected areas with clean drinking water and to prevent the spread of water borne diseases</li> <li>• Provide emergency water supplies when there is scarcity of potable water</li> <li>• Respond to the public health needs to prevent and mitigate a sudden outbreak of epidemic, water and food contamination as well as other public health-related problems in the aftermath of a disaster.</li> <li>• Relevant MDA works with the logistics section of the district level response teams to provide effective services to the field level responders</li> <li>• Necessary arrangements are made for supplying drinking water through tankers</li> <li>• Necessary arrangements are made for supplying chlorine tablets</li> <li>• Arrangements with vehicle manufacturers for vehicle mounted RO Systems with integrated power source and pouch facility with a condition that system should be in place usually within 6 hours</li> </ul>

		<ul style="list-style-type: none"> <li>• Arrangements with companies for providing vehicle mounted heavy duty dewatering pumps with a condition to make them available usually within 12 hours of request.</li> <li>• Facilitate the quick availability of hygienic portable toilets through pre-disaster agreements/ contracts with suppliers.</li> <li>• Facilitate the quick availability of packaged drinking water through pre-contracts with suppliers</li> <li>• As per request, assist in organizing emergency water supplies when there is scarcity of potable water.</li> </ul>	<ul style="list-style-type: none"> <li>• Arrangements with companies for providing vehicle mounted heavy duty dewatering pumps with a condition to make them available usually within 6 hours of request</li> <li>• Availability of hygienic portable toilets and bleaching powder through pre-disaster agreements/ contracts with suppliers.</li> </ul>
6	<b>Early Warning &amp; Alerting</b>	<ul style="list-style-type: none"> <li>• Issue scientific yet end-user friendly forecasts, alerts, warnings as early as possible</li> <li>• Provide early warnings (where possible) to reduce loss of life and property.</li> <li>• Disseminating warnings and information to all MDAs and stakeholder organisations</li> <li>• Use of satellite imageries and other scientific methods for risk assessment and forecasting.</li> </ul>	<ul style="list-style-type: none"> <li>• To disseminate early warning signals to the district administration, local authorities, and the public at large in the areas likely to be affected by a disaster so as to reduce loss of life and property.</li> <li>• Dissemination of warnings and information as frequently as possible.</li> <li>• Ensure appropriate compilation/ analysis of received data.</li> <li>• Use of satellite imageries and other scientific methods for risk assessment and forecasting.</li> </ul>
7	<b>Evacuation of People and Animals</b>	<ul style="list-style-type: none"> <li>• Main aim of GoSL is to support districts with evacuation coordination and execution.</li> <li>• National resources should be readied and mobilised as required.</li> <li>• Evacuation type may require a national coordination eg. fishermen at sea, jungle missing persons.</li> <li>• Transport and logistical mechanisms must be placed on pre-alert.</li> </ul>	<ul style="list-style-type: none"> <li>• Quick assessment of evacuation needs such as the number of people and animals to be evacuated and mode of evacuation</li> <li>• Special attention to evacuation of vulnerable populations.</li> <li>• Mobilize transport and resources for evacuation.</li> <li>• Identify and prepare sites for temporary relocation of affected people and animals.</li> <li>• Identify requirements of resources for evacuation such as helicopters, aircraft, boats and ships/ ferries to be provided to the affected district.</li> <li>• Request for national resources, if needed.</li> <li>• Coordinate with central agencies to mobilise required resources.</li> <li>• Monitor the situation.</li> <li>• Provide national updates.</li> <li>• Designate/ deploy resources of RSLAF as necessary.</li> </ul>

8	<b>Fatality Management</b>	<ul style="list-style-type: none"> <li>• Provide guidance and support depending on the type of disaster and challenges faced by the government.</li> <li>• Provide clarity when required in following the recommended international practices as prescribed in relevant Ministry/ NDMA guidelines and international norms such as those of the IFRC/ RC.</li> <li>• Facilitate the support from various national laboratories and institutions relevant for recording evidence and compiling data on the deceased such as forensic, DNA studies, personal effects.</li> <li>• If necessary, assist the district government to contain any public health challenges beyond the capabilities of the district administration.</li> </ul>	<ul style="list-style-type: none"> <li>• Deploy trained resources for detection and recovery of the survivors and the dead as early as possible after the event.</li> <li>• Establish a fatality management group at the EOC.</li> <li>• The recovery team will use appropriate personal protective kit (PPE) and follow adequate precautions.</li> <li>• Follow the protocols for the identification of the dead, recording evidence, transport and burial (i.e., disposal as per norms).</li> <li>• Follow protocols to maintain the dignity of the deceased.</li> <li>• If required, establish temporary mortuaries with adequate facilities where possible.</li> <li>• In special cases, appropriate arrangements and relevant protocol must be followed for victims in certain types of disaster keeping in view the safety of survivors and emergency workers.</li> <li>• Inform the affected community by giving wide publicity to the procedure for the management of the deceased.</li> <li>• Take urgent steps for release of ex-gratia payment.</li> </ul>
			<ul style="list-style-type: none"> <li>• Ensure to the extent possible ethical management of the dead.</li> </ul>
9	<b>Firefighting</b>	<ul style="list-style-type: none"> <li>• Senior NFF officer (s) mobilize to SLIMS EOC</li> <li>• NFF forecast resources from outside jurisdiction and consider use of other agencies and private sector</li> <li>• SL Met regularly updating weather conditions</li> <li>• Consideration for evacuation and temporary shelter</li> <li>• Rural fires- shelter for livestock and supplies where possible</li> <li>• Urban fires- consider vast amount of people</li> <li>• Water sources and replenishment for NFF</li> <li>• Activate SLIMS with necessary pillar leads</li> <li>• Ensure of clear communication channels</li> <li>• Selective use of volunteers if safety permits</li> </ul>	<ul style="list-style-type: none"> <li>• Act on early warning information and ensure all affected communities and sectors are alerted with relevant details.</li> <li>• Anticipate early need for additional resources</li> <li>• Engage with district SLIMS and silver/ bronze commanders</li> <li>• Ensure contingencies are in place for evacuation and safe shelter.</li> <li>• Continue reinforcing alerts through local channels- radio, loudspeakers,</li> <li>• Ensure of clear communication channels</li> <li>• Selective use of volunteers if safety permits</li> </ul>

#	Emergency Response Function	National Level Responsibilities	District/ Local Level Responsibilities
10	<b>Flood Response</b>	<ul style="list-style-type: none"> <li>• Early warning should facilitate pre-planning of response resources</li> <li>• Implement national flood response plan</li> <li>• SLMet and NWRA regularly update forecasting, river levels and provide the necessary alerts and notifications</li> <li>• Relevant agencies to ensure information is disseminated to affected locales</li> <li>• Response agencies pre-deployed</li> <li>• Machinery and necessary resources stood-up.</li> <li>• Stand up and implement necessary SLIMS requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Act on early warning information and ensure all affected communities and sectors are alerted with relevant details.</li> <li>• Pre-plan as much as possible with flood defences, evacuation and livelihood protection.</li> <li>• Ensure contingencies are in place for evacuation and safe shelter.</li> <li>• Continue reinforcing alerts through local channels- radio, loudspeakers,</li> <li>• Local SLMet and NWRA officials to collaborate with DDMO</li> <li>• SLRCS and NFF emergency responders pre-positioned to assist as required.</li> </ul>
11	<b>Fodder for Livestock in Disaster Areas</b>	<ul style="list-style-type: none"> <li>• When required, mobilize fodder and cattle feed to meet shortages, as in drought/ flood or scarcity conditions.</li> <li>• Facilitate transport of fodder from storage facilities or distant areas to the scarcity-hit areas.</li> <li>• Enlist organisations and private agencies for providing fodder and other support.</li> </ul>	<ul style="list-style-type: none"> <li>• Mobilize fodder and cattle feed to meet shortages, as in drought or scarcity conditions.</li> <li>• Transport fodder from storage facilities or collection centres to the scarcity-hit areas.</li> <li>• Organize fodder resource and mobilisation centres.</li> <li>• Organize collection centres for fodder and cattle feed.</li> <li>• Enlist PSUs and private agencies for providing fodder and other support.</li> </ul>

12	<b>Food and Essential Supplies</b>	<p>Facilitate the following:</p> <ul style="list-style-type: none"> <li>• Mobilise the availability of adequate and appropriate food supplies to the disaster-affected areas food grains, ready-to-eat/ pre-cooked food/ meals.</li> <li>• Transport with essential supplies at strategic location MOU with suppliers to provide required quantities of family packs of essential food provisions.</li> <li>• Supply of provisions to meet the needs of infants/ small children.</li> <li>• Counselling for lactating mothers</li> <li>• Prepare storage facilities to supply required food grains as per requirement of disaster affected areas.</li> </ul>	<ul style="list-style-type: none"> <li>• MDAs/ NGOs/ CSOs work with the logistic section of the district level incident response team to provide effective services to the field level response teams for response.</li> <li>• Action pre-planned agreements/ MoUs with suppliers to provide food grains ready-to-eat/ pre-cooked food/ meals, family packs of essential food provisions.</li> <li>• Agreements/ MoUs with organisations, trusts, and firms for setting up community kitchens in the affected areas.</li> <li>• Depending upon the requirement, coordinate with the relevant Ministry to make sure supplies reach the site on time.</li> <li>• Deploy a dedicated team at the local level to receive the supplies, maintain log (manual or computerized), and distribute them at required locations.</li> <li>• Ensure food storage facilities have sufficient stocks and are located in relatively risk-free locations.</li> <li>• Supply of provisions to meet the needs of infants/ small children.</li> <li>• Counselling for lactating mothers.</li> </ul>
13	<b>Fuel</b>	<ul style="list-style-type: none"> <li>• Petrol pumps are functional and adequate petrol, gas, oil and diesel are available to Government for relief, rescue and general public</li> <li>• Adequate supply of petrol, diesel, kerosene and LPG in the affected areas in close coordination with the district for general public as well as emergency responders/ equipment.</li> <li>• Rapid mobilization of fuel in hilly areas to avoid delays caused by complex supply chain to such areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Logistics section of the District level incident management team to coordinate with the relevant departments/ agencies to provide effective services to the field level teams for effective and efficient response.</li> <li>• Assess and make the requirement of fuel clear with the relevant Ministry and coordinate the delivery of fuel through local arrangements.</li> <li>• Ensure sufficient availability of tankers/ other vehicles for local transportation through the relevant department.</li> <li>• Establish mechanism for stocking the fuel at strategic locations with relevant agencies.</li> </ul>
14	<b>Housing and Temporary Shelters</b>	<ul style="list-style-type: none"> <li>• Ensure strict compliance with minimum standards of relief.</li> <li>• Assist the respective District government in the task of providing temporary, safe, hygienic and secure living spaces to meet the needs of people in disaster affected areas.</li> <li>• Providing shelters/ tents to the affected population.</li> <li>• Setting up of relief camps and catering to the needs of the responders.</li> <li>• Prior and long-term tie-up with prefab shelter manufacturers/ suppliers, and tent manufacturers to provide shelters at the site usually within 24 hours of placement of orders.</li> <li>• Establish regional logistical facilities that are well-coordinated.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure strict compliance with minimum standards of relief.</li> <li>• Identify shelter suppliers for supply of tents/ shelters up to the village level and have MoUs for supply at short notice (usually less than 24 hours) as per requirement.</li> <li>• Mobilize stockpile tents, tarpaulins and temporary shelter material in regional warehouses/ stores/ EOCs</li> <li>• Coordinate with the relevant Ministry to make sure tents/ shelters reach the site as soon as possible.</li> <li>• Deploy a dedicated team at the local level to receive the tents/ shelters</li> <li>• Maintain logs (manual or computerized) of all material movements and details of distribution to required locations.</li> </ul>

		<ul style="list-style-type: none"> <li>with the corresponding DDMC regional unit to maintain stocks of temporary shelters, tent and non-food items (NFI).</li> </ul>	
15	<p><b>Livestock and Other Animals: Veterinary Care, Rehabilitation and Ensuring Safety</b></p>	<ul style="list-style-type: none"> <li>Ensure strict compliance with minimum standards of relief.</li> <li>Assist the respective District government in the task of providing temporary, safe, hygienic and secure living spaces to meet the needs of people in disaster affected areas.</li> <li>Providing shelters/ tents to the affected population.</li> <li>Setting up of relief camps and catering to the needs of the responders.</li> <li>Prior and long-term tie-up with prefab shelter manufacturers/ suppliers, and tent manufacturers to provide shelters at the site usually within 24 hours of placement of orders.</li> <li>Establish regional logistical facilities that are well-coordinated with the corresponding DDMC regional unit to maintain stocks of temporary shelters, tent and non-food items (NFI).</li> </ul>	<ul style="list-style-type: none"> <li>Ensure strict compliance with minimum standards of relief.</li> <li>Identify shelter suppliers for supply of tents/ shelters up to the village level and have MoUs for supply at short notice (usually less than 24 hours) as per requirement.</li> <li>Mobilise stockpile tents, tarpaulins and temporary shelter material in regional warehouses/ stores/ EOCs</li> <li>Coordinate with the relevant Ministry to make sure tents/ shelters reach the site as soon as possible.</li> <li>Deploy a dedicated team at the local level to receive the tents/ shelters</li> <li>Maintain logs (manual or computerized) of all material movements and details of distribution to required locations.</li> </ul>

#	Emergency Response Function	National Level Responsibilities	District/ Local Level Responsibilities
16	<b>Media Relations</b>	<ul style="list-style-type: none"> <li>• Collect, process and disseminate information about an actual or potential disaster situation to all stakeholders so as to facilitate response and relief operations; update information on disaster and disaster victims; maintain contacts with mass media; inform public regarding the impact of disaster and the measures taken for the welfare of the affected people.</li> <li>• Ethical guidelines for disaster coverage by media as per accepted global standards respecting dignity and privacy of the affected communities and individuals and work with media to adopt the guidelines through self-regulation as well as oversight by relevant regulatory institutions.</li> <li>• Mechanisms for broadcasting warnings, do's and don'ts etc. to media and public before (if applicable), during and after the disasters.</li> <li>• Proper schedule for media daily depending on the severity of the disaster) and designate a nodal officer for interacting with media on behalf of the Government.</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Information works with the incident management staff to provide effective services and timely, regular and accurate information.</li> <li>• Ethical guidelines for coverage of disaster are prepared and shared with all media agencies</li> <li>• Plan is actioned for providing/ broadcasting warnings (do's and don'ts) to media and ensure its dissemination.</li> </ul>
17	<b>Medical Care</b>	<ul style="list-style-type: none"> <li>• Assess medical emergency needs (if national assistance is required).</li> <li>• Medical assistance to the affected district in response to its request for post-disaster emergency medical care.</li> <li>• Mobilise Field Hospitals similar to the that have trauma-care for the disaster-affected and serve as a temporary substitute for the collapsed local general medical and surgical facilities in the disaster zone.</li> <li>• Gradual improvement of the field hospital to conform to global standards</li> </ul>	<ul style="list-style-type: none"> <li>• Assess medical emergency needs in coordination with central agencies as per situation.</li> <li>• NACSA works with the logistic section of the district level to provide effective services (Medical Unit) to the field level for response.</li> <li>• District wise repository of hospitals (both Government and Private), availability of beds, doctors, paramedics and other trained staff available along with other infrastructure details and update it on a regular basis.</li> </ul>

		<ul style="list-style-type: none"> <li>• Mobile medical care units with operating theatre facility, power sources, dedicated trained staff of doctors, and paramedics who could be immediately summoned at the time of emergency.</li> <li>• Mobile medical support units stocked with medicines usually needed such as those for diabetics, heart problems, common ailments, elderly as well as provisions such as: bleaching powder, chlorine tablets; nutritional supplements catering to specialized groups such as lactating mothers, elders, and children below 6 years of age.</li> <li>• Timely technical support to the district governments for restoration of damaged hospitals as well as infrastructure.</li> <li>• Develop specialized facilities to handle chemical, biological, radiological and nuclear emergencies.</li> <li>• Strengthening of emergency departments in all hospitals under the national administration.</li> <li>• Mobilise Psycho-Social Support and Mental Health Services (PSSMHS) professionals, paraprofessionals and trained community level workers.</li> <li>• Assist district government in providing PSSMHS.</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate with suppliers for easy availability of common medicines during the emergency situations.</li> <li>• Hygienic conditions are prevalent at all times in various facilities established as well as hospitals to curb the spread of diseases.</li> <li>• Establishment of sound protocols for coordination between district's health dept. and the central agencies.</li> <li>• Ensure strict compliance with minimum standards of relief</li> <li>• Develop specialized facilities to handle chemical, biological, radiological and nuclear emergencies.</li> <li>• Deploy PSSMHS professionals, para- professionals and trained community level workers.</li> <li>• Identify those requiring immediate PSSMHS and organise PSSMHS services.</li> </ul>
<b>18</b>	<b>Power</b>	<ul style="list-style-type: none"> <li>• Assistance to the respective district government in repairing power infrastructure and restoring power supply in the disaster-affected areas, help power companies in establishing emergency power supply.</li> <li>• Arrangements of alternate sources of power such as generator sets, solar lanterns, portable tower lights, until resumption of normal power supply.</li> <li>• Arrangements with suppliers for emergency supplies usually within 24 hours of placement of order.</li> <li>• Technical support to the district for restoration of power supply as well as infrastructure on request.</li> </ul>	<ul style="list-style-type: none"> <li>• Electricity Board and Power Distribution Companies work with the logistical section of the district level to provide effective services to the field level for assisting response.</li> <li>• Mobile power supply units or other arrangements with power generation companies for quick deployment at the site during emergency.</li> </ul>



#	Emergency Response Function	National Level Responsibilities	District/ Local Level Responsibilities
19	<b>Public Health</b>	<ul style="list-style-type: none"> <li>• Assess public health (if national assistance is required).</li> <li>• Helping to implement public health incident management.</li> <li>• Respond to biological emergencies</li> <li>• Operating epidemiological surveillance systems.</li> <li>• Providing laboratory support.</li> <li>• Managing information systems</li> <li>• Providing risk communication.</li> <li>• Support public health logistics (drugs and vaccines), non-pharmaceutical interventions</li> <li>• Support immunisation, disinfection, vaccination and vector control measures.</li> </ul>	<ul style="list-style-type: none"> <li>• Activating Public Health incident management teams.</li> <li>• Assess public health needs in coordination with central agencies as per situation.</li> <li>• Coordinate with central agencies in case of biological emergencies.</li> <li>• Coordinate with central agencies for epidemiological surveillance.</li> <li>• Manage public health logistics (drugs and vaccines), non-pharmaceutical interventions.</li> <li>• Carry out immunisation, disinfection, vaccination and vector control measures.</li> </ul>
20	<b>Relief Employment</b>	<ul style="list-style-type: none"> <li>• Provide projects to employ people seeking work in disaster affected areas as a relief measure.</li> <li>• Provide financial support for such schemes.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide opportunities for unskilled work in public works for people seeking work in disaster affected areas as a relief measure.</li> <li>• Ensure quick and prompt payment of wages.</li> <li>• Carry out health check-up of those seeking work.</li> <li>• Draw from various funds including Disaster Response Fund to implement the employment schemes.</li> </ul>

21	<p style="text-align: center;"><b>Relief Logistics and Supply Chain Management</b></p>	<ul style="list-style-type: none"> <li>• Provide necessary support to the disaster-affected district government for organizing logistics for the availability of relief and emergency supplies of food, medical, and non-food materials.</li> <li>• Support for emergency supply of food and in some cases drinking water; first aid kits; temporary shelters, relief supplies.</li> <li>• Make a rapid assessment of emergency relief needs in consultation with the affected district government</li> <li>• Establish a mobilisation centre for the movement of relief supplies.</li> <li>• Deploy special transportation for the movement of relief supplies</li> <li>• Coordinate transportation of material from different parts of the country, and coordinate and provide relief supplies from neighbouring districts or countries.</li> <li>• Coordinate transportation for other National ministries/ departments/ agencies.</li> <li>• Locate, procure and issue resources to National agencies involved in disaster response, and supply to the affected district.</li> <li>• Adopt alternative means of transportation to reach relief supplies to the affected district.</li> </ul>	<ul style="list-style-type: none"> <li>• Establish a mobilisation centre for the movement of relief supplies within the district.</li> <li>• Deploy special transportation for the movement of relief supplies within the district.</li> <li>• Make arrangements to receive and distribute relief and emergency supplies received from different parts of the country or elsewhere.</li> <li>• Coordinate transportation with National ministries/ departments/ agencies.</li> <li>• Arrange alternative means of transportation to reach relief supplies to the affected location if normal transport cannot reach.</li> </ul>
22	<p style="text-align: center;"><b>Search and Rescue of People and Animals</b></p>	<ul style="list-style-type: none"> <li>• Fail safe communication between early warning agencies and EOCs of National and District</li> <li>• Adequate NDMA/ NFF support in a state of readiness to move at a short notice.</li> <li>• Deploy Rapid Response Teams (RRT)</li> <li>• Support of Armed Forces, SLP, SLRCS and NDMA volunteers as per requirement.</li> <li>• Coordinate with the district government and district EOC for deployment of RRTs.</li> <li>• SAR in coastal and marine waters coordinated with RSLAF/ Coastguard.</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic stationing of specialist equipment for search, rescue and response with dedicated trained manpower and facilities.</li> <li>• National Fire Force district commander is nominated as nodal officer for coordination with NDMA for additional requirements (including help from other MDAs and voluntary agencies)</li> <li>• Deploy Rapid Response Teams.</li> <li>• Coordination with SLRCS/ NDMA volunteers.</li> </ul>

#	Emergency Response Function	National Level Responsibilities	District/ Local Level Responsibilities
23	Transportation	<ul style="list-style-type: none"> <li>• Adequately address the post-disaster transportation needs to ensure that the emergency response and recovery efforts are carried out in a timely manner; restore the public transport; resumption of the movement of essential goods.</li> <li>• Pool heavy duty earth moving machineries, tree cutters, fork lifters and other required equipment either at strategic locations or centralized.</li> <li>• Quick deployment of resources and equipment for quick repairs/ restoration of roads and highways for movement of rescue and relief teams with their supplies.</li> <li>• Operational plans are in place to transport heavy machinery (like dewatering pumps, boats, etc.) through road in close coordination with the relevant Ministries.</li> <li>• Operational plans are in place for quick restoration of transport services, providing additional space, containers and passenger coaches for movement of relief supplies/ rescue equipment and personnel and shifting affected population to safer places/ shifting stranded passengers in consultation with district government.</li> <li>• Quick restoration of airport runways and restoration of air traffic for facilitation of transport of relief teams/ supply/ equipment, stranded passengers, etc.</li> <li>• All transport issues managed by a transport specific cell in National EOC.</li> </ul>	<ul style="list-style-type: none"> <li>• MDA's coordinate with the logistics section of the district level incident management team to provide effective services to the field level for effective response.</li> <li>• Requirement of transport for the movement of relief material, responders are arranged.</li> <li>• Coordinate with national govt. for transportation of relief materials within and near airfields/ airports.</li> <li>• Restoration of airfields/ airport at the earliest involving specialised response force of the central government.</li> <li>• Coordination of district administration to provide air support.</li> <li>• Cater to the needs of transporting affected people if required.</li> </ul>



# **Section 4: Transition to Recovery Planning**

## 4.1 Introduction

### Recovery

The process of restoring or improving of livelihoods and health, as well as the economic, physical, social, cultural and environmental assets, systems, and activities of a disaster-affected community or society. This process aligns with the principles of sustainable development, encapsulated in the phrases '*Build Back Better*' or '*Build to Last*', with the aim of avoiding or reducing future disaster risks.

The tasks of rehabilitation and reconstruction begins during or shortly after the emergency response phase concludes. Recovery should be guided by pre-existing strategies and policies that clearly define institutional responsibilities and encourage public participation. The primary focus of recovery is on restoring livelihoods and transitioning to path of sustainable development that mitigates disaster risks. Recovery should be viewed as an integral part of the ongoing developmental process at national, regional, and local levels. The context in which recovery occurs will be shaped by the prevailing social and economic conditions, as well as the vulnerabilities of the affected districts and communities.

Recovery processes aim to restore the capacity of both the government and communities to recover from disasters, strengthen their ability to cope with future disasters, and reduce overall disaster risk. The 'Build Back Better' approach emphasizes the opportunity to rebuild in a way that addresses development deficits in the affected areas, moving beyond merely restoring the pre-disaster status quo. Recovery programs, combined with heightened public awareness and engagement following a disaster, provide a valuable opportunity to develop and implement disaster risk reduction measures while applying the "Build Back Better" principle.

While disasters can cause significant disruption to normal life, resulting in immense suffering and loss of lives and property, global efforts view the recovery, rehabilitation, and reconstruction phase as an opportunity to "Build Back Better" (BBB). This perspective integrates disaster risk reduction into development measures, ultimately making communities more resilient to future disasters.

The Sendai Framework articulates that stakeholders will be prepared for the BBB approach following a disaster. Existing mechanisms may need strengthening to provide effective support and ensure better implementation. However, disaster recovery can be challenging and lengthy, with the specifics of reconstruction varying depending on the nature of the disaster, location, pre-disaster conditions, and the potentialities that arise during the recovery phase

The reconstruction and rehabilitation plan is designed based on worst -case scenarios, in which the capacity of the district administration may be overwhelmed, necessitating assistance from the National Government to restore normalcy in disaster affected areas. This section outline a general framework for the roles of Government and development partners in post-disaster restoration and the provision of essential services.

Much of this support during recovery will require the coordinated efforts of multiple agencies, both government and non-governmental. The SLIMS should be maintained throughout the recovery process for as long as reasonably practical. All agencies are required to closely monitor response activities and gather valuable data regarding the severity and intensity of the event, the affected geographical areas, and the potential unmet critical needs of the impacted population while developing a comprehensive recovery plan.

<b>NDMA Key Point</b>
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Sierra Leone agencies must embrace and implement a culture of recovery planning and thinking, incorporating recovery planning as part of a testing and training process.
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#### 4.2 Legislative Approach

The approach to reconstruction and recovery is guided by the NDMA Act 2020, particularly Its salient clauses/ sections: Part IV, Section 11 (r) states:

‘The Agency shall coordinate response and reconstruction efforts of local and foreign collaborators’.

#### 4.3 Recovery Process

Effective post-disaster recovery encompasses three broad aspects:

1. Physical aspects of recovery: Restoration and reconstruction of damaged community infrastructure, critical infrastructure, private housing, and cultural heritage buildings
2. Economic aspects of recovery: Revitalization of livelihoods, productive activities, and market services
3. Social recovery: Addressing social and psychological aspects of individuals, family, and community wellbeing.

Key interventions under recovery programmes can be classified into the following categories:

- Physical
- Economic
- Social
- Cross Cutting Sectors

Following a disaster, a Post-Disaster Needs Assessment (PDNA) must be conducted, led by the government. Depending on the disaster's scale, this assessment may involve collaboration between the national and local governments. The PDNA will also serve as a platform for international community to assist in recovery and reconstruction efforts when necessary. A systematic PDNA provides a credible foundation for recovery and reconstruction planning that incorporates risk reduction measures.

Typically, the PDNA consists of a 'Damage and Loss Assessment' (DALA), a 'Human Recovery Needs Assessment' (HRNA), and a 'Recovery Framework'. The DaLA is quantitative and can be used to quantify damages from a hazardous event and the subsequent economic losses incurred. It highlights the potential consequences for economic growth, the external sector, and fiscal balances, as well as the impact on household incomes and livelihoods. The HRNA focuses on the social impact of disasters, analyzing how they affect local life patterns, social structures, and institutions. It includes primary data analysis from households or other units of analysis, providing insights into recovery and reconstruction from the perspective of the affected community. The Recovery Framework summarizes recovery recommendations from the sectoral assessments within the PDNA, outlining short-, medium- and long-term priorities for the recovery, including plans for financing the 'Build Back Better' approach.

The UNDRR consultative document on building back better (UNISDR 2017), in support of the Sendai Framework, states that 'Recovery is the most complex of the disaster management functions, involving the greatest number and variety of stakeholders and affecting the greatest long-term impact on a community's social and economic success.' For this reason, recovery demands a separate policy, plan, and set of procedures.

The disaster recovery process is rarely a linear sequence of actions; it consists of several interrelated activities, including:

- Damage and needs assessments (PDNA, DALA, HRNA)
- Developing a recovery framework, including institutional arrangements and financing plans
- Ensuring socially inclusive recovery
- Focusing on sustainable development and climate change adaptation
- Demolition of damaged structures and debris clearance, with environmentally safe disposal
- Restoration and upgrading of utilities including communication networks
- Re-establishment of major transport linkages
- Provision of temporary housing and detailed building inspections
- Redevelopment planning
- Conducting environmental assessments
- Reconstruction efforts
- Integrating DRR into various development initiatives
- Financial management
- Economic impact analysis.

The major steps and processes involved in the recovery process are summarized in Table 6.



Table 6. Major steps and processes in the recovery process.

#	Major steps	Process
1	<b>Post-Disaster Needs Assessment and Credible Damage Assessment</b>	<ul style="list-style-type: none"> <li>• Preliminary assessment reports</li> <li>• Compilation and transmittal of damage and loss data</li> <li>• Disaster damage assessments led by government and assisted by humanitarian response agencies, and the initial damage surveys leading to a comprehensive assessment</li> <li>• Quantitative and qualitative baseline for damage, loss, and needs across districts, chiefdoms, wards and villages</li> <li>• Results monitoring and evaluation plan for recovery program</li> <li>• Select the most appropriate and achievable processes and methodology for conducting early and credible damage and needs assessments</li> </ul>
2	<b>Developing a vision for Build-Back Better (BBB)</b>	<ul style="list-style-type: none"> <li>• High level meetings as well as broad-based, wider consultations with experts, civil society, and key stake holders</li> <li>• Build consensus among the range of stakeholders within and outside government</li> </ul>
3	<b>Ensure coherence of BBB with the development programs and goals</b>	<ul style="list-style-type: none"> <li>• Discussions at top level to align the recovery vision with the government's broader, longer term development goals and growth and poverty reduction strategies</li> </ul>
4	<b>Incorporating resilience and BBB in recovery vision</b>	<p>Consultations and background studies on:</p> <ul style="list-style-type: none"> <li>• Disaster resistant physical recovery</li> <li>• Options for fast economic recovery</li> <li>• Gender and equity concerns</li> <li>• Vulnerability reduction</li> <li>• Natural resource conservation and environmental protection</li> <li>• Social recovery</li> </ul>

<b>5</b>	<b>Balancing recovery across sectors</b>	<ul style="list-style-type: none"> <li>• Balance public and private sectors BBB programs</li> <li>• Promote norms for non-discriminatory and equitable asset disbursement among individuals and communities</li> <li>• Prioritize infrastructure reconstruction</li> <li>• Address the recovery of the lives and livelihoods of disaster-affected communities</li> <li>• Show sensitivity to the needs of the affected population with regard to public expectations from recovery</li> </ul>
<b>6</b>	<b>Prioritizing sectors for recovery</b>	Determine relative importance of various sectors such as housing, water and sanitation, governance, transport, power, communications infrastructure, environment, livelihoods, tourism, social protection, health and education.

#### 4.4 Early, Mid and Long-term Recovery

According to the United Nation Disaster Risk Reduction (UNDRR), recovery programs, combined with heightened public awareness and engagement following a disaster, present a valuable opportunity to develop and implement disaster risk reduction measures while applying the ‘BBB’ principle. This approach is a crucial component of a risk reduction strategy, and when implemented systematically, it helps prevent affected communities from descending further into poverty and deprivation.

Disaster recovery programs typically unfold in three distinct stages, facilitating a sequenced, prioritized, and flexible multi-sectoral approach. Three recovery stages, during which appropriate policies and programs are planned and implemented, are as follows: a) Early, b) Mid -Term, and c) Long-Term

- a) Early recovery: this initial phase focuses on immediate needs and restoring basic services. It aims to stabilize the affected community and lay the groundwork for longer-term recovery efforts.
- b) Mid-term recovery: in this phase, the emphasis shifts to rebuilding infrastructure and restoring livelihoods. Mid-term efforts aim to strengthen the resilience of communities and address the underlying vulnerabilities that may have contributed to the disaster’s impact.
- c) Long-term recovery: the final stage involves comprehensive rebuilding and development efforts that integrate disaster risk reduction into broader development plans. This phase focuses on creating sustainable systems and improving overall community resilience to future hazards.

A brief description of these recovery stages is provided in Table 7. By following this structured approach, recovery programs can effectively address the diverse needs of affected communities while promoting sustainable development and reducing future disaster risks.

Table 7. Stages of Recovery.

Recovery Stage	Duration	Brief Description
Early	Within 18 Months	Cash for work, resumption of markets, commerce and trade, restoration of social services, transitional and temporary shelters
Mid-Term	Within 5 Years (concurrent with early recovery)	Recovery plans for assets and livelihoods, reconstruction plans for housing, infrastructure, public buildings and cultural heritage buildings
Long-Term	Within 10 Years	Implemented along with developmental plans: infrastructure strengthening, environmental, urban and regional planning

The salient provisions of the recovery framework are as follows:

- I. Institutional arrangements: Establishing institutional mechanisms at the national, district, and local (urban and rural) levels that clearly defines roles and responsibilities in the recovery process.
- II. Coordination: Recognizing the considerable interdependence among stakeholders – government, international agencies, private sector, and civil society organizations – is crucial for achieving recovery objectives. Effective inter-agency coordination is therefore essential .
- III. Public-Private Partnerships (PPP): leveraging the participation of the private sector for the greater public good. Public-Private Partnerships are an effective means to private sector involvement in recovery efforts.
- IV. Information and Communication Technology (ICT): Utilizing ICT effectively in the recovery program to disseminate messages amongst all stakeholders and provide comprehensive information on all aspects of the recovery process.
- V. Decision Support System (DSS): establishing an adequate DSS that includes a Management Information System (MIS), databases, and the deployment of spatial data management technologies.
- VI. Pool of Expertise: Pooling professional skills and expertise across diverse areas to enhance recovery efforts.

## 4.5 Fund Mobilization General

### 4.5.1 Background

Reconstruction and rehabilitation projects following a major disaster are typically resource-intensive. These projects are usually financed through the national budget. Recently, significant funds have been raised from multilateral/ bilateral funding agencies, as well as international organizations, in close coordination with the national Government.

### 4.5.2 Mobilization, Disbursement, and Monitoring

Domestic or internal sources of government funds for recovery typically include:

- Government operational and capital budgets
- Reallocation among the budget items to support disaster-hit sectors
- Special levies or taxes, including additional taxes or surcharges for recovery
- Contingency financing arrangements
- Issuing sovereign reconstruction or development bonds
- Introducing policy incentives for the private sector to share recovery costs
- Voluntary contributions from civil society and private philanthropies
- Insurance and risk transfer mechanisms.

External resources for post-disaster reconstruction can be sourced from multilateral development banks, regional development banks, bilateral development partners, international NGOs, private philanthropies, charities, and remittances. The potential multilateral financing resources for post - disaster recovery and reconstruction typically include:

- Credits or loans from multilateral development banks
- Reallocation of existing portfolio from international development institutions
- Multi-donor Trust Funds
- Debt relief.
- Risk Insurance
- Standby financing
- Catastrophic development Deferred Drawdown Option

Key aspects of mobilizing and managing the funds for a large recovery program include:

- I. Reviewing the Damage and Loss Assessment (DaLA)
- II. Developing a vision and specific time-bound goals for BBB
- III. Estimating the financial requirements of the recovery program
- IV. Identifying potential sources of funds and examining various options
- V. Defining and enforcing robust financial norms for effective financial management.

#### 4.6 Fund Mobilization in Sierra Leone

According to the NDMA Act of 2020, the NMDA is responsible for managing recovery funds. This responsibility enables the agency to pursue policies that achieve the fund's objectives, formulate strategies for generating revenue, and monitor and evaluate disaster management programmes concerning the funds received.

The NDMA will ensure accountability, provide clear direction for the rapid disbursement and access to the pooled funds, and facilitate the acquisition of EP&R equipment, resources and relief aid with the approval of the relevant platform. The agency will identify special funds for preparedness and response, allocate funds or require local councils to allocate funds; and designate funds for community use, including a wide range of community Emergency Preparedness and Response (EP&R) stakeholder groups.

Contingency relief reserves of various categories will be established and maintained at different levels, based on realistic estimates of potential response and recovery operations. The agency is also responsible for facilitating the use of anticipatory financing, including forecasts-based triggers for the early release of funds before the impact of disasters, and adapting social protection programs and mechanisms to channel assistance before and after disaster events, particularly for vulnerable groups.

The management of resources will adhere to the country's financial regulations, the Ministry of Finance's instructions, and the regulations established under the Finance Act.

## **Section 5: Integration of Gender and Climate Action**

## 5.0. Introduction

The integration of gender and climate action in the National Preparedness and Response Plan (NDPRP) is crucial for building resilience in communities facing disasters exacerbated by climate change.

### 5.1. Gender Responsive Disaster Risk Management

Gender responsive DRM recognizes that men and women experience disasters differently due to social, economic, and cultural factors. A comprehensive approach to gender-responsive disaster risk management (DRM) must encompass several key components that address the distinct needs and contributions of all genders throughout the disaster management cycle.

#### **a. Preparedness**

To enhance preparedness efforts, conducting gender-sensitive risk assessments is essential to identify vulnerabilities unique to different genders. These assessments should gather data on how men, women, and non-binary individuals experience risks differently based on their social, economic, and cultural contexts. Ensuring equal representation of women and men in disaster preparedness planning and training activities will create a more inclusive environment that values diverse perspectives. Additionally, targeted communication strategies must be developed to effectively reach all genders, taking into account their specific needs and preferred information channels.

#### **b. Response**

Integrating gender considerations into disaster response involves establishing mechanisms to track and address gender-specific needs during crises. This includes ensuring access to healthcare, shelter, and food for all genders, particularly marginalized groups. The formation of female-led response teams is vital for incorporating women's perspectives into decision-making processes. Furthermore, relief distribution must be equitable and sensitive to the unique challenges faced by all genders, ensuring that resources are allocated effectively and fairly.

#### **c. Recovery**

The recovery phase should prioritize the design of programs that specifically aim to reduce gender disparities, particularly in access to economic opportunities and resources. Engaging local women's organizations in recovery planning is crucial for ensuring that programs are inclusive and effectively address the unique challenges faced by women and other marginalized genders. Continuous monitoring of recovery efforts for their gender impacts will allow for necessary adjustments to better serve all individuals and maintain equitable progress.

#### **d. Mitigation**

In the context of climate action, supporting gender-responsive approaches is imperative. Policies that recognize and empower women in sustainable practices and environmental management should be promoted and integrated into climate adaptation and mitigation strategies. Community-wide discussions that engage men and boys are important to foster shared responsibility for gender equality in climate action initiatives. Comprehensive data collection on gender and climate issues must be prioritized to provide clear insights into the impacts of climate change on different genders, facilitating informed decision-making.

#### **e. Partnerships and Training**

Creating strong partnerships with gender-focused NGOs and community organizations will enhance outreach and engagement efforts, making disaster management and climate action more inclusive. Furthermore, developing training materials that highlight the

importance of integrating gender considerations into both climate action and disaster management will foster a culture of awareness and responsiveness to gender dynamics across all initiatives.

### **5.1.1. Gender Analysis and Assessment**

In the context of increasing frequency and severity of disasters, including floods, landslides, and disease outbreaks, which have distinct impacts on different segments of the population. It is essential to recognize that men, women, boys, and girls experience these events differently. A comprehensive analysis is critical for understanding these differences and ensuring that the National Disaster Preparedness and Response Plan (NDPRP) is inclusive, equitable, and effective in addressing the diverse needs of all community members. This integration of gender analysis examines how disasters impact individuals based on their gender and identifying the unique vulnerabilities, and capacities of all genders, that arise from these differences. By integrating gender considerations into disaster risk management, the NDPRP can enhance resilience, improve preparedness, and ensure that recovery efforts are equitable and effective.

Disasters do not affect all individuals equally; gender roles and social norms significantly influence the experiences of men, women, boys, and girls during and after a disaster. In Sierra Leone, women often face heightened vulnerability due to socio-economic inequalities, limited access to resources, and cultural practices that restrict their participation in decision-making processes. Conversely, men may experience pressures to fulfill traditional roles as providers, leading to stress and mental health challenges during crises.

*Key considerations in understanding gender dynamics include:*

1. **Vulnerability and resilience:** women, particularly in marginalized communities, may have limited access to information and resources, increasing their vulnerability during disasters. However, women also play critical roles in community resilience, often serving as caregivers and leaders in disaster response efforts.
2. **Access to resources:** gender disparities in access to education, healthcare, and economic opportunities can exacerbate the negative impacts of disasters. Ensuring equitable access to resources for all genders is crucial for effective disaster preparedness and recovery.
3. **Participation in decision-making:** women are often underrepresented in disaster management planning and response. Their exclusion can result in inadequate responses that fail to address the specific needs of women and girls.

*Strategies for Integrating Gender Analysis into the NDPRP*

To effectively incorporate gender analysis into the NDPRP, the following strategies will be implemented:

1. **Data collection and analysis:** Collect and analyze disaggregated data on gender, age, and socio-economic status to understand the specific needs and vulnerabilities of different groups. This data will inform targeted interventions and resource allocation. For example, South Africa's national framework emphasizes the collection and analysis of gender-disaggregated data to inform disaster response strategies. This evidence-based approach ensures that resource allocation effectively meets the needs of all genders.
2. **Community engagement:** Actively engage communities, particularly women and marginalized groups within communities, in the planning and implementation of disaster preparedness and response initiatives. These groups facilitate information dissemination and resource allocation, demonstrating the importance of grassroots involvement. Their input will help identify local needs and strengthen community resilience.
3. **Capacity building:** Develop training programs to enhance the capacity of disaster management personnel and community leaders to understand and address gender issues in disaster contexts. Promote gender-sensitive approaches in all phases of disaster management.



4. **Policy development:** Integrate gender considerations into national policies and strategies related to disaster risk reduction, climate change adaptation, and recovery efforts. Ensure that women's rights and gender equality are prioritized in all disaster-related policies. For instance, the Philippines has developed a framework that mandates the integration of gender analysis in local disaster risk reduction plans. This ensures that gender-sensitive policies are implemented at all levels of disaster management.
5. **Leveraging indigenous knowledge:** engaging with local communities, particularly women, to incorporate traditional knowledge into disaster management strategies enhance resilience. This approach highlights the value of respecting and utilizing cultural perspectives.
6. **Gender-sensitive recovery initiatives.** Post-disaster recovery efforts should prioritize the specific needs of women and children. Initiatives include creating safe spaces and ensuring access to healthcare, which underscores the necessity of addressing vulnerabilities during recovery.
7. **Monitoring and Evaluation:** Establish mechanisms for monitoring and evaluating the effectiveness of gender-responsive disaster management strategies. This will help identify gaps and successes, allowing for continuous improvement in gender integration efforts.

### **5.1.2 Gender-sensitive Preparedness Measures**

Disaster preparedness is a critical component of effective disaster management, and incorporating gender-sensitive approaches is essential for ensuring that the unique needs and vulnerabilities of all community members are addressed. In Sierra Leone, where socio-economic disparities and cultural norms can exacerbate the impacts of disasters, a gender-sensitive preparedness strategy can enhance resilience and improve outcomes for affected populations. The key elements of gender-sensitive preparedness that are considered in the National Disaster Preparedness and Response Plan (NDPRP) includes:

1. **Inclusive risk assessment:** Conduct comprehensive risk assessments that consider gender-specific vulnerabilities and capacities. This includes understanding how different genders experience and respond to risks, as well as identifying barriers to access information and resources.
2. **Community engagement and participation:** actively involve women, men, and marginalized groups in the planning and implementation of disaster preparedness initiatives. Their insights and experiences are invaluable in creating effective and inclusive strategies.
3. **Training and capacity building:** develop training programs that equip community members, particularly women, with skills and knowledge related to disaster preparedness. This can include first aid training, emergency response skills, and leadership development.
4. **Access to resources and information:** ensure that all community members have equitable access to information, resources, and services related to disaster preparedness. This includes providing materials in accessible formats and languages, as well as utilizing various communication channels to reach diverse populations.
5. **Establishment of support networks:** facilitate the creation of support networks that empower women and marginalized groups to take on leadership roles in disaster preparedness and response. These networks can enhance community cohesion and resilience.
6. **Community-Based Disaster Management:** the establishment of community-based disaster management committees that include women will play a pivotal in enhancing preparedness. Women's participation in these committees will lead to improved communication of risks and more effective evacuation plans that consider the needs of families, especially those with children and the elderly. This community-driven approaches will ensure that women's voices are heard in disaster management processes.

### **5.1.3 Gender Inclusive Response Strategies**

The integration of gender-inclusive response strategies is essential Sierra Leone's NDPRP.

Recognizing that disasters affect individuals differently based on their gender, age, and socio-economic status, this approach aims to ensure that all community members—particularly women and marginalized groups—are adequately protected, supported, and empowered during and after disasters. The following strategies, informed by successful lessons learned from other countries, will guide the implementation of gender-inclusive responses in Sierra Leone.

1. ensuring equal participation in decision-making: to enhance the effectiveness of disaster response efforts, it is crucial to establish mechanisms that ensure women and marginalized groups are actively involved in disaster response planning and decision-making processes. Drawing from the successful Women's Leadership in Disaster Management initiative in Bangladesh, which empowered women to take on leadership roles in community disaster management committees, NDMA together with relevant partners will form gender-balanced committees that include representatives from women's groups and marginalized communities. This will ensure that response strategies are informed by diverse perspectives and needs.
2. Conducting gender-sensitive needs assessments: comprehensive gender-sensitive needs assessments will be conducted before, during and after disasters to identify the specific needs, vulnerabilities, and capacities of different genders. This will allow NDMA to collect disaggregated data on the impacts of disasters on various gender to enable them to develop targeted interventions that address the unique needs of all community members, ensuring that response efforts are effectively tailored.
3. Training and capacity building: NDMA will provide training and capacity building programs for emergency responders and community members on gender-sensitive disaster response practices. Inspired by the Gender and Disaster Risk Reduction Training program in the Philippines, which trained local governments councils and community leaders, NDMA and its partners will equip emergency responders with the skills necessary to address gender-specific issues during disasters, such as gender-based violence (GBV) and reproductive health needs. This training will enhance the overall effectiveness of disaster response efforts.
4. Establishing safe spaces and support services: creating safe spaces and support services for women and vulnerable populations during and after disasters is a priority. The Shelter for Women initiative in Haiti, which established designated safe spaces for women and children, provides a successful example of how to protect vulnerable groups. The country can will implement similar safe spaces in emergency shelters, ensuring that women and children are safeguarded from gender-based violence and have access to essential services, such as healthcare and psychosocial support.
5. Addressing gender-based violence: developing and implementing strategies to prevent and respond to gender-based violence during and after disasters is critical. The GBV Prevention and Response in Emergencies program in South Sudan has effectively integrated GBV prevention measures into disaster response efforts. Sierra Leone will incorporate GBV prevention strategies into its NDPRP, ensuring that response teams are trained to recognize and address GBV, and that survivors have access to necessary support services, including legal and psychological assistance.
6. Promoting livelihood recovery for women: to support women's livelihoods and economic empowerment in the aftermath of disasters, the government will ensure that recovery programs specifically target women's economic needs. There is a need to initiates actions focusing on women's empowerment and livelihood recovery efforts targeting women's entrepreneurs affected by disasters. The program will focus on restoring and enhancing women's livelihoods, recognizing their critical role in community recovery and resilience.
7. Leveraging technology and communication: utilizing technology to enhance communication and information sharing among affected populations is essential. The SMS Alert System in Kenya has successfully disseminated important disaster-related information to communities. The NDMA will implement a similar communication strategy that ensures all community members, especially women, have access to critical

information during emergencies. This will include mobile technology to provide timely updates and alerts about disaster preparedness and response.

8. Monitoring and evaluation of gender-inclusive strategies: enhancing monitoring and evaluation frameworks will be essential for assessing the effectiveness of gender-inclusive response strategies. The Gender-Responsive Monitoring and Evaluation framework used in Tanzania has effectively tracked the impact of disaster response efforts on different genders. NDMA will adopt similar frameworks to ensure that gender considerations are integrated into all aspects of disaster response and recovery, allowing for continuous improvements and accountability.

#### **5.1.4 Gender-responsive Recovery and Rehabilitation**

The integration of gender-responsive recovery and rehabilitation strategies into Sierra Leone's National Disaster Preparedness and Response Plan (NDPRP) is essential for addressing the unique needs and challenges faced by women and marginalized groups in the aftermath of disasters. Recognizing that disasters can exacerbate existing inequalities, this approach aims to ensure that recovery efforts are equitable, inclusive and effective. This section outlines key gender-responsive recovery and rehabilitation strategies, informed by successful lessons learned from both African and global contexts, to ensure that recovery processes are equitable and effective.

1. Assessing Gender-Specific Needs in Recovery: To create effective recovery and rehabilitation strategies, tailored to the diverse experiences of all community members, NDMA will conduct gender-sensitive assessments during the recovery phase. The National Policy on Gender Equality emphasizes the importance of integrating gender considerations into all aspects of development, including disaster recovery and rehabilitation. By employing gender-disaggregated data and conducting thorough assessments, NDMA can identify the specific needs and vulnerabilities of women and children, ensuring that recovery strategies are informed by the realities of all community members.
2. Promoting Women's Economic Empowerment: Economic recovery and rehabilitation programs will specifically focus on restoring and enhancing women's livelihoods. The National Gender Policy of Sierra Leone recognizes the importance of women's economic empowerment in achieving gender equality and sustainable development. Inspired by the Women's Economic Recovery Program and the National Women's Council in Nepal and Rwanda, which provided women with access to microloans, market opportunities, and vocational training following the 2015 earthquake and conflicts, significantly contributing to their economic empowerment and community resilience. NDMA can adopt similar approach by creating programs that provide financial support, skills training, and mentorship for women entrepreneurs, ensuring that they have the resources needed to recover and thrive.
3. Ensuring Access to Essential Services: NDMA will prioritize access to essential services, including healthcare, education, and psychosocial support, during the recovery and rehabilitation phases. The Free Quality Education and the Health Sector Strategic Plan provide frameworks for ensuring that vulnerable populations, particularly women and children, have access to necessary services. The Integrated Recovery Program in Sri Lanka, which focused on rebuilding infrastructure while ensuring accessible healthcare and education services, serves as a valuable model. In South Africa, the Community Health Worker Program has been instrumental in providing healthcare services to marginalized communities, especially women and children, in the aftermath of disasters. This program mobilizes local health workers to deliver essential health services, including maternal and child health care, mental health support, and health education. NDMA and its partners will implement similar initiatives that prioritize access to essential services for all community members, focusing on women's health, education, and psychosocial support to aid recovery. This includes mobile health clinics, education support programs,

and mental health services, ensuring that recovery and rehabilitation efforts address the holistic needs of affected populations.

4. Addressing Gender-Based Violence (GBV): Comprehensive strategies to prevent and respond to gender-based violence during the recovery and rehabilitation process will be developed and implemented. The current policy of government outlines their commitments to addressing GBV, particularly in crisis situations. The GBV Prevention and Response in Emergencies program in South Sudan established community-based support networks and training for local leaders to address GBV in the aftermath of conflict and disaster. In Nigeria, the Women's Rights Advancement and Protection Alternative (WRAPA) has been effective in providing support to survivors of GBV, particularly in conflict-affected areas. Following the Boko Haram insurgency, WRAPA established safe spaces and provided legal assistance, counselling, and rehabilitation services to survivors. NDMA will integrate similar GBV prevention strategies into its NDPRP. This will include training local leaders to recognise and address GBV, establishing safe spaces for survivors, and providing access to legal and psychosocial support. By ensuring that survivors have access to necessary support services and that communities are educated on GBV issues to foster a safer environment during recovery and rehabilitation.
5. Engaging women in recovery and rehabilitation planning and implementation: To ensure that recovery efforts are responsive to the needs of women, the government is actively involving women in the planning and implementation of recovery and rehabilitation initiatives. The Participatory Recovery Planning initiative in Indonesia, which engaged women in the recovery process, serves as a successful example. In Uganda, the Gender in Recovery Program has successfully engaged women in post-conflict recovery planning, allowing them to voice their needs and preferences. This approach led to more effective recovery strategies that were responsive to the realities of women's lives. NDMA will create platforms for women's voices to be heard in recovery and rehabilitation planning. This can be achieved through community consultations, focus groups, and representation in recovery committees. By empowering women to contribute their insights, recovery and rehabilitation recovery strategies will be more effective and reflective of community needs. This engagement will not only empower women but also enhance the effectiveness of recovery efforts.
6. Strengthening community resilience through education and training: Education and training programs that enhance the skills and capacities of women and marginalized groups will be provided to support disaster recovery. The National Youth Policy and the National Gender Policy both emphasize the importance of education and skills development for fostering resilience in communities. The Women's Resilience Program in Bangladesh, which focused on training women in disaster risk reduction and sustainable livelihood practices, empowered women to take active roles in recovery efforts. In Tanzania, the Community Resilience Project has trained women in agricultural practices, disaster preparedness, and risk reduction strategies, enabling them to contribute effectively to their communities' resilience. By implementing similar training programs in Sierra Leone, women will be equipped with the skills needed to lead recovery initiatives, engage in sustainable agricultural practices, and contribute to community resilience. By enhancing the capacities of women will foster a culture of preparedness and resilience within its communities, facilitating both recovery and rehabilitation.
7. Monitoring and Evaluation of Gender-Responsive Recovery Efforts: Robust monitoring and evaluation frameworks will be established to assess the effectiveness of gender-responsive recovery and rehabilitation strategies. The National Policy on Gender Equality calls for the collection of gender disaggregated data to inform policy and decision-making. NDMA will adopt monitoring frameworks similar to the Gender-Responsive Monitoring and Evaluation Framework used in Tanzania, which effectively tracked the impact of recovery efforts on different genders. By collecting, disaggregated data and evaluating the effectiveness evaluating the effectiveness of gender-responsive strategies, Ghana has

been able to refine its recovery efforts. NDMA will adopt similar frameworks to ensure that gender considerations are integrated into all aspects of recovery, allowing for continuous improvement and accountability in addressing the needs of women and marginalized groups.

8. **Leveraging Technology for Gender-Responsive Recovery:** Utilizing technology to enhance communication and information sharing among affected populations is essential. The SMS Alert System in Kenya has successfully disseminated important disaster-related information to communities. This system has enabled women and marginalized groups to receive timely updates and alerts, helping them prepare for and respond to disasters. NDMA will continue to implement similar communication strategies that ensure all community members, especially women, have access to critical information during emergencies. This will include using mobile technology to provide timely updates about recovery services, health resources, and available support, thereby empowering women to make informed decisions during the recovery process.

## 5.2. Climate Action in Disaster Risk Management

### 5.2.1 Climate Risk Assessment

Conducting a comprehensive climate risk assessment is critical for understanding how climate change exacerbates disaster risks. This process involves identifying and evaluating the various climate-related hazards that communities face, such as floods, droughts, and heatwaves. It requires collaboration among scientists, local governments, and community members to gather relevant data and insights.

Utilizing participatory approaches is essential for engaging communities in the assessment process. This allows for the identification of local knowledge and experiences regarding climate impacts and vulnerabilities. Community workshops, surveys, and mapping exercises can be employed to gather information on local climate risks and adaptive capacities. The results of the climate risk assessment will inform planning and preparedness efforts. By developing risk maps and scenarios that illustrate potential climate impacts, the government agencies, institutions, local communities, and other stakeholders can prioritize interventions and allocate resources effectively. Additionally, integrating climate risk assessments into broader development planning ensures that communities are better prepared for future climate-related challenges.

### 5.2.2 Climate-Resilient Infrastructure

The principle of "Building Back Better" is a cornerstone of Sierra Leone's National Disaster Preparedness and Response Plan (NDPRP), emphasizing the necessity of restoring infrastructure while simultaneously enhancing resilience against future climate-related events. This strategy integrates climate resilience into recovery plans, ensuring that investments not only address immediate needs but also prepare communities for future challenges.

Successful international examples provide valuable insights into the effectiveness of this principle. Japan's recovery efforts following the 2011 earthquake and tsunami exemplify a robust application of "Building Back Better." The country focused on strategic investments in climate-resilient infrastructure, including seawalls and advanced drainage systems, which restored functionality while fortifying communities against future disasters. Similarly, New Zealand's recovery from the Christchurch earthquakes prioritized community engagement, ensuring that local residents' needs and preferences were central to rebuilding efforts. This participatory approach fostered a sense of ownership among the community and led to the development of sustainable infrastructure aligned with local environmental conditions.

For NDMA, implementing a "Building Back Better" strategy necessitates prioritizing sustainable infrastructure development that incorporates climate adaptation measures. This process should involve extensive consultations with local residents to ensure that rebuilding efforts align with community needs and preferences. By actively engaging local populations in the design and

implementation of recovery projects, the country can enhance ownership and effectiveness, ultimately fostering a culture of resilience that prepares communities to adapt to changing climate conditions.

A holistic recovery plan must encompass social, economic, and environmental factors. This involves stakeholder engagement across various sectors, including government, civil society, and the private sector. By integrating perspectives from these groups, NDMA can develop inclusive recovery strategies tailored to the unique needs of affected populations.

In addition, community involvement is vital in the recovery process. Engaging local communities in decision-making ensures that recovery strategies reflect local needs, while leveraging indigenous knowledge fosters ownership and accountability. Incorporating local perspectives leads to outcomes that are more relevant and sustainable, as demonstrated by New Zealand's recovery initiatives, which were embraced by the community due to their participatory nature.

### **5.2.3 Climate Adaptation Strategies**

Climate adaptation strategies are essential components of Sierra Leone's National Disaster Preparedness and Response Plan (NDPRP). Developing and implementing climate adaptation strategies is vital for enhancing community resilience to climate change. These strategies should be context-specific and tailored to the unique vulnerabilities and capacities of each community. The following key climate adaptation strategies includes:

1. Enhancing agricultural resilience: agriculture is a cornerstone of Sierra Leone's economy and livelihoods. However, climate change poses significant risks to food security through erratic rainfall patterns, increased temperatures, and pest outbreaks.
  - Promoting climate-smart agriculture (CSA). Implementing CSA practices can help farmers adapt to changing climate conditions. For example, the 'Climate-Smart Villages' initiative in various countries, including Kenya, empowers farmers to adopt sustainable practices such as crop diversification, agroforestry, and soil health improvements. Sierra Leone can establish similar programs to educate farmers on CSA techniques, enabling them to increase productivity while minimizing environmental impacts.
  - Improving irrigation systems: developing efficient irrigation systems can help mitigate the impacts of droughts. The Ministry of Agriculture should design a program that will enable farmers to implement rainwater harvesting techniques and construct small scale dams to provide them with reliable water sources. MAFFS can collaborate with NGOs and international organisations to provide technical support and funding for this initiative, ensuring that farmers have access to water during dry seasons.
2. Strengthening coastal and marine resilience: The country has an extensive coastline that is vulnerable to rising sea levels, coastal erosion, and increased storm intensity.
  - Restoration of mangroves and coastal ecosystems. The ongoing 'Mangrove Restoration Project' implemented by various actors will serve as a successful model for restoring mangrove ecosystems to protect coastal areas from erosion and storm surges, while providing alternative livelihoods through sustainable fishing practices. Community-based initiatives that involve local fishermen and residents in mangrove restoration efforts can foster stewardship and improve local economies.
  - Integrated Coastal Zone Management (ICZM): the ICZM approach emphasizes sustainable management of coastal resources while addressing climate vulnerabilities. The ICZM will enable the country to manage its coastal resources sustainably, incorporating land-use planning, habitat protection, and diverse risk reduction strategies that considers the need for local communities and ecosystems.

3. Improving water resource management: Access to clean and reliable water is crucial for health, agriculture, and economic activities. Climate change can exacerbate water scarcity and affect water quality.
  - Watershed Management: The “Integrated Watershed Management” program will enhance water availability and quality through reforestation, soil conservation, and the establishment of buffer zones. Engaging communities in the process will help foster a sense of ownership and responsibility for local water systems.
  - Developing Early Warning Systems: The “Flood Early Warning System” implemented in Bangladesh has proven effective in providing timely information on weather patterns, enabling proactive measures to protect water resources and agricultural activities. Sierra Leone can develop its early warning systems, utilizing local knowledge and modern technology to prepare communities for extreme weather events like floods and droughts.
4. Promoting Disaster Risk Reduction (DRR) and Climate Resilience Education: Education and awareness are fundamental to building a culture of resilience within communities.
  - Introduce Community-Based Disaster Risk Reduction Programs. This will empower communities to identify risks and co-design strategic action plans. The agencies will have to develop training programs for residents in disaster preparedness and response, ensuring that they understand the importance of climate adaptation strategies.
  - Incorporating Climate Education into School Curricula: The “Climate Change Education” initiative in Costa Rica integrates climate education into school curricula, raising awareness among students about climate change and its impacts. Sierra Leone can adopt this approach to educate the younger generation on climate issues, fostering a culture of sustainability and resilience.
5. Enhancing Health System Resilience: Climate change can exacerbate health risks, particularly in vulnerable populations.
  - Strengthening Health Infrastructure: the MoH should focus on improving health infrastructure to withstand climate-related shocks. There is a need to invest in strengthening the health facilities to handle increased disease outbreaks related to climate change, ensuring that they are equipped to respond effectively to health emergencies.
  - Implementing Public Health Campaigns: The “Health and Climate Change Unit” in the MoH and its partners should raise awareness about climate-related health risks. The public health campaigns should focus on educating communities about sanitation, hygiene, and vaccination, particularly in the context of changing climate conditions.
6. Engaging Stakeholders and Building Partnerships: Collaboration among various stakeholders is vital for effective climate adaptation.
  - Multi-Stakeholder Platforms: establish the “National Adaptation Fund” that brings together government agencies, NGOs, community organizations, and the private sector to facilitate knowledge sharing and resource mobilization. This platform will help to coordinate efforts and ensure that climate adaptation strategies are integrated into broader development planning.
  - Leveraging International Support: the country can benefit from international partnerships and funding to support climate adaptation initiatives. Engaging with organizations such as the Green Climate Fund and the United Nations Development Programme (UNDP) can provide access to technical expertise and

financial resources, enhancing the country's capacity to implement effective climate adaptation strategies.

#### **5.2.4 Integration of Climate Action in Recovery Plans**

The integration of climate action into recovery efforts is a critical component of building resilience in communities affected by disasters. As climate change continues to intensify the frequency and severity of natural disasters, it is essential that recovery processes not only address immediate needs but also incorporate strategies that reduce vulnerability to future climate impacts. This approach ensures that communities can rebuild in a way that enhances their long-term resilience and sustainability.

##### *Understanding the importance of climate-responsive recovery*

Recovery from disasters often involves significant investment in rebuilding infrastructure, restoring services, and revitalizing local economies. If these recovery efforts do not consider climate risks, communities may find themselves vulnerable to future disasters, exacerbated by the ongoing effects of climate change. Therefore, integrating climate action into recovery plans is not merely an option, it is a necessity.

Climate-responsive recovery involves several key elements that NDMA should consider:

- Recovery plan should begin with a thorough assessment of climate risks specific to the affected area. This includes identifying potential hazards, such as flooding, drought, or extreme weather events, and understanding how these risks may change over time due to climate change.
- Rebuilding infrastructure must prioritise sustainability and resilience. This means designing buildings, roads, and utilities that can withstand future climate impacts while also reducing greenhouse gas emissions.
- Engaging local communities in the recovery process is vital. Their insights and experiences can inform recovery strategies that are more effective and equitable. By involving local residents in the design process, will ensure that the solutions met the needs of the community while also fostering a sense of ownership.
- Recovery efforts should aim to diversify local economies, reducing reliance on vulnerable sectors and enhancing resilience against shocks.
- Recovery plans should align with broader climate policies and goals, ensuring recovery efforts contribute to national and global climate action.

##### *Key strategies for integrating climate action in recovery*

To effectively integrate climate action into recovery efforts, several strategies can be employed:

- Developing climate-resilient infrastructure: infrastructure projects should incorporate climate resilience principles, such as sustainable materials, implementing green infrastructure, and ensuring that buildings are designed to withstand extreme weather events. This includes designing buildings, roads, and public facilities equipped with climate adaptation measures, such as elevated structures in flood-prone areas and enhanced drainage systems can prevent damage during heavy rainfall. Investing in green infrastructure—such as parks, urban forests, and green roofs—can enhance urban resilience while providing additional social and environmental benefits.
- Incorporating climate risk assessments into recovery funding is another essential practice for sustainable recovery. This ensures that investments are directed toward initiatives that enhance resilience and contribute to long-term climate adaptation goals. Establishing



climate risk insurance mechanisms can provide financial protection for vulnerable communities, facilitating quicker recovery following disasters.

- Utilizing nature-based solutions: incorporating nature-based solutions, such as restoring wetlands and the creation of green spaces improved stormwater management, which can act as natural buffers against flooding and erosion while providing additional environmental benefits, such as improved biodiversity and water quality.
- Incorporating climate adaptation into economic planning: recovery efforts should include strategies for diversifying local economies and promoting sectors that are less vulnerable to climate impacts. This may involve supporting renewable energy initiatives, sustainable tourism, small and medium-sized enterprises (SMEs), and climate-resilient agriculture. There is a need to implement training programs for farmers on sustainable agricultural practices, resources for alternative livelihoods, and provide access to climate-resilient crop varieties. Programs that reduce dependency on climate-sensitive sectors enable communities to better withstand future shocks and promote economic stability. This will not only enhance food security but also strengthen the economy against future climate impacts.
- Strengthening community capacity: empowering local communities to engage in the recovery process is essential. This can be achieved through training programs, capacity-building initiatives in resistant construction and climate-smart agriculture, and resources to rebuild sustainably. Engaging communities in decision making ensures that recovery efforts reflect their needs and priorities, fostering a sense of ownership and resilience.
- Monitoring and evaluation: establishing robust monitoring and evaluation frameworks can help assess the effectiveness of recovery efforts in terms of climate resilience. Ongoing tracking of progress towards recovery goals and evaluating the impact of interventions can provide critical insights for improving future strategies. This will allow stakeholders to assess the impact of recovery strategies, ensuring accountability, and make necessary adjustments to improve outcomes.

### 6.3. Actionable Steps using the DRM Cycle

Effective DRM requires a structured approach that encompasses all phases of the disaster management cycle: preparedness, response, recovery, and mitigation. This section outlines clear, actionable steps for each phase, ensuring that all stakeholders undertake their roles and responsibilities. By providing specific tasks, timelines, and responsibilities, the plan aim to enhance the practical implementation of the disaster management strategies, ultimately building a more resilient Sierra Leone. The table below shows actionable step using the DRM Cycle.

Table 8: Actionable steps using the DRM Cycle

DRM Cycle	Actionable steps	Task	Timeline	Responsibility
Preparedness Phase	Conduct risk assessments	Identify and assess disaster risks in various regions	Within the first 6 months of the plan's implementation	NDMA in collaboration with local government
	Develop training programs	Create and implement training modules for emergency responders and	Ongoing, with initial programs launched within 12 months	NDMAs and relevant NGOs

		community leaders		
	Establish early warning systems	Set up and maintain early warning systems for natural disasters	Within 18 months	NDMA with support from SL-MET.
<b>Response Phase</b>	Activate Emergency Response Plans	Mobilize resources and personnel when a disaster occurs	Immediate activation upon disaster declaration	NDMA and local disaster response teams
	Coordinate with NGOs and community organization	Establish communication and coordination mechanisms with NGOs for effective response	Within 24 hours of disaster occurrence	NDMA with local NGOs
	Conduct Damage and Needs Assessment	Quickly assess the impact of the disaster to inform response efforts	Within 48 hours post-disaster	NDMA and local assessment teams
<b>Recovery phase</b>	Develop recovery plans	Formulate short-term and long-term recovery strategies	Within 2 weeks after the disaster	NDMA in collaboration with local authorities and community stakeholders.
	Allocate resources for recovery	Identify funding sources and allocate resources for recovery efforts	Within 1-month post-disaster	Ministry of Finance and NDMA
	Monitor and evaluate recovery efforts	Establish a framework for monitoring recovery progress and evaluating outcomes	Ongoing, with initial evaluation after 6 months	NDMA and independent evaluation teams
<b>Mitigation phase</b>	Implement mitigation projects	Identify and prioritize projects that reduce disaster risks (e.g., infrastructure improvements).	Within 1 year of the plan's implementation	NDMA and local governments
	Public awareness campaigns	Launch campaigns to educate the public about disaster risks and preparedness	Ongoing, with initial campaigns within 6 months	NDMA in partnership with media and community organisations
	Legislation and policy development	Review and update policies to enhance disaster risk reduction measures	Within 1 year	Ministry of Planning and Economic Development, and NDMA

#### **6.4. Community engagement**

Community engagement is a fundamental aspect of effective disaster management, particularly in countries like Sierra Leone, where local contexts and cultural practices significantly shape the success of disaster preparedness and response initiatives. By actively involving communities in the planning, implementation, and evaluation of disaster management strategies, Sierra Leone can ensure that these strategies are tailored to local needs and leverage indigenous knowledge. This engagement fosters a sense of ownership and accountability among community members, ultimately enhancing resilience and improving outcomes during emergencies.

Disasters can have devastating impacts on communities, particularly in a country like Sierra Leone, which has experienced its share of natural calamities, including floods, landslides, and disease outbreaks. Effective disaster management requires a deep understanding of local vulnerabilities, resources, and capacities. Community engagement plays a critical role in this process, as it allows for the integration of local insights and experiences into disaster management strategies. When community members are involved in the decision-making processes that affect their lives, they are more likely to participate actively in preparedness activities, leading to increased resilience and better disaster outcomes.

To effectively incorporate community engagement into the National Disaster Preparedness, Response, and Recovery Plan (NDPRRP), several strategies can be employed.

##### **a. Planning Phase**

The planning phase is crucial for laying the groundwork for effective disaster management. Involving community representatives in the planning stages through workshops and consultations ensures that their insights and needs are integrated into the disaster management strategies. This collaborative approach can be facilitated by organizing workshops that bring together local leaders, women's groups, youth organizations, and other stakeholders to discuss local hazards, vulnerabilities, and resources. By creating a platform for dialogue, Sierra Leone can ensure that the voices of its communities are heard and considered in the formulation of disaster management policies.

Additionally, establishing local disaster management committees can further enhance community involvement. These committees, composed of diverse community members, can facilitate ongoing communication between local populations and government agencies, ensuring that community perspectives are consistently integrated into disaster management efforts.

##### **b. Implementation Phase**

Engaging communities in the implementation of disaster preparedness activities is another vital aspect of effective community engagement. By involving community members in conducting disaster drills, awareness campaigns, and local hazard mapping exercises, Sierra Leone can build local capacity and resilience. For example, communities can participate in simulating evacuation procedures or creating local maps that identify hazards and available resources. Such activities not only enhance preparedness but also foster a sense of ownership among community members.

Moreover, promoting local knowledge and skills is essential for effective disaster management. Communities possess valuable traditional knowledge related to disaster resilience, such as indigenous building techniques and environmental management practices. Encouraging community members to share this knowledge can lead to the development of training programs that equip them with the skills needed for effective disaster preparedness. By leveraging local expertise, Sierra Leone can enhance its disaster management strategies and ensure that they are culturally relevant and effective.

### **c. Evaluation Phase**

The evaluation phase is critical for assessing the effectiveness of disaster management initiatives and incorporating community perspectives into future planning. Establishing feedback mechanisms, such as regular community meetings, surveys, and suggestion boxes, allows for the collection of insights from community members regarding the effectiveness of disaster preparedness activities and response efforts. This ongoing engagement ensures that the strategies remain relevant and effective.

Conducting regular community assessments is another important component of the evaluation process. These assessments can involve community members in evaluating the outcomes of disaster management initiatives, helping to identify gaps, successes, and areas for improvement. By involving the community in the evaluation process, Sierra Leone can foster a culture of accountability and continuous improvement in its disaster management efforts.

#### 6.5. Coordination with international bodies

Effective disaster management is a multifaceted endeavor that requires the collaboration of various stakeholders, particularly during large-scale disasters. In the context of Sierra Leone, where the impacts of natural disasters can be devastating, establishing strong coordination with international agencies, non-governmental organizations (NGOs), and other global partners is essential. This collaboration not only enhances the country's ability to respond to emergencies but also facilitates recovery efforts, ultimately leading to greater resilience in the face of future disasters.

Coordination with international bodies such as the United Nations (UN), the World Bank, and various NGOs is crucial for several reasons. First, these organizations bring a wealth of experience and expertise in disaster management, which can be invaluable in guiding local response efforts. Second, they often have access to significant resources, including funding, technical expertise, and logistical support, which can be critical during emergencies. Finally, effective coordination ensures that all stakeholders are aligned in their efforts, reducing the risk of duplication and inefficiency.

#### *Establishing Collaboration Frameworks*

To facilitate effective coordination, Sierra Leone must establish formal frameworks for collaboration with international partners. One of the primary strategies for achieving this is through the development of Memorandums of Understanding (MOUs). These agreements can outline the roles, responsibilities, and expectations of each party in disaster preparedness, response, and recovery. By formalizing these relationships, Sierra Leone can ensure that international partners are engaged and ready to assist when disasters strike.

In addition to MOUs, the creation of joint action plans is essential. These plans should specify collaborative efforts during disaster response and recovery, detailing resource allocation, timelines, and operational procedures. Workshops and meetings with international partners can help align these action plans with the needs of local communities, ensuring that assistance is both timely and relevant.

#### *Resource Sharing Mechanisms*

Another critical aspect of effective coordination is the development of mechanisms for resource sharing. During disasters, the ability to quickly mobilize resources can make a significant difference in the speed and effectiveness of the response. Sierra Leone should create a database of resources available from international partners, including equipment, personnel, and technical knowledge. This database would serve as a valuable tool for local authorities to access the support they need during emergencies.

Moreover, identifying funding opportunities and financial assistance from international bodies is vital for enhancing disaster management efforts. Collaborating with organizations like the World Bank and regional development banks can help secure financial resources for disaster preparedness and recovery projects. By establishing clear channels for resource sharing, Sierra Leone can bolster its capacity to respond to disasters more effectively.

#### *Communication Channels for Timely Coordination*

Clear communication is fundamental to successful coordination during disasters. Sierra Leone must establish communication protocols that define how information will be shared among local, national, and international stakeholders. This includes creating emergency communication systems that utilize technologies such as satellite phones, radio communications, and mobile applications to ensure reliable communication during crises.

Regular coordination meetings with international partners will further enhance collaboration. These meetings can serve as platforms for discussing preparedness initiatives, response strategies, and recovery efforts, fostering ongoing dialogue and cooperation among all stakeholders.

#### *Capacity Building and Training*

To maximize the benefits of coordination with international bodies, it is essential to invest in capacity building and training for local stakeholders. Organizing training sessions for government officials and NGOs on how to effectively collaborate with international organizations during disaster management can significantly enhance local capacities. Additionally, facilitating knowledge exchange programs will allow local stakeholders to learn from the best practices and experiences of their international counterparts.

#### *Monitoring and Evaluation*

Finally, establishing a robust monitoring and evaluation framework is vital for assessing the effectiveness of coordination efforts with international bodies. Defining key performance metrics will enable Sierra Leone to evaluate the success of collaborative initiatives, such as response times and resource allocation efficiency. Implementing feedback mechanisms will also allow for continuous improvement in coordination strategies, ensuring that the country remains agile and responsive to the evolving challenges of disaster management.

## 6.6. Technological integration

The integration of advanced technologies into disaster management processes is critical for enhancing real-time situational awareness, improving coordination, and facilitating effective communication among stakeholders. Technologies such as mobile applications, drones, satellite imaging, and digital platforms can significantly improve efficiency and effectiveness of disaster preparedness, response and recovery efforts. By leveraging these technologies, the country can build a more resilient disaster management framework that is responsive to the needs of its communities.

Table 9: Technological integration into DRM

Technological solutions		Objective	Action	Implementation timeline	Responsibilities
Real-time data collection	Mobile applications	Develop mobile applications that allow citizens to report incidents, hazards, and emergencies in real-time	Create a user-friendly app that enables users to send alerts, share location data, and provide information about the impacts of disasters (e.g. flooding, landslides)	Develop and pilot the app within 12 months	Collaborate with technology firms, universities, and the NDMA for development and deployment
	Drone for situation awareness	Utilize drones for aerial surveillance and data collection during and after disasters	Deploy drones to assess damage, monitor flood levels, and identify affected areas quickly	Establish a drone unit within 6 months and conduct training for operators	NDMA, Ministry of Defence, and Local NGOs
Satellite imaging	Hazard Mapping	Integrate satellite imaging technology for effective hazard mapping and risk assessment.	Use satellite imagery to identify high-risk areas prone to disasters such as flooding, landslides, and droughts	Partner with international organisations to obtain satellite data and create updated hazard maps within 9 months	NDMA, Ministry of Environment and Climate Change, and research institutions
	Monitoring disaster impacts	Employ satellite technology to monitor the extent of disasters and assess their	Conduct post-disaster assessments using satellite data to inform recovery efforts and	Establish protocols for satellite data analysis within 3 months of a disaster event.	NDMA and academic institutions specializing in remote sensing

		impacts on infrastructure and communities	resource allocation		
<b>Digital platforms for coordination and engagement</b>	Information sharing platforms	Develop a centralized digital platform for real-time information sharing among stakeholders	Create an online portal that provides updates on disaster preparedness, alerts, and response efforts, accessible to government agencies, NGOs, and the public	Launch the platform within 12 months and ensure regular updates and maintenance.	NDMA, MoCIT, and IT service providers
	Community engagement platforms	Utilize digital platforms to facilitate community engagement and feedback during disaster management processes	Implement tools such as social media, SMS alerts, and community forums for disseminate information and gather community input on disaster preparedness and response	Develop and launch engagement tools within 6 months	NDMA, local NGOs and community leaders
	Coordination tools	Implement digital tools for coordination among disaster management agencies	Use tools like GIS systems and online dashboards to coordinate response efforts and track progress	Integrate within 6 months	NDMA and local government

To ensure the effective integration of these technological solutions, it is essential to invest in training and capacity building for all stakeholders involved in disaster management. This includes:

- Training programs: develop training programs for government officials, emergency responders, and community members on the use of new technologies.
- Workshops and simulations: conduct workshops and simulation exercises that incorporate technological tools, allowing participants to practice their use in realistic scenarios.

## **Section 6: Monitoring, Evaluation, and Reporting Framework**



## 6.0. Introduction

The successful implementation of the National Disaster Preparedness, Response, and Recovery Plan (NDPRRP) is contingent upon a robust Monitoring and Evaluation (M&E) framework that ensures accountability, transparency, and continuous improvement in disaster management initiatives. This framework is essential for assessing the effectiveness of strategies employed to mitigate disaster risks, respond to emergencies, and facilitate recovery efforts. Below, we outline the key components of the M&E framework, including clear success metrics, data collection methods, reporting mechanisms, stakeholder engagement, and continuous improvement processes.

### 6.1. Monitoring and evaluation framework metrics

Disaster management is a multifaceted process encompassing preparedness, response, recovery, and rehabilitation efforts. To effectively manage and mitigate the impacts of disasters on communities, it is essential to establish a robust monitoring and evaluation framework. This framework serves as a vital tool for assessing the effectiveness and efficiency of disaster management initiatives, ensuring that interventions are tailored to the needs of all community members, particularly the most vulnerable populations.

The following table below presents a comprehensive set of indicators categorized into four main areas: Preparedness, Response, Recovery, and Cross-Cutting Themes (including Gender, Vulnerability Assessment, and Climate Change). These indicators are designed to capture key metrics that reflect community resilience, integration of gender considerations, and proactive measures in disaster risk reduction and management. By utilizing this metrics framework, stakeholders can better understand and improve disaster management practices, ultimately contributing to the resilience and well-being of communities affected by disasters.

Table 10: Monitoring and Evaluation Metrics Framework

Category	Indicator	Metric	Measurement Method	Data Source
Preparedness	Percentage of women and marginalized groups reporting improved access to essential services (healthcare, education, psychosocial support)	% Improved Access	Surveys	Beneficiary feedback surveys
	Number of community members trained in disaster risk reduction and preparedness	# Members Trained	Training attendance records	Training logs
	Proportion of disaster preparedness plans incorporating gender and vulnerability considerations	% Plans Incorporating Gender/Vulnerability	Document review	Preparedness plan assessments
	Number of early warning systems established and operational	# Early Warning Systems	System audits	Technical reports
	Percentage of communities with updated emergency response plans	% Communities with Updated Plans	Document review	Emergency response plan assessments
	Number of training sessions conducted	# Training Sessions	Training attendance records	Training logs

	for local response teams			
	Percentage of critical infrastructure assessed for disaster resilience	% Infrastructure Assessed	Assessment reports	Infrastructure evaluation reports
	Number of communities conducting risk assessments	# Communities Conducting Risk Assessments	Surveys	Risk assessment documentation
Response	Time taken to deliver essential services (e.g., healthcare, shelter) post-disaster	Average Delivery Time (hours)	Time tracking through incident reports	Service delivery logs
	Number of women-led businesses receiving financial support and training compared to pre-disaster levels	# Women-led Businesses Supported	Financial records and training attendance	Business support program reports
	Cost per beneficiary for recovery and rehabilitation services	Cost per Beneficiary (NLE)	Financial analysis	Budget and expenditure reports
	Number of community consultations held to inform recovery strategies	# Community Consultations	Meeting minutes and attendance records	Consultation documentation
	Percentage of response resources allocated to gender-specific needs	% Resources for Gender-Specific Needs	Budget analysis	Financial reports
	Average response time during disaster events	Average Response Time (hours)	Time tracking through incident reports	Incident reports
	Number of emergency drills conducted annually	# Emergency Drills	Drill records	Training logs
	Percentage of affected populations receiving timely assistance	% Receiving Timely Assistance	Surveys	Beneficiary feedback surveys
Recovery	Community satisfaction ratings regarding the relevance of recovery interventions	Community Satisfaction Rating (1-5 scale)	Surveys	Beneficiary feedback surveys
	Percentage of recovery projects that continue to operate one year after implementation	% Projects Operating	Follow-up evaluations	Project sustainability assessments
	Proportion of women involved in decision-making processes related to recovery and rehabilitation	% Women in Decision-Making	Stakeholder analysis	Meeting attendance records

	Number of reported cases of gender-based violence (GBV) pre- and post-intervention	# GBV Cases	Health and police records	Community health worker reports
	Number of psychosocial support sessions conducted for women and marginalized groups	# Support Sessions	Program documentation	Service delivery logs
	Percentage of recovery interventions targeting the needs of marginalized groups	% Interventions Targeting Marginalized Groups	Program evaluation	Project reports
	Percentage of beneficiaries reporting improved mental health post-recovery	% Reporting Improved Mental Health	Surveys	Beneficiary feedback surveys
	Number of livelihood restoration programs implemented targeting women	# Livelihood Programs	Program documentation	Project reports
	Percentage of affected households that have returned to pre-disaster living conditions within a specified timeframe	% Households Returned	Household surveys	Recovery assessments
	Number of resilience-building projects initiated post-disaster	# Resilience Projects	Project documentation	Project reports
Cross-Cutting: Gender	Percentage of women reporting increased economic empowerment post-intervention	% Women Reporting Economic Empowerment	Surveys	Beneficiary feedback surveys
	Number of women trained in leadership and advocacy related to disaster management	# Women Trained	Training attendance records	Training logs
	Number of partnerships established with women's organizations for disaster recovery	# Partnerships Established	Partnership agreements	Organizational records
Cross-Cutting: Vulnerability Assessment	Proportion of vulnerable populations (elderly, disabled, low-income) included in recovery planning	% Vulnerable Included	Demographic surveys	Risk assessments
	Number of community resilience initiatives implemented focusing on vulnerable populations	# Resilience Initiatives	Program documentation	Project reports

	Percentage of vulnerable groups participating in recovery planning	% Participation in Planning	Stakeholder analysis	Meeting attendance records
Cross-Cutting: Climate Change	Number of climate adaptation measures integrated into recovery projects	# Adaptation Measures	Program documentation	Project reports
	Percentage of communities implementing climate-resilient practices post-disaster	% Communities Implementing Practices	Surveys	Community assessments

## 6.2. Data Collection Methods

A robust M&E framework requires well-defined methods for data collection to ensure consistency and reliability. The following approaches will be employed:

- **Quantitative Methods:** Surveys and structured questionnaires will be utilized to gather numerical data on key indicators. This can include demographic data, resource allocation, and service delivery metrics that can be statistically analyzed.
- **Qualitative Methods:** Interviews and focus group discussions will provide in-depth insights into stakeholder experiences and perceptions. This qualitative data can help contextualize the quantitative findings and reveal underlying issues that may not be captured through surveys alone.
- **Existing Data Analysis:** Leveraging existing records and databases from government agencies, NGOs, and other relevant sources will enhance data accuracy and reduce duplication of efforts. This approach ensures that the M&E framework builds on available knowledge and resources.
- **Technology Utilization:** The incorporation of mobile applications and Geographic Information Systems (GIS) can facilitate real-time data collection and analysis, improving efficiency and responsiveness. For instance, GIS can be used to map vulnerable areas and track resource distribution in real time during disaster events.
- **Field Observations:** Utilize direct observations of disaster management practices to assess the on-ground implementation of strategies and response efforts during drills and actual emergencies.
- **Administrative Data:** Analyze existing records from government agencies, NGOs, and international organizations regarding disaster management activities, resource allocation, and outcomes.

## 6.3. Reporting Mechanisms

Establishing clear reporting mechanisms is vital for effective communication of progress to stakeholders. The M&E framework will include:

- **Reporting Frequency:** Regular updates will be provided on a quarterly and biannual basis to ensure stakeholders remain informed about the progress of disaster management initiatives. These reports will highlight successes, challenges, and areas for improvement.
- **Report Format:** Standardized reporting templates will be developed to ensure consistency in data presentation and analysis. This will facilitate easier comparison of progress over

time and across different regions.

- **Dashboard for Real-Time Monitoring:** Develop an online dashboard that presents real-time data on progress against key performance indicators. This accessible platform will provide stakeholders with up-to-date information on disaster management initiatives and outcomes.
- **Dissemination Channels:** Reports will be disseminated through various channels, including official government websites, stakeholder meetings, and community forums, to reach a broad audience. Engaging with local media can also help raise awareness and keep the community informed about disaster management efforts.

#### 6.4. Stakeholder Engagement

Engaging stakeholders in the development and refinement of the M&E framework is crucial for its effectiveness. This will involve:

- **Consultative Workshops:** Organizing workshops with diverse stakeholders, including government agencies, NGOs, community representatives, and academic institutions, will gather input on relevant indicators and data collection methods. This collaborative approach will ensure that the framework is comprehensive and grounded in practical realities.
- **Feedback Mechanisms:** Establishing channels for stakeholders to provide ongoing feedback on the M&E process and the effectiveness of disaster management initiatives will foster a culture of transparency and accountability.
- **Capacity Building:** Providing training and resources to stakeholders will enhance their understanding of the M&E framework and their roles within it. This will empower local communities to take an active role in monitoring and evaluating disaster management efforts.

#### 6.5. Continuous Improvement

An effective M&E framework must incorporate mechanisms for feedback and continuous improvement. This will involve:

- **Regular Reviews:** Conducting periodic reviews of performance indicators and data collection methods will ensure they remain relevant and effective in addressing emerging challenges in disaster management. This adaptability is crucial in a field that is constantly evolving due to climate change and other factors.
- **Adapting to Change:** Utilizing feedback from stakeholders and lessons learned from previous disasters will allow the M&E framework to evolve and improve disaster management strategies. This iterative process will enhance resilience and responsiveness.
- **Learning and Sharing:** Promoting a culture of learning by sharing best practices, success stories, and challenges faced in implementing the NDPRRP will foster collaboration and innovation among stakeholders. This can be achieved through workshops, webinars, and online platforms dedicated to knowledge sharing.

## Appendices

Appendix A. Peril (Hazard) Classification List 2014.

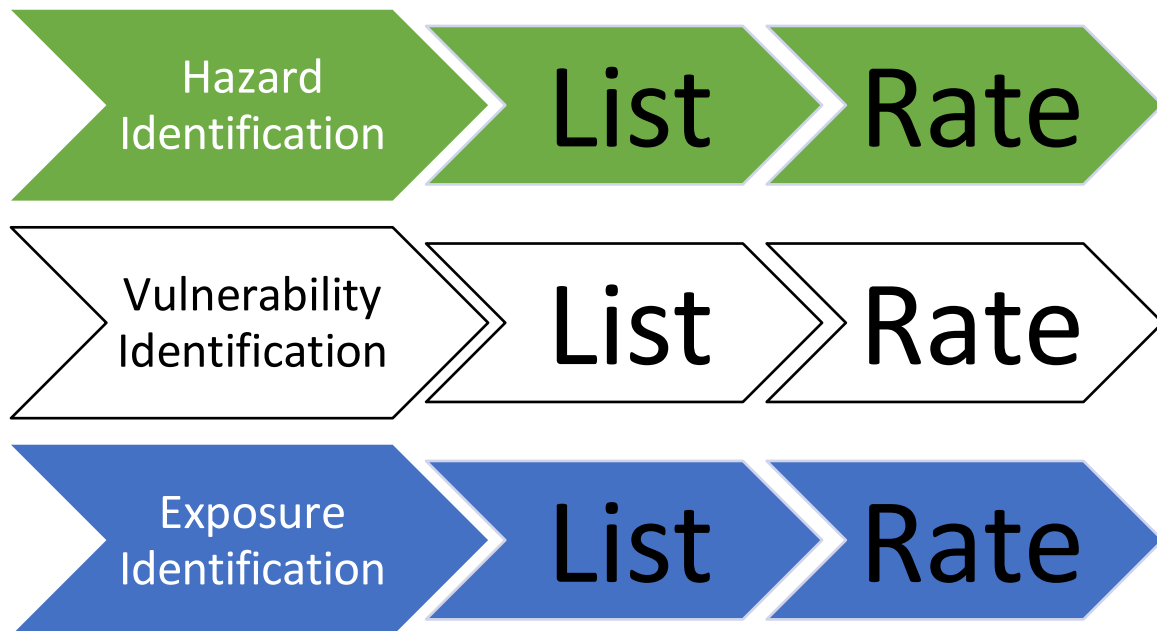
FAMILY	MAIN EVENT	PERIL
Geophysical	Earthquake Mass Movement Volcanic Activity	Ash Fall Fire Following EQ Ground Movement Landslide Following EQ Lahar Lava Flow Liquefaction Pyroclastic Flow Tsunami
Hydrological		
Meteorological	Flood Landslide Wave Action	Avalanche: Snow, Debris Coastal Flood Coastal Erosion Debris/Mud Flow/Rockfall Expansive Soil Flash Flood Ice Jam Flood Riverine Flood Rogue Wave Seiche Sinkhole
Climatological		
Biological	Convective Storm Extratropical Storm Extreme Temperature Fog Tropical Cyclone	Cold Wave Derecho Frost/ Freeze Hall Heat Wave Lightning Rain Sandstorm/ Dust Storm Snow/ Ice Storm Surge Tornado Wind Winter Storm/ Blizzard
Extraterrestrial		
	Drought Glacial Lake Outburst Wildfire	Forest Fire Land Fire: Brush, Bush, Pasture Subsidence
	Animal Incident Disease Insect Infestation	Bacterial Disease Fungal Disease Parasitic Disease Prion Disease Viral Disease
	Impact Space Weather	Airburst Collision Energetic Particles Geomagnetic Storm Radio Disturbance Shockwave

<b>Government of Sierra Leone</b>	
Office of National Security (ONS)	Ministry of Land, Housing and Environment
Department of Disaster Management (DMD)	Ministry of Local Government and Rural
National Platform for Disaster Risk Reduction (NPDRR)	Ministry of Tourism and Cultural Affairs
District Disaster Management Committees	Ministry of Transport and Aviation
All local and district councils	Ministry of Water Resources
Environment Protection Agency (EPA)	National Commission for Social Action (NACSA)
Ministry of Agriculture and Forestry	Republic of Sierra Leone Armed Forces
Ministry of Energy	Sierra Leone Firefighting Force
Ministry of Fisheries and Marine Resources	Sierra Leone Meteorological Agency (SLMA)
Ministry of Health and Sanitation	Sierra Leone Police Service
Ministry of Higher and Technical Education	University of Sierra Leone
Ministry of Social Welfare	National Commission for Social Action
National Civil Registration Authority	
<b>Major Hospitals</b>	<b>Transport Authorities</b>
<b>Public and Private Utilities Corporations</b>	<b>Private Sector</b>
<b>Local NGOs</b>	<b>Local CSOs</b>
<b>International NGOs</b>	
ACF	Handicap International
Action Aid	IFRC/ RC
Adra	International Medical Corps
Africare	International Rescue Committee
Care	MSF
Caritas	Norwegian Refugee Council
Catholic Relief Services	Oxfam
Concern	Save the Children
Cordaid	World Vision International
<b>UN Agencies</b>	
FAO	UNICEF
IOM	UNICHA
UNAMSIL	UNOPS
UNDP	WFP
UNHCR	WHO
<b>Other</b>	
Gates Foundation	US Aid
PCA	World Bank
UK Aid	



Appendix C. Risk Assessment Process.

Term	Details	Information/ Rating
Those Affected	The <b>who</b> (and what if necessary) may be impacted by the hazard and its consequences	People, places, areas, towns.
Likelihood	The <b>probability</b> that an event (hazard) which may lead to injury, ill-health or damage.	Low
		Medium
		High
Severity	<b>Level of damage</b> possible of a particular hazard	Low
		Medium
		High
Control Measures	Control measures are the <b>interventions</b> you put in place to reduce risk and prevent harm.	Elimination Substitution Mitigation Limitations Reduction Additional rules Extra resources



Appendix D. Risk Assessment Template and Example.

Location		Kroo Bay, Freetown Western Area Urban		Assessor	Paul Murphy	Date	12/6/21
#	Hazard	Likelihood Rating	Severity Rating	Vulnerability Rating	Exposure Rating		
1	Flooding	2	3	3	3		
<b>Control Measures/ Comments:</b> SL Met to provide early warning and forecasting. Public awareness and preparation for rainy season in suitable time. Sandbags and flood prevention resources and activities. Tide monitoring, landslide monitoring and emergency and technical services on stand-by.							
#	Hazard	Probability Rating	Severity Rating	Vulnerability Rating	Exposure Rating		
2	Major Fire	1	3	3	3		
<b>Control Measures/ Comments:</b> City resources to remove unnecessary combustibles and fire loading on direction of NFF. NFF provide awareness initiatives on safe cooking, community and business fire safety and arson awareness. Access and exit routes clear for vehicles, water sources established with pre-planned operational procedures. Create a culture of community ownership of fire safety.							
#	Hazard	Probability Rating	Severity Rating	Vulnerability Rating	Exposure Rating		
3	Severe Storm	2	2	3	3		
<b>Control Measures/ Comments:</b> Advance warning and ongoing forecasting from SLMet. Ongoing rainfall and tide monitoring and applicable modelling where required. Early warning to all locations and assistance with community protection and evacuation if required. Community advised to stay indoors and reinforce as required.							

Rating Scale	
1	Low
2	Medium
3	High

## Appendix E. SLIMS Strategic (Gold) Command Role & Responsibilities

### **Role**

The overarching aim of the strategic commander is to protect life, property and the environment by setting the policy, strategy and the overall response framework for the incident and for both the tactical and operational command levels to act on and implement.

Strategic commanders should jointly agree the response strategy with representatives from relevant responder agencies at a strategic co-ordinating group (SCG) meeting.

### **Responsibilities**

- I. Protect life, property and the environment.
- II. Set, review, communicate and update the strategy, based on available intelligence on threat and risk.
- III. Attend and possibly chair a Strategic Co-ordinating Group (SCG) meeting, if a group is established, or
- IV. Consider requesting that a SCG is set up.
- V. Consult partner agencies and community groups when determining the strategy.
- VI. Consider setting tactical parameters within which the tactical level can work.
- VII. Become involved in briefings where appropriate.
- VIII. Remain available to other agencies' strategic or tactical tiers of command, to ensure that appropriate
- IX. communication mechanisms exist at a local and national level.
- X. Ensure, where appropriate, that command protocols are set, agreed and understood by all relevant parties.
- XI. Where appropriate, secure strategic resources in order to resolve the incident and prioritise the allocation of resources.
- XII. Ensure that there are clear lines of communication between all responder agencies.
- XIII. Review and ensure the resilience and effectiveness of the command team, identify requirements for assistance from the wider resilience community and manage them accordingly.
- XIV. Plan beyond the immediate response phase for recovery from the emergency and returning to a new normality.
- XV. Have overall responsibility within the command structure for health and safety, diversity, environmental
- XVI. protection, equality and human rights compliance, and ensuring that relevant impact assessments are completed.
- XVII. Identify the level of support needed to resolve the incident or operation and resource the agency's response.
- XVIII. The development of communication and media strategies.
- XIX. Consider any issues that have negatively affected interoperability and ensure they are entered in the log for an after-action report (AAR).

### **Role**

The role of the tactical commander is to protect life, property and the environment by ensuring that rapid and effective actions that save lives and minimise harm are implemented through a tactical co-ordinating group (TCG). They work between the strategic and operational levels of command. Tactical commanders are responsible for interpreting strategic direction (where strategic-level command is in use) and developing and co-ordinating the tactical plan. The Joint Decision Model (JDM) should be used as the standing agenda for tactical co-ordinating group meetings.

### **Responsibilities**

- I. Protect life, property and the environment.
- II. Be aware of and understand the multi-agency command structure, commander roles, responsibilities, requirements and capabilities (including gaps), and monitor the operational command structure, including functional roles.
- III. Determine whether the situation merits the activation of the strategic level of co-ordination and recommend accordingly.
- IV. Establish shared situational awareness between the responder agencies. e) Initiate, if appropriate, and identify a chair for a multi-agency tactical co-ordinating group meeting at the earliest opportunity and convene them at regular intervals to maintain shared situational awareness.
- V. Construct and agree the overall joint intent, objectives and concept of operations, and their achievement within a joint plan. Regularly assess and disseminate the information and intelligence available through appropriate communication to evaluate threats, hazards, vulnerabilities and actions. Establish and maintain multi-agency shared situational awareness and promote effective decision making.
- VI. Provide accurate and timely information to inform and protect communities using the media and social media.
- VII. Understand how ever-changing threats and hazards affect each organisation, and work with multiagency colleagues to conduct joint dynamic risk assessments, putting in place appropriate mitigation and management arrangements to continually monitor and respond to the changing nature of emergencies for the organisation.
- VIII. Ensure that statutory responsibilities are met, and doctrine considered for the health, safety, human rights, data protection and welfare of individuals during the incident.
- IX. Share and co-ordinate operational plans to ensure multi-agency compatibility and understanding of initial tactical priorities and ongoing tactics.
- X. Manage and co-ordinate multi-agency resources and activities where required, providing a joined-up and directed response.

- XI. Liaise with relevant organisations to address the longer-term priorities of restoring essential services and the recovery of affected communities.
- XII. Ensure that all tactical decisions made, and the rationale behind them, are documented in a decision log, ensuring that a clear audit trail exists for all multi-agency debriefs and future multi-agency learning.

## **Role**

The overarching aim of the operational commander is to protect life, property and the environment by ensuring that rapid and effective actions are implemented on the ground to save lives and minimise harm. Commanders from all relevant responder organisations are responsible for working together to develop and execute the initial operational response and, where activated, the tactical plan. Each commander is responsible for the response of their respective agency. They work with the commanders from other responder agencies to co-ordinate activities.

## **Responsibilities**

- I. Protect life, property and the environment
- II. Make an initial assessment of the situation (using appropriate procedures including single service and M/ETHANE), ensuring that appropriate resources are requested and, where appropriate, declaring a major incident
- III. Co-locate with representatives/commanders from other responder agencies to agree timings and a forward command post for future meetings
- IV. Convene joint meetings and use the joint decision model to share information, intelligence and risk information to make effective joint decisions and co-ordinate operational plans. Agree a common view of the situation, its consequences and potential outcomes and the actions required within a working strategy
- V. Using the Joint Decision Model (JDM), maintain shared situational awareness through effective communication between all multi-agency organisations to assist in the implementation of the operational plan
- VI. Using the joint decision model, identify the challenges the organisation's operational plan may present to its multi-agency partners and take action to minimise or reduce them
- VII. Make and share decisions according to the agreed level of responsibility, with an awareness of consequence management. Share the decisions with multi-agency colleagues
- VIII. Construct a working strategy and establish priorities for its execution in sufficient detail so that other agencies have a clear understanding of its actions
- IX. Carry out a briefing at the earliest opportunity and at regular intervals subsequently
- X. Understand the role of each agency in managing and co-ordinating the care of victims, survivors and relatives
- XI. Consider the security of the scene and identify and agree triggers, signals and arrangements for emergency evacuation

- XII. Using the joint decision model conduct, record and share ongoing dynamic risk assessments, putting in place control measures with appropriate actions and review
- XIII. Understand how continually changing hazards and risks affect each organisation and work with multiagency colleagues to address them
- XIV. Ensure that statutory responsibilities for the health, safety and welfare of personnel are met during the incident
- XV. Determine whether the situation requires activating the next level of command support (Tactical Level) and make appropriate recommendations
- XVI. Update the tactical commander on any changes, including any variation in agreed multi-agency tactics within their geographical or functional area of responsibility
- XVII. Ensure appropriate support by the organisation at the scene in terms of communications operatives and logisticians. If available, support from a National Liaison Officer (or equivalent) should be provided. The amount and type of support will be determined by the incident
- XVIII. Maintain accurate records of information known, decisions taken and a concise rationale for those decisions. Records should be made contemporaneously
- XIX. Consider organisational post-incident procedures
- XX. Carry out a post-incident hot debrief

## Appendix H. Useful Links.

### **1. International Disaster Risk Management Doctrine**

- 1.1 Sendai Framework for Disaster Risk Reduction  
<https://www.undrr.org/>
- 1.2 Sustainable Development Goals  
<https://sdgs.un.org/goals>
- 1.3 United Nations Climate Change  
<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
- 1.4 World Bank Disaster Risk Management  
<https://www.worldbank.org/en/topic/disasterriskmanagement>
- 1.5 World Bank Global Facility for Disaster Reduction and Recovery  
<https://www.gfdr.org/en>
- 1.6 UNDRR Knowledge Hub Prevention Web  
<https://www.preventionweb.net/english/>

### **2. Regional Information**

- 2.1 Economic Community of West African States  
<https://www.ecowas.int/>
- 2.2 African Development Bank  
<https://www.afdb.org/en>
- 2.3 Red Cross/ Red Crescent  
<https://www.ifrc.org/en/what-we-do/disaster-management/>

### **3. Sierra Leone Information**

- 3.1 Hazard Profiling  
<https://www.harpis-sl.website/index.php/hazard-profiles/sierra-leone-hazard-profile>
- 3.2 World Bank Multi-City Hazard Reviews  
<https://www.worldbank.org/en/topic/disasterriskmanagement/brief/sierra-leone-multi-city-hazard-review-and-risk-assessment>
- 3.3 World Bank Sierra Leone  
<https://www.worldbank.org/en/country/sierraleone>



- 3.4 UNDP Sierra Leone  
<https://www.sl.undp.org/content/sierraleone/en/home.html>
- 3.5 WFP Sierra Leone  
<https://www.wfp.org/countries/sierra-leone>
- 3.6 Prevention Web Sierra Leone Profile  
<https://www.preventionweb.net/english/countries/africa/sle/>
- 3.7 Regent Landslide Rapid Damage and Loss Assessment  
<https://www.gfdr.org/en/publication/sierra-leone-rapid-damage-and-loss-assessment#:~:text=The%20assessment%20outlined%20the%20total,the%200landslide%20leading%20to%20349>

#### **4. Disaster Risk Management Personal Development**

- 4.1 Humanitarian Leadership Academy  
<https://www.humanitarianleadershipacademy.org/new-online-course-disaster-risk-reduction-management/>
- 4.2 Future Learn Emergency Preparedness and Planning  
<https://www.futurelearn.com/courses/emergency-planning-preparednessFutureLearnEmergencyPlanningandPreparedness>
- 4.3 World Health Organisation Open Learning  
<https://openwho.org/courses?q=emergency>
- 4.4 Harvard University Humanitarian Initiative Online Courses  
<https://hhi.harvard.edu/online-education>
- 4.5 U.S. Emergency Management Institute Online Courses (US postal address required)  
<https://training.fema.gov/is/>
- 4.6 UK Emergency Planning Resources  
<https://www.epcresilience.com/insight>
- 4.7 Disaster Ready (Online learning)  
[www.disasterready.org](http://www.disasterready.org)