

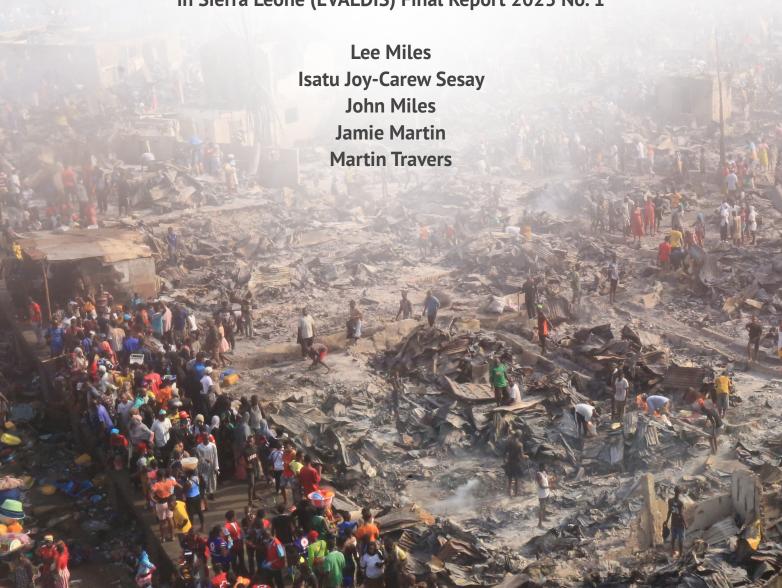






IMPROVING SUBNATIONAL DISASTER MANAGEMENT IN SIERRA LEONE

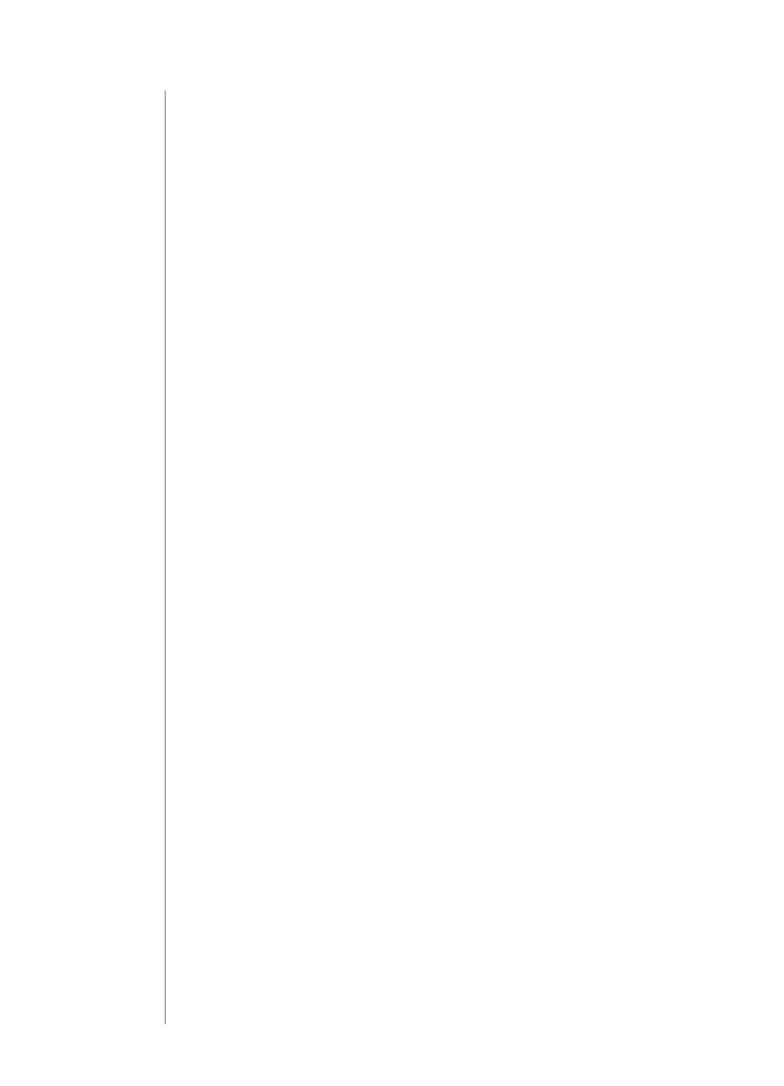
Evaluating Local Disaster Management in Sierra Leone (EVALDIS) Final Report 2023 No. 1











© Bournemouth University
Disaster Management Centre.

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher.

ISBN: 9781858993379

Authors Details



Professor Lee Miles

The Professor of Crisis and Disaster Management at Bournemouth University Disaster Management Centre (BUDMC). He is an awardwinning, distinguished scholar, who has held full professorial positions at four universities (in the UK and Sweden) since 2006. He has researched and published extensively on African and Caribbean disaster management issues, as well as directed numerous research projects seeking to enhance disaster management and crisis communication in, among others, Cameroon, Nigeria, Ghana, Sierra Leone and Senegal. Lee has also advised national and local authorities on disaster risk reduction, response and recovery issues in Sierra Leone; most recently, in relation to COVID-19 as well as the fire disaster in Susan's Bay, and the Wellington Fuel Tanker incident in Freetown in 2021. Prior to EVALDIS, Lee was the Programme Director of the Driving African Capacity-Building in Disaster Management (AFRICAB) project, funded by the UK's Global Challenges Research Fund (GCRF) and lead author of its 2021 Final Report that has been influential in shaping policies and practices towards disaster management in Sierra Leone. Lee was also a co-author of another 2021 report that represents the first major nationwide research survey of the impact of COVID-19 on disaster journalism in Sierra Leone.



Isatu Joy-Carew Sesay

From and resides in Freetown, Sierra Leone. She acted as the EVALDIS Country Facilitator and was a lead researcher in disaster management on the EVALDIS project. She holds a MSc in Disaster Management from Bournemouth University, UK (2021) and her distinction-level Masters dissertation was entitled 'Evaluating Health Emergency Operation Centres in Sierra Leone: Learning from the 2014-2016 Ebola Virus Disease Response from a Single Point of Failure Perspective'. She completed her undergraduate degree with honours at Njala University in Sierra Leone. Prior to the award of a prestigious Commonwealth Scholarship to study for her UK Masters, Joy worked at the Directorate of Health Security and Emergencies/Emergency Operational Centre, Ministry of Health and Sanitation (MHS) in Sierra Leone. Whilst studying at Bournemouth, Joy also worked alongside Professor Miles in delivering disaster management training at dedicated AFRICAB workshops to local communities in Freetown in 2021. After the completion of her Master studies, Joy returned home to Africa. As well as being valued member of the EVALDIS team, Joy currently works as a Planning Officer for the Emergency Preparedness and Response Department, Directorate of Health Security and Emergencies, Ministry of Health and Sanitation (MHS) in Sierra Leone.



John Miles

The EVALDIS Researcher in Disaster Management and Climate Resilience. John is a graduate of Bournemouth University receiving his BSc (Hons) in Geography in 2020. He has worked as a researcher at the Disaster Management Centre on several projects, including the AFRICAB project in 2020, and contributed as a co-author to the FCC Facilitators Guide to Disaster Management that received wide circulation in Freetown, Sierra Leone. In 2022, John also contributed to the development of new Standard Operating Procedures (SOPs) for handling emergencies and disasters at Freetown's vulnerable dumpsites. John has a particular interest in climate resilience, development and local government issues in Africa. He is presently completing a Masters in Climate Change and Development at the Centre for Development, Environment and Policy (CeDEP) at SOAS, University of London. In addition, John has contemporary experience of local government, and he presently works for the Democratic Service at Dorset Council in the UK.



Jamie Martin

Associate Lecturer with Bournemouth University Disaster Management Centre (BUDMC) since October 2015. Prior to that he served 33 years in the British Army, rising to the rank of Colonel. During his military career, he gained experience of working with foreign governments and international agencies, serving for three years as the Military Adviser to the Government of Sierra Leone and Commander of the International Military and Advisory Training Team (IMATT) in Sierra Leone (2011-13). He also served as a sector commander in a military observer mission in Mozambique (2014-15). Since joining BUDMC he has worked extensively on the development and delivery of disaster management education, training and exercises in the UK, Africa, the Middle East and the Caribbean. More recently, he has also taken part in disaster management research and capacity building activities in West Africa and the Caribbean.



Martin Travers

An associate lecturer at the BUDMC and holds a Master degree in Defence Studies (2007). After a 35-year career in the British Army, that included senior roles and notable deployments across the world, including Sierra Leone, Martin assumed the role as strategic advisor to the Mayor of Freetown, Sierra Leone (2020-2021). In this position, he provided leadership, governance and programme support to Freetown City Council (FCC). He was a major contributor to the city's COVID 19 response plan, to the creation of Sierra Leone's first subnational Disaster Risk Management (DRM) unit and the review, reorganisation and expansion of the city's Municipal Police Force. Martin continues to work closely with partners in Sierra Leone as well as providing training and consultancy in disaster risk management (DRM) and security sector reform in Nigeria, Fiji and Guyana in 2022-23.

Acknowledgements

This EVALDIS Final Report No 1. is the product of extensive cooperation with highly valued partners in Sierra Leone. First and foremost, the authors of the report would like to express their gratitude to Director-General Lt Gen. (Rtd) Brima Sesay and Deputy Director-General Mr John Vandy Rogers of Sierra Leone's National Disaster Management Agency (NDMA), for their unstinting support, cooperation and insights that have enriched the EVALDIS research and project. No matter how busy they are they have always been supportive. Appreciation should also be given to Directors Sinneh Mansaray, Thomas Lebbie, Abu Bakarr Bangura and Mohamed L. Bah for their cooperation in ensuring the constant access of the EVALDIS research team to the operations of the NDMA. The new NDMA continues to prove to be a valuable and generous partner assisting the research of Professor Lee Miles and Bournemouth University Disaster Management Centre (BUDMC).

A special thanks should be also extended to Abdul Rahman Bangura of the NDMA for his personal contribution in facilitating the field research and feedback sessions, particularly those with the NDMA's Provincial Officers in 2022 that proved so valuable to shaping the reflections and recommendations incorporated in this report.

EVALDIS are also grateful to the appointed NDMA Provincial Officers for their contributions and time. It has also been a great pleasure to work with partners at Freetown City Council (FCC) during 2020-2022. Thanks to the Mayor of Freetown, Mrs Yvonne Aki-Sawyerr, for her unstinting support of and interest in the EVALDIS project. The cooperation of the FCC Climate Action and Disaster Risk Management Unit (CADRMU), especially the work of its head, Gabriel Hallowell and Abdulai Sesay at the Mayor's Delivery Unit (MDU) has been invaluable.

Above all, it is also important to recognise the ongoing and exceptional participation of councillors, chiefs, community leaders and volunteers in the local communities across Freetown, as well as, the leaders of the national organisation of community disaster management committees, Daniel Bob Jones and Mohamed Sahid Conteh. Their roles and contributions in the co-ordination of EVALDIS Focus Groups in Freetown warrant special mention and thanks.

Appreciation is also extended to Lucy Green, BUDMC Manager, for her expert editorial and copy-editing efforts that have contributed greatly to the presentation and style of this EVALDIS Final Report.

Professor Lee Miles, Isatu Joy-Carew Sesay, John Miles, Jamie Martin and Martin Travers (BUDMC)

Acronyms

AAR After Action Reviews

AFRICAB Driving African Capacity Building in Disaster Management
BUDMC Bournemouth University Disaster Management Centre
CDMCs Community or Chiefdom Disaster Management Committees

COVID Coronavirus disease

DISTRICT DISASTER Management Committees
DICOVERC DISTRICT COVID-19 Emergency Centre

DM Disaster Management

DMD Disaster Management Department

DRR Disaster Risk Reduction

EPA Environmental Protection Agency

CADRMU Climate Action and Disaster Risk Management Unit

EVD Ebola Virus Disease
EWS Early Warning System

EVALDIS Evaluating Local Disaster Management in Sierra Leone (Project)

FCC Freetown City Council

GCRF Global Challenges Research Fund Geographical Information System

HAZMAT Hazardous Materials
IT Information Technology

Least Developed Country/Less Developed Country

MC Main challenges

MOU Memorandum of Understanding

NaCOVERC National COVID-19 Emergency Response Centre

NDMA National Disaster Management Agency
NERC National Ebola Response Centre

NFF National Fire Force

NGO Non-Governmental Organisations

ODK Open Data Kits

OECD Organisation of Economic Cooperation and Development

ONS Office for National Security

PI Public Information
RC Risk Communication

RSLAF Republic of Sierra Leone Armed Forces

SDG Sustainable Development Goals

SLP Sierra Leone Police

SLMet Sierra Leone Meteorological Agency

SM Social Mobilisation

SOPs Standard Operating Procedures

SPOF Single Points of Failure
TWG Technical Working Group

UK United Kingdom

UNDP United Nations Development Programme

VHF Very High Frequency
WFP World Food Programme



Contents

EXECUTIVE SUMMARY	Page	
	7	ES
INTRODUCTION	9	1
CONCEPTS, METHODOLOGY & METHODS	17	2
RESULTS & FINDINGS	31	3
CONCLUSIONS & RECOMMENDATIONS	71	4
BIBLIOGRAPHY	87	5



FOREWORD

This EVALDIS Final Report can be regarded as yet another positive statement of the ongoing cooperation between the National Disaster Management Agency (NDMA) and Bournemouth University Disaster Management Centre (BUDMC). The EVALDIS (Evaluating Local Disaster Management in Sierra Leone) project represents another step in the journey of a truly active partnership that brings together the research power and professional practice experience of one of the UK's leading and dedicated institutions in disaster management to work with our newly established agency that coordinates disaster risk reduction, relief, response and recovery across Sierra Leone.

Since the launch of the Agency in November 2020, I am pleased to say that the NDMA has continued to cooperate with the Centre and with Professor Lee Miles in particular. His work on disaster management, and especially the outcomes of the previous AFRICAB project (Driving African Capacity-Building in Disaster Management) project have been highly impactful and proved to be a constant reference point for the Agency in meeting its commitment to evidence-based policymaking. The work of Professor Miles on addressing resolvable single points of failure has helped to shape numerous policy innovations coordinated by the agency, including, for example, revised National Standard Operating Procedures for Relief and Response in 2022 and the development of the Agency's first ever Service Charter in 2023. Professor Miles and the AFRICAB project have contributed substantially to the activities of the Agency in helping to save lives and property across Sierra Leone.

Most importantly, the findings in this EVALDIS Final Report offer many relevant insights and recommendations for the NDMA and other disaster management related institutions and stakeholders in Sierra Leone to consider and take forward into the future.

The focus of the EVALDIS Final Report on helping to improve subnational disaster management in Sierra Leone is especially timely and appropriate for the work of the NDMA. In particular, the Agency, in line with its planning objectives for 2022, has recently expanded its presence across the provinces, with the appointment of new NDMA Provincial and District Officers that significantly improves the capacity of the Agency across Sierra Leone.

Indeed, I was delighted to see that one of the main findings of the EVALDIS research is that it shows the existence of an overwhelming consensus that this represents a progressive policy development on the part of the Agency.

In my view, the EVALDIS Final Report also reveals – once again - the value of the focus on resolvable single points of failure as a methodology and how rigorous academic research can lead and shape viable policy recommendations that policymakers and stakeholders can regard as realistic and affordable options for Sierra Leone and African disaster management more widely. The recommendations and immediate action points offered in the EVALDIS Report will help to further improve the development of our evolving NDMA regional capacity. They will be considered by the Agency with the utmost seriousness and represent key foundations for future policy implementation now and in the future.

Lt Gen (Rtd) Brima Sesay GCOR

Director General

NDMA



1 March 2023

As Director of the Evaluating Local Disaster Management in Sierra Leone (EVALDIS) project, I welcome you to this EVALDIS Final Report.

The aim of this Final Report is to present key findings and evidence drawn from extensive research involving actors and participants from across Sierra Leone that can further improve disaster management conducted at the subnational level. The use of the term 'subnational' – and something that is incorporated into the specific title of the Final Report - has been carefully chosen here. It reflects the fact that EVALDIS covered aspects pertaining to disaster management affecting the country's provinces, districts as well as wards/local communities.

At the request of the National Disaster Management Agency (NDMA), this Final Report has also especially reflected on those challenges and resolvable single points of failure (SPOF) that could potentially influence the ongoing and future development of the NDMA provincial and district capacities. The EVALDIS Final Report has therefore been designed to speak particularly to this important agenda. The Report provides a strong evidence-base through the application of rigorous research techniques and innovative SPOF methodologies. It includes specific recommendations and action points pertinent for future strategic and operational decision-making that could, and should, shape the further development of the NDMA's provincial and district capacities.

Yet, the true delights of leading and working on the EVALDIS project are related to the fact that the project has been fully interactive in many senses. In the first place, the EVALDIS Final Report applies SPOF concepts, diagnostics and techniques that have been refined by the BUDMC through conversations with partners here in Sierra Leone. EVALDIS is enriched by that dialogue. In this way, the NDMA has been, and continues to be, a vital and valued partner - not just in EVALDIS - but also in shaping the applications of SPOF concepts, diagnostics and techniques to the wider context of African disaster management.

Second, the EVALDIS project has enjoyed the major advantage of building on the striking achievements of the prior AFRICAB (Driving African Capacity-Building in Disaster Management) research project that I directed between 2019-2021. That previous project has been, and continues to be, highly impactful in influencing disaster

management-related discussions, policies, procedures and documents not just in Sierra Leone but also more widely in Africa, among international institutions and at international conferences and summits today.

Third, the EVALDIS project, funded by the UK's prestigious Research England's (RE) Participatory Research Programme in 2022, places notable significance on the participation of local actors that can help to ensure that the research design and data collection involve those most affected by emergencies and disasters. Notable parts of the field research – delivered in conjunction with disaster managers at Freetown City Council (FCC) - draws upon Focus Groups covering all 8 administrative blocks of the country's capital city. In my view, EVALDIS perhaps represents one of the most comprehensive recent studies of subnational disaster management in Sierra Leone since it fully engages with not just national, provincial and district policymakers, but also the local communities of Freetown covering over 1.2 million people. I give my personal thanks to the vibrant cooperation and valuable insights of the many participants from the capital that have helped to inform this EVALDIS study.

The hope then is that the EVALDIS project, and this EVALDIS Final Report, addresses key issues and agendas affecting the design and delivery of disaster management at the subnational level. It can act as a valuable reference point that will contribute to shaping future pathways for improving subnational disaster management in Sierra Leone. At the very least, EVALDIS should contribute to dynamic, evidence-based discussions between valued partners that must, and in many cases already do, cooperate to make this beautiful country and its communities more safe and secure before, during and after disasters.



Professor Lee Miles, PhD

Professor of Crisis and Disaster Management/Director, EVALDIS project

Bournemouth University Disaster Management Centre (BUDMC)

Imiles@bournemouth.ac.uk

www.budmc.uk



Executive Summary

The EVALDIS Final Report No. 1 represents a comprehensive assessment of the challenges confronting provincial, district and local disaster management across the country and is designed to contribute valuable research based and evidenced recommendations that can help to shape the NDMA's thinking and direction towards developing stronger regional capacities across the country in 2023.

Research was conducted by a team from the internationally acclaimed Bournemouth University Disaster Management Centre (BUDMC), led by Professor Lee Miles, during 2022. EVALDIS constitutes one of the most extensive, contemporary studies undertaken in recent years. The Report draws on data collected from stakeholder interviews and Focus Groups as well as peer/participant observations in disaster management meetings at the national, provincial, district and local levels. At all stages, the research has involved cooperation with Sierra Leone's disaster management institutions, the participation of local communities and incorporates peerreview feedback on the findings presented in the EVALDIS Final Report.

Through the application of innovative Bournemouth University led research techniques, focusing primarily on identifying 'resolvable single points of failure' (SPOF), refined in conjunction with the NDMA, this Final Report highlights that:

- There is an overwhelming consensus that the development of the NDMA's provincial and district capacities, including the appointment of NDMA Provincial and District Officers, and the creation of NDMA Provincial and District Offices is a welcome development.
- However, there remain 12 notable areas where SPOF exist that are likely to lead to the breakdown of part or all of this evolving

- subnational component of Sierra Leone's disaster management system. This includes aspects of disaster risk reduction, response and recovery.
- These 12 SPOF areas are clearly and commonly identifiable by all three participating constituencies of national stakeholders, representatives of local communities and provincial disaster management officers, and verified through participating interactions. Thus, there is a firm basis for concerted future subnational action and initiatives. There is a remarkably high level of consistency and consensus shared by all three participating constituencies that the top SPOF areas are resolvable and fixable over the short to medium terms (within 5 years), provided appropriate recommendations and immediate action points are implemented to address them.
- There is resoundingly strong agreement that key initiatives such as the development of Facilitators Guides to increase the knowledge, skills and competencies of the NDMA Provincial and District Officers (and offices) represent important initiatives for the future.

The EVALDIS Final Report calls for the NDMA to further develop an integrated NDMA regional strategy/document that can further underpin the development of the NDMA's provincial and district capacities during 2023-24. The Strategy would be wise to recognise and consider the 51 notable, resolvable SPOF identified in the EVALDIS Final Report, and implement most (if not all) of the 62 specific evidenced-based recommendations and immediate action points that are aimed at improving subnational disaster management in Sierra Leone now and in the future.



Chapter 1 Introduction

"There have been notable advancements in terms of disaster management governance" It is widely recognised that Sierra Leone, and its capital of Freetown, is highly vulnerable to hazards and disasters, such as floods, landslides and mudslides as well as quite regularly experiencing human-induced emergencies, such as urban fires. Most international indicators, for example, place Sierra Leone in the top half of disaster-prone countries across the world in terms of levels of risk (see, for example, World Risk Report, 2022: 55). In addition, like most parts of west and central Africa, Sierra Leone also carries a high disease burden that also makes the country's population vulnerable to vectorborne, such as malaria, water-borne, like cholera and typhoid and communicable diseases as illustrated by the 2014-2016 Ebola outbreak and the 2020-21 Covid-19 epidemic.

Sierra Leone is furthermore also at the forefront of experiencing the ongoing impacts of climatic change, Recent years have seen greater unpredictability relating to the dry and rainy seasons leading to deep-seated challenges with, for instance, water scarcity, droughts and rising heat temperatures during the dry season and greater propensities for flooding, landslides and mudslides during the raining season. Put simply, considerable, and ever more consistent work needs to be undertaken by governmental authorities, policymakers and disaster/emergency managers to handle the implications of these vulnerabilities and meet the challenges of frequent emergencies and disasters across the country.

Sierra Leone is still some way from having a comprehensive national capacity to enhance disaster risk reduction, preparedness, response and recovery.

There are still notable areas where substantial limits in state capacity exist (Miles et al, 2021; Turay and Gbetuwa, 2022). In practice, national and local disaster managers across the country continue to rely heavily upon close cooperation with international institutions and nongovernmental organisations (NGOs) through 'hybrid governance' arrangements and measures (Clark-Ginsberg et al, 2022; Melis and Hilhorst, 2020) to respond effectively to and during crises and disasters. Informal and bespoke approaches are still required to meet the demands of specific crisis and disaster events as they occur to fill in the short-term gaps in capacity (Miles, 2021a).

Nevertheless, the overall picture is a significantly improving one in terms of ambitions and measures to enhance the capacities of Sierra Leone disaster management system. In recent years, successive governments have displayed forthright commitments to developing a disaster management system for Sierra Leone that can help to meet these challenges. There have been notable advancements in terms of disaster management governance, including the passing of new disaster management (DM) related laws and legal frameworks. Most notably, the revised legal frameworks have led to the creation of new governmental institutions, policies and processes to enhance national coordination of disaster risk reduction (DRR), preparedness, response and recovery (see Miles et al, 2021; Turay and Gbetuwa, 2022).

In accordance with Presidential Decree, the 2020 National Disaster Management Agency (NDMA) Act was passed. It represented a significant step that sets out the size and scope of an updated approach to disaster management, and the roles, responsibilities and parameters of Sierra Leone's first ever dedicated national institution focused on specifically disaster (risk) management. Most notably, the 2020 NDMA Act led to the creation and formal launch of the National Disaster Management Agency (NDMA) on 19 November 2020.

Although a comparatively recent innovation, the NDMA continues to develop in substantial ways and at pace. The Agency was - in its first 12 months of existence - required to deal with over 291 incidents across the country in 2021-22. In addition, the Agency co-ordinated the national disaster relief and response to highly demanding (at least Level 2 designated) national emergencies like the catastrophic Susan's Bay fire in March 2021, where over 7000 households lost their homes in one night, the traumatic fire that engulfed parts of Kroo Bay fire in September 2021 and the Wellington fuel tanker incident, later in November 2021.

Indeed, the seriousness of the latter
Wellington emergency prompted a formal
Presidential Task Force enquiry and report,
delivered in 2022, and led by the DirectorGeneral of the NDMA. Some of these
disaster responses were also undertaken
while continuing to contribute to the
country's national apparatus for handling the
Covid-19 pandemic since a declared state of
emergency also existed in this regard until
March 2021.

The Agency has also not lost time. Since 2021, the NDMA has spearheaded key initiatives, including, amongst others, developing formal national disaster preparedness and response plans, a revised national inter-pillar system for handling

emergencies, new websites, telephone hotlines and communications for and with the
public, new proposals and projects to develop
early warning systems, and a growing
array of first-ever formal national standard
operating procedures (SOPs) to enhance
disaster management countrywide.
The 2020 NDMA Act is also notable in
envisaging the new NDMA to play a more
erstwhile role in the promotion of disaster risk
reduction (DRR) across the country.
The NDMA has attempted to develop a better
disaster risk reduction portfolio.

"NDMA continues to develop in substantial ways"



"The innovations and outcomes of the AFRICAB project have received positive international attention"

Furthermore, the Agency has shown a strong commitment to evidence-based policymaking in line with its function to conduct and participate in research on matters relating to disaster in Sierra Leone under Part III of the 2020 NDMA Act (Government of Sierra Leone, 2020: 15). Initial success in this regard, especially in these early years of development, puts some other comparable African disaster management agencies in the shade. The Agency has, for example, been an active, integral partner in numerous research projects with external stakeholders and even universities. This includes a growing partnership with the UK's Bournemouth University, that have led to, for example, the development of innovative single points of failure (techniques) as part of the Driving African Capacity-building in Disaster Management (AFRICAB) project (2019-2021 - see Miles et al, 2021; Miles 2021a). The innovations and outcomes of the AFRICAB project have received positive international attention, with representatives even discussing the AFRICAB project in international conferences and forums, such as ECOWAS (Economic Community of West African States) proceedings in 2022.

Central to the aims and objectives of the Agency is the development of a country-wide disaster management structure that enables the NDMA to have a formal presence in all of the country's five provinces and across all its major districts. This is central to the NDMA's ambitions to develop active cooperation and dialogue with local communities across the country. Indeed, the 2020 NDMA Act requires the Agency to be engaged with local communities.

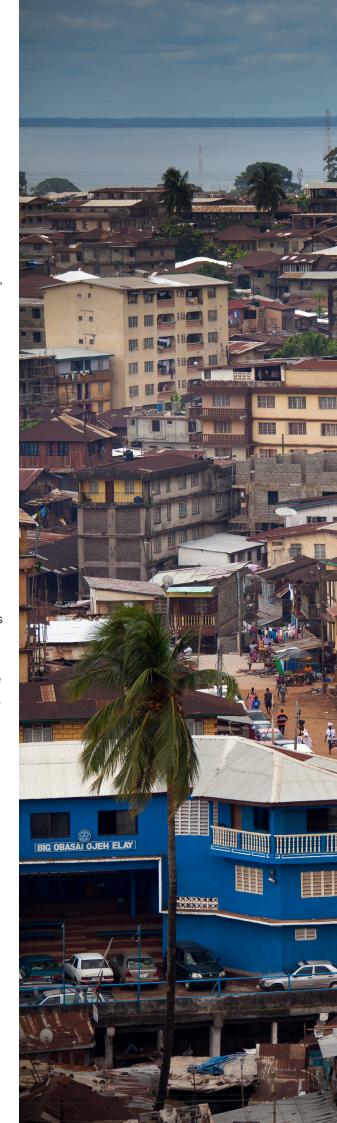
Under Part III of the Act, for example, the functions of the Agency are defined as including responsibilities to implement national, regional, district and chiefdom emergency plans and to facilitate the development of communities and community-based organisations to respond effectively to disasters (Government of Sierra Leone, 2020: 13).

Moreover, the NDMA has been relatively quick to begin to develop its structure. The AFRICAB Final Report 2021 launched in September 2021 identified that there is a need to develop strong NDMA local DM governance arrangements to alleviate and resolve potential single points of failure when handling disasters and emergencies. This was further endorsed as a priority by the Chief Minister of Sierra Leone, Jacob Jusu Saffa in January 2022 (see Miles et al, 2021). The AFRICAB report also provided additional evidential weight to support the development of an NDMA regional capacity as a priority in their 2022 national strategic documentation. Indeed, 2022 saw the appointment of five NDMA Provincial Officers and sixteen NDMA District Officers for the first time. accompanied by some initial induction training in partnership with, for instance, the WFP/UNDP, as the first steps on the road to develop a substantive NDMA regional capacity.

"There have been improvements to disaster risk management capacities at the subnational level"

In addition, the NDMA has sought to engage with the subnational level, in terms of embedding DRM principles and practices within the domains of local districts and chiefdoms. In August 2021, the Agency launched an innovative, pilot initiative, again with UNDP support, to develop and train chiefdom disaster management committees in selected communities across Sierra Leone, demonstrating the NDMA's commitment to foster community-based approaches in disaster management. These initiatives have been significantly expanded and intensified in the spring of 2023, with the NDMA rolling out an extensive array of fire prevention and flood management training activities with selected Chiefdom Disaster Management Committees denoting the NDMA's commitment to capacity-building across the provinces. The NDMA is also organising, with funding support from the World Bank, major exercises with local stakeholders across the cities of Sierra Leone, such as working with local partners to deliver an NDMA led flooding exercise in Makeni in November 2022. It was against this background of expansive developments that the Evaluating Local Disaster Management in Sierra Leone (EVALDIS) project was borne and implemented in 2022. Indeed, the NDMA (officials participating at all levels) remains a steadfast, and indispensable, partner of the project, contributing to all aspects of EVALDIS.

There have also been improvements to disaster risk management capacities at the subnational level, especially in the capital of Freetown. Freetown City Council (FCC) has, for example, further developed its own capacities for handling smaller emergencies in the city as well as actively contributing to more comprehensive responses to larger (Level 2 or 3 level) national emergencies and disasters that are formally led and coordinated by the NDMA.



"'The overall picture by 2023 includes greater degrees of optimism"

Despite major challenges with resourcing, the FCC is often a very active participant in disaster risk reduction, relief and response across the city. In addition, the Mayor of Freetown has been an active proponent of climate change action. Alongside appointing Africa's first dedicated Heat Officer, the Mayor has secured notable external funding from international sources, such as, the C40 city resilience network and driven numerous climate initiatives as part of the 'Transform Freetown' agenda, such as Freetown The Tree Town campaign (FCC, 2021a). Most notably, there has been the further development of the Climate Action and Disaster Risk Management Unit (CADRMU) initially established in 2020 that provides coordination of FCC actions on disaster preparedness and response with those wider stakeholders (Miles, 2021b). There have also been significant initiatives, such as, contributions by Bournemouth University to the development of a new FCC Level 1 Disaster Response Standard Operating Procedure (SOP) in 2021 and the launch of new Standard Operating Procedures for Disasters and Emergencies covering the city's largest (Kingtom and Kissy) dumpsites in 2022 that are highly vulnerable to uncontrolled urban fires (FCC, 2022a; 2022b). AFRICAB findings were also used as an evidence base for the FCC's first ever Climate Action Strategy, launched in February 2023 (FCC, 2023). Indeed, EVALDIS has been fortunate to have the FCC also as a formal partner, alongside the NDMA, in the design, organisation and delivery of the EVALDIS project.

In Freetown, local communities have gradually benefitted in recent years from better organisation of local volunteers, community arrangements and particularly the Community Disaster Management Committees (CDMCs) located in the city's wards. There have been significant initiatives aimed at further establishing and

strengthening a national organisation of CDMCs in Sierra Leone in 2022 that is also in the process of developing more formal collaboration both with the NDMA and in Freetown with the FCC.

This community based voluntary organisation and the FCC's Climate Action and Disaster Risk Management (CADRM) Unit for example, contributed substantially to the design and organisation of the field research in Freetown, especially in terms of the organisation of Focus Groups with councillors, CDMC chairs, paramount chiefs, community and disaster management leaders and volunteers in 2022.

The overall picture by 2023 includes greater degrees of optimism. Although there remain consistent and ongoing challenges in terms of scarce resourcing, institutional policy and capacity deficits and some degrees of organisational rivalry and tensions among those operating at the national, regional and local levels (see Miles et al, 2021), there have been important initiatives by respective disaster management bodies in 2022 and beyond to build and expand the capacities of provincial and local disaster management across Sierra Leone. The aim is that the EVALDIS project – through participatory design and collaborative research and shared interpretations - can help to expand the evidence-based underpinning discussions and decisions about what and where to go in the future with regional and local level disaster risk management.

Introducing the EVALDIS Final Report

This EVALDIS Final Report No. 1, led by Professor Lee Miles from the BUDMC and funded by Research England's (RE) Participatory Research Programme is based upon a comprehensive set of data and findings drawn from key interviews and participatory Focus Groups with policymakers and stakeholders as well as extensive peer review feedback conducted under the auspices of an NDMA hosted EVALDIS Steering Group that discussed the regional and local architecture, organisational structures and performance of Sierra Leone's emerging subnational disaster management system in 2022. Interpretations were also taken from a complementary EVALDIS Community Advisory Board consisting of local stakeholders, including representatives from Freetown City Council (FCC) that focused on Freetown's local disaster management arrangements across the blocks and wards of Sierra Leone's capital city.

Aim

The aim of this EVALDIS Final Report is to present findings, reflections and recommendations that address the identified local and urgent needs that have been repeatedly expressed by provincial, district and local disaster managers, policymakers and communities across Sierra Leone, including Freetown. In particular, the aim is that these findings, reflections and recommendations can inform the NDMA as it develops its regional capacities to improve disaster management at the subnational level.

Objectives

The objectives of EVALDIS are:

 To offer research and evidence-based findings drawing upon comprehensive data collection and field research involving participants from all of Sierra Leone's five (Western, North-Western, Northern, Southern and Eastern) provinces. A distinctive feature of the



Report is that the research also draws upon Focus Groups involving Freetown's 8 blocks and 48 wards, that will provide quality assurance and evidenced recommendations for the enhancement of support for and to the local communities of Freetown and ensure that the views of local communities shape the development of NDMA regional capacities as appropriate.

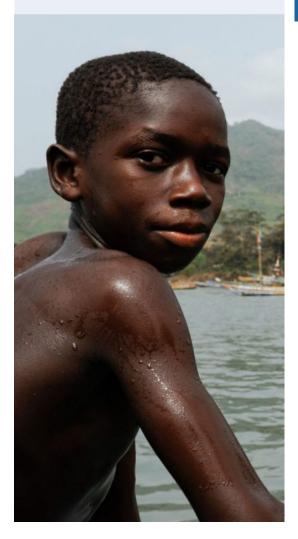
- 2. To provide evidence-based findings and reflections that can inform future actions and further refine the activities of the NDMA and ongoing development of NDMA regional capacities and offices across all of Sierra Leone. More specifically, to deploy Single Points of Failure (SPOF) techniques and diagnostics developed in the prior AFRICAB Report to consider regional deficiency and offer solutions that will further improve DM governance and capacities. This will also help to fulfil the objectives of the EVALDIS project to contribute to stronger institutions at all levels (United Nations Sustainable Development Goal (UNSDG) 16).
- To generate practical recommendations that can contribute to increasing the agility of local policymakers, stakeholders and communities through innovative research and knowledge exchange.
- 4. To ensure that the views of local communities shape the development of future SPOF methodologies and key NDMA deliverables so that they fully reflect the views and full participation of local actors, especially in relation to Freetown.

Structure

This EVALDIS Final Report consists of four short chapters. Chapter 1 offers an Introduction to EVALDIS whilst Chapter 2 presents the Concepts, Methodology and Methods that underpin the research

SUBNATIONAL DEFINITION

Subnational means those levels of governance below the national level, including provinces, districts, blocks, wards and local communities.



findings. Chapter 3 presents the key selected findings and results that have pertinence for subnational disaster management and climate resilience in Sierra Leone, and especially Freetown, The inclusion of findings is based on an appreciation by the EVALDIS research team as to what has most resonance for future planning and development of the country's regional disaster management capacities as envisaged by the NDMA. Chapter 4 offers conclusions and recommendations for action.



Chapter 2

Concepts, Methodology & Methods

Introduction

A distinctive feature of the EVALDIS project is that, and building on the work of the prior AFRICAB project, it seeks to present findings based on a clear identification of the main challenges that affect local communities in Sierra Leone, especially Freetown, as well as the existing NDMA regional capacities using a combination of SPOF diagnostic analysis and participatory research techniques. Chapter Two introduces the underpinning definitions as well as the main conceptual and diagnostic analytic tools that act as key lenses when interpreting the data. For more detailed explanation then also please refer to

Concepts

2021)

Two primary concepts underpin the analysis undertaken in this EVALDIS Report. These concepts are referred to as 'Main Challenges' (MC) and 'Single Points of Failure' (SPOF):

the AFRICAB 2021 Final Report (Miles et al,

MC

"SPOF has a

very strong

likelihood

and a high

failure"

propensity for

Refer to the identification of issues and/ or areas that have impacted or will impact substantially on the full functioning of subnational disaster management now or in the future. These MCs are perceived by disaster managers, stakeholders and local communities as notable in influencing both the development and the delivery of fully functioning disaster management. MCs are largely associated with levels of functioning.

SPOF

Refer to a specific failure within a place (situation/location), entity (organisation, team or individual) or process (policy, plan, process or procedure) leading to the breakdown or

paralysis of part or all of the local disaster management at any point in time in the DM cycle. It takes the analysis of MCs a step further, since it highlights those deficiencies that also have extreme criticality; namely a SPOF has a very strong likelihood and a high propensity for failure of part or all of the DM system itself. SPOF are mainly associated with failures (see breakout box).

SINGLE POINTS OF FAILURE (SPOF) DEFINITION

Specific failures within a place (situation or location), entity (organisation, team or individual) or process (policy or procedure) leading to the breakdown or paralysis of part or all of the DM system at any point in time in the DM cycle.

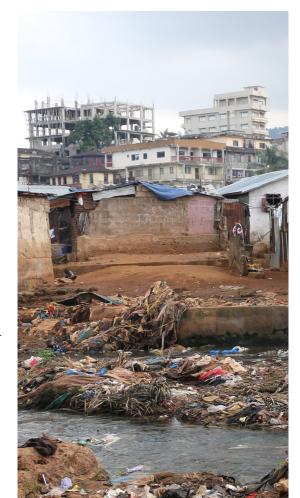


Source: Authors' Own.

The value-added effect of understanding those areas and issues of a DM system that represent potential or real SPOF is that it is possible to identify those MCs that have highly disproportionate and detrimental effects on subnational disaster management (governance, systems and practice). SPOF are so critical that they can have sizeable, dramatic and paralysing effects on part or all of local disaster management in Sierra Leone, and especially Freetown. Put simply, they are likely to result in failures. While there can be numerous MCs that can impact on the functioning of DM to various degrees, there is a need to go further. It is necessary to identify those MCs that are also real or potential SPOF and have a strong likelihood of resulting in the part or complete failure of subnational disaster management in the country (and especially Freetown).

Understanding and addressing specific SPOF is especially helpful for the emerging NDMA regional capacity as well as local communities when general levels of resourcing remain scarce. Identifying SPOF also provides valued -added given that presently those local communities remain very dependent on limited (often local) human capacity. By recognising SPOF, and thereby tailoring the subsequent policy actions, there is an enhanced possibility of turning current failure into future success. For more explanation see AFRICAB Report 2021 (Miles et al, 2021).

Furthermore, the use of SPOF diagnostics can not only inform and assist national and local disaster managers to handle the challenges confronting them in Sierra Leone. Rather it can aid them to identify and focus on the respective control measures that can remove or resolve SPOF or, at least, seek to alleviate and reduce the inherent risks of SPOF. Indeed, this is one of the primary motivations for seeking to study the nature of SPOF operating at the provincial, district and local levels since this will provide further insights that can help the NDMA shape its evolving regional capacities in the future (see Figure 2.1)





It is also important to understand the respective control measures to address specific forms of SPOF. As Figure 2.2 indicates, SPOF can take numerous forms, including:

Technical

Failures in the omission, existence, format, description,

implementation, interoperability & enforcement of standards.

Procedural

Failures in the omission, existence, aims, objectives, format,

description, implementation and enforcement of policy and/or legal framework.

Single Points of Failure Forms

Human

Single Points of Failure that relate to human error & deficiencies arising from staff numbers & resilience, issues, seniority & leadership issues, expertise, competence, skills & training issues.

Physical

Failure of critical infrastructure, buildings & estates, communications, transport system, tools, equipment, vehicles, geographical locations, climate & geology etc.

Economic or Financial

Budgets & allocations, short & long term financing, contingency funding & international assistance.

Figure 2.2: Forms of SPOF.

Source: AFRICAB Final Report (Miles et al, 2021, p. 15).

Methodology

The methodology supporting this EVALDIS Final Report can be likened to a combination of two 'Lenses'.

Lens 1:

The first lens comprises the Main Challenges (MC) analysis. This identifies and categorises the various types of challenges facing Sierra Leone's DM system that are regarded by disaster managers, policymakers and key stakeholders as impacting to various degrees on the DM system and/or competency framework in the country. The authors gathered information and data from disaster managers and stakeholders countrywide at both the national and subnational levels on their risk perceptions, as well as interpretations of existing general and specific challenges.

Lens 2:

The second lens comprises the SPOF analysis where the disaster managers, policymakers and stakeholders were asked to identify and comment upon potential and real SPOF guided by diagnostic concepts developed as part of Bournemouth University's inductive SPOF approach. This diagnostic tool assists disaster managers to understand the impacts of SPOF and how better to develop strategies and control measures to confront and handle them. This builds on the initial challenge-based analysis by identifying and defining the specific deficiencies that have disproportionately large and detrimental impacts and could lead to failures within Sierra Leone's DM system.

¹ Note: Alongside identification of SPOF form there is need to consider interrelationships. There are thus multiple SPOF form that are highly interlinked.

Essentially, it is important to recognise that not all SPOF are perceived by disaster managers and stakeholders as having the same likelihood and/or severity of impact. In simple terms, some SPOF are deemed to have a greater likelihood of happening and would have more severe implications for a particular area of disaster management. For example, the destruction of mobile phone masts on the hills of Freetown due to high winds or rainfall induced landslides will lead to major 'dead spots' in the communication network that will make communication in that part of the capital highly difficult given the lack of other alternatives, Hence, perceptions of the determinants of a SPOF include understanding estimations of their severity within one area of DM activity. In addition, how scalable a SPOF is perceived to be is also significant in terms of the ability of that specific failure in one area to transcend and lead to major accompanying challenges and failures in other parts of the DM system.

Thus the loss of mobile phone connectivity and capacity will impact not just on the communication network, but also could lead to scalable failures that transcend into other areas of disaster management; so if disaster responders are heavily reliant on mobile phones for communication then this will inhibit the speed, response and coordination of the emergency services. In other words, SPOF are assessed in terms of their severity and of their scalability:

- Severity: The degree to which a SPOF affects an area of the DM system and the extent to which it will in itself lead to the breakdown of part or all of the system (vertical – within an area/policy field).
- Scalability: The degree to which a SPOF in one part affects other parts of the DM system that may eventually lead to a breakdown of that system (horizontal across area/policy fields).



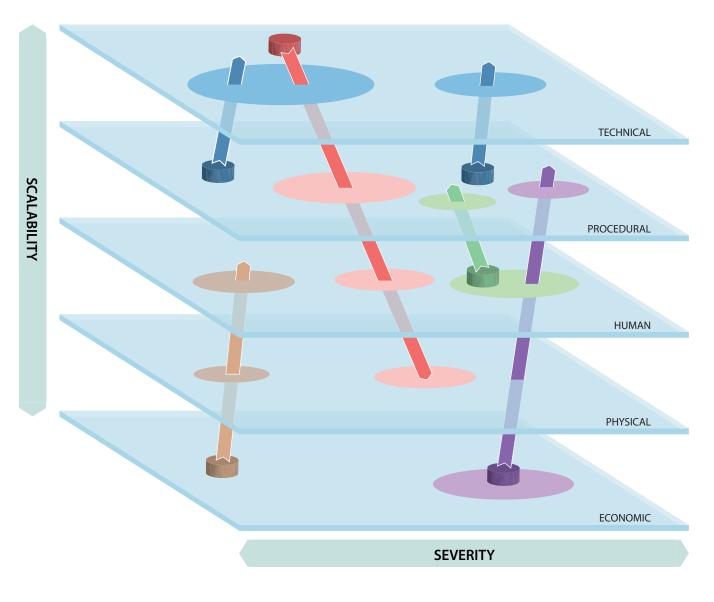


Figure 2.3: Severity & Scalability.

Source: AFRICAB Final Report (Miles et al, 2021, p. 16).

As part of Lens 2, participants were asked to comment upon SPOF utilising two differing typologies. The first focuses on the size of the SPOF by determining the degrees of perceived severity and scalability of any SPOF (Determinants of SPOF).

The second focuses on its ability to be addressed or 'fixed' using appropriate control measures (Categories of SPOF). It should be noted however that in this report the main focus in terms of presentation of findings in Chapter 3 will focus on the next typology.



Nevertheless, perceptions of the severity and scalability of a particular SPOF by respective disaster managers and stakeholders will also influence to what extent they regard and estimate the extent to which a SPOF can be resolved (partly or completely) by the proper implementation of existing control measures or by the introduction of new control measures and solutions. Put simply, this indicates whether a SPOF can be fixed, partly fixed or will remain unfixed by the actions of disaster managers and respective stakeholders working together to enhance Sierra Leone's DM system. Thus SPOF can be categorised (see Figure 2.4) as follows:

Figure 2.4: Categories of SPOF.

Source: Authors' Own.

Resolvable

Temporary:

Can be removed via mitigation and removal.

Single Points of FailureCategories

Residual

Temporary & Permanent:

Can only be partly removed via mitigation, preparedness and risk reduction measures.

Resistant

Permanent:

Cannot be removed - management strategies based on accepting their existence and avoiding them.

Resolvable (Fixable):

SPOF that are categorised as 'Resolvable' can be regarded as temporary in nature since if appropriate resources and control measures are implemented or put in place then either or both the severity and scalability of a SPOF can be removed and thus the SPOF is resolved. Under this reasoning, the key strategies for addressing Resolvable SPOF are usually based on mitigation and removal.

Residual (Partly Fixable):

SPOF that are categorised as 'Residual' are more complex and multi- faceted. Residual SPOF can be reduced and/or removed only in part through the implementation of key strategies and control measures, leaving an enduring 'residual' element which governments and their disaster managers need to be constantly aware of and seek to mitigate.

Resolvable (Fixable):

SPOF that are categorised as 'Resistant' should be regarded as impervious to strategies and measures that seek their removal and are therefore regarded as permanent in their entirety and cannot be removed at all. Consequently, the management strategies to handle Resistant SPOF are often based around recognising and accepting their existence. These strategies are usually then based on acknowledging the Resistant SPOF as an extreme form of vulnerability, implementing limited risk reduction where it is feasible, and reconciling the boundaries where the SPOF will have a catastrophic impact in terms of the functioning of part or all of the respective DM system.

SHAPE RESEARCH SCOPE & PURPOSE

Enrich Understanding of Provincial/District/Local Issues. Refine Purpose of Research Questions & Interview Guides. 2

ADD TO RESEARCH IMPLEMENTATION & CONTEXT

Input into Research Design, Methodology & Methods. Advice on Relevant Participants. Ensure Respect of Local Culture. 5

PROVIDE LOCAL INTERPRETATIONS & INFLUENCE APPLIED OUTCOMES

Comment, Feedback & Enrich Intepretations of Field Research Results. Enhance Exposure of Local Communities. Ensure Knowledge Translation, includes Local Voices.

Figure 2.5: EVALDIS IKT Methodology.

Source: Authors; Own. Modified from Cargo and Mercer (2008: 338).

Methodology

A further distinctive feature of the EVALDIS project is its application of Integrated Knowledge Translation (IKT) methodology and technique (Jull et al, 2017: 4). Briefly, IKT recognises the value of engaging in the research process (rather than just being the subjects of the research) those who are intended to be beneficiaries, users and stakeholders of the research. Local knowledge and perspectives, and especially those of practitioners, policymakers and local communities, are not only acknowledged but form an important basis for research and planning (Cornwall and Jewkes, 1995: 1667).

For EVALDIS, IKT is highly appropriate since it seeks to bridge the gap between research and practice. It seeks to operationalise an active partnership between academics (BUDMC), practitioners (NDMA and FCC) and local communities (CDMCs, tribal chiefs and disaster management volunteers). The aim is ensure that policymakers, disaster managers, and provincial, district and local communities participate and help shape the purpose, research design and approach, field research and contribute to the final outcomes of EVALDIS (see Figure 2.5).







1. ENGAGEMENT

- Identify Local Communities of Interest through Preparatory Meeting
- Develop Relationships Drawing on AFRICAB success

2. FORMALISATION

- Create Dialogue and Decision-making Principles
- Establish Participatory
 Structures: Community Advisory
 Board (CAB) and NDMA Steering
 Group

3. MOBILISATION

- Undertake Field Research (Interviews, Focus Groups, Sessions and Peer Observations)
- Co-creation of EVALDIS Final Report: (Consultation and Empowerment)

4. MAINTENANCE

- Development of Training and Exercising Competence Requirements for NDMA Provincial and District Officers
- Guidance and Advice for NDMA Regional Arrangements and Implementation

In EVALDIS, there is a an emphasis placed on translating knowledge into action and seeing knowledge translation from researchers to practitioners and vice-versa. The stress is on 'knowledge to action' and 'knowing and doing' and implementing an interactive process of knowledge exchange between researchers and knowledge users (Jull et al, 2017). EVALDIS has four phases to ensure active participation (see Figure 2.6)

The primary purpose of IKT is to bridge the 'know-do gap' by ensuring that research is available to and used by knowledge users; like government policymakers, disaster managers and community leaders to improve systems and outcomes' (Jull et al, 2017: 2). It also recognises the expertise of policymakers and community members since the 'co-creation of knowledge is the result of both researcher and knowledge user expertise' (Jull et al, 2017: 4). EVALDIS highlights that we are all experts in some way (see Figure 2.7).

Yet, through greater active participation, EVALDIS functions better in co-collecting, collating and analysing data and translating them into findings and recommendations that also makes sense and have resonance to national, provincial and local disaster managers as well as local leaders and communities.

Findings that are informed by an IKT approach may even help to empower them as knowledge users by giving them clear evidence to support what they do, the challenges that they face and the disaster management solutions that they need (Lilja and Bellon, 2008).

Figure 2.6: Four Phases of IKT in EVALDIS.

Source: Authors' Own. Modified from Cargo and Mercer (2008: 334).

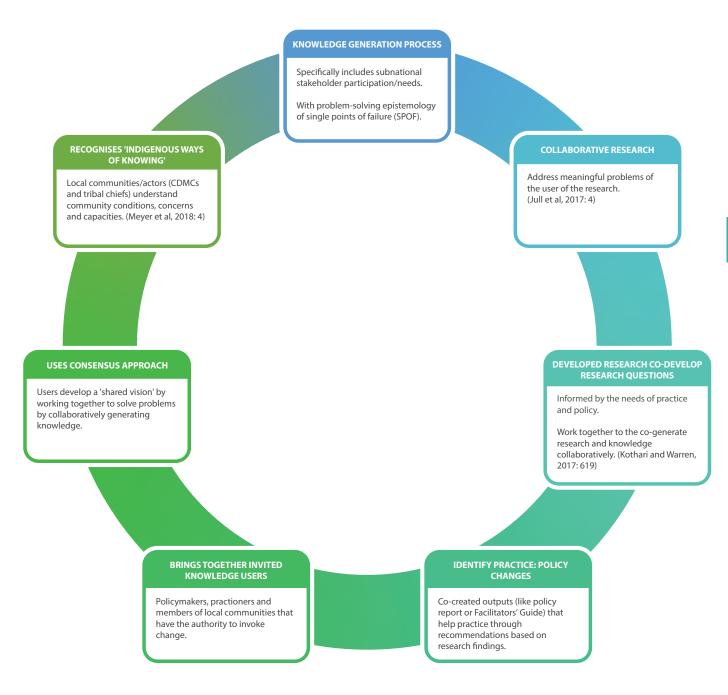


Figure 2.7: Integrated Knowledge Translation (IKT).

Source: Authors' Own.

Method

The EVALDIS Final Report employed a variety of research methods to support and underpin the respective 'Lens' methodology (see Figure 2.8) that were deployed via two workstreams. There was also participation from across the 'triple-helix' of the Government/Public, Private, and Third Sectors, including Non-Governmental Organisations (NGOs).

METHODOLOGY DATA INPUT **CATEGORISATION OF DATA** SPOF Technical SeverityScalabilit Thematic AreasImmediate Action Points Interviews • Focus Groups Procedural Sessions Workshops Physical Economic Resistant Challenges Lens **SPOF Lens**

Figure 2.8: EVALDIS Methodology.

Source: Authors' Own. Modified from AFRICAB Final Report (Miles et al. 2021: 18).

Workstream 1

Literature Review:

This included the completion of an extensive literature review/document survey of over 50 existing primary and secondary materials and resources to support the application of the MC analysis. Initial consultations with national stakeholders were also held in January 2022 to provide early insights into the nature and characteristics of critical gaps and to ensure stakeholder involvement and co-creation in the EVALDIS research design. The Literature Review was also updated at various points during the EVALDIS life-cycle.

Stakeholder and Partner Benchmarking and Co-creation:

As part of the IKT approach of EVALDIS, an EVALDIS NDMA Steering Group was established that brought together key stakeholders involved in the development of national, provincial, district and local disaster management. This included the NDMA Director-General (DG), Deputy Director-General (DDG) as well as Directors of all of the main Directorates of the NDMA (Disaster Risk Reduction (DRR); Relief and Response; Research, Monitoring and Evaluation; Communication, and Partnerships). There were also representatives from key responder organisations, like the Police, National Fire Force (NFF), Sierra Leone Armed Forces (SLAF) and key agencies including the Environmental Protection Agency (EPA) and Sierra Leone Meteorological Service

(SLMet) as well as important organisations, like the UNDP and WFP. In addition, a complementary Advisory Board (EVALDIS-CAB) was also established that included local policymakers from the FCC, councillors, and representations from the Community Disaster Management Committees (CDMCs), community leaders and volunteers as well as responders, such as the National Fire Force and Metropolitan Police in Freetown. NDMA Steering Group and CAB stakeholder meetings took place from February 2022 with a view to comprehensive involvement of all types of participants as knowledge users and knowledge providers.

The main role of the EVALDIS NDMA Steering Group as well as EVALDIS-CAB was to offer insight into generating and refining research questions to be looked at, comment on feasible research designs and forms of data collection, advise on contacts and (sometimes) facilitate dialogue with persons for EVALDIS to contact and meet and help EVALDIS researchers to interpret data so that it can then inform practice, policy recommendations and the communities in a better way. The aim was that together, greater value-added would be provided and offer something more (Kothari and Wathen, 2012: 188), helping to pave the way for more self-reliant communities in Sierra Leone by facilitating provincial, district and local level involvement in mitigation, preparedness and response.

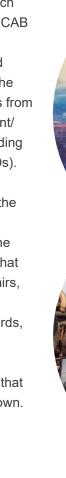
Field Research:

A qualitative research investigation process took place during June to November 2022. This involved three specific rounds of field investigations involving a total of 259 participants across Sierra Leone. In particular, it also included comprehensive Focus Groups with Freetown's 8 administrative blocks (including 48 wards).

First, semi-structured, detailed one-hour interviews (18) were undertaken in February and March 2022 after the first EVALDIS NDMA Steering Group and CAB meetings with senior stakeholders and participants to further refine the research design. They also provided some initial insights on the specific elements to be further investigated in the later Focus Groups – namely the perceived views, risk perceptions and actions among local communities towards single points of failure, the creation of priority lists to mitigate those SPOF, feedback on the existing role and impact of the prior AFRICAB research project, including the impact of the AFRICAB Final Report and finally, local attitudes and actions towards climate change and specifically rising heat temperatures in the city. The interviews included participants from across the 'triple-helix' of the Government/ Public, Private, and Third Sectors, including Non-Governmental Organisations (NGOs).

Second, this was then followed on with the organisation of eight (8) half day-Focus Groups in Freetown during May and June 2022. They were held on a block basis that brought together councillors, CDMC chairs, local government development officers, specific responders working in those wards, paramount and tribal chiefs and local community leaders and volunteers from each of the six (6) wards that constitute that respective administrative block in Freetown.







helix' "

from across

the 'triple-

"The

interviews

included participants

"Findings were duly presented to meeting of the EVALDIS NDMA Steering Group"

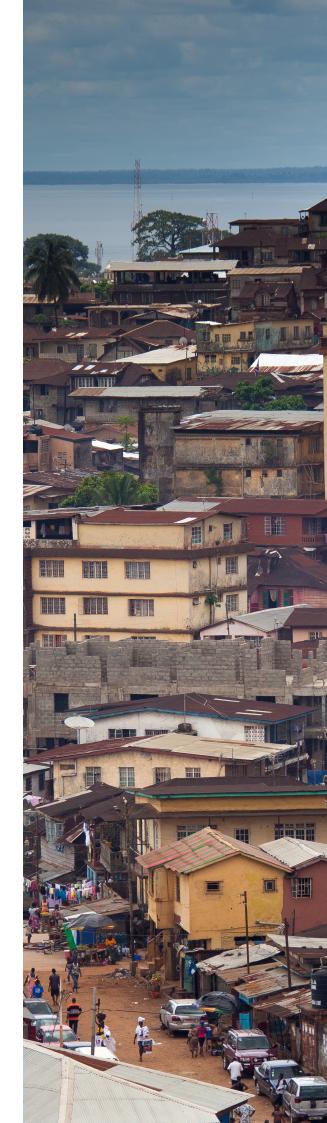
Interim findings were duly presented to meeting of the EVALDIS NDMA Steering Group for further comment, peer-review and feedback in November 2022. The completion of interviews and Focus Groups allowed the co-creation of a detailed Freetown-wide field research base-line data set covering SPOF perceptions, request listings, specific feedback on the FCC facilitators' guide and on climate change readiness across all 8 blocks (including all 48 wards) of Sierra Leone's capital city.

Third, there was also dedicated field research including participants involved in the ongoing development and delivery of the NDMA's regional capacity during 2022. More specifically, a dedicated Focus Group involving all of the NDMA's newly appointed Provincial Officers from all five of the country's provinces was held at the NDMA in November 2022, co-chaired by Professor Lee Miles and the Deputy Director-General (DDG) of the Agency. This was also accompanied by a small set of seven (7) follow on one-to-one interviews in Freetown in November 2022 to capture further updates on developments and attitudes prior to the writing of this report. Interim findings were duly presented to meeting of the EVALDIS NDMA Steering Group for further, almost immediate, comment, peer-review and feedback in November 2022.

Workstream 2

Local Stakeholder Observations:

The NDMA and FCC also proved once again to be a highly valuable and productive partners of the EVALDIS project. Professor Lee Miles was allowed full access to the proceedings of the NDMA's strategic coordination inter-pillar meetings and participated in the NDMA's virtual emergency response groups to numerous incidents, including the second Susan's Bay fire incident in December 2022.





The NDMA also permitted Professor Miles full access to thinking and official reflections in relation to after-action reviews and reporting on the November 2021 Wellington Fuel Tanker incident as well as contributions by Professor Miles to the Presidential Task Force reflections on the Wellington emergency undertaken during 2022. Professor Miles also joined and participated in inter-pillar emergency response meetings organised by the NDMA throughout 2022.

EVALDIS researchers observed contemporary deliberations relating to DM arrangements, processes and procedures in Freetown during January- December 2022, including participation in a high-level EVALDIS meeting in November 2022 held at the FCC headquarters. Professor Miles also participated in the FCC's 'virtual' Emergency Response Group (bringing together NDMA, FCC, NGOs and stakeholders) as well as the newer CDMC Response Group that handled over 60 major fire, flood and landslide incidents in Freetown in an ongoing evaluation role.

The 2022 rainy season was regarded as above average in terms of rainfall leading to a succession of fire, flood and landslide related emergencies requiring significant local and national response efforts. The data collection and analysis of this report therefore also reflects the most contemporary and detailed insights into levels of situational awareness relating to the NDMA's national and provincial, and Freetown's more local, emergency response operations as well as the current state of the resilience of local communities across Freetown during 2022.



Chapter 3

Results & Findings

Introduction

"The launch

and expansion

of the NDMA's

regional

capacity

in 2022 is

a welcome

development."

Chapter 3 presents selected results and findings from the EVALDIS project in relation to the identification of resolvable single points of failure. As described in the previous chapter, this involved a process of qualitative field research in terms of semi-structured interviews with 25 senior national and local stakeholders and community representatives and leaders, complemented by 8 Focus Groups across Freetown (including 229 participants) as well as a detailed Focus Group with existing (5) NDMA Provincial Officers. This was supported by feedback sessions and peer observations. EVALDIS field research therefore consulted with and involved a total of 259 participants. The findings presented here are based on key inclusion criteria guiding the data selection which identified that resolvable SPOF included in this chapter were:

- Commonly identified in at least onethird of the one-to-one semi structured interviews and interview transcripts.
- Commonly identified by the blocks and wards in Freetown and appeared in their top five rankings of the most discernible, resolvable SPOF. They also needed to be discussed in at least 2 of the 8 Focus Groups and thus were identified as resolvable SPOF in more than one block of the city.
- Commonly identified by representatives from more than two provinces in the respective Focus Group with NDMA Provincial Officers. They also needed to appear in the respective top 10 rankings

- of the most discernible SPOF of the respective NDMA Provincial Officers.
- Further verified and elaborated in the peer-review and feedback EVALDIS sessions or in the peer/participatory observations at key DM meetings attended by Professor Miles.

Findings on Development of Existing NDMA Provincial and District Capacities

It is important to place the context of any analysis of resolvable SPOF against the context of wider background developments and environments. From this perspective, one of the resounding findings is that the overwhelming majority of respondents across all groups regard the development of NDMA provincial and district capacities as a welcome innovation on the part of the NDMA. All 25 (100%) of the stakeholder interviews and feedback from all 8 (100%) blocks in Freetown saw the appointment of NDMA Provincial and District Officers as a resounding positive development and a good thing for regions and local communities of Sierra Leone. It is fair to conclude that the launch and expansion of the NDMA's regional capacity in 2022 is a welcome development.

The data also revealed that since their appointment, there is growing awareness of the roles and impact of the NDMA Provincial and District Officers. For example, it was regularly cited in discussions that they have made a positive contribution to disaster relief and response during the major floods of August and September 2022.



Furthermore, the initial awareness and impact of the newly appointed NDMA Provincial and District Officers (and offices) was, to some extent, demonstrable in relation to:

- Activation at times of disaster relief and response.
- Coordination with networks of stakeholders and partners.
- Participation in some (still limited) training and capacity-building.

There is then strong evidence that the expansion of the NDMA provincial and district capacity across the 5 provinces and 16 districts of Sierra Leone has made a beneficial, if currently rather selective, impact.

Nevertheless, the findings also reveal the existence of large number of identified, resolvable SPOF:

 Overall, 51 Resolvable SPOF were commonly found and met the inclusion criteria across the three research constituencies.

Cumulatively, this suggests that there is an extensive number of perceived potential SPOF affecting the NDMA provincial and district capacity in Sierra Leone. These findings reveal that the current, if improving, subnational DM system in the country

is far from robust or resilient to potential breakdown or failures. Furthermore, three notable observations can be drawn from this data collection:

- There is a high degree of commonality of identified SPOF across all the provinces.
- There is a notable degree of commonality of identified SPOF between the provincial, district and local levels.
- That the SPOF methodology was confirmed as a useful value-added tool and an insightful policy concept at the provincial, district and local levels. In fact, all (100%) of the stakeholders interviews, all (100%) of the wards in the 8 blocks in Freetown and all (100%) of the NDMA Provincial Officers responded that they regarded the application of the SPOF techniques and diagnostics as beneficial and help to their understanding of the challenges confronting subnational disaster management in Sierra Leone.

Notable SPOF

The data reveals numerous resolvable SPOF grouped into 12 cross-cutting thematic areas. These 12 thematic areas are grouped the same as those identified in the national and local contexts in the 2021 AFRICAB Report (Miles et al, 2021) to aid comparison.

This technique also allows for commentary on where the EVALDIS results vindicate and/ or undermine and/or falsify the findings in the AFRICAB Final Report. The 12 thematic areas of resolvable SPOF are duly presented in the rest of this chapter.

Data Management SPOF

Data Management constitutes a thematic area with discernible and high propensities for SPOF. This is principally because data management and coordination remains a primary responsibility of the national disaster management unit of the central government (and the recently established NDMA under the 2020 NDMA Act).

Yet, as the previous 2021 AFRICAB Final Report also demonstrated, data management is an area where SPOF are commonly found since it shows how even effective data collection and management is a complex undertaking that needs extensive human, technological and financial resources and often leads to tensions with other stakeholders, local communities and even the general public (Miles et al, 2021). The research findings reveal that data management challenges are well recognised by the government and stakeholders (see World Bank, 2019). EVALDIS also confirms that the NDMA has undertaken some hard technological solutions like greater use of mobile technologies (e.g. tablets and smart phones) to improve the ability to input data at the scene/site. The EVALDIS findings also show that stakeholders recognise the NDMA's growing use of dedicated software solutions to facilitate data input, collection and analysis to improve, for example, the ability to produce more accurate rapid response assessments.

Table 3.1: Data Management SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
1. DATA MANAGEMENT	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	Imprecise guidance and procedures covering accurate and timely collection of data relating to onsite assessments and Registered List of Affected Persons in the provinces and districts (Technical/Procedural). 10/25 (40%)	Comparatively much poorer access of representatives of subnational authorities, CDMCs and volunteers to IT necessary to assist NDMA in the completion of onsite assessments and Registered Lists of Affected Persons. Can inhibit coordination and timely completion (Technical). 4/48 (8%)	Limited available IT (software, computers, tablets, and mobile phones) for provinces/ districts restricts regional staff ability to undertake rapid risk assessments and Registered Lists of Affected Persons (Technical). 3/5 (60%)

Nevertheless, EVALDIS findings (Table 3.1) confirm that issues with the collection of accurate and accessible data during the time of major incidents represent ongoing SPOF across the provinces. EVALDIS findings also concur and validate the prior results and recommendations from the 2021 AFRICAB Final Report (Miles et al. 2021: 24-29). Specifically, there remain issues relating to:

SPOF 1.1: Imprecise guidance and procedures covering timely and accurate collection of data in relation to the compilation, presentation and distribution of Registered Lists of Affected Persons, compiled and led by the NDMA. This SPOF was specifically raised among the national stakeholders in 10 of the 25 interviews (40% of interviewees placed this data management issue in their top 5 SPOF rankings); and also, to some extent, featured indirectly in the Focus Group discussions with the NDMA Provincial Officers. Here, the most recurrent SPOF raised, concerned imprecise procedures, SOPs and guidance for NDMA Provincial and District Officers, when undertaking and completing onsite assessments and the Registered List of Affected Persons. This often led to deficiencies in data collection and reporting; and importantly to numerous cited instances where data on affected persons was insufficiently precise and/or where there were missing types of data which restricted the abilities of important wider stakeholders to undertake effective resource mobilisation and coordination with the NDMA Provincial and District Officers and Offices. Local actors and NGOs were often not satisfied with the level of detail and specific data provided by NDMA assessment reports and registration lists of affected persons highlighting inaccuracies or incomplete registration of

affected persons.



This prompted delays in disaster relief and response, complicated local disaster management coordination with stakeholders and other subnational authorities and often acerbated tensions between partners. Delays in the production of NDMA assessment reports and lists of affected persons lead to slow relief distribution by NGOs to local areas and scenes. The imprecise procedures also led to lack of clarity about responsibility and procedures for forwarding and handling local requests towards revising data on affected persons after initial collection and data analysis. Although improving, there are specific SPOF weaknesses in the existing NDMA's provincial and district disaster capabilities to collate, analyse, share and distribute accurate listings in a timely manner (Technical/Procedural SPOF).

prior results"

"EVALDIS

concur and

validate the

findings

"IT deficiencies are also prevalent across the country."

SPOF 1.2: Data collection and management remains limited and highly restricted in areas outside Freetown due to the limited availability of IT (software, computers, tablets and mobile phones) provision in the respective provinces and districts; which then constrains the ability of NDMA Provincial and District Officers to undertake onsite risk assessments and complete data for the Registered List of Affected Persons (Technical SPOF). It should be noted that the situation is particularly acute in the provinces with this specific SPOF being raised by 60% of the NDMA Provincial Officers in the respective Focus Group. Nonetheless, IT deficiencies are also prevalent across the country. Findings from the stakeholder interviews also revealed consistent concerns among the participants with the data management capacities and IT provision even in Freetown (including the Climate Action and Disaster Risk Management Unit of FCC) (Physical/ Economic SPOF).

Interestingly, neither issue features strongly and/or was raised consistently in the Focus Groups with Freetown's local communities. This suggests that the focus of the local communities was either not primarily concerned and/or aware of these SPOF to the same degree as the other research constituencies.

Moreover, given the NDMA's enhanced engagement with local communities in recent years, this could also suggest that actors in the local communities perceived that, overall, the NDMA and cooperating agencies were improving and were, to some degree, handling data management more effectively. Nevertheless, the Focus Groups across Freetown did indicate an overall lack of capacity of local CDMCs, volunteers and responders often led to constant challenges in filtering out ineligible affected persons during data collection points at the scene which often led to 'swelling of numbers' and inaccuracies in data (see also Miles et al, 2021: 29).



Strategic Communication and Media Management SPOF

There are significant SPOF identified in the data findings in relation to strategic communication and media management. It should be noted that - as the 2021 AFRICAB Final Report observed - progress has been made in terms of developing a coherent pillar structure to handle respective disasters by the NDMA (Miles et al, 2021: 30). Consideration is also being given as to how the NDMA Provincial and District Officers can be incorporated effectively into this structure and indeed, what should also exist at the provincial and district levels across Sierra Leone respectively. The NDMA has also embarked in 2022-2023 on a more intensified engagement with selected local communities across Sierra Leone. In particular, in the areas of fire prevention, flood warnings and disaster risk reduction, which implies that attention is already focused on seeking to address some of these resolvable SPOF in the coming years if levels of regularised activity prevail.

Nevertheless, the EVALDIS findings also confirm that more work needs to be done and SPOF are prevalent in relation to strategic communication and media management (see Table 3.2). EVALDIS results confirm that there is a consistent consensus across all three data collections from stakeholder interviews, Freetown Focus Groups with local communities and the Focus Group with NDMA Provincial Officers regarding resolvable SPOF affecting strategic communication and media management.



Table 3.2: Strategic Communication and Media Management SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25
Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SF	ECIFIC SPOF CHALLENG	GES
2. STRATEGIC COMMUNICATION & MEDIA MANAGEMENT	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
Strategic Communication	Poorly established modus operandi on crisis communication including lack of messaging templates for DRR (Procedural). 9/25 (36%)	Poor communication procedures on DRR (Procedural). 10/48 (21%) 3/48 ranked 1st (6%)	Weak and unstructured communication messaging/ information-sharing between NDMA HQ and provinces and districts (Procedural). 3/5 (60%)
	Poorly established modus operandi on crisis communication, including lack of messaging templates for disaster relief and response (Procedural). 9/25 (36%)	Poor, slow crisis communication messaging to districts at times of disaster relief and response (Procedural). 10/48 (21%) 3/48 ranked 1st (6%)	
	Ineffective coordinated system of crisis communication messages between NDMA headquarters and provinces and districts (Procedural). 9/25 (36%)		
Media Management	Insufficient media training and knowledge of NDMA Provincial and District Officers. Require further capacity building in media and social media management (Human). 14/25 (56%)		Present lack of/weak media expertise, knowledge and training among NDMA Provincial and District Officers (Human). 5/5 (100%)



Moreover, the consensus largely pertains to the identification of common procedural-related SPOF and they are also broadly similar to those raised in the prior 2021 AFRICAB Final Report (Miles et al, 2021: 30-32). More specifically, they are:

- SPOF 2.1: Poorly established, unsophisticated and/or weakly implemented crisis communication procedures, including lack of messaging templates, pertaining to Disaster Risk Reduction (DRR). NDMA Provincial and District Officers are not presently trained in strategic communication/media management around DRR and rely heavily on crisis communication and messaging guidance from NDMA headquarters at this time. Presently, there is a lack of clarified SOPs and especially, pre-prepared key strategic communication messaging templates and/or established modus operandi guidance that NDMA Provincial and District Offices can adapt to promote DRR in their respective regional settings. This tends to accentuate ambiguity in crisis communication messaging from the governmental authorities, including the NDMA Headquarters, to the NDMA provincial and district levels, which leads to confusion/slow implementation by them. There is a corresponding weak understanding among many local communities (including CDMCs) about how to respond to any respective crisis communication messaging and thereby to turn words into appropriate DRR-related local action. A sizable number of the representatives of local wards in Freetown suggested that too little attention was still being paid to
- prior messaging that could educate communities on DRR prior to disasters. This was identified in 9 of the 25 (36%) of the stakeholder interviews and by 60% of the NDMA Provincial Officers as a resolvable SPOF.
- SPOF 2.2: Sporadic and unstructured crisis communication messaging and information sharing between NDMA headquarters and the respective provinces and districts at times of disaster relief and response.

A developed system of communication messages between the national and provincial and then district level does not presently exist as regards relief and response. This leads to deficiencies in terms of a lack of/insufficiency of pre- planned or formatted messaging templates that NDMA Provincial and District Officers can draw upon during disasters and at times of relief and response. The translation of key messages drawing on the NDMA's 2022 Standard Operating Procedures for Relief and Response are also not developed yet. There are also notable delays in the delivery of crisis communication and messages so that even when crisis communication reaches the provinces and districts, they are often poorly understood. This can lead to confusion, uncertainty and even criticism about perceived inaction from the Provincial and District Offices and arrangements at times of relief and/or response. This was identified in 9 of the 25 (36%) of the stakeholder interviews and by 60% of the NDMA Provincial Officers as a resolvable SPOF.

- SPOF 2.3: Weak formal crisis communication capacity at the subnational level. The issues raised above in terms of weak crisis communication procedures and unstructured messaging are exacerbated by corresponding and rather similar deficiencies between the provincial/ district levels and the respective local communities. Presently, the data suggests that participants do not see the NDMA provincial and district levels as having their own robust procedures for crisis communication and messaging which inhibits levels of trust in, and the credibility of, the Provincial and District NDMA Officers among their local communities. This SPOF particularly weakens ties between them and the local CDMCs and community leaders. This was also identified as an issue that affects Freetown where representatives of 10 of the 48 wards placed poor strategic crisis communication and messaging within their top 5 resolvable SPOF with 3 wards even placing it first in their rankings.
- SOPs 2.4: Present lack of/weak media expertise, knowledge and training in media management among NDMA **Provincial and District Officers and** across Offices. A notable, yet resolvable SPOF was mentioned in both the stakeholder interviews and the Focus Group with NDMA Provincial Officers about present levels of competency and capacity in media management across the NDMA Provincial and District Offices. So to provide effective media messaging, covering any response and to offer effective public communication and engagement via social media. This current SPOF implies notable reputational risk for the Agency.

There are also obvious concerns about any poor and/or ineffective crisis communication with wider stakeholders and the public which could compromise DRR and relief and response actions of the NDMA. This was identified in 14 out of the 25 (56%) stakeholder interviews and across all of the provinces (100%) in the respective NDMA Focus Group with the NDMA Provincial Officers.

Disaster Risk Reduction (DRR) and Early-Warning Systems (EWS)

The EVALDIS findings - relating to DRR and EWS - confirm that there are resolvable SPOF associated with both areas (see Table 3.3). Specific SPOF were commonly identified in the stakeholder interviews and Focus Group with NDMA Provincial Officers, demonstrating relatively high-level agreement among the relatively expert parties of the most paramount resolvable DRR and EWS SPOF. The identified SPOF also vindicate the prior analysis of the DRR and EWS SPOF in the 2021 AFRICAB Final Report (Miles et al, 2021: 33-35).

With the exception of one area, the eight Focus Groups with Freetown's local blocks and wards placed much less emphasis on particular technical forms of Early Warning Systems. Indeed, EWS warnings to local communities featured comparatively infrequently in discussions of identified SPOF despite comparatively different perspectives among the expert groupings. This suggests that there is more work to do to ensure that local communities across Sierra Leone, and even in Freetown, become fully convinced of the real-life benefits of improved EWS communication. Presently, the primary perceived focus of the local community and/or chiefdom disaster management committees still largely focuses relief and response arrangements and efforts.

Table 3.3: DRR and EWS SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SF	PECIFIC SPOF CHALLENG	GES
3. DISASTER RISK REDUCTION (DRR) & EARLY-WARNING SYSTEMS (EWS)	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
Disaster Risk Reduction (DRR)	Lack of updated hazard maps and up to date risk registers for most districts and wards (Procedural). 15/25 (60%)		Lack of updated DRR hazard maps and up to date risk registers for most provinces, districts and wards (Procedural). 5/5 (100%)
	Challenges with local urban planning implementation and enforcement (Procedural). 15/25 (60%)	Deficiencies in urban planning implementation and enforcement (Procedural). 11/48 (23%) 1/48 ranked 1st	Challenges with local urban planning implementation and enforcement (Procedural). 5/5 (100%)
	Ineffective coordinated system of crisis communication messages between NDMA headquarters and provinces and districts (Procedural). 9/25 (36%)	Weak recognition of DRR interdependencies with Local Deforestation Management/Policies in Provinces/Districts (Procedural). 6/48 (12.5%)	Weak recognition of DRR interdependencies with Deforestation Management in Provinces/Districts (Procedural). 2/5 (40%)
			Poor enforcement of rules on electrification of buildings (Procedural) 2/5 (40%)
Early Warning Systems (EWS)	No regional EWS capability (Technical/Physical). 8/25 33%)		No regional EWS capability (Technical/Physical). 5/5 (100%)
	Insufficiently robust national EWS capability (Technical/Physical). 8/25 (32%)		Not robust national EWS capability (Technical/Physical). 5/5 (100%)

SPOF THEMATIC AREA	SF	PECIFIC SPOF CHALLENG	GES
	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
Early Warning Systems (EWS)	Lack of maintenance budget to service equipment and systems leads to breakdown and gaps in capacity (Economic). 8/25 (32%)		
	Limited translation/ interpretation of often unfocused SLMet EWS and weather information. Limited SLMet focus on specific requirements of provinces and districts (Technical/Procedural). 15/25 (60%)		Limited of detailed regional specific EWS information/ translation of EWS and weather information for regions. 5/5 (100%)
	Poor coordination and distribution of SLMet information to NDMA Provincial and District Officers (Technical/ Procedural). 15/25 (60%)		Poor coordination and distribution of accessible and understood SLMet information to NDMA Provincial and District Officers (Technical/ Procedural). 5/5 (100%)
	Limited engagement on EWS/DRR with local community disaster management committees (where exist) across the country (Procedural). 10/25 (40%)	EWS Messages from ministries to districts is inconsistent and often delayed. EWS in practice relies largely on local individuals checking websites on their own. 2/48 (4%)	Limited engagement on EWS/DRR with local community disaster management committees (where exist) across the country (Procedural). 3/5 (60%)





Nevertheless, there were clearly identifiable DRR SPOF where a comprehensive consensus existed among and across the stakeholders' interviews, Focus Groups with local communities in Freetown and discussions with the NDMA Provincial Officers. There remain significant, yet resolvable, SPOF in relation to effective urban planning and enforcement across Sierra Leone. Here there were very strong results that indicated that the three constituencies viewed that there were major DRR issues with urban planning that affected all provinces of Sierra Leone. These related to:

- SPOF 3.1: Lack of updated DRR
 hazard maps and up to date risk
 registers for most provinces, districts
 and wards. 15 of the 25 (60%) of the
 stakeholder interviews and all of the
 provinces (100%) in the Focus Group
 identified this as a notable SPOF.
- SPOF 3.2: Uncontrolled distribution of land and building permits leads to uncontrolled construction and/ or poor building construction. More specifically, this often blocks drainage and storm drainage systems increasing vulnerabilities of local communities to flooding as well as inhibits fire prevention leading to widespread threats of fires engulfing entire local communities. All three constituencies regarded this aspect as a significant SPOF.

- SPOF 3.3: Weak DRR-related enforcement of by-laws and building regulations leads to building in places that constrains or blocks off road access to local communities which limits effective access from emergency responders and their equipment at times of emergency. All three constituencies viewed this aspect as a significant SPOF.
- SPOF 3.4: Inadequate DRR-related enforcement of laws on access to electrical supplies, combined with lack of sensitisation of local communities to associated risks leads to illegal and dangerous connections of local housing to electrical supplies meters and stations that substantially increases likelihoods of very dangerous urban fire outbreaks.

The findings showed remarkable consistency in viewpoints between key stakeholders and the view of the NDMA Provincial Officers on the benefits of resolving SPOF in the domains of DRR and EWS. More specifically, four notable SPOF were commonly identified:

SPOF 3.5: Lack of functioning/ effective regional EWS capabilities in the provinces and across Sierra Leone. This is essentially a technical and physical SPOF since the common perception was that deficits and delays in EWS and DRR information arriving from the national and governmental headquarters in Freetown with local communities were partly due to a lack of alternative local EWS infrastructure and capacity. Where it did arrive from the national EWS, information was vague and lacked local detail. Hence, this was regarded as a major SPOF since it was widely regarded that any early warning would be better based on relevant local information and arrive with the local communities in a timely manner.

 SPOF 3.6: Limitations in formats of EWS information produced by key governmental authorities. Planning by Provincial and District arrangements (as well as NDMA headquarters) is often constrained by the format of SLMet climatic and hydrological information. Presently this is frequently produced by SLMet in rudimentary/inaccessible forms that are often difficult to translate into DRR practical action by NDMA Provincial and District Officers.

- communities to interpret and/or understand EWS terminology and weather information provided to provinces/districts through lack of capacity-building and training. Even if EWS information arrives in a clear way and in good time to the NDMA Provincial and District Officers, they face technological and procedural SPOF in necessarily convincing the communities of the need for timely and quicker action.
- SPOF 3.8: Poor linkage/association of DRR with deforestation policies/ priorities/enforcement among local communities. Specific concerns were discernible in the findings from and among the NDMA Provincial Officers in terms of poor or indeed, even nonexistent linkages of DRR to deforestation policies and enforcement across many of the provinces. This was highlighted in six of the wards in Freetown and by two provinces in the Focus Group with NDMA Provincial Officers as an emerging, yet resolvable SPOF. This resulted in the local communities in many provinces not making the important connection between policy domains and that there was a joint need to work together to both develop DRR actions and afforestation initiatives together.

"The findings showed remarkable consistency in viewpoints between key stakeholders"





Critical Infrastructure (CI) SPOF

The field research also revealed common identification of a number of ongoing SPOF relating to critical infrastructure. While it is to fair to say that given the country's status as a less developed country (LDC), it is highly likely that this will often mean many parts of

the country's infrastructure are deficient or even lacking (e.g. comprehensive sanitation and clean water systems, waste disposal and sewage systems, power supply etc.), the interviewees and Focus Groups commonly identified a smaller number of critical infrastructural issues that define ongoing SPOF in terms of DM (see Table 3.4).

Table 3.4: Critical Infrastructure (CI) SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
4. CRITICAL INFRASTRUCTURE (CI)	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	Poor Drainage/Storm Drainage Systems (Physical). 8/25 (32%)	Poor Drainage/ Storm Drainage Systems in Districts and Wards (Physical). 32/48 (66.6%) 19/48 ranked 1st (40%)	Poor Drainage/Storm Drainage Systems (Physical). 4/5 (80%)
	Power cuts and unavailable/inconsistent power supply inhibit coordination at scenes in many instances. 13/25 (52%)	Poor electricity connection and maintenance of local electricity supply (Physical). 18/48 (37.5%) 2/48 ranked 1st (4%)	

The findings for critical infrastructure SPOF fall into three groupings.

- SPOF 4.1: Poor maintenance and state of drainage and storm drainage systems. The first grouping - related to notable SPOF - was focused more generally and in the context of the wider local communities. Here, physical SPOF in relation to the infrastructure and environment of the local communities was a reoccurring theme in relation to the Focus Groups with the local communities and actors. The focus in this regard was on the lack of investment in, and maintenance and clearance of, drainage and storm drainage that were regularly made inoperative or were substantially undermined by the illegal dumping of waste and plastics. This meant that by the time of the rainy season even those local communities that had storm drains were ineffective leading to raised levels of vulnerabilities of local housing and residencies to flooding in and out of the rainy season. There was a very strong recording of this as a resolvable CI SPOF among the Focus Groups covering Freetown's wards. In fact, 32 of the wards (66.6%) recorded this SPOF within their top five ranked SPOF overall - the second highest recorded in the EVALDIS research and 40% ranked this SPOF as the most significant of all resolvable SPOF in Freetown.
- SPOF 4.2: Poor maintenance and state of electrical supplies. This also extended to the poor access to and/or poor maintenance of electrical supply to and within the local communities which means that electrical supply cables, meters and even stations were in poor repair and open to widescale misuse by local communities.

There were major concerns expressed about the lack of maintenance of local electrical supply that is often obsolete contributing to outbreak of fires during the dry season. There were notable concerns about the lack of engagement of power companies with responders, local councillors and CDMCs to promote fire prevention and fire safety practices among communities. There was a very strong recording of this as a resolvable CI SPOF among the Focus Groups covering Freetown's wards. In fact, 18 of the wards (40%) recorded this SPOF within their top five ranked SPOF overall - the second highest recorded in the EVALDIS research; this probably reflects the high incidence of urban fires attributed to electrical supply misuse and issues with poor maintenance of electrical power supplies in the city in recent years.

SPOF 4.3: Road Network Planning and Maintenance. The additional peer group observations also highlighted the planning and maintenance of Sierra Leone's road network as a significant SPOF. Weak urban planning and little rural investment in roads meant that remote and rural communities, especially in the provinces and districts are poorly accessible or reachable in a timely manner. There are also weaknesses in access by road within many of the informal settlements which makes them inaccessible to responders and that first responders are reliant on local volunteers and CDMCs in terms of fire-fighting and flood response in numerous informal settlements. Concerns were raised about weak enforcement of urban planning rules, laws and by-laws at the local level leads to unapproved buildings and structures being erected that block local roads especially in informal settlements.

"There were major concerns expressed about the lack of maintenance of local electrical supply"

Responder SPOF

Interestingly and regardless of the widespread recognition of the growing challenges facing Sierra Leone's responder services (such as the Sierra Leone Police and National Fire Force (NFF), specific SPOF relating to the responders did not feature heavily in the respective findings in the mainstream. An extensive assessment of the main Responder SPOF was nevertheless,

provided in the 2021 AFRICAB Final Report (see Miles et al, 2021: 39-40). It should also be noted that in many cases, the commitment and professionalism of the responders in Sierra Leone was perceived positively. However, in the context of this report relating to the evolving NDMA regional capacity, specific resolvable SPOF were raised in relation to the size, scope and existing capacities of the National Fire Force (NFF) in particular (see Table 3.5).

Table 3.5: Responder SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
5. RESPONDER	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	Notable deficiencies in numbers and availability of NFF operational equipment, especially in provinces outside Freetown (Physical). 5/25 (20%)	Notable deficiencies in numbers and availability of NFF operational equipment led to slow or no response. Slow response times influenced by lack of working hydrants (Physical). 3/48 (6%)	Notable deficiencies in numbers and availability of NFF operational equipment, especially in provinces outside Freetown (Physical). 3/5 (60%)
		Issues of inaccessibility/ poor access for NFF to many of the informal settlements in Freetown (Physical). 3/48 (6%)	Notable variations of interpretations by responders as to their role and leadership functions in incident command (Procedural). 3/5 (60%)
	Restricted maintenance budgets leads to breakdowns and unavailability of key equipment for responders especially in provinces (Economic). 5/25 (20%)		Restricted maintenance budgets leads to breakdowns and unavailability of key equipment for responders especially in provinces (Economic). 3/5 (60%)

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	Limited training opportunities for fire fighters to enhance their emergency response skills restrict skill sets of available responders, especially in relation to mass casualty incidents, chemical, biological or hazardous incidents (Human). 5/25 (20%)		Limited and in many cases, no access to urban communities, informal settlements and remote areas restricts responder involvement in disaster response (Physical). 3/5 (60%)

"Response is often restricted to some urban

areas"

SPOF 5.1: Significant variations and inadequacy of existing size, scope and capacity of the respective fire force provisions in many of the provinces. In particular, the findings from 4 of the 25 stakeholder interviews and the Focus Group with the NDMA Provincial Officers suggest that the general perception was that there were notable reservations about functioning numbers and availability of NFF operational equipment and plant in at least three of the provinces. These operational challenges imply that there remain significant variations in the ability of the NFF to undertake timely emergency response in local communities across the provinces due to issues with levels of available equipment, vehicles and plant as well as training in some instances. Notable deficiencies in numbers and availability of operational equipment for NFF, especially in the provinces mean that response is often restricted to some urban areas. Response times to rural areas are excessive or simply not undertaken by responders.

The responder SPOF are:

SPOF 5.2: Existing Financial and **Equipment Limitations of the** National Fire Force (NFF) to provide sufficient DRR and fire prevention guidance and training across the provinces. Including on the usage of fire extinguishers, on a regular basis to all local communities across all the provinces. Indeed, the perception was that – at best – the NFF was geared to provide emergency response, with very limited resources (especially outside Freetown) dedicated to fire prevention guidance and interactions with local communities. This extended even to Freetown but was especially discernible in relation to the wider provinces.



Logistics SPOF

It should be noted that the NDMA has developed significant plans to ensure effective logistical support for its new NDMA Provincial and District Offices, alongside developing commitments to enhancing disaster relief and response stockpiles across the respective provinces. Nevertheless, EVALDIS findings reveal notable current SPOF (see Table 3.6) in relation to logistics. They also validate the previous findings outlined in the 2021 AFRICAB Final Report (Miles et al, 2021: 41-43).

Table 3.6: Logistics SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
6. LOGISTICS	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	Limited Transportation for NDMA Provincial and District staff due to shortage of 4x4 vehicles and motorbikes (Physical). 13/25 (52%)	3 of the 48 wards and districts identify lack of vehicles/transport available to NDMA offices. 3/48 (6%)	Limited Mobility of NDMA Provincial and District staff due to shortage of 4 x 4 vehicles and motorbikes (Physical). 5/5 (100%)
	Limited Transportation options for NDMA Provincial and District staff due to poor road network in many provinces. Limits access to rural regions and local communities (Physical). 9/25 (36%)	Lack of regional and local stockpiles in secure units for local communities to draw upon. 3/48 (6%)	Limited Mobility of NDMA Provincial Staff due to lack of sufficient fuel allowance (Procedural). 5/5 (100%)
	Limited regional stockpiles and warehouse facilities for NDMA regional capacity to draw upon. 9/25 (36%)	Lack of/insufficient clearance tools stored safely and securely stored either at the provincial, district or local levels. 11/48 (23%) 3/48 ranked 1st (6%)	Limited regional stockpiles and warehouse facilities for NDMA regional capacity to draw upon. 3/5 (60%)

Commonly perceived logistics SPOF pertaining to regional and local capacities were identified in five specific areas, namely:

- **SPOF 6.1: Limited Transportation** and Mobility due to Poor Availability of Vehicles: All three constituencies cited the insufficient numbers of available vehicles (including tricycles, motorbikes and especially all terrain/4 x 4 vehicles) to the NDMA at, provincial and district levels as a highly significant physical SPOF. In effect, all three constituencies strongly highlighted the limited transportation options available to NDMA Provincial and District Officers that severely curtails timely activity. 13 of the 25 (52%) stakeholder interviews and representation from all five provinces (100%) participating in the Focus Group with NDMA Provincial Officers highlighted that the geographical reach of NDMA Provincial and District Officers/Offices remains currently curtailed by the lack of appropriate transportation/vehicles. They are often slower than they would like to be in attending and/or assessing emergency incidents. To all intents and purposes, notable geographical areas of the provinces, and especially remote, rural local communities are not readily accessible to NDMA Provincial (and even District) Officers on a consistent basis.
- SPOF 6.2 Limited Transportation and Mobility due to poor road network in many provinces. The physical SPOF of poorly maintained road networks implied that in practice there remains very restricted access to rural regions and local communities (even when access to vehicles and transportation exist).
- SPOF 6.3 Limited stockpiles and warehouse facilities in the provinces and districts mean that there is only a relatively rudimentary NDMA regional capacity to draw upon. 9 of the 25 (36%) stakeholder interviews and representation from three provinces (60%) participating in the Focus Group with NDMA Provincial Officers stressed limitations in regional stockpiling as a notable resolvable SPOF. In many instances, demands during disaster response were often fulfilled from finite national and/or wider NGO/stakeholder stockpiles (where they exist) rather than from more readily accessible regional and/or local stockpiles. Moreover, regional stockpiling was also curtailed by the lack of suitable, secure warehouse facilities in the provinces.

"Regional stockpiling was curtailed by the lack of suitable, secure warehouse facilities in the provinces."



- "There is a complete overreliance on donor logistical capacities"
- **SPOF 6.4: Limitations in local logistics** management, and expertise mean there are challenges of maintaining up to date inventories of available equipment at local levels. Local requests to government are therefore slow and often incoherent, leading to delays with governmental distributions and actions. Even at Level 1 disasters, there is a complete overreliance on donor logistical capacities in terms of transport and supply vehicles that may quickly become overstretched. This accentuates 'donor-fatique', duplication of NGOs roles and resistance among NGOs to coordinate for reputational purposes.
 - SPOF 6.5: Limited availability of clearance and construction tools in the local communities, especially in Freetown. An important physical SPOF in terms of local capacity in the provinces, districts and wards being severely constrained by the lack of and/ or insufficiency of secure stockpiles of clearance tools (spades, shovels, etc.) available and stored locally within local communities. This restricts the ability of the local volunteers to act quickly during the onset of an incident and/ or to transition to recovery through the clearance of respective sites and vulnerabilities. It also places greater demands on NDMA Provincial and District Officers to coordinate the supply of such tools as part of relief and response if not available more locally. This was regarded as the number one priority by 3 wards (6%) and as a top 5 physical logistical SPOF by 11 wards (23%) across Freetown; and there is little to suggest that similar views would not be held in local communities in other provinces. Peer review observations also

confirm the view that the lack of locally available clearance tools also influences the effectiveness of coordination of respective NDMA Provincial and District Officers to also act quickly during disasters and emergencies.



National – Provincial/District Relations SPOF

An extensive assessment of National-Provincial/District relations SPOF was provided in the 2021 AFRICAB Final Report (see Miles et al, 2021: 44-47). The EVALDIS findings confirm many of those prior findings, and particularly endorse three SPOF that have resonance in the context of the

NDMA Provincial and District Offices (see Table 3.7). The most resounding SPOF in relation to defining national and provincial/ district relations revolves resolutely around the question of the limited level of financial resourcing available to support the roll-out and development of the NDMA regional capacity, and in particular the financing and resourcing of the NDMA Provincial and District Offices.

Table 3.7: National-Provincial/District Relations SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
7. NATIONAL/ DISTRICT RELATIONS	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	NDMA limited national financial resources committed to provincial and district engagement (Economic). 11/25 (44%)	Lack of Funding for Community Resilience and Community/ Chiefdom Disaster Management Committees (CDMCs). 12/48 (25%) 3/48 ranked 1st (6%)	Very Limited Financial Resourcing for Provincial and District Offices (Economic). 4/5 (80%)
	Limited own dedicated resources at Provincial and District Offices (Economic). 11/25 (44%)		Lack of Financial Transparency, such as dedicated regional bank accounts for NDMA Provincial and District Offices (Economic). 4/5 (80%)
	Not enough wider subnational resourcing for regional DM tasking exacerbates pressures on NDMA Provincial and District Officers/Offices (Economic). 11/25 (44%)	Lack of Capacity- Building and Training of (CDMCs) (Economic). 8/48 (16.6%) 4/48 ranked 1st (8.3%)	

"Most

districts rely

heavily on

volunteers

at times of

emergencies"

Specific commonly identified SPOF include:

- **SPOF 7.1: Limited Financial** Resourcing and Integrity of the NDMA Provincial and District Levels: Both the stakeholder interviews (11 of the 25; 44%) and the Focus Groups with the NDMA Provincial Officers (4 of the 5 provinces; 80%) suggested that the very limited own resources presently attributed to the NDMA provincial and district levels remained a major concern and a resolvable economic SPOF. The uncertainties and limitations in dedicated resourcing was perceived in both the stakeholder interviews and in the Focus Group with NDMA Provincial Officers as having a comprehensive effect, from influencing daily abilities to run full-functioning regional offices, affecting the ability to develop and disseminate new disaster risk reduction, relief and response and recovery plans to restricting capacities of the NDMA officers to travel to as well as engage with local communities and stakeholders. In several cases across the provinces, reference was also made to the need to establish transparent and stable financial procedures and integrity, such as bank accounts for the NDMA provincial (and most likely district) offices.
- **SPOF 7.2: Financial Limitations** of NDMA National Capacity: It was also noted that limitations in financial resourcing included the NDMA's lack of/ limited own dedicated funding budget lines to support interaction with the emerging NDMA regional capacity. Staff at the headquarters were restricted in their engagements with the wider provinces due to lack of budgets and funding. Hence, the national NDMA headquarters remains constrained in terms of its own capacity to engage fully with its new regional capacity of NDMA Provincial and District Officers. Issues with financing consistent and stable Internet connectivity and media platforms like Zoom and/or Teams inhibits the ability of the national headquarters to communicate with the regional office (see later). Similarly shortage of finances for mobility and/or common communication solutions also meant that there were real potential for delays in and/or unstructured dialogue between the national and provincial/district levels of NDMA that were principally a result of a financing/ economic SPOF.



Human Resources and Expertise SPOF

The EVALDIS findings also confirm that issues of human resources (HR) and expertise remain a prominent and commonly perceived group of cross-cutting SPOF.

There is also striking resonance and similarities to the results outlined in the 2021

AFRICAB Final Report (Miles et al, 2021: 48-51) that demonstrates that there are numerous SPOF that could be resolved and also affect national, provincial, district and local levels. There is thus a strong consensus for action to resolve SPOF in the areas of HR and expertise. In terms of the provincial and district contexts, then there are five distinct SPOF (see Table 3.8).

Table 3.8: Human Resources (HR) and Expertise SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
8. HUMAN RESOURCES AND EXPERTISE	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	Limited number of NDMA staff at HQ and in provinces and districts (Human). 15/25 (60%)	Limited capacity building at local level. Limited training of Councillors, Chiefs and CDMCs in DRR. 8/48 (16.6%)	No clear-cut Terms of Reference (ToR) and rules of service for NDMA Provincial and District Officers (Human). 4/5 (80%)
	Lack of dedicated DRM knowledge presently among NDMA staff at HQ and in provinces and districts (Human). 15/25 (60%)	Lack of training and exercising of subnational local government actors (councillors and officials) to work closely with NDMA Provincial and District Officers/Offices. 8/48 (16.6%)	Limited training and exercising restricts regional capacity-building (Human). 5/5 (100%)
	Limited training of new NDMA Provincial and District Officers (Human). 15/25 (60%)		Limited training and restricted career development opportunities of NDMA Provincial and District Officers (Human). 4/5 (80%)

Table 3.8: Human Resources (HR) and Expertise SPOF at the Subnational Level (recorded by respective participants) (Continued). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	Lack of formal DRM qualifications among NDMA Provincial and District Officers (Human). 18/25 (72%)	Lack of formal DRM qualifications among NDMA Provincial and District Officers (Human). 15/48 (31%)	Lack of formal DRM qualifications among NDMA Provincial and District Officers (Human). 5/5 (100%)
	Not enough registered volunteers in most provinces and districts restricts capacity (Human). 9/25 (36%)	Limited numbers of registered and trained volunteers in local communities. 12/48 (25%)	Lack of dedicated training budgets for NDMA Provincial and District Officers and Offices. 5/5 (100%)
		Lack of stipends for local volunteers restricted their respective activity and contributions to DRM of respective local communities. 4/48 (8.3%)	

Four HR SPOF pertain to the specific NDMA Provincial and District HR capacities, namely:

• SPOF 8.1: Limited Number of NDMA Provincial and District staff. Alongside the comparable HR SPOF relating to the national level - as identified in the 2021 AFRICAB Final Report – there are notable and relatively severe limitations in the numbers of fully employed NDMA staff at the provincial and district levels. This is commonly perceived as SPOF by 15 of the 25 (60%) of the stakeholder interviews, 8 of the 48 wards of Freetown and 4 out of 5 (80%) of the respective NDMA Provincial Officers. In 2022, the provincial and district presence is limited to the appointment of the dedicated

Provincial and District Officer and at best and in most cases a mere handful of supporting staff which is woefully small given the size and scale of the respective DM tasks that the respective offices are likely to have to contribute to and even coordinate. The present relatively small HR resource is precious one and easily subjected to overstretch, with little capacity to currently handle multiple incidents at any one time within their respective provinces/districts.

- spof 8.2: Limited DM expertise among NDMA Provincial and District Staff. The NDMA Provincial and District Officers appointed in 2022 have a diverse set of backgrounds and past careers, with none of them holding either dedicated DM-related educational qualifications and/or in many cases specialist experience of handling past disasters. This is regarded as notable, commonly shared, HR SPOF across all three constituencies (18 of the 25 (72%) stakeholder interviews, 15 of the 48 wards in Freetown and 100% of the NDMA Provincial Officers).
- **SPOF 8.3: Constrained DM Training** and Exercising Opportunities. So far, a major SPOF relates to levels of training and exercising presently undertaken by existing NDMA Provincial and District Officer in conjunction with local stakeholders. This was highlighted in the Focus Group of NDMA Provincial Officers (100%) and featured in 15 of the 25 (60%) stakeholder interviews. So far, the vast majority have experienced restricted chances to undertake dedicated and/ or bespoke DM training. Rudimentary attention has also been placed on DRR issues. At present, there are clearly identifiable deficits in their levels of DM related knowledge and expertise.

This will inhibit abilities to operate effectively during disaster response as well as restrict their abilities to undertake educational and sensitisation and DM awareness programmes with local communities due to their own limitations in present levels of competence and knowledge.

SPOF 8.4: Undeveloped Terms

of Reference/Remits of NDMA Provincial and Regional Officers. 80% of participants in the Focus Group of NDMA Provincial Officers also specifically highlighted that there was a present lack of clarity in terms of the respective Terms of Reference (ToRs) and remits of the respective officers. This lack of clarity could lead to potential, yet resolvable SPOF in terms of mapping operational requirements and functions of the provincial and/or district capacities to posts, understanding the level of expertise required and needed to be further developed and thereby the training requirements to support these evolving provincial and district capacities. In simple terms, this specific SPOF reinforces and exacerbates the potential severity and scalability of the previous three of (staff quantities, staff expertise and competencies and training opportunities).



These human resources/expertise SPOF apparent at the NDMA Provincial and District levels implies that an even greater, often compensatory level of resilience is required from the local volunteers and community/chiefdom disaster management arrangements and operations. Here there are three further local community related SPOF that accentuate present levels of uncertainties, namely:

- SPOF 8.5: Limitations in, and declining numbers of, active and reliable volunteers within the local communities that constrains levels of local community resilience.
- SPOF 8.6: Limited numbers of functional and effective community/ chiefdom disaster management committees in operation in Freetown and to an even more notable degree across the provinces of Sierra Leone.
- SPOF 8.7: Irregular and often unsystematic training and capacitybuilding in DM, and especially DRR, within the local communities, and especially of the CDMCs, of Sierra **Leone.** Although the NDMA (and in the case of Freetown, also the FCC) have developed welcome and positive capacity-building initiatives to enhance the local resilience capacities of some local communities, there so far lacks a comprehensive country-wide attempt to ensure all local communities across Sierra Leone have received even basic levels of DM training and exercising. Due to the lack of local training budgets, nearly all local training and exercise activity has to be provided by external NGOs and they largely determine the nature of local training. Where they exist, they often focus on addressing basic operational considerations in terms of First Aid training and fire-fighting,

rather than DM planning techniques and knowledge. Current levels of capacity building and engagements with local communities, while improving, are piecemeal and uneven across the country.

Procedural SPOF

Findings from all three constituencies indicate that there are commonly perceived SPOF in DM - related procedures (see Table 3.9). EVALDIS confirms many of the prior findings outlined in the previous 2021 AFRICAB Final Report (Miles et al, 2021: 52-54).



Table 3.9: Procedural Issues SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SF	PECIFIC SPOF CHALLENG	ES
9. PROCEDURAL ISSUES	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	No clear accountability established (Procedural). 7/25 (28%)	Lack of dedicated waste policies leading to illegal waste dumping. 9/48 (18.75%) 3/28 ranked 1st (6%)	
	No local risk registers or dedicated local disaster risk reduction plans or SOPs (Procedural). 17/25 (68%)		No local risk registers or dedicated local disaster risk reduction plans or SOPs (Procedural). 5/5 (100%)
	No dedicated local relief response plans or SOPs (Procedural) 17/24 (68%) Primarily Response focused (Procedural). 11/25 (44%)		No dedicated local relief/ response plans or SOPs (Procedural). 5/5 (100%)
	Little attention to recovery issues. No dedicated local recovery plans or SOPs. 13/25 (52%)	Wards not familiar with procedures and/ or trained in recovery (Procedural). 5/48 (10.4%)	Little attention to recovery issues. No dedicated local recovery plans or SOPs (Procedural). 5/5 (100%)
	Cannot handle multiple incidents simultaneously and effectively (Procedural). 9/25 (36%)		
	Weak general guidance. Need for Facilitators Guides for NDMA Provincial and District Officers (Technical/ Procedural. 25/25 (100%)	Weak general guidance. Need for Facilitators Guides for local communities and NDMA Provincial/District Officers (Technical/ Procedural). 48/48 (100%)	Weak general guidance. Need for Facilitators Guides for NDMA Provincial and District Officers (Technical Procedural). 5/5 (100%)



Specifically, in the context of NDMA Provincial and District capacity, the identified procedural SPOF are apparent in four primary and related areas, namely:

- SPOF 9.1: Lack of clear lines/levels of decision-making and accountability in relation to overall DM plans. The stakeholder interviews revealed a sizable minority (of just under one-third of the interviews) that were concerned about the lack of application of rules relating to the guidance on the declarations of levels of incidents. These interviewees regularly cited that the level of the incident and thus which respective organisations would lead/coordinate the respective incident relief and response was often undeclared and/or not cited, provoking some confusion among participating stakeholders. In many incidents, the declared level of the incidents was not formally agreed or officially declared as soon as possible, leading to delays and confusion that could affect the effectiveness of the NDMA led interpillar meetings. This was particularly the case in relation to level 0/1 incidents where formally the local subnational authorities are often formally designated to lead, with the NDMA formally in a support role. However, as noted in the 2021 AFRICAB Final Report, severe weaknesses in the capacities of the subnational authorities across Sierra Leone often meant that the NDMA was forced to step into a leadership capacity even for relatively smaller level incidents. This was particularly the case outside Freetown, but there were also notable instances where even the capacities
- of Freetown City Council (FCC) were insufficient. Implications of this presently ongoing situation is not lost on the developing NDMA provincial and district capacities. The findings suggest that, on the one hand, the existing circumstances vindicates the decision of the NDMA to develop its own regional capacities in 2022. On the other, it also demonstrates that additional and complex pressures are and will continue to be placed on these important Provincial and District Offices almost from day one. There remains a growing imperative to ensure that they are operational and effective as soon as realistically possible (Procedural).
- or standard operating procedures covering functions, roles and responsibilities of NDMA Provincial and District Officers and Offices. At present, there remains a lack of clarity as to the specific parameters of the offices and their specific roles and duties towards local communities that needs to be quickly addressed through the implementation of specific ToRs, standard operating procedures and plans. This documentation, once devised, should be implemented effectively and quickly to reduce potential severity and scalability. This notable SPOF were highly prevalent in the findings from the stakeholder interviews and Focus Group

with the NDMA Provincial Officers.

SPOF 9.2: Insufficient development

of provincial and/or district specific

disaster management plans and/

"In many incidents, the declared level of the incidents was not formally agreed"

"Planning was reliant upon workarounds and ad-hoc contingencies"

- SPOF 9.3: Lack of and/or insufficient existing Disaster Risk Reduction (DRR) plans and SOPs at the NDMA provincial and district level to further promote regional and local contextspecific disaster risk reduction. NDMA planning clearly envisages that the NDMA Provincial and District Offices will progressively expand and do more to promote and deliver provincial and district level disaster risk reduction. However. specific SPOF were identified that presently restrict these activities, such as the lack of and/or present deficiencies in provincial, district and local risk registers and/or NDMA provincial and district level emergency response plans that are largely rudimentary (if they exist at all). 17 of the 25 (68%) stakeholder interviews and all provinces (100%) in the NDMA Provincial Officers' Focus Group highlighted the lack of updated and effective local risk registers as a resolvable SPOF. Interestingly, the lack of prevalence of DRR discussions and the strong focus on discussions and issues relating to disaster relief and response among local representatives and participants in the Freetown Focus Groups demonstrated how large a task this is and how the present lack of initial plans and SOPs represents an important and resolvable SPOF.
- existing disaster relief and response specific plans and SOPs at the NDMA provincial and district levels that can guide the roles, functions and delivery of the NDMA Provincial Offices and Officers during disaster relief and response phases of a (major) incident. Although all three constituencies consistently highlighted the value and response-focus of the NDMA in terms of coordinating and delivering disaster relief and response, and that the NDMA had notable and

- growing experience of handling disasters and emergencies to call upon, the lack of local plans and SOPs meant that much of this planning was reliant upon workarounds and ad-hoc contingencies of NDMA staff rather than developing regionally specific and targeted planning and operations, 17 of the 25 (68%) stakeholder interviews and all provinces (100%) in the NDMA Provincial Officers' Focus Group highlighted the lack of updated provincial and district specific relief and response plans as a resolvable SPOF. It should be noted that the NDMA has gone some way to addressing these SPOF at the national level, such as through the introduction of the NDMA-led Standard Operating Procedure for Relief and Response in 2022 that specifically incorporates recognition of existing SPOF outlined in the 2021 Final Report.
- SPOF 9.6: Weak NDMA provincial and district guidance, documentation and capacities to handle multiple hazards and incidents. A third of the stakeholder interviews also noted that the NDMA Provincial and District Offices presently lack procedures, plans (as well as associated capacities) to effectively handle and coordinate multiple emergencies across their respective territories without resorting to considerable help either from national NDMA headquarters and/ or wider stakeholders. At present, these procedural SPOF contribute to constraining the effectiveness of the NDMA Provincial and District Offices to operate autonomously and deliver envisaged regional coordination, remits and roles robustly (covering DRR, relief and response and especially recovery) (Procedural).



- SPOF 9.7: Integration with local waste policies. Interestingly, the Focus Groups in the local communities were less focused on discussing the paramount procedural issues raised in the stakeholder interviews and Focus Group with NDMA Provincial Officers. Rather, nearly a quarter of the wards in Freetown highlighted the need for the new local NDMA capacity (especially for the western area) to coordinate with and promote the integration of DRR planning with local waste management policies, highlighting how the primary focus of local communities' priorities were very much focused on addressing drainage/storm drains/flood prevention and fire prevention issues. There is little to suggest that those views would not also be held by local communities across Sierra Leone. There is an important opportunity that when NDMA Provincial and District Offices develop their plans and SOPs for DRR, relief and response and recovery and address these resolvable SPOF that they also focus on engagement and integration with local waste management plans and practices to provide comprehensive, holistic approaches and solutions.
- In the context of Freetown, this is also driven by major concerns over the vulnerability of the urban dumpsites to hazards that have the propensity to spread across the capital. (Procedural).
- SPOF 9.8: Weak general guidance. **Outstanding Desire for Facilitators Guides for NDMA Provincial and** District Officers. A resounding response was registered across all three constituencies to the need for specific all-round guidance such as that provided by Facilitators Guides to reinforce basic induction training and provide quick workarounds to developing closer relations between the new NDMA Provincial and District Offices and the respective local communities. This was overwhelmingly supported across all three constituencies, registering 100% support for their development and adoption by NDMA Provincial Officers (Technical/Procedural).

Lessons Learned SPOF

The 2021 AFRICAB Final Report identified a range of SPOF concerning relating capacities of the evolving NDMA to capture lessons learned from previous emergencies and disaster to inform its future procedures and practice (see Miles et al, 2021: 55-56). While the NDMA has become proficient in capturing lessons identified, the translation of these into lessons learned as part of continuous improvement was regarded as where more work needed to be done.

The EVALDIS research findings confirm that one of the central elements where this can be undertaken is in the timely completion of highly reflective and transparent After-Action Reviews (AARs) in consultation with wider stakeholders. Indeed, this has been further recognised by the NDMA in its revised National SOPs for Relief and Response introduced in 2022.

Table 3.10: Lessons Learned SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES			
10. LESSONS LEARNED	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³	
	AAR implementation not embedded at the NDMA provincial and district levels yet (Procedural). 5/25 (20%)	Limited engagement of local actors in AARs (Procedural). 3/48 (6%)	AAR implementation not embedded at the NDMA provincial and district levels yet (Procedural). 5/5 (100%)	
	Staff not really trained or experienced in undertaking After Action Reviews (AARs) for local incidents (Human). 5/25 (20%)		Staff not really trained or experienced in undertaking After Action Reviews (AARs) for local incidents (Human). 5/5 (100%)	



In relation to the NDMA provincial and district levels, then two aspects were identified, namely:

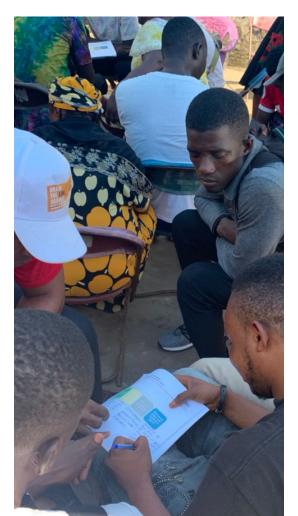
- SPOF 10.1: Procedures to undertake
 AARs at the provincial and district
 levels have not been fully established
 leading to inabilities to capture lessons
 and learn from them comprehensively.
 This was highlighted in both the
 stakeholder interviews (5 out of 25) and
 by all (100%) five provinces in the Focus
 Group with NDMA Provincial Offices.
- SPOF 10.2: Existing NDMA Provincial and/or District staff are not trained and/or have previous experience in undertaking After Action Reviews (AARs) for local incidents (Human). This was highlighted in both the stakeholder interviews and in the Focus Group with NDMA Provincial Offices.

Furthermore, three specific SPOF were also identified via peer observations and through participation iin respective meetings of stakeholders. These were:

- Weaknesses in the usage of virtual technologies and platforms like
 Skype, Zoom or Teams at important
 AAR consultation meetings leads to key stakeholders not being able to attend the very limited number of AAR related meetings. This led to perceptions among key stakeholders around limited consultations and a lack of accessibility to input into AAR processes.
- Follow-up of AARs are not robust; lessons identified are not routinely being translated into implemented lessons learned. Stakeholders remain unclear as to how AARs are formally taken forward procedurally to affect future implementation. This led to concerns that AARs are seen as the end of the processes and procedures of review rather than a step to input into enhanced

- ongoing continuous review.

 As a case in point, the consistent demands among stakeholders to have wider virtual access to key NDMA meetings on the implementation of Lessons Learned has so far not been uniformly or consistently applied.
- Limited engagement of local actors in After Action Reviews (AARs). Lessons identified in AARs are often based on quickly called meetings that lead to poor local involvement and limited capture of local lessons. Often key local actors, like chiefs, are not informed of AAR meetings and CDMCs and volunteer representation are often poor at AAR/ recovery meetings.
- Lack of systemic guidance and procedures and incentives from NDMA mean that many CDMCs and volunteers are unclear on how to implement lessons identified that inevitably leads to the repetition of SPOF during future disasters.



Coordination Challenges SPOF

The EVALDIS findings also reveal numerous, common-identified coordination-related SPOF that have particular resonance for the provincial and district levels and for the continuing development of an NDMA regional capacity (see Table 3.11). EVALDIS findings also continue to validate the findings and recommendations of the 2021 AFRICAB Final Report (Miles et al, 2021: 57-59).



Table 3.11: Coordination Challenges SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES			
11. COORDINATION CHALLENGES	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³	
	Inconsistent, and often bespoke, levels of NDMA coordination with NGOs and international organisations in the respective provinces and districts (Procedural). 10/25 (40%)	Limited coordination between NDMA and those CDMCs that do exist in Freetown (Procedural). 4/48 (8.3%) 2/48 ranked 1st (4.2%)	Limited Involvement of NDMA Provincial and District Officers in key decision-making and discussions at NDMA HQ that affect provincial and regional delivery (Procedural). 3/5 (60%)	
	Limited and highly selective engagement of those local disaster management committees that exist (Procedural). 11/25 (44%)	Limited, but improving coordination with national organisation of CDMCs. Relationship with new NDMA Provincial and District Officers not formalised (Procedural). 4/48 (8.3%)	Lack of MoUs between NDMA Provincial and District Offices and NGOs/third parties complicates coordination and leads to duplication of efforts (Procedural). 3/5 (60%)	
	Weak NDMA inter-pillar coordination at meetings leads to frustration among local actors (Procedural). 11/25 (44%)			

Table 3.11: Coordination Challenges SPOF at the Subnational Level (recorded by respective participants) (Continued). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	Lack of a comprehensive system of local community/chiefdom disaster management committees across all provinces poses SPOF for NDMA Provincial and District Officers/Offices (Procedural). 13/25 (52%)		Lack of a comprehensive system of local community/chiefdom disaster management committees across all provinces poses SPOF for NDMA Provincial and District Officers/Offices (Procedural). 3/5 (60%)
	More developed engagement of new NDMA Provincial and District Officers with paramount chiefs and community leaders required. 13/25 (52%)	Role of Paramount Chiefs recognised, but relations and engagement with NDMA still underdeveloped. Still areas of Freetown without effective and/ or operational CDMCs. 4/48 (8.3%) 2/48 ranked 1st (4.15%)	

More specifically, these include:

SPOF 11.1: Uneven NDMA 'horizontal' coordination with NGOs and international organisations in the respective provinces and districts of Sierra Leone implies that the level and scope of engagement varies considerably across the provinces of Sierra Leone. While it is always the case that the involvements and activities of NGOs will vary across the provinces due to, amongst other things, interests, resources, types of activities, and maturity of partnerships, this will influence the coordination between the new NDMA Provincial and District Offices and NGOs.

However, presently there is a notable resolvable SPOF in that most of this cooperation is unsystematic and relies upon existing relationships and personal networks. Even now there are demonstrable examples where the new NDMA Provincial and District Officers have been able to utilise this cooperation to enhance local disaster response arrangements. However, at the moment, there are not many systematic Memorandum of Understandings (MoUs) and agreements with the NDMA provincial and district capacities to enable local NDMA coordination to be more effective and for assets and resources to be deployed most effectively at times of

- crisis and disasters. This also applies to a lack of MoUs in relation to enhancing DRR coordination more generally. Presently, the dominant role of donor NGOs in implementing pillar operations during disasters leads to local actors coordinating more with NGOs than the NDMA provincial and district actors as the NGOs can deliver assets, supplies, relief and often payments more quickly. The high propensity for siloed operations and weak coordination between donors/ NGOs and NDMA leads to pressures for local actors in maintaining cordial relations with all relevant partners.
- SPOF 11.2: Potential deficiencies and gaps in the representation and 'vertical' involvement of the NDMA **Provincial and District Officers in key** decision-making and discussions at the NDMA headquarters that nevertheless have important repercussions for the operation of the NDMA Provincial and District Offices and the delivery of disaster management in the provinces and districts. Specific issues were raised in the stakeholder interviews, peer observations and by 3 provinces in the Focus Group with NDMA Provincial Officers, such as, the notification and timing of national meetings and debates, slow notification of key events, and issues of financing the ability of NDMA Provincial and District Officers to travel to meetings in Freetown were all identified as part of this coordination SPOF. 11 of the 25 stakeholder interviews (44%) highlighted a key SPOF in relation to weak inter-pillar coordination at NDMA meetings in general, often focusing on reporting back activity rather than agreeing and coordinating future activities. This also leads to frustration among local actors about slow or ineffective coordination and uncertainty

- about next steps affecting local communities by NDMA Provincial and District Officers. SPOF exist in relation to coordination gaps between the NDMA national and provincial levels.
- SPOF 11.3: Irregular 'vertical' coordination with local community and/or chiefdom disaster management committees (CDMCs). A common resolvable SPOF that was specifically mentioned in the stakeholders' interviews and in the Focus Groups with the local communities is that the development of effective NDMA provincial and district operations will be affected by a lack of regular, 'vertical' coordination with local community and/or chiefdom disaster management committees where they exist. 11 of the 25 (44%) stakeholder interviews and a small number of the wards in the Freetown during the Focus Groups with local communities highlighted that the weaknesses in regular coordination between the NDMA and CDMCs was a demonstrable, yet resolvable SPOF. It should be noted that in 2022 and 2023 the NDMA has undertaken several initiatives and pilot projects with a selected group of local CDMCs as well as undertaking field exercises in key cities and regions to try to close some of these gaps and should be regarded as welcome work in progress. However, this coordination SPOF between the NDMA Provincial and District Offices and specific local communities in their own respective regions is also inhibited by the fact that in many places, local communities do not yet have operational community/chiefdom disaster management committees. This complicates the ability of the NDMA to speak to local communities or for those respective communities to speak more coherently to the evolving NDMA regional capacities.

"Weaknesses in regular coordination between the NDMA and CDMCs was demonstrable"

SPOF 11.4: Underdeveloped coordination with paramount chiefs and community leaders. Improving coordination with paramount chiefs and community leaders is recognised. Yet, engagement with NDMA Provincial and District Offices is sometimes underdeveloped. Sound relations with the paramount chiefs and community leaders are critical to effective DRR and essential for relief and response and recovery arrangements. 13 of the 25 (52%) stakeholder interviews and 3 of the provinces in the Focus Group with NDMA Provincial Officers highlighted this as a resolvable SPOF with more investment needed in coordination and training the chiefs and community leaders in DRR and DRM-related roles and responsibilities so that they can more effectively coordinate with NDMA Provincial and District Offices. This was also identified in the Freetown Focus Groups where the lack of CDMCs in some wards also placed even greater importance on coordination with paramount chiefs and community leaders that was also not as developed as it could be.

Communication and Technology Challenges SPOF

Communication and technology challenges have long been associated as significant issues in the operation of disaster management in Sierra Leone. Indeed, the 2020 AFRICAB Final Report further identified those that can be regarded as resolvable SPOF at the national and local levels (see Miles et al, 2021: 60-61). The EVALDIS research confirms that communication and technology SPOF readily exist in terms of the development of an NDMA provincial and district capacity, and that they are largely common across the country, including in Freetown.



Table 3.12: Communication and Technology SPOF at the Subnational Level (recorded by respective participants). Sources: Data Collection Methods: 25 Stakeholder Interviews¹ (Top 5 SPOF); 8 Focus Groups (covering 48 Freetown wards)² (Top 5 SPOF); 1 Focus Group with 5 NDMA Provincial Officers³ (Top 10 SPOF).

SPOF THEMATIC AREA	SPECIFIC SPOF CHALLENGES		
12. COMMUNICATION & TECHNOLOGY CHALLENGES	Stakeholder Interviews ¹	Freetown Focus Groups ²	NDMA Provincial Officers Focus Group ³
	Limited numbers of mobile phones/VHF for risk communications Lack of alternatives to use of private mobile phones for NDMA Provincial and District Offices (Physical). 15/25 (60%)		Limited numbers of mobile phones/VHF for risk communications (Physical). 4/5 (80%)
	Reliance on private resourcing for mobile phones. Limited funding of phone credits (Economic). 15/25 (60%)	Limited distribution of phones to CDMCs by NDMA means that reliance on private resourcing for mobile phones to contact NDMA. No help with phone credits. 4/48 (8%)	Reliance on private resourcing for mobile phones. Limited funding of phone credits (Economic). 3/5 (60%)
	Poor internet connectivity (Physical). 15/25 (60%)		Poor internet connectivity (Physical). 5/5 (100%)
	Reliance on old systems and Word/Excel packages for compiling key information leads to slow dissemination (Technical). 13/25 (52%)		Lack of tablets at provincial and district levels restricts ability to complete assessments and undermines quick, accurate data collection (Physical). 4/5 (80%)
	Weak usage of virtual platforms (Zoom, Teams, Skype) at interpillar meetings inhibits participation of actors and effective and speedy coordination (Technical/ Procedural). 13/25 (52%)		Absence of dedicated and highly equipped Emergency Operations Rooms (EORs) leads to poor coordination and poor engagement of local actors. 4/5 (80%)

Overall, in relation to the NDMA Provincial and District capacities, three communication technology SPOF are highly prevalent:

- SPOF 12.1: Insufficient IT and communication technology provision for NDMA Provincial and District Officers and Offices. NDMA Provincial and District Officers and Offices have significant lack of availability and/ or shortages of provision regarding most forms of IT, including computers, laptops, tablets and phones (mobile, VHF, satellite) that severely restricts the pace of situational awareness, risk communication and messaging from and to the respective NDMA Provincial and District Offices. This also implies that there are currently varied abilities in terms of the Provincial and District Offices to gain regular access key guidance via internet, smart phone or website applications or communicate with national agencies and responders. These physical SPOF also restrict the ability of NDMA Provincial and District Officers to deploy effectively in the field.
- SPOF 12.2: Severe reliance of NDMA **Provincial and District Officers on** (often private) mobile phones for regular communication. This phone reliance means that there is very little redundancy if a major event were to make the mobile phone network inoperative. There are significant dead spots where no mobile coverage exists in Sierra Leone which severely restricts effectiveness. In addition, there are limited and in some instances a complete lack of financial provision for mobile phone credits which means that NDMA Officers regularly rely on private phone credit purchases to remain effective and this constitutes a resolvable, economic SPOF in relation to IT/phone resourcing. Hence, the strong reliance on private mobile phones by NDMA Provincial and

- District Offices as well as local actors to receive coordination and messages can be undermined by dead spots and expensive access to credits.
- spof 12.3: Weak Internet coverage and connectivity across many parts of Sierra Leone which restricts the new NDMA Provincial and District Officers and Offices from communicating. This physical SPOF also restricts the NDMA Provincial and District Offices from implementing virtual communication networking and communications, like Microsoft Teams or Zoom that would enhance coordination possibilities with wider stakeholders and also enhance the possibilities of coordinating with the NDMA headquarters in Freetown.
- SPOF 12.4: The lack or absence
 of dedicated, properly equipped
 Emergency Operations Rooms (EORs)
 in the regions and local areas means
 that coordination of response activities
 relies almost entirely on cheap yet
 unsophisticated virtual solutions like
 WhatsApp groups that have limited
 functionality. It also inhibits the use of
 virtual platforms by key local actors.

"There are significant deadspots where no mobile coverage exists"



Chapter 4 Conclusions & Recommendations

General Conclusions

"There have

been notable

in many

areas."

improvements

The EVALDIS research findings indicate that:

- There have been notable improvements in many areas of provincial and district disaster management in Sierra Leone in recent years.
- The development of a more formal NDMA provincial and regional capacity is yet another step in the right direction. There is therefore a strong foundation on which to identify, refine and build so that those SPOF identified as having resonance for the NDMA Provincial and District Offices and as resolvable can be 'fixed' at both the national and local levels.
- There are striking similarities in the views of participants on the resolvable SPOF and where comprehensive action will produce clear improvements in subnational disaster management.
- 51 Resolvable SPOF across 12 mutually inclusive thematic areas have been identified by this EVALDIS Final Report.
- These resolvable SPOF represent significant 'windows of opportunity' for future action since there is largely a consensus among national, provincial and district actors on what is fixable and what needs to be done to fix them.

- Nevertheless, without further action defined through clear recommendations and immediate action points (IAPs), there is a strong likelihood for SPOF to continue that may result in detrimental and damaging breakdowns in part or all of the Sierra Leone's emerging NDMA provincial and district capacity. Without addressing the resolvable SPOF, this new NDMA provincial and district capacity will not be as good as it could be
- 62 Recommendations and Immediate
 Action Points (IAPs) across 12 mutually
 inclusive thematic areas have been
 identified by this EVALDIS Final Report.
- There is therefore an important opportunity cost if these resolvable areas are not attended to quickly and/or where existing actions are not continued and further enhanced for the future.
- That if resources remain tight and ambitions have to be limited, then policy attention should be placed initially on the development of fully functioning NDMA Provincial Offices to create stable platforms for the future covering all parts of Sierra Leone. It is important to have very strong provincial hubs that can support the development of the district spokes.

Specific Recommendations and Immediate Action Points (IAPs)

This 2023 EVALDIS Final Report is focused on providing recommendations for improving provincial and district disaster management in Sierra Leone. Hence the recommendations in this chapter should be seen in the context of the prior 2021 AFRICAB Final Report that considered enhancements to the entire disaster management system of the country (see Miles et al, 2021).

Furthermore, the recommendations in this EVALDIS report address commonly identified areas of SPOF that have resonance for evidencing further improvements in the provincial and district capacities of the NDMA. (As discussed in Chapter 3). There is also agreement that the recommendations have strong

interdependencies and synergies and agreement on resolvability of specific SPOF in the short term (less than 5 years). The recommendations also build upon areas where the NDMA has keenly established a strong trajectory for existing and future action and thus where interventions are considered likely to have substantial positive impact.

The following chapter is therefore now divided into a further 12 sections – each of which presents a dedicated table that outlines the specific resolvable SPOF and includes targeted recommendations as immediate action points to begin to address them. Where appropriate, the recommendations take the form of specific practice-based actions. EVALDIS recommends that these 62 recommendations could be integrated into a comprehensive NDMA Regional Strategy document for 2023-24.

Table 4.1: Data Management: Recommendations/Immediate Action Points (IAPs).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
1. DATA MANAGEMENT	spof 1.1: Timely and accurate collection of data in relation to the compilation, presentation and distribution of official Lists of Affected Persons (Technical).	IAP 1.1a: Development of new Guidance and Standard Operating Procedures (SOPs) for NDMA Provincial and District Officers and office staff relating to on-site assessments and Official Lists of Affected Persons to accommodate Provincial and District Offices (Technical). IAP 1.1b: Planning for Awareness/ Training of NDMA Provincial and District Officers on new Guidance and SOPs (Human).
	SPOF 1.2: Data collection and management remains limited and highly restricted in areas outside Freetown due to the limited availability of IT provision in the respective provinces and districts.	IAP 1.2: Development of formal IT Procurement Strategy/Plan to support NDMA Provincial and District Offices to enhance capacity to complete accurate and timely Registered List of Affected Persons (Procedural).

Table 4.2: Strategic Communication and Media Management: Immediate Action Points (IAPs).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
2. STRATEGIC COMMUNICATION AND MEDIA MANAGEMENT Strategic Communication	SPOF 2.1: Poorly established, unsophisticated and/or weakly implemented crisis communication procedures, including lack of messaging templates, pertaining to Disaster Risk Reduction (Procedural).	IAP 2.1a: NDMA review/establish dedicated crisis communication SOP/Communication Plan with dedicated DRR sections for NDMA Provinces and Districts Offices (Procedural). IAP 2.1b: NDMA establish/review pre- messaging/messaging templates and guidance on DRR for use by NDMA Provincial and District Offices. This should be hazard, regional and season specific (Technical). IAP 2.1c: NDMA incorporate regular training and exercising on use of communication SOPs and messaging for DRR for NDMA Provincial and District Officers (Human).
	SPOF 2.2: Sporadic, unstructured crisis communication messaging and information sharing between NDMA headquarters and provinces and districts at time of disaster relief and response (Technical).	IAP 2.2a: NDMA to include in dedicated relief and response sections in aforementioned dedicated crisis communication SOPs/Communication Plan for NDMA Provinces and Districts Offices (Procedural). IAP 2.2b: NDMA establish/review pre-messaging/ messaging templates and guidance on relief and response for use by NDMA Provincial and District Offices. This should be hazard, regional and season specific (Technical). IAP 2.2c: Follow-on training/exercising on messaging/SOPs/Communication Plan (Human).

Table 4.2: Strategic Communication and Media Management: Immediate Action Points (IAPs) (Continued).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
Strategic Communication	SPOF 2.3: Weak formal crisis communication capacity at the subnational level.	IAP 2.3: NDMA Provincial and District Officers/Offices to be train in and develop dedicated regional crisis communication plans, in consultation with regional/local stakeholders, NGOs and media. Compile accompanying resourcing plan.
Media Management	SPOF 2.4: Present lack/weak media expertise, knowledge and training in media management among NDMA Provincial and District Officers/Offices.	IAP 2.4: NDMA to develop media management training and exercising (including social media) for NDMA Provincial and District Offices, including media management coordination and information sharing between Provincial and District Levels (Human).

Table 4.3: Disaster Risk Reduction (DRR) and Early Warning Systems (EWS): Immediate Action Points.

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
3. DISASTER RISK REDUCTION (DRR) AND EARLY WARNING SYSTEMS (EWS) Disaster Risk Reduction	SPOF 3.1: Lack of updated DRR hazard maps and up to date risk registers for most provinces, districts and wards (Technical/Procedural).	IAP 3.1: NDMA to further implement plans for DRR hazard maps and risk registers for all NDMA provinces and districts with annual updating requirement (Technical/Procedural).
	spof 3.2: Uncontrolled distribution of land and building permits leads to uncontrolled construction and/or poor building construction (Technical/ Procedural).	IAP 3.2: NDMA and Ministry of Lands to further incorporate DRR considerations/requirements into decision-making on land use and building permits. NDMA Provincial and District Offices open further dialogue with provincial authorities to highlight challenge of uncontrolled distribution and building of lands as appropriate (Technical/Procedural).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
Disaster Risk Reduction	SPOF 3.3: Weak enforcement of by-laws and building regulations (Procedural).	IAP 3.3: NDMA National, Provincial and District Officers engage with local police, community leaders and chiefs to promote enforcement of by-laws. NDMA to coordinate dialogue/new initiatives focusing on enforcement of building regulations (Procedural).
	spof 3.4: Inadequate DRR-related enforcement of laws on access to electrical supplies, combined with lack of sensitisation of local communities (Procedural).	IAP 3.4: NDMA to continue to coordinate/lobby utility providers on MOU on DRR and maintenance of electricity supplies. NDMA National, Provincial and District Officers to further develop dedicated fire prevention sensitisation programmes for MDAs, wider stakeholders & local communities (Procedural/Human).
Early Warning Systems	SPOF 3.5: Lack of functioning/effective regional EWC capabilities in the provinces and districts (Physical/Technical).	IAP 3.5: NDMA to undertake EWS needs assessment/capacity review for the provinces and districts to establish their EWS requirements (Procedural/Technical).
	SPOF 3.6: Limitations in formats of EWS information produced by key governmental authorities (Technical).	IAP 3.6: NDMA Provincial and District Offices to continue to engage with NDMA HQ and SLMet to establish specific regional requirements, joint procedures and training programme for EWS information sharing. Promote best practice. (Technical/Human).
	SPOF 3.7: Limited abilities of local communities to translate and/or understand EWS and weather information provided to provinces/districts (Technical/ Human).	IAP 3.7: NDMA (with SLMet support) to undertake/accelerate sensitisation programmes for Community/Chiefdom Disaster Management Committees (CDMCs) and Community Leaders on EWS information and data interpretation (Human).
	SPOF 3.8: Poor linkage/association of DRR with deforestation policies/priorities/enforcement among local communities (Human).	IAP 3.8: NDMA and EPA to develop joint awareness/sensitisation programmes delivered to, and by, NDMA Provincial and District Offices for local communities (Human). NDMA to continue to focus on key priorities: Green Belt/conservation reserves (Procedural/Human).

Table 4.4: Critical Infrastructure (CI): Immediate Action Points (IAPs).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
4. CRITICAL INFRASTRUCTURE (CI)	SPOF 4.1: Poor maintenance and state of drainage and storm drainage systems (Physical/ Economic).	IAP 4.1: NDMA National, Provincial and District Officers to coordinate annual DDR focused drainage and storm drainage clearance campaigns in cooperation with subnational authorities, CDMCs and local communities (Procedural).
	SPOF 4.2: Poor maintenance and state of electrical supplies (Physical/ Economic).	IAP 4.2: NDMA (with NFF) to develop stringent MoUs with electrical utility suppliers on DRR, DRR investment and fire safety and prevention covering all provinces and districts. NDMA and NFF to work with utility suppliers to develop national, provincial and district sensitisation programmes on dangers of misuse of electrical supplies (Physical/Procedural/Economic).
	SPOF 4.3: Road Network Planning and Maintenance.	IAP 4.3a: NDMA (with responders) to coordinate and lobby for stronger DRR requirements to be incorporated into national and local road building and maintenance strategies and schemes. IAP 4.3b: NDMA Provincial and District Offices to undertake/ accelerate sensitisation programmes for Community/Chiefdom Disaster Management Committees (CDMCs) and Community Leaders on storm drainage and road access issues and by-law enforcements (Human).



Table 4.5: Responders: Immediate Action Points (IAPs).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
5. RESPONDER	SPOF 5.1: Existing size, scope and capacity of the respective fire force provision in many of the provinces (Physical/ Economic).	IAP 5.1: NDMA to enhance coordination with NFF on future capacity requirements for DRR, and disaster response across provinces and districts. NDMA Provincial and District Offices (with NFF) to conduct joint needs and capacity assessment for their respective areas to ascertain existing levels of local fire fighting capacities and vulnerabilities (Procedural).
	spof 5.2: Existing Financial and Equipment Limitations of the National Fire Force (NFF) to provide sufficient DRR and fire prevention guidance and training (Physical/ Economic).	IAP 5.2a: NDMA National, Provincial and District Offices (with NFF) to develop bespoke and region-specific fire prevention guidance for local communities (Technical/Procedural).
		IAP 5.2b: NDMA (and NFF) to develop and coordinate joint fire prevention training to be offered to local communities (coordinated with NDMA Provincial and District Offices) (Human).
		IAP 5.2c: Fire safety regulations and inspections to be incorporated into provincial and district DRR policies to enhance coordination.



Table 4.6: Logistics: Immediate Action Points (IAPs).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
6. LOGISTICS	SPOF 6.1: Limited Transportation and Mobility due to Poor Availability of Vehicles (Physical/ Economic).	IAP 6.1: Development of a NDMA fleet management and procurement policy to map transportation needs of the NDMA Provincial and District Officers/ Offices. This can guide governmental procurement, resource strategies and negotiations on support from outside funders and international institutions. It will inform plans and SOPs in terms of deployment of real transportation capacity (Procedural/Economic).
	SPOF 6.2: Limited Transportation and Mobility due to poor road network (Physical/ Economic).	IAP 6.2: NDMA to lobby for enhanced national and local road building and maintenance strategies and schemes (see IAP 4.3a) (Procedural).
	SPOF 6.3: Limited stockpiles and warehouse facilities in the provinces and districts (Physical/Economic).	IAP 6.3: Further development of NDMA implementation strategy for provincial and district and local stockpiling and store management, with the aim of creating safe and secure stockpiles of assets in all provinces and districts (Procedural).
	SPOF 6.4: Limitations in local logistics management, and expertise mean there are challenges of maintaining up to date inventories of available equipment at local levels (Procedural/Human).	IAP 6.4: Further development of NDMA Provincial and District Logistics Management Capacity-Building Programme. NDMA Provincial and District offices to be further trained and exercised in logistics management so that provincial, district and local stores and stockpiles can be used most effectively and to reduce demands on the national level (Human).
	SPOF 6.5: Limited availability of clearance and construction tools in the local communities, especially in Freetown (Physical/Economic).	spof 6.5: Further development of Provincial, District and Local Priority Lists of required clearance and construction tools that can be kept safely and securely within local communities. Priority Lists can be used to inform negotiations for funding support for tools with wider partners, stakeholders and international funders (Procedural/Economic).

Table 4.7: National-Provincial/District Relations: Immediate Action Points (IAPs).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
7. NATIONAL- PROVINCIAL/DISTRICT RELATIONS	SPOF 7.1: Limited Financial Resourcing and Integrity of the NDMA Provincial and District Level (Economic).	IAP 7.1: NDMA to establish and/ or expand dedicated funds/funding provision for operation of NDMA Provincial and District Offices, including consideration of opening bank accounts for respective NDMA Provincial and District Offices (Economic).
	SPOF 7.2: Financial Limitations of NDMA National Capacity (Economic).	IAP 7.2: NDMA to establish dedicated regional facilitation programme/fund to support NDMA national officials operations in the provinces and districts (Economic).

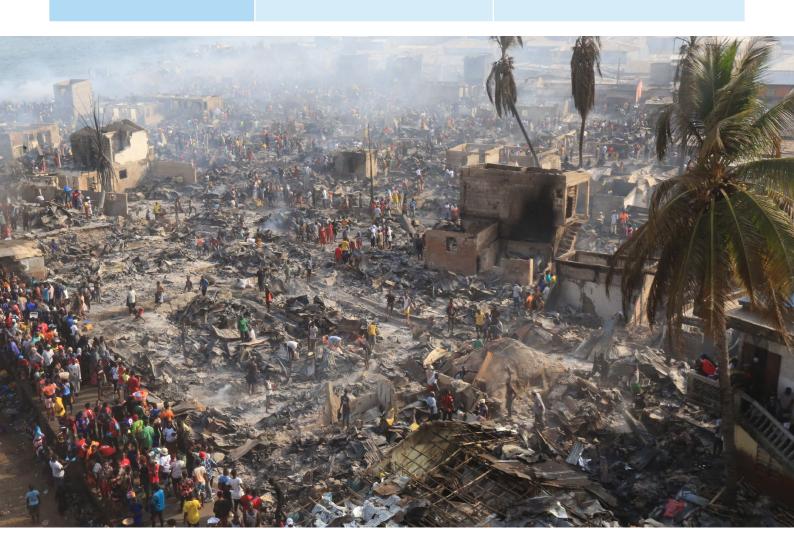


Table 4.8: Human Resources: Immediate Action Points (IAPs).

Tuble 4.5. Human Resources. Immediate Action Forms (IAF 5).		
SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
8. HUMAN RESOURCES AND EXPERTISE	SPOF 8.1: Limited Number of NDMA Provincial and District staff (Human).	IAP 8.1: Regular Updating of NDMA Staffing Policy and Requirements for NDMA Provincial and District Offices (Procedural).
	SPOF 8.2: Limited DM expertise and formal DM qualifications among NDMA Provincial and District Staff (Human).	IAP 8.2: Development of an NDMA DM Training Capacity Programme in conjunction with award-making institutions, like universities to expand DM-related qualifications base of NDMA Provincial and District Staff. Funding to be secured in cooperation with wider stakeholders and international partners (Human).
	SPOF 8.3: Constrained DM Training and Exercising Opportunities (Human).	IAP: 8.3: Development of NDMA Training Modules and Courses in conjunction with partners and stakeholders. Funding to be secured in cooperation with wider stakeholders and international partners (Human).
	SPOF 8.4: Undeveloped Terms of Reference/Remits of NDMA Provincial and District Officers (Human/Technical).	IAP 8.4: Review of ToRs of NDMA Provincial and District Officers and Office on an annual basis.
	SPOF 8.5: Limitations in, and declining numbers of, active and reliable volunteers within the local communities (Human).	IAP 8.5: Development of a NDMA Strategy on Disaster Management Volunteerism that sets out expected capacity requirements in each province, district and ward as well as expected roles and responsibilities of volunteers, and the coordination responsibilities of the NDMA Provincial and District Offices towards communicating and working with volunteers. Resourcing issues such as the role of stipends should also be considered alongside the new strategy.
	SPOF 8.6: Limited Numbers of functional and effective community/ chiefdom disaster management committee (CDMCs) in operation.	IAP 8.6a: NDMA to expand its currently successful engagement policy with local communities.

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
		IAP 8.6b: NDMA to develop closer relations with local subnational authorities. This also includes further MoUs with the national organisation representing CDMCs to encourage creation of CDMCs across all wards of Sierra Leone.
	SPOF 8.7: Insufficient systematic capacity-building in DM within the local communities (especially CDMCs and Community leaders) of Sierra Leone (Human).	IAP 8.7: NDMA Provincial and District offices to further develop joint training and exercising programmes/initiatives with local partners and organisations to provide additional DRR, relief, response and recovery training and exercising to the local communities.



Table 4.9: Procedural Immediate Action Points (IAPs).

Tuble 4.5. I Toccaula Illimediate Action I onito (IAI 5).		
SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
9. PROCEDURAL	SPOF 9.1: Lack of clear lines of decision-making and accountability in relation to overall DM plans (Procedural).	IAP 9.1: Further reviews of NDMA policies in line with 2020 NDMA Act and incorporation of findings into revised plans and SOPs (Procedural).
	SPOF 9.2: Insufficient development of provincial and/or district specific disaster management plans and/or standard operating procedures covering functions, roles and responsibilities of NDMA Provincial and District Officers and Offices (Procedural).	IAP 9.2: Development of NDMA Planning Documents and revisions of 2023 NDMA Service Charter to further cover roles, responsibilities and services of NDMA Provincial and District Officers and Offices (Procedural).
	SPOF 9.3: Lack of and/or insufficient existing Disaster Risk Reduction (DRR) plans and SOPs at the NDMA provincial and district level to further promote regional and local context-specific disaster risk reduction (Procedural).	IAP 9.3: Introduction of region-specific NDMA DRR Plans and SOPs at the NDMA provincial and district levels. These documents will also take account of national-level guidance, plans and SOPs and in consultation with wider stakeholders (Procedural).
	SPOF 9.4: Lack of and/or insufficient existing disaster relief and response specific plans and SOPs at the NDMA provincial and district level (Procedural).	IAP 9.4: Introduction of region-specific NDMA Relief and Response Plans and SOPs at the NDMA provincial and district levels. These documents will also take account of national-level guidance, plans and SOPs and in consultation with wider stakeholders (Procedural).
	SPOF 9.5: Lack of and/or deficiencies in, DM-related documentation, planning and training relating to Disaster Recovery at the provincial and district levels (Procedural).	IAP 9.5: Introduction of region-specific NDMA Recovery Plans and SOPs at the NDMA provincial and district levels. These documents will also take account of national-level guidance, plans and SOPs and in consultation with wider stakeholders. Further dedicated recovery functions may need to be established at the NDMA Provincial and District Offices in the future (Procedural).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
	SPOF 9.6: Weak NDMA provincial and district guidance, documentation and capacities to handle multiple hazards and incidents (Procedural).	IAP 9.6: Consideration of multi-hazard scenarios should be built into risk registers (see IAP 3.1) and into the respective DRR, relief and response and recovery. Training and Exercising to follow (Procedural) (IAPs 9.3-9.5).
	SPOF 9.7: Integration with Local Waste Policies.	IAP 9.7: Development of NDMA-EPA working group to develop synergies between NDMA DRR plans and EPA and subnational authorities waste management guidance and policies (Procedural).
	SPOF 9.8: Weak general guidance. Need for Facilitators Guides for NDMA Provincial and District Officers.	IAP 9.8: Development of dedicated Facilitators Guide in Disaster Management for NDMA Provincial and District Officers (Procedural).



Table 4.10: Lessons Learned: Immediate Action Points.

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
10. LESSONS LEARNED	SPOF 10.1: Procedures to undertake AARs at the provincial and district levels have not been fully established (Procedural).	IAP 10.1: Development of dedicated guidance on AAR for NDMA Provincial and District Officers to ensure detailed, effective and timely completion. (Procedural).
	SPOF 10.2: Existing NDMA Provincial and/or District staff are not trained and/or have previous experience in undertaking After Action Reviews (AARs) for local incidents (Human).	IAP 10.2: Organisation of annual AAR training and exercise events to ensure effective updating and calibration across NDMA Provincial and District Offices on undertaking AARs (Human).

Table 4.11: Coordination: Immediate Action Points (IAPs).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
11. COORDINATION	SPOF 11.1: Uneven NDMA 'horizontal' coordination with NGOs and international organisations in the respective provinces and districts of Sierra Leone (Procedural).	IAP 11.1: Development of new Engagement Policy with NGOs and Private Sector to formally establish parameters of NGO involvement in pillar frameworks and to reduce fragmentation (Procedural).
	SPOF 11.2: Potential deficiencies and gaps in the representation and 'vertical' involvement of the new NDMA Provincial and District Officers in key decision- making and discussions at the NDMA headquarters (Procedural).	IAP 11.2: Establish Coordination Concordat that sets out expectations, rights and roles of NDMA Provincial and District Officers to be (or not) consulted during relevant decision- making (in coordination with existing plans and SOPs) (Procedural).
	SPOF 11.3: Irregular 'vertical' coordination with local community and/or chiefdom disaster management committees (CDMCs) (Procedural).	IAP 11.3: Development of a Dedicated Chiefdom and Community Leadership Engagement and Support Programme to focus entirely on increasing DRR and DRM awareness among wider community leaderships (Procedural/Human).
	SPOF 11.4: Underdeveloped coordination with paramount chiefs and community leaders (Procedural/Human).	IAP 11.4: DRR Programme for Chiefs. Outline NDMA's expectations of roles of chiefs/community leaders for handling emergencies (Procedural/Human).

Table 4.12: Communication and Technology: Immediate Action Points (IAPs).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
12. COMMUNICATION AND TECHNOLOGY CHALLENGES	SPOF 12.1: Insufficient IT and communication technology provision for NDMA Provincial and District Officers and Offices (Physical/Economic).	IAP 12.1: Development of dedicated and regularly reviewed IT procurement and maintenance strategy and budget for NDMA Provincial and District Offices. Can inform discussions for financial support and provision with wider stakeholders and international funders (Procedural/Economic).

SPOF THEMATIC AREA	SPECIFIC RESOLVABLE SPOF	SPECIFIC RECOMMENDATION / IMMEDIATE ACTION POINT (IAP)
Where it needs to be fixed?	What needs to be fixed?	How it could be fixed?
	SPOF 12.2: Severe reliance of NDMA Provincial and District Officers on mobile phones for regular communication (Physical).	IAP 12.2: Balanced procurement and maintenance strategy supporting NDMA Provincial and District Offices including purchase of VHF sets/ megaphones. Agreement of MoUs with telephone network providers on priority and discounted usage for NDMA Provincial and District Offices. Dedicated procurement plan on purchase and maintenance of mobile phone and phone credits (Procedual/Economic).
	SPOF 12.3: Weak internet coverage and connectivity across many parts of Sierra Leone (Physical).	IAP 12.3a: MoU with internet providers and coordination on investment strategies to reduce alleviate weak internet coverage and 'deadspots' (Technical/Procedural). IAP 12.3b: Procurement and Maintenance Plan for Wi-Fi provisions and connections at NDMA HQ and NDMA Provincial and District Offices. IAP 12.3c: Purchase and maintenance of virtual platform subscriptions (Microsoft Teams or Zoom) to facilitate more effective inter-pillar meetings and engagement/coordination with wider stakeholders and NGOs.
	SPOF 12.4: The lack or absence of dedicated, properly equipped Emergency Operations Rooms (EORs) in the regions and local areas.	IAP 12.4: Investment in the NDMA emergency operations rooms in NDMA Provincial and even District Offices. Investments in establishing effective emergency operations rooms (beyond virtual provisions like emergency WhatsApp groups) to create an integrated framework for improved situational awareness in the country (see Miles et al, 2021).



Bibliography

Cargo, M. and Mercer, S. L. (2008) 'The Value and Challenges of Participatory Research: Strengthening its Practice', *Annual Review of Public Health*, 29: 325-50.

Clark-Ginsberg, A., Blake, J. S. and Patel, K. V. (2022) 'Hybrid governance and disaster management in Freetown, Sierra Leone, Monrovia, Liberia and Dar es Salaam, Tanzania', *Disasters*, 46 (2), 450-472.

Cornwall, A. and Jewkes, R. (1995) 'What is Participatory Research?', **Social Science and Medicine**, 4: 1667-1676.

Freetown City Council (FCC) (2021a) *FCC Level 1 Disaster Response Standard Operating Procedures* (FCC: Freetown).

Freetown City Council (FCC) (2021b) *Transform Freetown Second Year Report, January* **2020 -** *January* **2021**, (FCC: Freetown).

Freetown City Council (FCC) (2022a) **Standard Operating Procedure (SOP) for Emergencies and Disasters at Kingtom Dumpsite** (FCC: Freetown).

Freetown City Council (FCC) (2022b) **Standard Operating Procedure (SOP) for Emergencies and Disasters at Kissy Dumpsite** (FCC: Freetown).

Freetown City Council (2023) *Freetown's First Climate Action Strategy 2022-2030* (Freetown City Council: Freetown).

Government of Sierra Leone (2020) *The National Disaster Management Agency Act 2020* (Government of Sierra Leone: Freetown).

Hempel, L., Kraff, B. D. and Pelzer, R. (2018) 'Dynamic Interdependence: Problematising Criticality Assessment in the Light of Cascading Effects', *International Journal of Disaster Risk Reduction*, 30: 257-268.

Jull, J., Giles, A. and Graham, I. D. (2017) 'Community-based Participatory Research and Integrated Knowledge Translation: Advancing Co-creation of Knowledge', *Implementation Science*, 12: 150.

Kothari, A. and Wathen, C. N., (2017) 'Integrated Knowledge Translation: Digging Deeper, Moving Forward'. *Journal of Epidemiol Community Health*, 71: 619-23.

Lilja, N. and Bellon, M. (2008) 'Some Common Questions about Participatory Research: A Review of the Literature', *Development in Practice*, 18: 479-488.

Lynch, P. (2009) Single Point of Failure: The 10 Essential Laws of Supply Chain Risk Management (Wiley: Oxford).

Melis, S. and Hilhorst, D. (2020) 'When the mountain broke: disaster governance in Sierra Leone', *Disaster Prevention and Management*, 30(6): 14-25.

Mercer, J., Kelman, I., Lloyd, K. and Suchet-Pearson, S. (2008) 'Reflections on the Use of Participatory research for Disaster Risk Reduction', *Area*, 40: 172-183.

Meyer, M., Hendriks, M., Newman, G., Horney, J., Berke, P., Masterson, J., Sansom, G., Cousins, T., Van Zandi, S. and Cooper, J. (2018) 'Participatory Action Research: Tools for Disaster Resilience', *International Journal of Disaster Resilience and the Built Environment*, 94: 402-419.

Miles, L. (2020) 'Sierra Leone Faces Coronavirus as Rainy Season Hits: Local Disaster Planning will be Key', *The Conversation*, 19 June 2020. Accessed at: https://theconversation.com/sierra-leone-faces-coronavirus-as-rainy-season-hits-local-disaster-planning-will-be-key-139604

Miles, L., Rogers, J., Travers, M., Bang, H., Martin, J., Miles, J, Patel, M., and Zhang, Y. (2020) *FCC Facilitators' Guide to Disaster Management* (BUDMC: Bournemouth).

Miles, L. (2021a) 'Targeting disaster management: New research evidence from Sierra Leone', *The Conversation*, 7 November 2021. Accessed at: Targeting disaster management: New research evidence from Sierra Leone (theconversation.com).

Miles, L. (2021b) **BUDMC-AFRICAB Fire Incidents Evaluation Report** (BUDMC: Bournemouth).

Miles, L., Bang, H., and Martin, J. (2021) *Enhancing Disaster Management in Sierra Leone: Driving African Capacity-Building in Disaster Management (AFRICAB) Final Report 2021*, (BUDMC: Bournemouth).

National Disaster Management Agency (2021) *National Disaster Preparedness and Response Plan* (NDMA, Government of Sierra Leone: Freetown).

Thornhill, P. and Rogers, J. (2021) *After Action Review: Susan's Bay Fire* (World Food Programme (WFP) and Global Logistics Cluster: Freetown).

Turay, B. and Gbetuwa, S. (2022) 'A state-of-the art examination of disaster management in Sierra Leone: the implementation drawbacks, research gaps, advances and prospects ', *Geoenvironmental Disasters*, 9: 1-15.

Wolf, L. (2004) 'Preventing Failure: The Value of Performing a Single Point of Failure Analysis for Critical Applications and Systems', *Information Systems Security*, 13: 1-54.

World Bank (2019) *Capacity Needs Assessment and Lessons Learned for Emergency Preparedness and Response* (Steadman Global Consulting Limited).

World Risk Report (2022) 'World Risk Report 2022' (Ruhr University Bochum: Bochum).

Report produced by

www.penelo.co.uk

G R A P H I C S