LIBERIA MULTI-HAZARD CONTINGENCY PLAN
NOVEMBER 2021

Six Common Hazards of Liberia



Flood



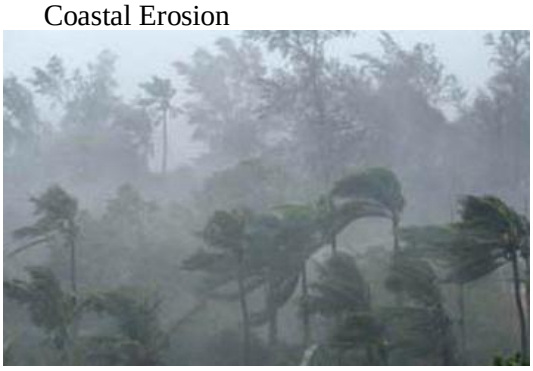
Fire



Coastal Erosion



Epidemics



Windstorm



Conflict

EUROPEAN UNION

cooperation germany – ecowas
ZUSAMMENARBEIT DEUTSCHLAND - ECOWAS

MINISTRY OF HEALTH
Republic of Liberia

LIBERIAN RED CROSS

Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Table of Contents

Forward 5

Acknowledgements 7

Abbreviations/Acronyms 8

1.0 Introduction 10

1.1 Objectives 11

2.0 Risk Overview 12

2.1 Flood 13

2.2 Windstorm 15

2.3 Conflict 16

2.4 Coastal Erosion 17

2.5 Fire 18

2.6Epidemics 19

2.6.1 Map of Human Health Hazards 22

2.6.2 Map of Animal Health Hazards 24

..... 25

..... 26

3.0 Risk profiles 26

5.0 Scenarios and Planning Assumptions 27

6.0 Preparedness for Response 30

6.1 Scenario and Early Warning Triggers 30

6.2 Prepositioning of Logistics 34

7.0 Priority preparedness activities 36

8. 0 Coordination Arrangements 40

8.1 Coordination at the National level 41

8.2 Coordination at the County level 42

8.3 Partner Relationship with other stakeholders 43

8.4 Operational Support Arrangements 44

9.0 Annexes 46

Annex 1: Sector Priority Response Plans 46

1. Shelter and None Food Items Response Plan 46

Priority Preparedness Activities, Indicator, Target, and Time Frame 46

Early Warning Information and Monitoring Responsibility 49

Priority Response Activities, Indicators, and Target 49

Sector Budget 51

Stock inventory 51

2. Food Security and Nutrition Response Plan 51
Priority Preparedness Activities, Indicator, and Target 52
Early Warning Information and Monitoring Responsibility 54
Priority Response Activities, Indicators, and Targets 54
Sector Budget 56
Stock inventory 56
3. Health Response Plan 57
Sector Members: 57
Priority Response Activities, Indicators, Targets, and Time Frame 57
Early Warning Information and Monitoring Responsibility 59
Priority Response Activities, Indicators, and Targets 59
Sector Budget 61
Stock inventory 61
4. Logistic Response Plan 62
Sector Members: 62
Priority Response Activities, Indicators, Target, and Time Frame 62
Early Warning Information and Monitoring Responsibility 63
Priority Response Activities, Indicators and Target 64
Sector Budget 65
Stock inventory 65
5. WASH Response Plan 66
Sector Members 66
Priority Preparedness Activity, indicator, target and time frame 66
Early Warning Information and Monitoring Responsibility 67
Priority Response Activities, Indicators and Target 68
Sector Budget 69
Stock inventory 70
6. Education Response Plan 70
Sector Members: 70
Priority Preparedness Activity, indicator, target and time frame 70
Early Warning Information and Monitoring Responsibility 72
Priority Response Activities, Indicators and Target 72
Sector Budget 73
Stock inventory 74
7. Protection Response Plan 74
Sector Members: 74

Priority Preparedness Activity, Indicators, Target and Time Frame 74
Early Warning Information and Monitoring Responsibility 76
Priority Response Activities, Indicators and Target 76
Sector Budget 78
Stock inventory 78
Annex 2: Contact list 78
Annex 3: Need Assessment Template 78
Annex 4: Minimum reports to be produced within 14 days of an emergency 78
Annex 5: Contributor and Editor 79
Annex 6: Sources/References 80

List of Tables

Table 1: Risk Dimension and Components 13
Table 2: List of Very Likely Hazards Identified by Sector, Liberia, 2021 19
Table 3: Risk Profiles 26
Table 4: Hazards, Humanitarian Impacts, Priority Needs, and Planning Assumptions 27
Table 5: Triggers and Activation Levels 30
Table 6: Hazards, Early Warning Activity, Indicator, Frequency, and Responsible Institution 32
Table 7: Risk Monitoring/Minimum Preparedness Actions, Liberia 36
Table 8: Priority Response Activities 39
Table 9: Roles and Responsibilities of Government Coordination Structures 42

List of Figure

Figure 1: Inland Flood Prone Areas, Liberia 15
Figure 2: Geographical Distribution of Windstorm Areas, Liberia, 2019 16
Figure 3: Risk Distribution of Conflict by County, Liberia, 2021 17
Figure 4: Geographical Distribution of Coastal Areas, Liberia 18
Figure 5: Risk Distribution of Fire by County, Liberia, 2021 19
Figure 6: Risk Distribution of Ebola Virus Disease by County, Liberia, 2021 22
Figure 7: Risk Distribution of Lassa fever by County, Liberia, 2021 ..... **23**
Figure 8: Risk Distribution of Acute Bloody Diarrhea by County, Liberia, 2021……..... 23
Figure9: Risk Distribution of COVID-19 by County, Liberia, 2021……..……..…... 23
Figure10: Risk Distribution of Measles by County, Liberia, 2021 23
Figure11: Risk Distribution of PPR by County, Liberia, 2021 24
Figure12: Risk Distribution of New Castle Disease by County, Liberia, 2021 24
Figure 13: Distribution of Bovine Tuberculosis by County, Liberia, 2021 ..... **25**
Figure14: Risk Distribution of Animal Rabies by County, Liberia, 2021 24
Figure 15: Risk Distribution of Brucellosis by County, Liberia, 2021 26
Figure16: Map of Critical Infrastructures, Liberia 36
Figure17: Services Map, Liberia 35

Forward

Recent disasters in Africa and the increased frequency and magnitude of hazards such as floods, wind storm, fire, Coastal erosion, landslide, epidemics, and others in Liberia have given the impetus for the Multi Hazard Contingency Plan for Liberia. This impetus is also driven by a need to reduce the risks related to these hazards as a result of high vulnerability from over fourteen years of war, poverty and low human and physical capacity. Additionally, the risk of economic, social and environmental losses is high, also given the high pressure on resources in areas like Monrovia with a high concentration of population.

Obviously, the effects of climate change in Africa will exacerbate disaster situations. In Africa, as in many parts of the world, impacts could include greater and more rapid sea level rise than previously projected; increased incidence of extreme weather events; substantial reductions in surface water resources; accelerated desertification in sensitive arid zones; and greater threats to health, biodiversity and agricultural production. African marine and fresh water fisheries already count among the world's most vulnerable and in the face of declining or migrating fish stocks as a result of climate change. West and Central Africa show particularly high exposure and dependency, and low adaptive capacity. Clearly the frequency of hydro-meteorological hazards and disaster risks will continue to increase. Lastly, with the population steadily increasing the incidence of disasters striking with a proximity to a Liberian community will increase. It was therefore imperative that the policy for disaster risk management was developed and implemented in Liberia with full participation of all stakeholders, in particular women and other vulnerable groups of our society such as, children, the elderly, and the disabled.

Political commitment to the disaster risk reduction (DRR) agenda has taken an upswing in recent years.

The National Disaster Management Agency (NDMA) has developed a National Disaster Management Action Plan for Disaster Risk Management in Liberia as well as a Guide for Emergency Response and Preparedness. The National Disaster Risk Reduction and Resilience Strategy 2020-2030 was also developed. It is important that we all rally behind these magnificent efforts and aspire to make our nation free of disasters.

In 2014, the Ebola epidemic hit the country severely: nearly Ten Thousand (10,000) people diagnosed with Ebola Virus Disease (EVD), of whom at least Four Thousand Eight Hundred (4,800) died, including nearly Two Hundred (200) health workers. Despite a considerable investment made in the health system since the end of the civil war, the Ebola outbreak had a devastating impact, on not only the health sector, but it also led to closure of schools and a devastated national economy. The national capacity to detect and respond to epidemic outbreaks, is gradually been boosted with lessons learnt and operational legacy from the Ebola outbreak. The establishment of a National Public Health Institute of Liberia (NPHIL) with its own Emergency Operations Centre (EOC) helped to strengthen the Liberia health system.

Predicated on this, the National Disaster Management Agency (NDMA) with support from the United Nations Development Programme in 2018 developed a multi-hazard contingency plan aimed at managing hazards and other events. However, the plan did not capture key components affecting human health. Therefore, a Vulnerability risk Assessments and Mapping (VRAM) exercise, led by the National Public Health Institute of Liberia (NPHIL) with support from the World Health Organization (WHO) was conducted in June 2021 to identify and map hazards and other factors that determined population and health system vulnerability, as well as the existing capacity to address gaps in emergency preparedness and response.

Hence, the need to update the National Multi-Hazard Contingency Plan with findings from the Vulnerability Risk Assessment and Mapping exercise (VRAM) was essential to strengthen capacity for preparedness and response to these hazards.

.....

Hon. Henry O. Williams, MSc
Executive Director
National Disaster Management Agency

.....

Hon. Wilhelmina Jallah, MD, MPH, CHES, FLCCP, FWACP
Minister of Health
Republic of Liberia

.....

Hon. Jane A. MaCauley
Director-General
National Public Health Institute of Liberia

.....

Hon. Jeanine Milly Cooper
Minister of Agriculture
Republic of Liberia

.....

Hon. Wilson K. Tarpeh
Executive Director
Environmental Protection Agency

Acknowledgements

This multi-hazard contingency plan was developed by the National Disaster Management Agency (NDMA) in 2018 with support from the United Nations Development Programme (UNDP) and updated in 2021 with inputs from the National Public Health Institute of Liberia, Ministry of Health, along with One Health institutions including EPA, MOA, NAFAA, FDA, AFL, LNP, and partners with support from GIZ-Liberia Country Office.

Abbreviations/Acronyms

AAP	Accountability to Affected Populations
ABD	Acute Bloody Diarrhea
AFL	Armed Forces of Liberia
CDMC	County Disaster Management Committee
CwC	Communicating with Communities
COVID- 19	Corona Virus Disease
DDR	Disaster Risks Reduction
DDMC	District Disaster Management Committee
DEA	Drug Enforcement Agency
EHI	Essential Household Items
EOCs	Emergency Operation Centers
EPA	Environmental Protection Agency
EW	Early Warning
EWS	Early Warning Systems
EVD	Ebola Virus Disease
GBV	Gender Based Violence
GSA	General Services Agency
HIV	Human Immune Virus
ICRC	International Committee of the Red Crescent
INFORM	Index for Risk Management
IT	Information Technology
JIC	Joint Information Committee
LLA	Liberia Land Authority
LIS	Liberia Immigration Service
LISGIS	Liberia Institute of Statistics & Geo-Information Services
LNP	Liberia National Police
LNRCS	Liberia National Red Cross Society
LRRRC	Liberia Refugee Repatriation Reintegration Commission
ME	Mines & Energy
MACs	Ministries Agencies & Commissions
MFDP	Ministry of Finance & Development Planning
MOA	Ministry of Agriculture
MOCI	Ministry of Commerce & Industry
MOFA	Ministry of Foreign Affairs
MOGCSP	Ministry of Gender, Children & Social Protection
MOH	Ministry of Health
MOT/MET	Ministry of Transport/Metrological
MPW	Ministry of Public Works
NCD	New Castle Disease
NDMA	National Disaster Management Agency
NDMTC	National Disaster Management Technical Committee
NDRC	National Disaster Relief Commission
NEWEOC	National Early Warning Emergency Operations Center
NFIs	Non-Food Items
NGOs	Non-Governmental Organizations
NPHIL	National Public Health Institute of Liberia
PPR	PesteDe Petit Ruminant
PR	Public Relations

RC	Regional Coordinator
RFL	Restoring Family Life
SOPs	Standard Operating Procedures
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations Higher Commission on Refugees
UHC	Universal Health Coverage
UNMIL	United Nations Mission In Liberia
VRAM	Vulnerability risk Assessment and Mapping
WASH	Water Sanitation Hygiene
WFP	World Food Programme
WHO	World Health Organization

1.0 Introduction

Disasters such as floods and epidemics have hugely reversed the gains made in several sectors, the fragility of Liberia remains as an outstanding concern to the world over. The Country past history of over fourteen years of civil turbulence compounded by extreme poverty makes it more susceptible to various types of humanitarian crises that might result from land and religious conflicts or other human induced hazards. Accosted to these hazards, people, especially the poor suffer most due to high degrees of vulnerability and exposure.

The Country lies below Five Hundred (500) meter in altitude; rain forest and swampy areas are common geographic features. The climatic condition renders the environment much more vulnerable to malaria transmission throughout the year in most parts of the country. During the rainy season—July through September—temperatures average 24.5°Celsius and rise to 26.5°Celsius in December and January when it is predominantly dry. Rainfall in the coastal areas where the capital, Monrovia, lies, is over Five Thousand (5,000) millimeters a year; however, this decreases as one moves inland to as little as Two Thousand (2,000) millimeters.

The climatic condition of the country would have made it as an economic hub in the region, however, the Fourteen (14) years civil conflict, as indicated above, has made Liberia lagging behind in several sectors including Socio-Economic, Political, Health, etc. To date, Liberia is one of the least developed countries in the world. Liberia currently ranks One Hundred Seventy-Five (175) on the global human development index scale 2021 and One Hundred Seventy-Four (174) out of One Hundred Eighty-Nine (189) on the Notre Dame Global Adaptation Initiative on Climate Change vulnerability 2021.

The Liberian economy is highly dependent on agriculture, which unfortunately is still under major constraint to support sustainable and stable growth of food crop production. The country produces Two Third (2/3) of its food crop requirement, mainly rice. The remaining One Third (1/3) of its food crops requirement is imported. Given this backdrop, the ability to respond, cope, adapt or recover from disaster or shocks is very challenging for poor communities. The latest Cadre Harmonizes assessments conducted in October 2017 indicate that roughly, Twenty Eight Thousand Seven Hundred Eighty-Six (28,786) people are food insecure at present and this figure is likely to increase to 43,489 during the rainy season (Jun-Aug 2018).The year 2017 was a critical

year for Liberia due to multiple transitions, predominantly the October Presidential and Legislative elections, as well as the drawdown and eventual closure of the United Nations Mission in Liberia (UNMIL) scheduled in March 2018. As part of the UNMIL transition – a Peace building Plan was developed as per the Security Council Resolution 2333 (2016). The priority focus is on ensuring a peaceful transition of power, economic reform, governance, decentralization, legislative support, youth and Human Rights.

According to the UNHCR, the number of registered refugees in Liberia is about Eight Thousand Two Hundred (8,200) as of October 2020 (last available data). The Government of Liberia (GOL), UN agencies and NGOs are providing protection and humanitarian assistance, including food, health care, sanitation, shelter, and clean water. As the voluntary repatriation operations continue, the Government has also welcomed local integration as a solution for some Ivorian refugees.

Regardless of the progress made so far, the Government's capacity to address emergencies and humanitarian needs remain weak, and still very much dependent on the support of the international community. The Government has however committed to invest more in sustainable measures to address all major hazards through enhanced early warning systems, public education and improved infrastructural development. In connection to these, investing in resilience measure is expected to bring substantial returns in terms of broader development outcomes. In addition, early humanitarian response is assumed far more cost effective than late humanitarian response. Hence, the development of this preparedness and response plan is crucial in addressing disaster issues.

1.1 Objectives

The overall goal of the national multi-hazard preparedness and response plan is to ensure a coordinated, effective and functional preparedness and response mechanism is in place at each level of the government, with the capacity to address all threats to human safety.

Specific objectives and expected outcomes include:

- an effective and coordinated response to disasters at both national and local levels;
- Strengthen an effective seasonal planning to improve readiness for response;
- reduce suffering among the affected communities by addressing the immediate and live-saving needs with special focus on the most vulnerable groups;

- based on the risk analysis, develop sectorial response plans and identify key gaps in the humanitarian system
- provide an effective forum for collaboration between Government and aid agencies in responding to emergencies caused by disasters;
- Provide validated processes and procedures for overall preparedness and response.

2.0 Risk Overview

Liberia is generally prone to enormous natural and human induced hazards and its associated risks such as floods, coastal-erosion, windstorms, epidemics, conflict, pest infestation, poor waste management, and fires (forest and home) etc. These hazards are expected to worsen with climate change and periodic variations in the day-to-day weather conditions. Recent observations, experience and scanty data showed that floods, windstorm, epidemics, conflict, fires and coastal erosion are the most prevalent. However, considering that Liberia has a coastline measuring Five Hundred Sixty- Five (565) kilometers Three Hundred Fifty (350 miles), it is obvious that the country is exposed and vulnerable to Tsunami. Also considering the upsurge impact of climate change and deforestation, there are visible signs of drought around the Foya belt in Lofa County just to name a few.

Below is a graph taken from the Index for Risk Management (INFORM) tool, which compares three elements - Hazard & Exposure + Vulnerability + Coping Capacity, to explain Liberia's risk and vulnerability to disasters. It shows a risk profile of 5.1 out of 10. While Liberia has a low hazard exposure of just 2.9, its high vulnerability and lack of coping capacity makes it at high risk.

Table 1: Risk Dimension and Components



In 2013, the World Food Programme (WFP) and National Disaster Relief Commission (NDRC)-Now the National Disaster Management Agency (NDMA) conducted a Baseline Survey on disaster risk vulnerability and capacity. The survey identified the following common hazards and areas most vulnerable.

2.1 Flood

Flood is a high or over flow of water which exceeds either the natural or artificial banks of a river or area of land. These events result to human and animal sufferings adversely affecting the socio-economic survivability and existence. The recent Vulnerability Risk Assessment and Mapping (VRAM) conducted in June of 2021 showed that flood continues to pose severe threat to the population. The assessment result also showed that the exposure rate continues to increase by the year. The increase in the exposure rate of flood is as a result of climate change, increase in urbanization, construction in water ways, and waste disposal in drainages and water ways as some of the leading causes.

The occurrences of flood cause injuries, disease outbreaks, deaths, and substantial damage to structures, landscapes, and utilities.

There are several types of floods globally. However, In Liberia the three different kinds of floods that affect the population include:

- River Flood
- Flash Flood
- Costal Flood

Of the three common types of flooding that occur in Liberia, Flash flooding is the most common and occur across the country particularly in urban communities.

No matter what type of flood we are dealing with, they are generally caused by the same factors and there are always negative effects on the community and its surroundings.

According to the National Disaster Risk Reduction and Resilience Strategy 2020-2030, fourteen (14) out of fifteen counties were categorized as flood prone counties across Liberia. It is further stated that a total of two hundred and twenty-nine (229) communities across fourteen (14) counties were captured as flood hotspots, with at risk population totaling One million four hundred twelve thousand one sixty-three (1,412,163).

The risk hotspots and their vulnerability profiles in Liberia show that eight (8) sectors are affected by the impact of flooding. Sectors affected include; Agriculture, Fishery, Education, Health, Housing, Transport, WASH, Trade and Commerce.

In Liberia**,** flood is one of the most frequent and costly natural hazards in terms of human hardship and economic loss. Flood causes injuries, deaths, and substantial damage to structures, landscapes, and utilities. Certain health hazards are also common to flood events. Standing water and wet materials in structures can become a breeding ground for microorganisms such as bacteria, mold, and viruses. This can cause disease, trigger allergic reactions, and damage materials long after the flood. Direct impacts such as drowning can be limited with adequate warning and public education about what to do during floods. Flood is common during the rainy season. Areas vulnerable to flooding include Montserrado, Nimba, Grand Kru, Margibi, Grand Bassa, Sinoe, Lofa and Grand Cape Mount counties. There was a report of high risk due to the following: a) None existent or poor drainage system; b) location in low land plains and swamps; c) localities near river banks; d) overflow of rivers during heavy rains; e) excessive and intensified rainfall; f) clogging of drainage;

and g) lack of awareness and resistance by some communities to shift from their living areas to safer places.

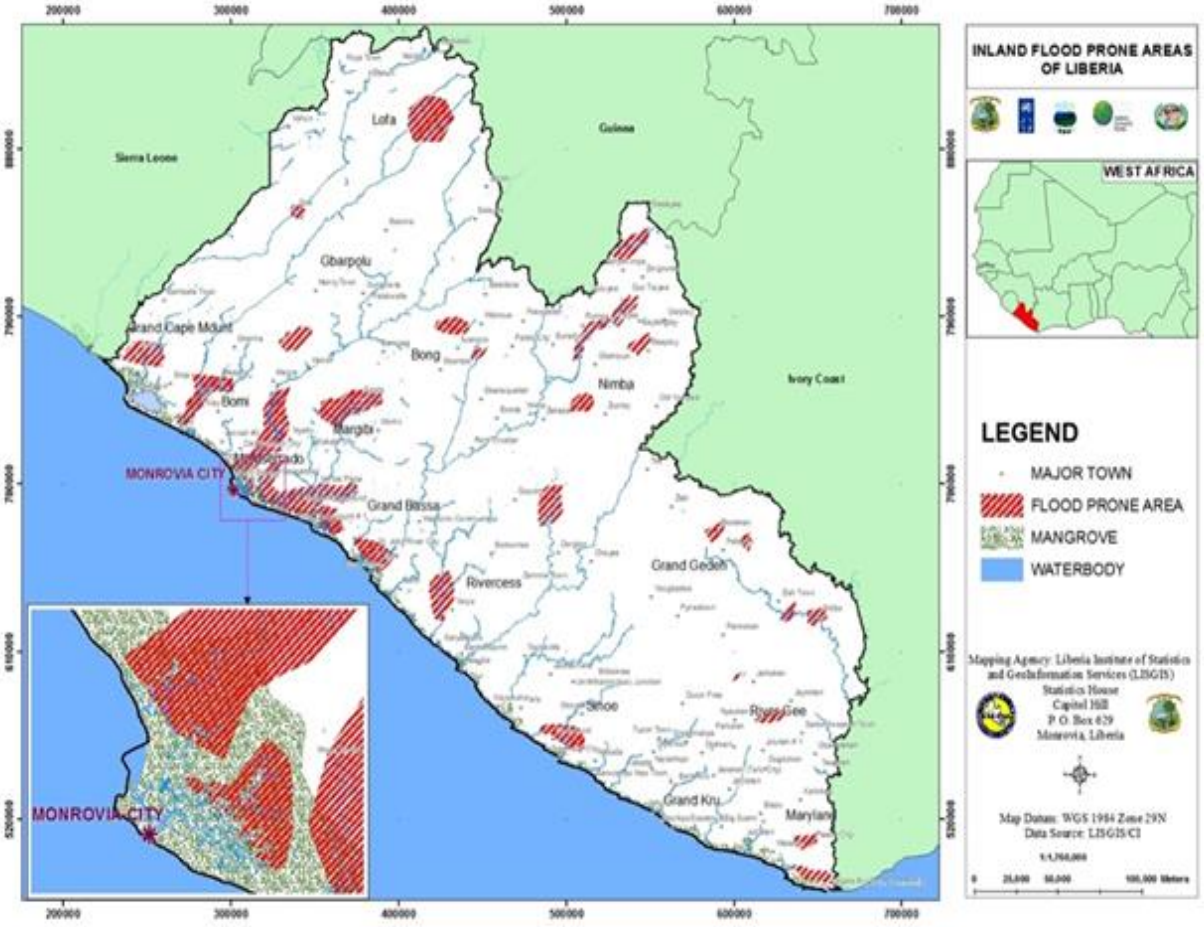


Figure 1: Inland Flood Prone Areas, Liberia

2.2 Windstorm

Windstorm is a wind that is strong enough to cause at least light damage to trees and building and may or may not be accompanied by precipitation. Wind speeds during a windstorm typically exceed Twenty-Four (24) meters per second. Winds damage can be attributed to gusts (short bursts of high-speed winds) or longer periods of stronger sustained winds. Windstorm may also last for just a few minutes when caused by downbursts from thunderstorms, or may last for hours (and even several days) when they result from large-scale weather systems.

Although the geographical coverage and duration of storms are sometimes small and short, the damage and losses caused by windstorms are enormous. According to National Disaster Management Agency (NDMA), approximately One Hundred Fifty Thousand (150,000) persons

have suffered from the impact of strong windstorms over the recent three years in Liberia, ranging from 2018- 2020.

The impacts in Liberia include; the falling of trees on vehicles and homes, dropping of power lines and poles, de-roofing buildings, flying of zincs and other dangerous objects, eye injuries caused by flying dust or debris, is largely attributed to exposure and low capacity for storm-resistant construction practices and inputs.

Liberia is prone to windstorms especially intense at the inception and close to the rainy season in April and October. Since 2008, the exposure of population to windstorms has been increasing and as of 2018, it was recorded that about 2.1 million are exposed to windstorms.

Windstorm, according to the DRR baseline survey is prevalent in Montserrado, Bomi, Gbarpolu, Lofa, Bong, and Nimba. It is also violent especially at the inception of the rainy season in March and April. Coverage and time-scale is sometime small, but damage and loss are enormous. The vulnerability depends largely on exposure and low capacity for storm resistant construction practices and inputs.

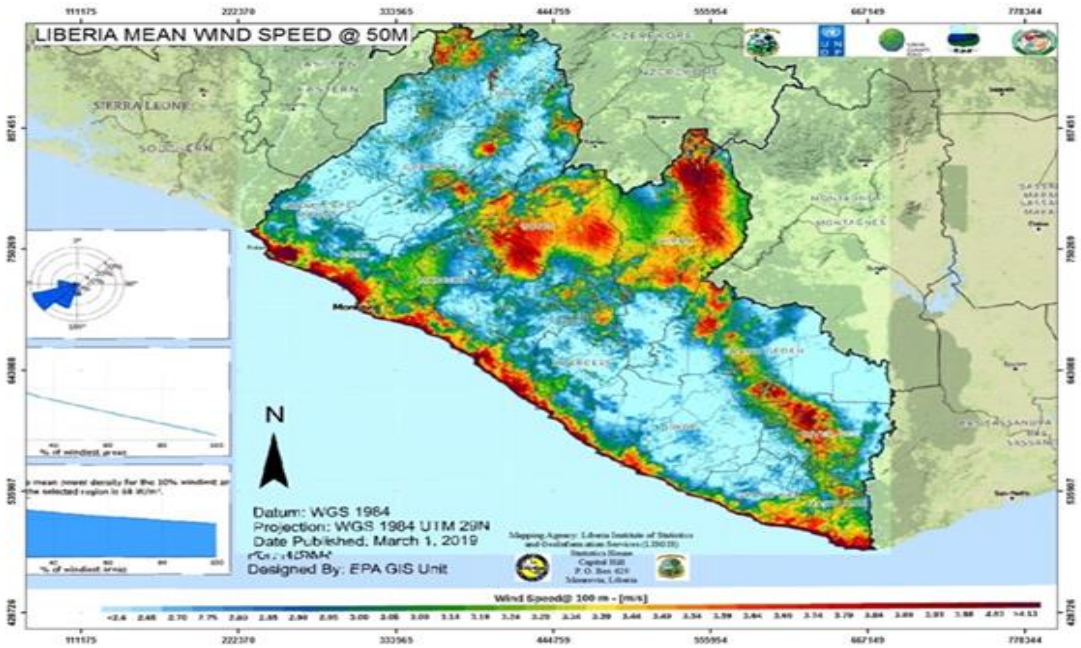


Figure 2: Geographical Distribution of Windstorm Areas, Liberia, 2019

2.3 Conflict

Conflict is a struggle and a clash of interest, opinion or a strong disagreement often violent, between two opposing groups or individuals. It is one of the systemic and potential hazards that affect Liberia as the result of the fourteen years civil war. Liberia has also been victimized by

religious uprisings and other social and political factors such as: land disputes, electoral violence, mob justice, civil disobedience, unemployment, corruptions, ethnic discrimination, unspecified causes of deaths, rape, domestic violence etc. which occurs in urban and rural communities. Additionally, Boundary disputes between counties have also come under the spotlight as a major trigger of conflict. Conflicts in Liberia according to research are widely perpetrated by youths which normally result into loss of lives, destruction of private properties, and critical infrastructures to include; police stations, school building among others. Liberia also experienced violent conflicts in concession areas because of little or no understanding of concession agreements signed between the local authority and the concessioners.

Findings from the Liberia Land Authority in 2018 categorized Montserrado, Margibi, Nimba, Bong and Maryland counties as red zones for land conflicts. Additionally, the 2021 VRAM report also flagged Grand Cape Mount, Montserrado, Margibi, Bong, Grand Bassa, Nimba, Sinoe and Maryland as counties



exposed to all categories of risk which are potential threats to conflict.

Figure 3: Risk Distribution of Conflict by County, Liberia, 2021

2.4 Coastal Erosion

Coastal erosion is a gradual process of swash that builds up to encroachment on human settlements. The destruction of natural infrastructure like the coastal wetlands including coastal mangroves is major contributing factors to coastal erosion. Coastal defense is one sure way of mitigating

impacts, but our coastal defense system is weak although there is an ongoing coastal defense project under the Green Environment Fund (GEF) project being implemented by the Government of Liberia in collaboration with the United Nations Development Programme, much is needed to be done across the entire coast of Liberia. Social-economic activities like sand mining and wetlands degradation in several communities to include Montserrado and other coastal counties such as Grand Bassa, Sinoe, Grand Cape Mount and Maryland in Liberia have influenced and hastened the advancement of coastal erosion on these settlements. Additionally, increase in global sea level due to climate change is a major contributing factor. Coastal erosion remains a potential hazard with a magnitude to wash away a whole community of thousands of inhabitants. Interestingly, the sea is a major source that provides livelihood for these community dwellers, and so relocation is a critical decision that has potential social tension which serves as a recipe for conflict. The 2021 VRAM exercise also identified coastal erosion as a hazard very likely to occur in nine counties every year in Liberia.



Figure 4: Geographical Distribution of Coastal Areas, Liberia

2.5 Fire

Fire hazard is an event caused by lightning strikes, sparks during arid conditions, the eruption of volcanoes, and man-made fires arising from deliberate arson or accidents. According to the United Nations Office for Disaster Risks Reduction (UNDRR), more than One Hundred Fifty Thousand

(150,000) people die globally from fires or burn-related injuries every year. Over 95% of fire deaths and burn injuries are in low- and middle-income countries. Meanwhile, urban growth is said to be one of the 21st century's most transformative trends, posing massive sustainability challenges in terms of housing, infrastructure and basic services, amongst others. Low-income countries have seen a 300% increase in the overall area of built-up spaces and a 176% increase in population in the past 40 years.

Findings from the 2019 National Risk Assessment identified fire as a very likely hazard with moderate impact. Additionally, reports from the 2021 VRAM also shows fire as an environmental hazard. However, experiences over the last two years have shown that the risk of fire is high in the population. Liberia in general is prone to fire hazard. Power theft and misuse of electrical appliances; Improper use of candle lights and fire woods; inappropriate handling or storage of gasoline and flammable items; children playing with fire inadequate awareness on fire safety; overcrowded living conditions in slum community; careless burning of farms closer to towns; open drier along the coastal areas; savanna area and lots of savanna grass prone to fire; i) are some reasons for vulnerability to home (domestic) and wild forest fires.

Though there are no statistics on the prevalence of wildfire in Liberia, Foya District in Lofa experienced one of its worst cases of fire devastation caused by human-induced fire in 2010. Over 100 hectares of land, especially farms were gutted by wild forest fire thus posing the populations at risk.

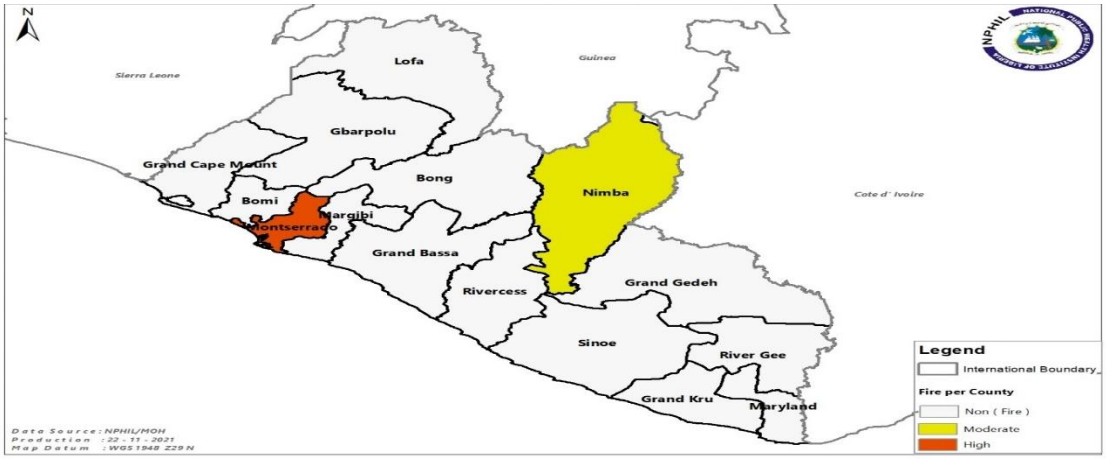


Figure 5: Risk Distribution of Fire by County, Liberia, 2021

2.6Epidemics

Epidemics refer to an increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area in a specified time, while a disaster is an occurrence disrupting the normal conditions of existence and causing a level of suffering that

exceeds the capacity of the affected community/district/county/country to respond. This means that an epidemic may be elevated to a disaster. During this time of response, the National Disaster Management Agency coordinates response activities from diverse actors/stakeholders to avoid duplication of efforts and ensure synergies.

Epidemics occur when an agent and susceptible hosts are present in adequate numbers, and the agent can be effectively conveyed from a source to the susceptible hosts. More specifically, an epidemic may result from:

- A recent increase in number or virulence of the agent,
- The recent introduction of the agent into a setting where it has not been before,
- An enhanced mode of transmission so that more susceptible persons are exposed,
- A change in the susceptibility of the host response to the agent, and/or
- Factors that increase host exposure or involve introduction through new portals of entry.

In Liberia, disease outbreaks constitute most of the documented epidemics. Unhealthy life styles, shortages of medical facilities/resources and prevailing poverty, porous points of entry (air, land, sea) coupled with inadequate of awareness on the risks factors associated with these hazards has heightened the disastrous effects of disease outbreaks. This could directly affect economic and social development of the society. There are sometimes sporadic cases of measles, meningitis, diarrhea, yellow fever, and other priority disease outbreaks in the country in different locations and times. Experiences from the 2014/2015 EVD outbreaks and the ongoing Corona virus Disease pandemic have shown that Liberia needs a more robust and responsive healthcare system. In consideration of the above, the need to strengthen emergency preparedness and response systems are overwhelming. Liberia's participation in the Global Health and Safety initiative to Universal Health Coverage (UHC) remains critical to building a stronger and resilient health system.

Moreover, the recent (2021) Vulnerability Risk Assessment and Mapping exercise conducted identified a total of twenty-six (26) hazards across the counties and sectors. Human health accounts for Thirty-Eight (38%- (n=10), while animal and environmental health sectors account for Thirty-One (31%-n=8) respectively.

Findings from the assessment show that Fifty-Eight Percent (58%-n=15) of the hazards are very likely to occur across the sectors and counties. Fifty percent (50%) of the hazards identified in the

human health sector were very likely (n=5), while sixty-three (63%) of the hazards identified in the animal and environmental health sectors (n=5) respectively were very likely to occur. For frequency, these hazards (n=26) occurred annually in human, animal, and environmental health sectors. However, Sixty-Three (63% -n=5) and Thirty-Eight(38%- n=3) of the animal health hazards occurred bi-annually and quarterly.

For impact, Sixty-Three (63%- n=5) of the animal health hazards severe, all One Hundred (100%) of the environmental health hazards low (n=8) but also moderate, and high, and severe as well, while Twenty (20%- n=2) of the human health hazards were severe. These hazards occurred during both dry and rainy seasons across the sectors. Overall, the rainy season accounts for Seventy-Three (73%- n=19), followed by Fifteen (15% -n=4) and Twelve (12% n=3) during dry and rainy seasons respectively. Below is the list of very likely hazards identified in the human, animal, and environmental health sectors as well as risk distribution by county, Liberia:

Table 2: List of Very Likely Hazards Identified by Sector, Liberia, 2021

Very Likely Hazards		
Human Health	**Animal Health**	**Environmental Health**
ABD	Brucellosis	Conflict
COVID-19	PPR	Fire
EVD	Bovine TB	Flood
Lassa fever	NCD	Sea Erosion
Measles	Rabies	Windstorm

2.6.1 Map of Human Health Hazards

The below listed maps show the geographical distribution of human health hazards:



Figure6: Risk Distribution of Ebola Virus Disease by County, Liberia, 2021



Figure7: Risk Distribution of Lassa fever by County, Liberia, 2021

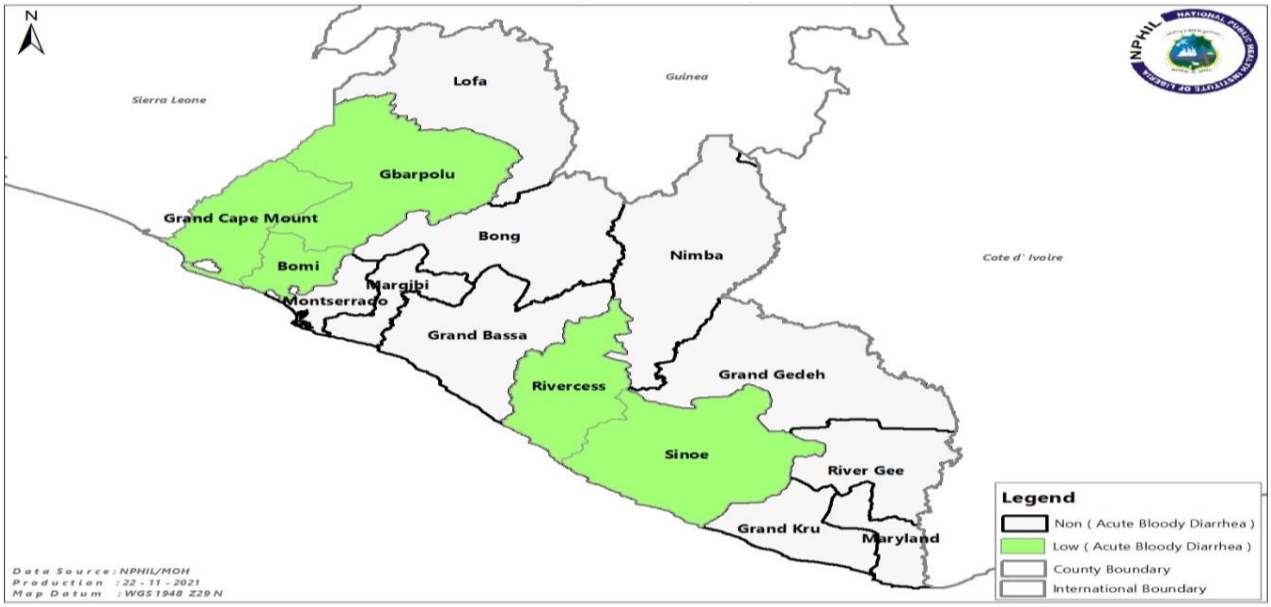


Figure 8: Risk Distribution of Acute Bloody Diarrhea by County, Liberia, 2021



Figure9: Risk Distribution of COVID-19 by County, Liberia, 2021



Figure10: Risk Distribution of Measles by County, Liberia, 2021

2.6.2 Map of Animal Health Hazards

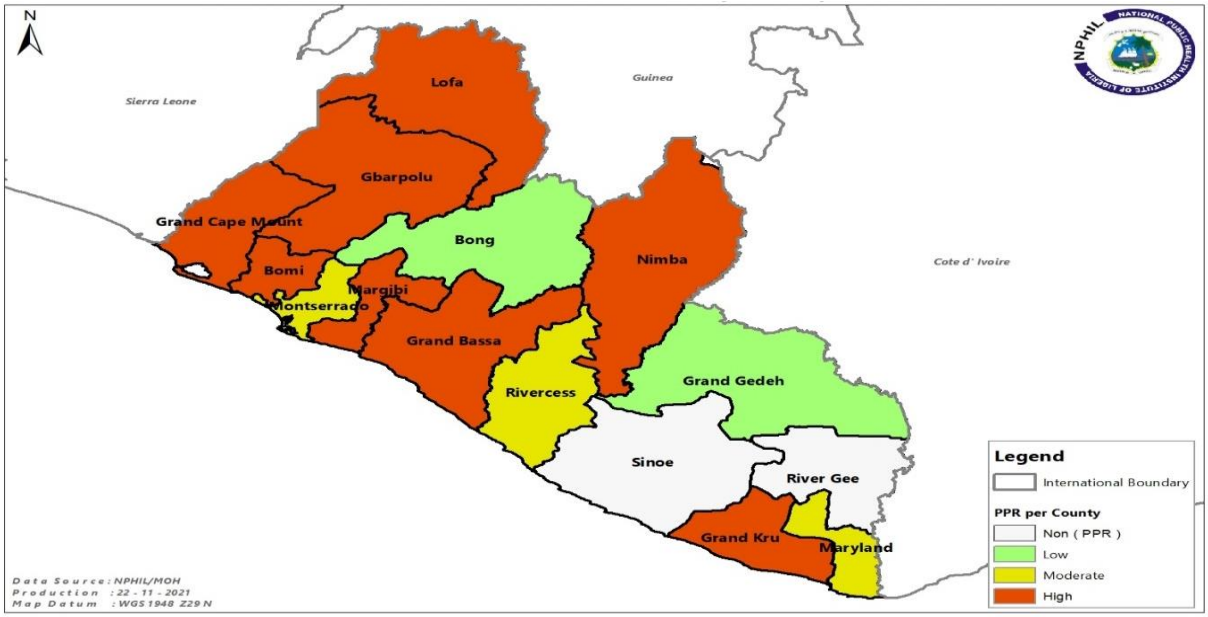


Figure11: Risk Distribution of PPR by County, Liberia, 2021

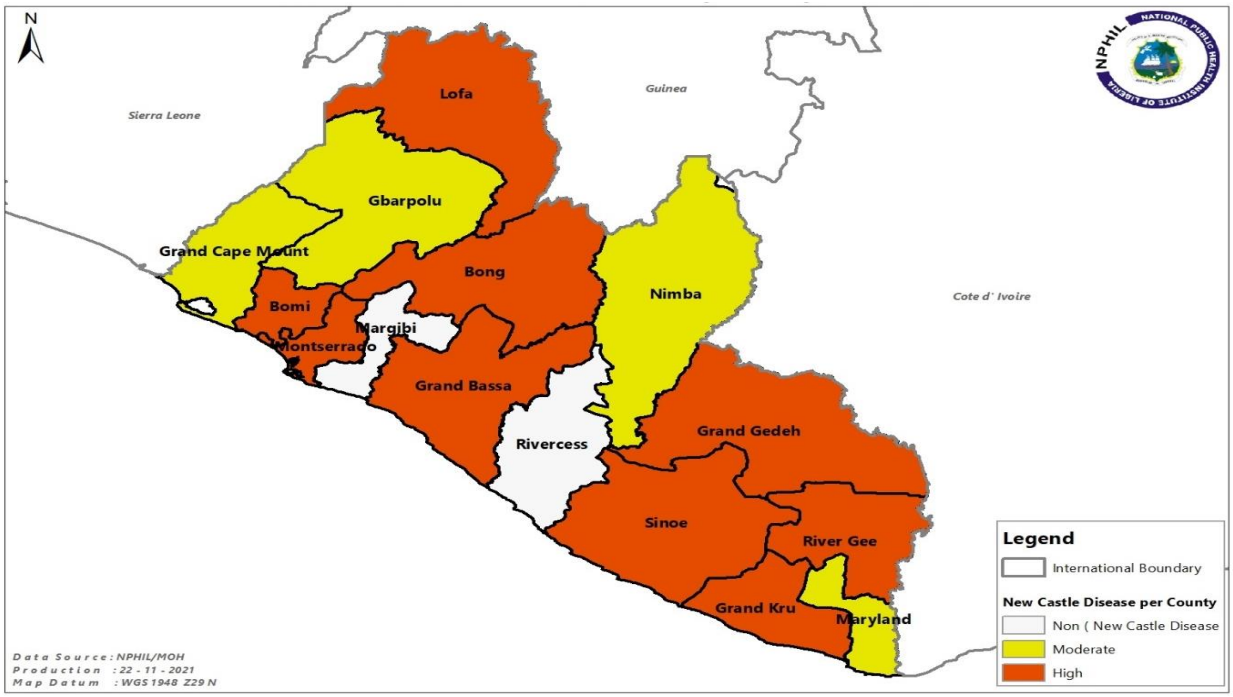


Figure12: Risk Distribution of New Castle Disease by County, Liberia, 2021

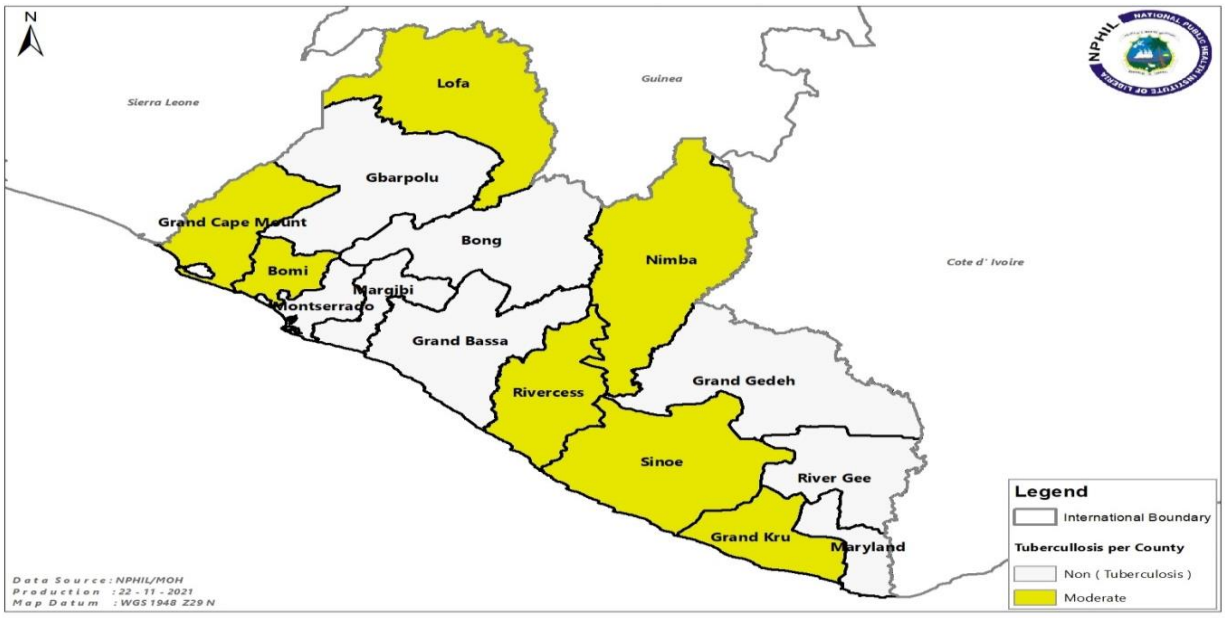


Figure13: Distribution of Bovine Tuberculosis by County, Liberia, 2021

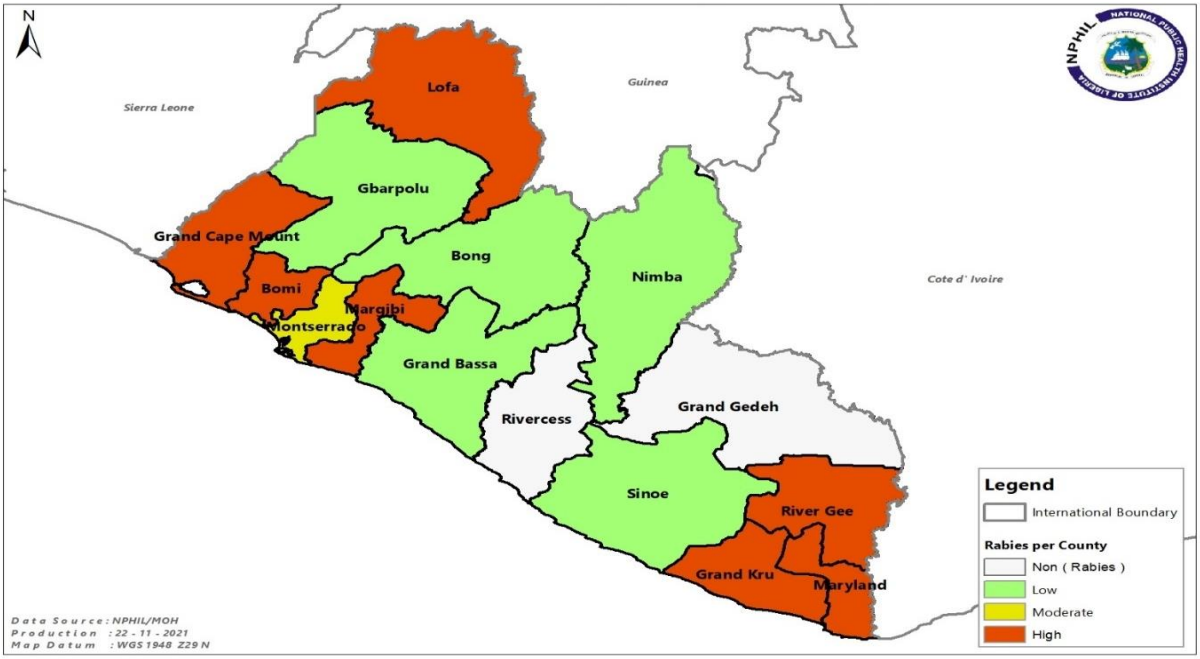


Figure14: Distribution of Rabies per by County, Liberia, 2021

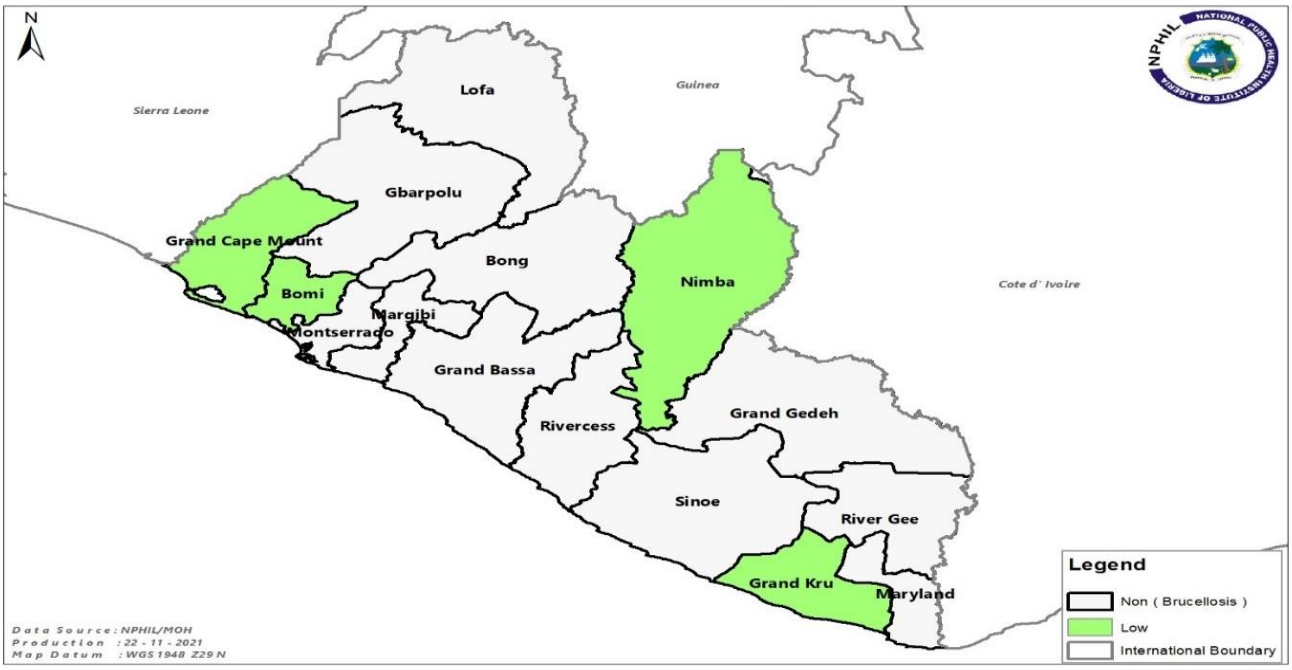


Figure15: Distribution of Brucellosis by County, Liberia, 2021

3.0 Risk profiles

Table 3: Risk Profiles

Likelihood	**Impact**
1 = Unlikely less than 20% chance of happening 2 = Moderately likely 20-50% chance of happening 3 = Very likely (over 50%)	1 = Minor (minimal impact on population) 2 = Moderate 3 = Severe (pronounced impacts requiring international assistance)

Epidemics

Likelihood	Impact				
		Low	**Moderate**	**High**	**Severe**
	Unlikely				
	Likely	Acute Bloody Diarrhea (ABD), Measles	Brocelosis, Peste de Petit Ruminant (PPR)		

	Very Likely	COVID-19	Bovine TB, Rabies		EVD, Lassa fever, New Castle Disease,

Other Hazards:

Impact	Severe			Floods Fire
	Moderate		Conflict Coastal Erosion	Windstorm
	Minor			
		Unlikely	Likely	Highly Likely
	Likelihood			

5.0 Scenarios and Planning Assumptions

This Contingency Plan will target people in communities directly affected by floods, windstorm, fires, epidemics and other natural hazards. It intends to address the immediate needs of people affected by natural and man-made hazards and their associated risks. To effectively target and address these needs, it is assumed that the estimated number of people to be affected by one of the aforementioned emergencies as indicated below:

Table 4: Hazards, Humanitarian Impacts, Priority Needs, and Planning Assumptions

Hazard	Humanitarian Impacts	Priority Needs	Planning Assumptions
Floods	• Loss of property • Population Displacements • Closure of institutions (e.g healthcare facilities, schools, government buildings, banks, religious buildings etc) • Disease outbreak (water borne diseases) • Water pollution or contamination • Damage to crops/livestock loss • Damage to infrastructure impacting access (e.g	• Shelter (human and animal) • Food/feed • Clean portable water and toilets (WASH) • Access to basic services - schools and health facilities in case of injuries and disease outbreak, • Clothing • Protection (human, Pets and Livestock)	1. **Wthin 48 hours** – estimated 5,000 people affected 2. 2-5 thousand persons internally displaced 3. Continuous rainfall for over 72 hours affecting basic services including access to food, water points, etc.

	healthcare facilities, schools, government buildings, banks, religious buildings, dwelling homes etc) • Injury and Loss of lives • Impact to livelihood • Social protection issues (e.g rape • Psychosocial issue (mental health) • Security issues (theft of properties) • Vector and pest infestation Population likely to be affected:10, 000-50,000	• Search and rescue service (live jackets, transport equipment) • Provision of security protection for victims properties • Provision of vector and pest control services as recovery effort	
Windstorm	• Loss of property/housing and damage to infrastructure • Population Displacements • Injuries and deaths • Loss of livelihood (fishing community, tourism) Population likely to be affected: 100-25,000	• Shelter • Food • Clean portable water and toilets (WASH) • Access to basic services • Medical services	1.Over 10-100 houses/infrastructure damaged in a single location 2.Displacement of 500-1,000 persons 3.Reports of 3-5 cases of windstorm incidents in 2 counties consecutively
Epidemics (ABD, COVID-19, EVD, Lassa fever, Measles, Bovine TB Brucellosis, NCD, PPR, Rabies),	• Loss of lives (humans & animals) • High economic, social, religious, political, and cultural impacts • Closure of schools and public facilities/institutions • Overwhelmed health facilities Areas likely to be affected: homes, communities, villages/ towns, districts, counties, and cities.	• Food, clothing, and shelter • Water and basic sanitary supplies • Health services (medication, isolation facilities, testing and treatment facilities, ambulances, Risk Appropriate PPE) • Human resource (surge team: healthcare workers and non-healthcare workers) • Logistics (vehicles, fuel, stationeries, constant water and electricity supplies) • Finance (allowances, hazard	1.Report of any cases above the threshold of the IDSR/ADSR /IHR 2005approved priority diseases in any part of the Country 2.Confirmation of cases of highly pathogenic diseases under surveillance that overwhelms the system 4.Declaration of an outbreak in neighboring Countries 5.High number of cases of epidemic-prone priority diseases reported in endemic counties

	Population likely to be affected (directly or indirectly): 500,000	incentives, stimulus package) • Psychosocial services/support	during a specified time period
Conflict	• Loss of property/critical infrastructure • Displacements • Loss of lives • Economic loses • Social & religious disintegration • Lack of Trust • Protest/ civil unrest • Domestic Violence/ Child abused Population likely to be affected: **5,000**	• Safe haven (shelter & security) • Humanitarian assistance • Dialogue • Mediation • Psychosocial support • Curfew/ State of emergency • Crowd Control	1. Religion uprising and other triggers such as: Land dispute, electoral violence, Ethnic discrimination, etc, lasting more than 24hrs - 10,000 people affected, loss of lives, injuries, properties damaged, internal displacement, and shutdown of basic socio- economic services (schools, hospitals etc
Coastal Erosion	• Loss of property/critical infrastructure • Displacements • Loss of lives • Economic loses . Population likely to be affected: 500,000 people across the coast of Liberia	• Safe haven (shelter & security) • Food • Humanitarian assistance (safe drinking water, sanitation, health care etc.) • Community engagement • Psychosocial support • Addressing climate change mitigation and adaptation (coastal wetlands protection, protection of mangrove along the coast, addressing marine liters, restricting all mining activities at or near coastal communities)	Coastal flooding that could affect 50,000 coastal community dwellers • Causes political upheaval • Social and economic instability • Pollution of marine environment and ground water • Affect drinking water facilities • Hinder educational and health care activities

Fire	• Loss of life) • Destruction of homes/ properties • Injuries • Displacement of people/populations Population likely to be affected: 2,500	• Food, clothing, and temporary shelters • Emergency health care (medications, ambulances, • Psychological First Aid • Recovery package (i.e. building materials, clothing, agricultural tools, and equipment, seeds, restocking of animals, etc)	• Fire outbreak involving 150 households • Destruction of properties/homes ranging from USD100, 000 - 200,000

6.0 Preparedness for Response

6.1 Scenario and Early Warning Triggers

Scenarios

The following scenarios may result in the launch and/or activation of this: the multi-hazard contingency plan trigger and subsequent activation depends on the context of the situation. Responses could be triggered at a like case scenario based on impact and or extreme of the disaster. This plan will consider triggering during the most likely and or worst case scenario context as well as when the triggers below are attained.

Table 5: Triggers and Activation Levels

Hazards	Alert	Likely	Worst
Flood	Flood situation affecting 100 people with high precipitation	Flood situation affecting 1000 people with a possible death reported and high precipitation anticipated	Flood situation that overwhelms the coping capacities of local authorities and affecting more than 100,000 people, possible 5 or more deaths and damage to critical infrastructures reported
NEWEOC Level of Activation	Level -1 Normal Operation	Level -2 monitoring & providing technical support to local authorities	Level -3 full activation
Windstorm	Windstorm situation affecting 50 people	Windstorm situation affecting 100 people with a possible death reported	Windstorm situation that overwhelms the coping capacities of local authorities and affecting more than 100 people, possible 5 or more deaths and damage to critical infrastructures reported

NEWEOC Level of Activation	Level -1 Normal Operation	Level -2 monitoring & providing technical support to local authorities	Level -3 full activation
Fire	Fire situation that can be managed within the regular operating mode/routine services. It can be managed by the sector/institution with its own resources.	Fire situation that overwhelms the capacity of the resources in the Sector but which do not overwhelm the capacity of the national resources to respond (such areas of impact can be declared Disaster Areas).	Fire situation that overwhelms the capacity of the national resources to respond (such an event may be designated as a National Disaster). The President will make the declaration of a National Disaster. The declaration will be based upon the assessment's reports and recommendations from the lead agency.
NEWEOC Level of Activation	Level -1 Normal Operation	Level -2 monitoring & providing technical support to local authorities	Level -3 full activation
Coastal Erosion	A Coastal erosion situation affecting a community of 10,000 people ● Sea level rise ● Misuse of coastal wetlands ● Harvesting of coastal mangroves ● Flooding in coastal communities	A Coastal erosion situation affecting a community of 50,000 people ● Destruction of homes and structures at coastal communities. ● Disruption of busy social infrastructure affecting over 1,000 homes	A Coastal erosion situation affecting a community of 100,000 people ● Displacement and relocation of over 50,000 people
NEWEOC Level of Activation	Level -1 Normal Operation	Level -2 monitoring & providing technical support to local authorities	Level -3 full activation
Conflict	Claims and counterclaim over land, boundaries, territories etc Dissatisfaction of election results, Media Hate messages, false alarm, plan demonstration, unprofessional journalism	Violence eruption that leads to serious tension among parties, civil unrest, religious tension affecting approximately 3000-5000 inhabitants	Insecurity among local residents, including riots, exchange of gunfire that leading to destruction of properties including loss of lives above 50-100 individuals. Distrust from international partners, Decrease in investment, insurrection, lack of respect for the rule of law
NEWEOC Level of Activation	Level -1 Normal Operation	Level -2 monitoring & providing technical support to local authorities	Level -3 full activation

Epidemics (ABD, COVID-19, EVD, Lassa fever, Measles, Bovine TB Brucelosis, NCD, PPR,, Rabies),	Localized epidemics that can be managed within the regular operating mode/routine services. It can be managed by the sector/institution with its own resources.	Epidemics that overwhelm the capacity of the resources in the Sector but which do not overwhelm the capacity of the national resources to respond (such areas of impact can be declared Disaster Areas).	Epidemics that overwhelm the capacity of the national resources to respond (such an event may be designated as a National Disaster). The President will make the declaration of a National Disaster. The declaration will be based upon the assessment's reports and recommendations from the lead agency.
NEWEOC Level of Activation	Level -1 Normal Operation	Level -2 monitoring & providing technical support to local authorities	Level -3 full activation

Triggers: This document will be activated based on the following reasons:

Upon request from County administration based on disaster incidents that have overwhelmed the local capacity to adequately respond. Any incident of emergency or disaster that has impacted lives and properties as indicated in table 3.

- Disaster that result in the death of at least hundred (100)or more persons in twenty four(24) hours.
- An emergency situation that threatens public health and so declared by the Ministry of Health that require a consolidated response
- Any disaster or emergency that has or could potentially displace fifty (50) or more people

Table 6: Hazards, Early Warning Activity, Indicator, Frequency, and Responsible Institution

Risk/Hazard	EW Activity/ Information	Type of indicator	Frequency of monitoring	Responsible institution/agency
Floods	Monitor water level rise (rivers, streams, etc) Provide information on rainfall projections	Level of water in major rivers Rainfall received in mm	Daily (April-Sept)	Meteorological Department @ Min Transport; NDMA; District Coordination Platform

	Collect relevant data on rainfall and share with all stakeholders including vulnerable communities Communicate affected populations the warnings and possible early actions	Days of rainfall		
Epidemics	Community surveillance data Regularly share public health disease trend reports	Number of cases/affected persons Number of outbreaks Records from health facilities Rise and fall in infectious disease reports	Weekly (8 transmissible diseases monitored)	MoH NPHIL
Windstorm	Develop and disseminate information leaflets on prevention and response Monitor climate and periodic weather data Use traditional and local knowledge at all times to predict storm over time-scales	Number of information products developed Percentage (%) of people reached.	Quarterly	NDMA, National Met Center

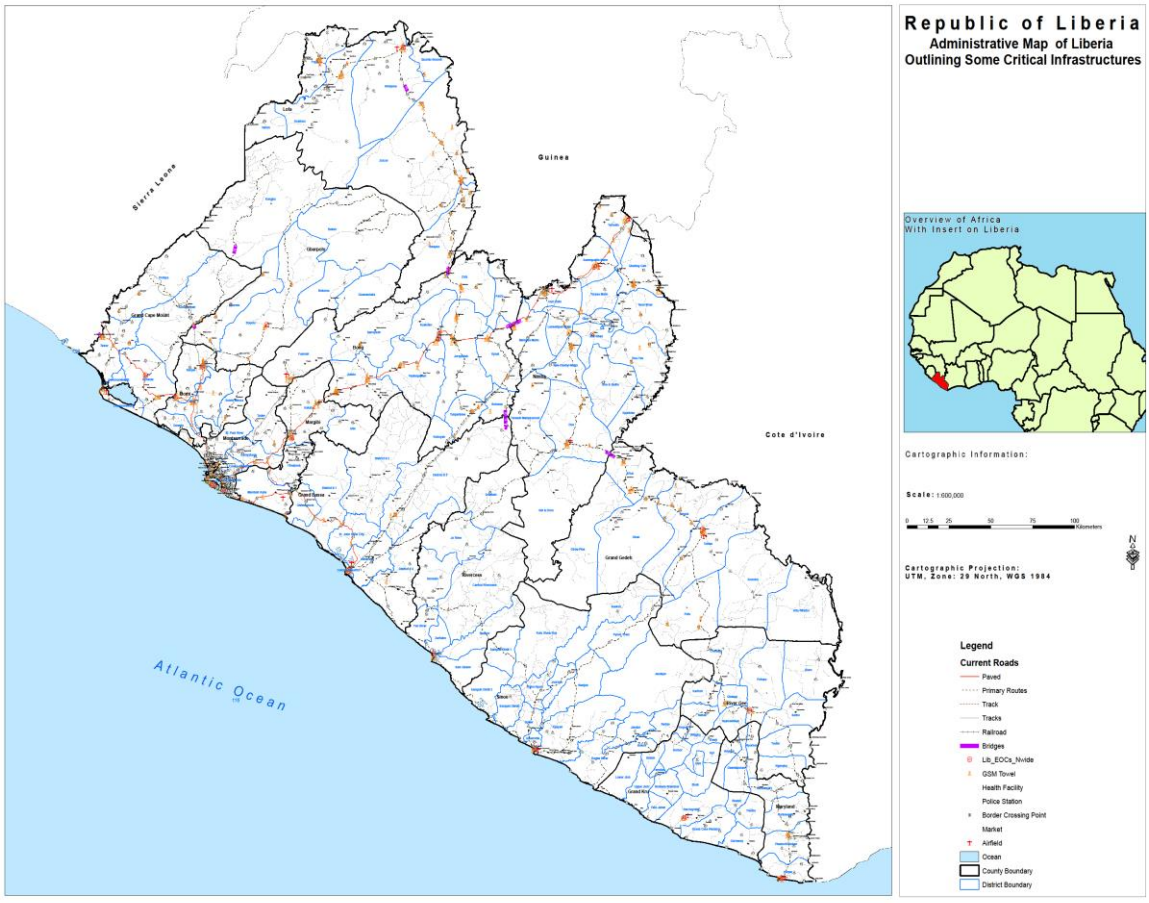
6.2 Prepositioning of Logistics

Basic Logistics deployment for effective response remains as a pivotal concern in this Contingency Plan. There are already plans to establish three regional logistics hubs in three locations across the country, namely Bomi, Bong, and Grand Gedeh Counties. These points will need adequate stock of medical, food, non-food response and recovery Essential Household Items (EHI). Prepositioning will be done early in time to facilitate effective response to emerging situations. Emergency response operations require transport of humanitarian aid, personnel and equipment to the disaster site. Therefore, logistics and transport issues are crucial to a successful response. As part of the logistics prepositioning strategies, the following are included:

- Defining normal aid delivery routes to anticipated disaster areas and affected populations
- Defining seaports and airports to be used
- Determining available storage sites
- Specification of transportation modes (road, railway, air) and issues such as availability and cost
- Defining availability of fuel and garages. Rural Liberia is challenged with the availability of these basic infrastructure and services
- Define and establish cooperation with key humanitarian organizations already working in the region.
- Using a joint Sectorial (MACs) approach, customs clearance and all regulations on import and export of humanitarian goods and services will be handled
- Identify the spare parts that may be needed for vehicles; make all preliminary arrangements
- Define the probable impact of weather on logistics work

Define and conduct training for personnel or divisions responsible for logistics in an emergency

Figure16: Map of Critical Infrastructures, Liberia



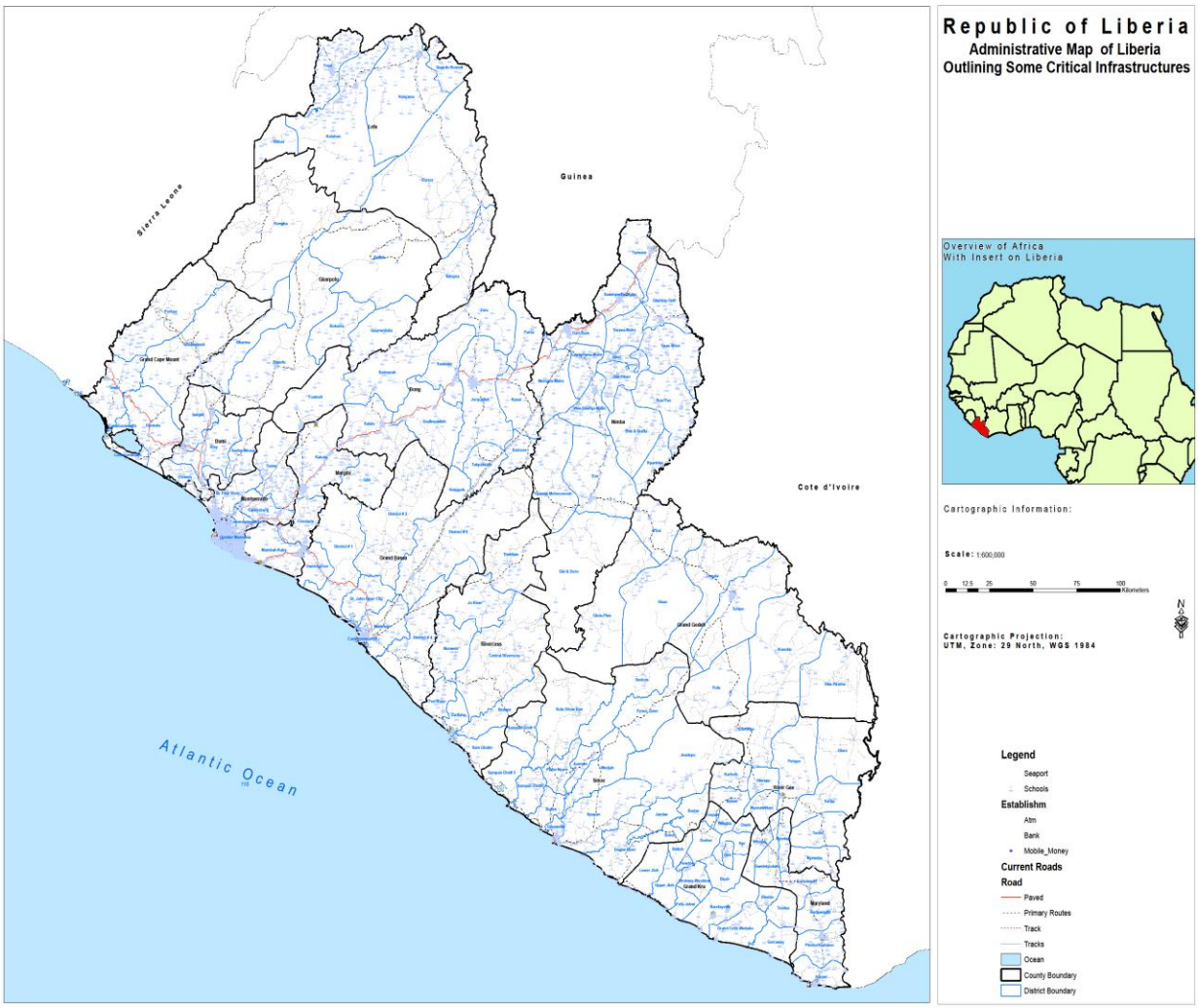


Figure17: Service Map, Liberia

7.0 Priority preparedness activities

Table 7: Risk Monitoring/Minimum Preparedness Actions, Liberia

Risk Monitoring				
	STATUS		LEAD	

MINIMUM PREPAREDNESS ACTIONS	DONE	DEADLINE SET	TO BE INITIATED	DUE DATE/ TIMEFRAME		ACTIONS TAKEN
Risk Monitoring Mechanism						
Establish EW monitoring and analysis systems, including action dates for seasonal hazards	X				MoT/MET, NDMA, EPA	MoT EWS project in place
Establish situation analysis (baseline), including gender analysis to identify underlying inequalities and vulnerabilities influencing risk susceptibility of the women and men and their communities Production and dissemination of EW bulletins and Strips			X		LISGIS, NDMA, MoGSP	N/A
Coordination & Management Arrangements						
	DONE	**DEADLINE SET**	**TO BE INITIATED**			
Basic Guidance						
Familiarize humanitarian partners, government, and other key partners with the following: ● Humanitarian principles, humanitarian architecture and international response tools ● Early Recovery and "Building Back, Better"	X				NDMA, UNDP OCHA	N/A
Government (incl. Civ/Mil)						
Ensure that clear procedures/protocols are in place between the HCT and the Government for requesting/accepting international assistance.			X		NDMA, MoFA, MFDP	N/A
Ensure that the NEWEOC and relevant Regional/County EOCs are at the right activation level	X				NDMA	NEWEOC established.
Ensure that all humanitarian agencies are aware of the respective Government coordination structures for emergency response and recovery			X		NDMA, UNDP	emergency coordination mechanism in place
Ensure that requirements such as custom clearances, visas, and access to affected populations are established and clear to all relevant stakeholders (depending on the scale of the emergency).					MoCI, NDMA, MoFA, MFDP	N/A
Establish a proper and functioning communication system with local NGOs and civil society, including women's organisations, to ensure the timely flow of	X				NDMA, NGO consortium	N/A

information before and during response and recovery.					
Compile a list of contacts for in-country donors and technical focal points to be contacted.	X			NDMA, UNDP	Directory of all actors exist at the NDMA
Needs Assessment/Information Management/Response Monitoring					
	DONE	**DEADLINE SET**	**TO BE INITIATED**		
Ensure humanitarian and government partners are familiar with the IASC operational guidance on needs assessments. Harmonies assessment methodologies, reporting requirements, tools and templates including sex and age disaggregated data and gender-responsive information	X X			NDMA NDMA	N/A N/A
Ensure that a robust emergency information management system under the NEWEOC is in place and activated. Familiarize partners of reporting and information flow and responsibilities.	X			NDMA	N/A
Operational Capacity and Arrangements to Deliver Relief and Protection					
	DONE	**DEADLINE SET**	**TO BE INITIATED**		
Ensure that sector/cluster partners are familiar with the following; ● The centrality of protection ● Relevant sector/cluster procedures and standards ● Guidance on Accountability to Affected Populations (AAP) and Communicating with affected Communities (CwC) ● IASC Gender Equality Policy Statement 2008 and Gender Handbook	X			NDMA, UNDP, OCHA, UN Women, MoGCSP	N/A
Establish an inclusive sector/cluster groups including the participation of NGOs and Red Cross/Crescent.	X				All key partners including the RcRC Movement

Identify and map the respective response capacities of sector/cluster partners, including government. Initiate discussions with potential private sector partners on what kind of contribution could they provide in a humanitarian response.	X X			are part of the emergency response mechanism
Identify what a basic relief assistance package might consist of, considering cultural practices, gender considerations and climatic conditions. Evaluate the feasibility of using cash and voucher programs during the emergency response phase (with due consideration to gender issues and implications).	X X			NDMA Partners
Identify local suppliers of items to be included in a basic relief assistance package. Identify key logistical requirements to transport relief items	X X			NDMA GSA

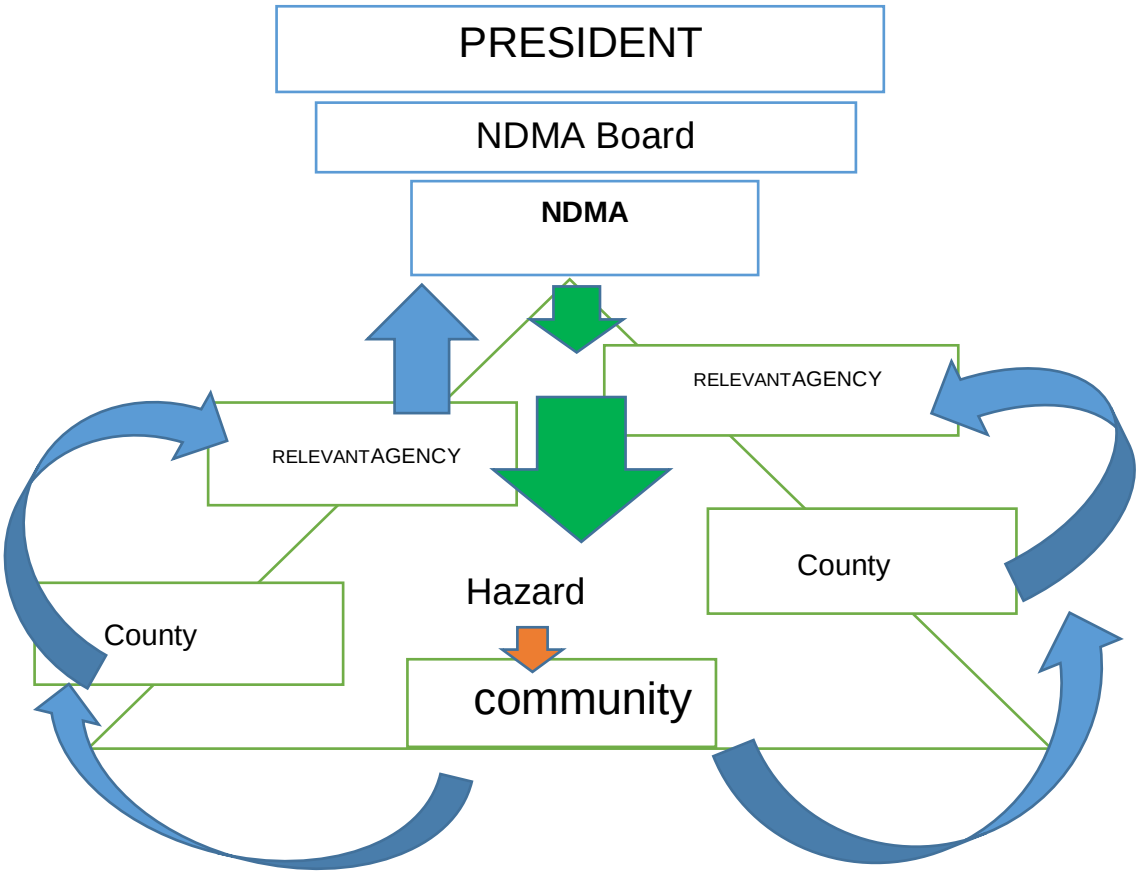
SO1 Provide immediate live saving assistance to meet the nutritional needs
SO2 Affected families supported with basic and protective shelter solutions
SO3 Prevent disease outbreak through immediate access to basic WASH and health services
SO4 Affected people are protected against violence and have equal access to services

Table 8: Priority Response Activities

Activity	Responsibility
Distribute ready to eat food, conduct general food distribution, provide unconditional market-based solutions (cash and vouchers), and/or conditional market-based solutions (cash and vouchers, food for assets/training)	NDMA, MoA, WFP, FAO
Revitalize primary health care services including the management of non-communicable diseases, disabilities, reproductive health, mental health and injury rehabilitation through the provision of essential medicines and supplies, and rehabilitation of damaged health facilities integrating disaster risk reduction strategies	MoH, WHO
Provision of safe and equitable access to a sufficient quantity of water for drinking, cooking and personal and domestic hygiene	NDMA, MoW, UNICEF,
Distribute shelter kits and NFIs	LRRRC, NDMA, UNHCR

8. 0 Coordination Arrangements

The Government of Liberia holds the primary responsibility to provide for the needs of populations affected by disasters. The Ministry of the Internal Affairs is the supervisory Ministry for emergency response assisted by the relevant line Ministries, Agencies and Commissions (MACs) (i.e. the



National Disaster Management Technical Committee, NDMTC) The National Disaster Management Agency (NDMA), which was established through an act of the national legislature, and an autonomous body with a lateral supervisory function by the Ministry of Internal Affairs, has the mandate to coordinate all disaster and emergency related activities in Liberia.

In the event of a national disaster, the NDMTC will meet immediately to assess the situation and if considered necessary, advise the President to officially declare a state of emergency and request for international assistance. The National Early Warning and Emergency Operations Centre (NEWEOC) with representation from the relevant response MACs will coordinate all response activities with support from other humanitarian actor's in-country.

The Strategic Coordination Objectives of this contingency plan are therefore to do:

8.1 Coordination at the National level

The National Disaster Management Agency's (NDMA) is the government institution charged with a mandate to:

- Coordinate the national disaster management system incorporating state and non-state actors at national, county, district and chiefdom
- Handle disaster-related issues to ensure reduced vulnerabilities to natural and human induced hazards
- Implement the national disaster management policy

NDMA Board of Directors comprises ten members namely: Ministry of Internal Affairs – Chair; Ministry of Health – Co-Chair; NDMA – Secretary; Ministry of Justice; Ministry of Finance and Development Planning; Ministry of Public Works; Ministry of Defense; Ministry of Agriculture; Ministry of Mines and Energy; Liberia Maritime Authority; and United Nation Country Team

Coordination of this plan will heavily rest on the NEWEOC. The NEWEOC is organized to serve as an integrative mechanism for coordination of all government disaster response activities, including monitoring of disaster situations and national bio-surveillance activities, providing effective communications with all levels of government and stakeholders, prioritizing resource utilization and disseminating and enacting the decisions of elected authorities and their delegated representatives. While the NDMA is responsible for the organization and operation of the NEWEOC, it is critical that all ministries, agencies and institutions with equities in disaster management are represented within the NEWEOC during disaster response operations. In addition, depending on the disaster event, it may also be critical that international organizations and non-governmental entities be represented within the NEWEOC to ensure appropriate coordination of non-governmental response support. Where appropriate, the NDMA who is the National Incidence Commander may request that specific private sector businesses be represented within the NEWEOC, particularly those businesses providing services and commodities on which society and government are particularly dependent (i.e. energy, telecommunications, transportation, etc.).

A National Disaster Management Technical Committee will be established by NDMA to provide technical support to its operations. The committee shall further constitute itself into subcommittees responsible for different sectorial /thematic areas including food and agriculture, water and sanitation, education and women and children protection, health care, environment and shelter, early recovery and infrastructure:

- The NDMA is expected to hold monthly technical coordination meetings comprising all relevant actors
- When a disaster strikes, an incident management meeting is called with relevant partners to discuss the nature of the disaster and designate the institution to lead
- The NDMA leads general coordination

8.2 Coordination at the County level

- The Superintendent Heads Disaster Management Committee in the County
- The Disaster Risk Management (DRM) Coordinator at county levels coordinates activities of the National Disaster management Agency.
- The Country has been divided into three regions and three Regional Coordinators will coordinate the activities of NDMA at county level.

Table 9: Roles and Responsibilities of Government Coordination Structures

	Pre-Disaster functions	**During Emergency phase**
National Disaster Management Technical Committee (NDMTC)	• recommend disaster risk reduction policy direction to NDMA • provide technical support to the implementation of decisions of NDMA pertaining to disaster risk and vulnerability reduction; • undertake disaster risk and vulnerability assessments and mapping of hazards in the country; • provide support to ensure respective sectors mainstream disaster risk reduction into development plans; • assist NDMA in resources mobilization for DRR programs carried out by line ministries and other agencies including those by UN agencies, Non-governmental agencies and community based organizations; • undertake simulation exercises among various stakeholders in disaster management;	• advice and recommend to NDMA the need for declaration of a disaster by the President; • assist NDMA in soliciting international and national assistance; • provide support to the coordination and monitoring of multi-sectorial disaster relief, rehabilitation, recovery and reconstruction measures being undertaken; • provide support to making appeals for relief resources including finances to various partners as directed by NDMA • ensure that NDMA and its structures at local level have the capacity to respond effectively and efficiently to the disaster/emergency.
County and City Disaster Management Committees (CDMCs)	• institutional development; • risk identification and early warning; • information and knowledge management; • risk reduction strategies; and • emergency preparedness.	• activate County Contingency or Preparedness Plans and put the Disaster Management Technical Committee on standby in case the affected district requires their intervention; • co-ordinate information exchange with the DDMC; • mobilize resources as maybe required for effective and efficient response to the disaster at hand; • assist the district to carry out a more detailed disaster impact assessment; • determine the resource requirement and submit to the Agency for appropriate action or assistance; • liaise with all other players including the UN, NGOs and private sector in the disaster affected district and county on who is doing what and where and document and report gaps; • co-ordinate logistical arrangement for movement of relief materials; • co-ordinate information flow with the media and act as a public relations officer for briefs and debriefs on the disaster situation; • co-ordinate public awareness and education activities in the district where the disaster has struck; • ensure that adequate measures are put in place for security/safety of the disaster victims, responders and property within the disaster area; • ensure availability of resources for the affected district to effectively deal with the disaster situation;

District Disaster Management Committee (DDMC)	• institutional development; • risk identification and early warning; • information and knowledge management; • risk reduction strategies; and • emergency preparedness.	• trigger response mechanism through activation of preparedness/ plans; • initiate a disaster impact assessment in order to determine the extent of the damage/losses as well as resource requirements; • concurrently relay information to the County Disaster Management Committee and National Disaster Management Agency; • notify and initiate cooperation, where applicable, with a neighboring district for any assistance required; • notify and seek support, where applicable, from district authorities in the neighboring county for any assistance or cooperation required, based on the signed bi-lateral or Regional protocols or Memoranda of Understanding as the case may be; • commence immediately disaster relief operations involving all players at district level; • make appeals where necessary to the County Disaster Management Committee and the Agency for more resources; • recommend the declaration of district, county or national disaster to the County and national level authorities; • continue to monitor the disaster and update the County Disaster Management Committee and the Agency; • take necessary security measures to protect the disaster area for further • investigations; and • Undertake early recovery assessments, develop early recovery plan and coordinate implementation by all stakeholders.
Borough, Township, Chiefdom, Clan, General Town and Locality Levels Disaster Management Committees	The functions of the Borough, Township, Chiefdom, Clan, General Town and Locality Levels Disaster Management Committees before, during and after disasters shall be established as the same functions of the District Disaster Management Committee but shall perform functions at the community level. Such committees shall remain functional always, and undertake training programs provided by the Agency	

8.3 Partner Relationship with other stakeholders

1. **Liberia National Red Cross Society (LNRCS)**

Usually in the first line of response, working in partnership with (IFRC and ICRC) as appropriate. The agency has specialized expertise and resources (including a network of Chapter Offices in all counties), crucial for responding to emergencies. During a disaster, LNRCS will be responsible for:

- Support NDMA to conduct rapid needs assessment and share data and information with other relevant agencies. (This will facilitate the agency's coordinated joint assessments)
- Support NDMA for rapid needs assessments and monitoring of response
- Support the NDMA to carry out distribution of needed food, non-food and recovery items to affected families
- Support the NDMA to carryout life-saving first aid services
- Support NDMA in coordination with relevant government line ministries and other humanitarian actors, engage in Restoring Family Links (RFL) activities
- Support NDMA to provide Psychosocial Support interventions, including Psychological First Aid
- Support the development of sector specific emergency response plans, Conduct post-disaster recovery assessments and carryout relevant interventions

2. United Nations

Through the RC office, relationship has been established between UN Agencies and the NDMA to foster adequate coordination during emergency response. In May of 2017, a coordinating structure was determined and set up by the RC Office and the NDMA. This structure is to ensure harmony between the national structure and our supporting partners to enhance DRR in Liberia.

The UN will work within its designated mandate to support the government in the following areas:

- Technical and logistic support for relief efforts
- Assist in resource mobilization and advocacy
- Participate in joint needs assessments and monitoring of response
- Relevant UN agencies to co-facilitate sector working groups and support NDMA in coordination

3. Non-Governmental Organizations (NGOs)

NGOs specialize and work in different domains that can be critical during emergencies. They are likely to support in the following areas:

- Technical and logistic support for relief efforts
- Assist in resource mobilization and advocacy
- Participate in joint needs assessments and monitoring of response
- Implement or coordinate distribution of relief items in support of NDMA

4. Donor Agencies

Resident donor agencies are first step for foreign assistance. They can quickly disburse urgent funds and mobilize additional resources from their headquarters in time of emergency. They can also provide technical capacity/assistance such as data/information management or key technical capabilities in terms of specific scenarios as was the case with Ebola response.

5. The private sectors:

The private sector in this plan refers to businesses and corporations that have the capacity to mobilize financial resources or logistic support to assist areas/communities affected by a disaster. They will be included in the coordination forums for preparedness exercises and during response accordingly.

6. Line Ministries and Agencies

8.4 Operational Support Arrangements

Needs Assessments

Currently, there is a draft assessment template (2008 response plan), which needs to be reviewed base on the MIRA tool guidance. It has been concluded that the ODK in collaboration with Kobo tool will be the official tools used. Training will shortly be conducted and dissemination made to local Government officials as well as partners. At the same time the Liberia Disaster Database (LDD) will be the official data storage for disaster data.

Information Management

The NDMA Public Relations (PR) Unit, which is responsible for compiling and sharing information on preparedness and response activities, will lead the EOC information section that is responsible for all messaging activities, including media messaging and public

education/information operations. The PR will provide the spokespersons for press briefs and other messaging activities doing activation. A Joint Information Center (JIC) may also be established as a fusion cell for all government public information operations during larger disaster response operations... Most of this information will be uploaded on the NDMA website, which is managed by the IT Unit. Information will include: data being collected from the Health and County EOCs by the main data center at the National Early Warning and Emergency Operations Centre, weekly and ad hoc updates – operational activities, trainings, workshops, situational updates among others.

The newly renovated NDMA office complex will house a National Early Warning and Emergency Operation Centre (NEWEOC). The NEWEOC will provide real time information as provided by the users and can be used during the planning, mitigation, response and recovery phases of any emergency. This facility will be replicated in 2 regions.

Response Monitoring

Coordination is taking place throughout the national structure and the identified sectoral working groups. National coordination structures include UN agencies, NGOs, Liberia National Red Cross Society and governmental agencies in charge of disaster management. The monitoring of coordination activities will be assessed against the provided indicators and the overall improvement of humanitarian response to ongoing and slow onset emergencies. Considering the critical nature of monitoring coordination during emergencies, the National Early Warning and Emergency Operation Centre with its capacity and mobile capability will play a vital role in monitoring coordination both at the national and sub-national levels.

Common Service Areas

NDMA has an arrangement with response agencies (i.e. LRRRC, GSA, National Army etc.), that provide personnel, equipment and logistics, infrastructure and transport support in a disaster preparedness and response. Partner humanitarian organizations including the UNCT and RCRC Movement also provide needed support.

Safety & Security

Although there are no specific security or safety concerns in Liberia at present but humanitarian workers during crisis and emergency periods are most times at risk even from the very people they intend to serve. Including a safety dimension to involve AFL, LNP, LIS, DEA and LNFS in joint security operations has a far-reaching impact. This operation will monitor closely for potential social tensions or demonstrations during disaster emergency. Though there is no existing binding document between the NDMA and other government security agencies for disaster safety and security, but under the mandates of security agencies, they provide services to save lives and property during disasters and emergencies.

Finance

Currently, neither the Government nor its development partners have a dedicated pool of resources for DRR and Emergency Response. The national fiscal budget allocates very little, if any, funding for disaster preparedness and response. As a result, the government's response to disasters has been ad-hoc and limited. Partners such as Red Cross Movement, UN agencies and NGOs bear the largest costs in responding. However, the Act establishing the National Disaster Management Agency proposes the establishment of a fund to be known as the Disaster Management Trust Fund, which comprises of the Disaster Mitigation Fund and the Disaster Response Fund. It aims to provide for the coordination and sustainable financing of projects and programs to strengthen disaster preparedness, emergency response and mitigation as outlined in the Disaster Management Action Plan.

9.0 Annexes

Annex 1: Sector Priority Response Plans

1. Shelter and None Food Items Response Plan

Sector Lead: LRRRC **Contact person:** Claudia Page Cephas**; Email:** claudiapage7@gmail.com

Co-lead: Liberia NRCS **Contact person:** Christopher Johnson & Samuel woods**; Email:**johnson@liberia-redcross.org/ woods@liberia-redcross

Sector Members: (NDMA, MOPW, LRRRC)

The main objective of the Shelter and Non-Food Items (NFI) sector is to put in place mechanism that provides shelter and NFIs to affected populations during disaster. It also seeks to address issues leading to post disaster recovery plans execution.

Priority Preparedness Activities, Indicator, Target, and Time Frame

Priority preparedness activities	Indicator	Target	Time Frame
Coastal Erosion i) Identify sites for temporary shelter ii) Identify actors in shelter sector and map capacities and resources available iii) Map coastal erosion hotspots iv) Conduct market surveys to identify vendors and service providers v) Develop tools/checklist for needs assessments vi) Develop SoPs for distributions vii) Procure, preposition NFIs	Number of sites identified Matrix of resources Coastal erosion map on hotspots Survey reports Tools developed for need assessment Copy of finalized SOPs Records on Number of affected people assisted NFIs are prepositioned and procured	5 sites 1 1 map 1 survey report 1 checklist available 1 Consolidated SOP	2nd quarter 2022

Floods: i)Identify flood prone communities/hotspots ii)Identify sites for temporary shelter construction iii)Identify appropriate existing infrastructures for temporary use iv)Identify actors in shelter sector and map capacities and resources available v)Map potential vulnerable hotspots vi)Conduct market surveys to identify vendors and service providers vii)Develop tools/checklist for needs assessments viii)Develop a standard package for NFIs distribution ix)Procure, and preposition NFIs as needed x)Develop distributions plans	Number of sites identified Matrix of actors and resources developed Number of hotspots mapped Assessment reports NFI package developed Number of NFIs procured and prepositioned Number of affected people to be assisted	10 sites Assorted building materials to construct 100 shelters 1 matrix 1 vulnerability map 1 Assessment report 1 checklist available Assorted NFIs for 1000 families	2nd and 3rd quarter 2022
Windstorm I. Identify vulnerable communities/hotspots II. Identify sites for temporary shelter construction III. Identify appropriate existing infrastructures for temporary use IV. Identify actors in shelter sector and map capacities and resources available V. Map potential vulnerable hotspots VI. Conduct market surveys to identify vendors and service providers VII. Develop tools/checklist for needs assessments VIII. Develop a standard package for NFIs distribution IX. Procure, and preposition NFIs as needed Develop distributions plans	Number of sites identified Matrix of actors and resources developed Number of hotspots mapped Assessment reports NFI package developed Number of NFIs procured and prepositioned Number of affected people to be assisted	10 sites Assorted building materials to construct 100 halters 1 matrix 1 vulnerability map 1 Assessment report 1 checklist available Assorted NFIs for 1000 families	2ndand 3rdquarters 2022
Epidemics i)Identify isolation/ Holding centers	Number of isolation/holding centers identified Number of functional laboratories identified	All epidemic-prone communities/villages/towns, cities/Counties	2nd Quarter 2022

ii)Identify and map laboratories for testing of specimens iii) Develop/update existing SOPs iv) Review and update data and reporting collection tools v) Heighten surveillance at all levels in counties/districts/communities vi) Identify surge team and conduct orientation vii) Procure and preposition response kits to all strategic areas	Number of SOPs and data collection tools developed/updated Number of suspected cases reported through the surveillance system Number of persons on response teams orientated Number of response kits procured and prepositioned to all strategic areas		
Fire i)Identify sites for temporary shelter ii) iii)Conduct inventory of available resources and identify gaps iv) v)Map potential vulnerable hotspots vi)Develop tools/checklist for needs assessments vii)Renovate/build temporary structures for affected population	Number of sites shelter cites identified Number of inventories conducted for available resources and gaps identified Number of potential vulnerable hotspots mapped Number of tools/checklists developed for needs assessments Number of temporary structures renovated/built for affected population	All fire-prone communities/villages/towns, cities/counties	2nd Quarter 2022
Conflict: I. Create barriers and control system for distribution II. Provide site security III. Crowd Control activities IV. Homes spacing (gender sensitive) V. Awareness on SGB/SEA VI. Criminal activities	I. Number of different barriers and awareness II. Number of Security personnel Deployed III. Number of Incident reported IV. Number of awareness conducted V. Number of SGBV cases reported	I. All IDPs II. Women and children III. Maps IV. SGBV referral Pathway document V. Training Aids	All quarters of 2022

Early Warning Information and Monitoring Responsibility

Early Warning information	Monitoring Responsibility
Coastal Erosion (i) No. of people leaving their homes (ii) No. of homes/property destroyed (iii) Rise in the sea level (iv) Assessment report from Monrovia Metropolitan and GEF Project (Greenville)	Min. of Transport NDMA, EPA,MME, Community Groups
Floods i) 24 hours rain forecast ii) Intensity of rainfall received over a span of time. (i) No. of homes/property destroyed	Ministry of Transport/ Mines and Energy
Epidemics i)Report of a confirmed case of any of epidemic-prone disease in any of the counties ii) Outbreak in neighboring Countries	NPHIL ,MoH
Fire i) destruction of homes/properties by fire	Fire Service
Windstorm	
Conflict I. Dissatisfaction due to the lack of food II. Poor Shelter III. Increase prevalence disease	LRRRC,NDMA, MOA,MOPW MIA, WFP, UNHCR, MoH, NPHIL

Priority Response Activities, Indicators, and Target

Priority Response Activities	Indictor	Target
Coastal Erosion (i) Distribute NFI and food items to affected families (ii) Conduct rapid needs assessment (iii) Distribute emergency shelter kits (iv) Organize community and sensitization drives	Number of people receiving food and NFI Report of needs assessment Number of distribution sites Numberof people reached with key messages	25,000 people 1 report 5 sites 50,000 people
Activation threshold ● 200 people affected ● 100 houses destroyed		
Floods (i) Distribute temporary shelter kits/repair provisions to flood affected persons (ii) Distribute NFI and food items (iii) Disseminate safe fixing and fastening for building emergency shelters (iv) Repair/rehabilitate dams, flooding walls etc. (v) Assist in safe return to areas of origin	Number of affected family receiving shelter kits Number of families assisted Number of building constructed safely Number of dam's flooding wall repaired Number of people assisted	5,000 families 10,000 families Xxx buildings Xxx of dams 60% of displaced

Activation threshold ● 100 households displaced		
Epidemics: I. Identify isolation/ Holding centers II. Identify laboratories for testing of specimens III. Develop/update existing SOPs IV. Review and update data collection and reporting tools V. Heighten surveillance at all levels in counties/districts/communities VI. Identify surge team and conduct orientation VII. Procure and preposition response kits to all strategic areas	Number of isolation/holding centers identified Numberof functional laboratories identified Number of SOPs and data collection tools developed/updated Number of suspected cases reported through the surveillance system Number of persons on response teams orientated Numberof response kits procured and prepositioned to all strategic areas	All epidemic-prone communities/villages/towns, cities/Counties
Activation threshold Activation depends on the magnitude/severity of the epidemics and if it exceeds the available capacity of the national resources to respond (such an event may be designated as a National Disaster).		
Fire I. Distribute WASH supplies and food items to affected families II. Conduct rapid needs assessment III. Distribute emergency food and NFI to affected people IV. Identify sites for temporary shelter V. Organize community and sensitization drives VI. Conduct inventory of available resources and identify gaps VII. Map potential vulnerable hotspots VIII. Develop tools/checklist for needs assessments IX. Renovate/build temporary structures for affected population X.	● **Number**of people receiving WASH and food supplies ● Report of needs assessment ● Number of shelter kits distributed ● Number of people reached with key messages ● Numberof inventories conducted and available resources and identify gaps identified ● Number of potential vulnerable hotspots mapped ● Number of temporary structures renovated/built for affected population	500 families? 1 report 200 families 50,000 people
Activation threshold ● 50 houses burnt		
Windstorm		

Conflict I. Provide site security II. Crowd Control activities III. Homes spacing (gender sensitive) IV. Criminal activities	I. Number of Security personnel Deployed II. Number of SGBV Incident reported	5000-10000 Reports

Note that the activation threshold is for the sector and this will help determine national threshold for plan activation.

Sector Budget

Actions	Cost	Available	Gap
(Example) Pre-positioning of relief items			
- Seeds for distribution	$150000	$40000	$110000

Stock inventory

This will also be helpful for budget preparation and resource mobilization. The table can be completed for each type of hazard considering that requirements for different disasters are not the same.

Type of stock needed	Existing stock quantity	Estimate number of people to be targeted	Stock Gaps	Comments
e.g. Aqua tabs				
Tents				

2. Food Security and Nutrition Response Plan

Sector Lead FS: Ministry of Agriculture **Sector contact person:** Sam R. Yoryor III**; Email:** samryoryor@gmail.com

Sector Lead Nutrition: Ministry of Health **Contact Person: Email:**

Co-lead: Contact person: Annete Brima-Davis: email: brimadavis@gmail.co

Sector Members: NDMA, NFA, NaFAA, MOC

The main objective of Food Security and Nutrition sectors is to meet the immediate food needs of the disaster affected people, as well as avoiding nutritional deterioration among the affected populations. To achieve this objective, independent assessments will be undertaken in collaboration with all the relevant actors.

Priority Preparedness Activities, Indicator, and Target

Priority preparedness activities	Indicator	Target	Time Frame
Coastal Erosion i) Map capacities and resources available ii) Conduct market surveys to identify vendors and service providers iii) Develop tools/checklist for needs assessments iv) Develop SoPs for distributions v) Community mobilization – (awareness, participation and ownership)	Number of actors identified Report of the survey Copy of checklist developed Finalized copy of SOPs developed Reports on Number of people reached with key messages/mobilized	100 partners 2 reports (bi-annual) 1 100,000	2nd quarter 2022
Floods: i) Map capacities and resources available ii) Conduct market surveys to identify vendors and service providers iii) Develop tools/checklist for needs assessments iv) Develop SoPs for distributions v) Community mobilization – (awareness, participation and ownership) vi) Develop and update emergency food and distribution items listing and package vii) map partners for food security and nutrition services viii) Procure and stockpile (preposition) emergency food items	Number of actors identified Report of the survey Copy of checklist developed Number of people reached with key messages/mobilized Number of food items procured and stock pile	10-30 partners 2 reports (bi-annual) 1 2,500 food items packaged	2nd and 3rd quarters 2022
Epidemics: I. Identify isolation/ Holding centers II. Identify laboratories for testing of specimens III. Develop/update existing SOPs IV. Review and update data collection and reporting tools V. Heighten surveillance at all levels in counties/districts/communities VI. Identify surge team and conduct orientation VII. Procure and preposition response kits to all strategic areas	• Number of isolation/holding centers identified • Number of functional laboratories identified • Number of SOPs and data collection tools developed/updated • Number of suspected cases reported through the surveillance system	100 partners 2 reports (bi-annual) 1 500,000	2nd quarter 2022

	• Number of persons on response teams orientated • Number of response kits procured and prepositioned to all strategic areas		
Fire i)Identify sites for temporary shelter iii)Conduct inventory of available resources and identify gaps v)Map potential vulnerable hotspots vi)Develop tools/checklist for needs assessments vii)Renovate/build temporary structures for affected population	Number of sites shelter cites identified Number of inventories conducted for available resources and gaps identified Number of potential vulnerable hotspots mapped Number of tools/checklists developed for needs assessments Number of temporary structures renovated/built for affected population	100 partners 2 reports (bi-annual) 1 50,000	2nd quarter 2022
Windstorm: i)Map capacities and resources available ii)Conduct market surveys to identify vendors and service providers iii)Develop tools/checklist for needs assessments iv)Develop SoPs for distributions v)Community mobilization – (awareness, participation and ownership) vi)Develop and update emergency food distribution items listing and package vii)Map partners for food security and nutrition services viii)Procure and stockpile (preposition) emergency food items	Number of actors identified Report of the survey Copy of checklist developed Number of people reached with key messages/mobilized Number of food items procured and stockpile	5-10 partners 2 reports (bi-annual) 1 250 food items packages	2nd and 3rd quarters 2022
Conflict I. Protest due to the lack of food II. Increase criminal activities	Number of daily protest activities Number of crime reported by LNP	Total population Mapping criminal hideout	All quarters of 2022

Early Warning Information and Monitoring Responsibility

Early Warning information	Monitoring Responsibility
Coastal Erosion i) No of people leaving their homes (displacements) ii) Alerts from monitoring institutions (rise in sea level)	Min of Transport NDMA, EPA, Community Groups, SST data
Floods i) No of people leaving their homes (displacements) ii) Destruction caused to crops/storage facilities iii) Communities cut off from markets	NDMA, LNRCS
Epidemic I. Report of a confirmed case of any epidemic-prone disease in any of the Counties II. Outbreak in neighboring Countries	MoH, NDMA
Fire i) Destruction of homes/properties by fire	Fire Service, NDMA
Windstorm I. Number of people leaving their homes (displacements) II. Destruction caused to houses and other infrastructure III. Communities cut off from markets, schools, healthcare facilities	NDMA, LNRCS
Conflict I. Plan Demonstration II. High price of food	NDMA, LRRRC, MOJ/ Joint Security

Priority Response Activities, Indicators, and Targets

Priority Response Activities	Indictor	Target
Coastal Erosion i) Distribute ready to eat meals or general food distributions to affected families ii) Provide direct cash transfers or vouchers iii) Conduct rapid needs assessment iv) Set up distribution sites v) Organize community and sensitization drives	Number of people receiving food assistance or cash Report of needs assessment Number of distribution sites Number of people reached with key messages	25,000 displaced people 1 As needed 50,000
Activation threshold ● Less than >200 people affected ● Less than >100 houses destroyed		
Floods	Number of people receiving food assistance or cash	50,000 people

i) Distribute ready to eat meals or general food distributions to affected families ii) Provide direct cash transfers or vouchers iii) Conduct rapid needs assessment iv) Set up distribution sites and distribute food and nutrition supplies v) Organize community and sensitization drives vi) Monitor children for signs of malnutrition and provide necessary supplements	Report of needs assessment Number of distribution sites Number of people reached with key messages	2 As needed 50,000
Activation threshold ● Less than > 50 families displaced		
Windstorm i)Distribute ready to eat meals or general food distributions to affected families ii)Provide direct cash transfers or vouchers iii)Conduct rapid needs assessment iv)Set up distribution sites and distribute food and nutrition supplies v)Organize community and sensitization drives vi)Monitor children for signs of malnutrition and provide necessary supplements	Number of people receiving food assistance or cash Report of needs assessment Number of distribution sites Number of people reached with key messages	2,500 people 2 As needed 5,000 people
Activation threshold ● Less than > 25 families displaced		
Epidemics i) Distribute ready to eat meals or general food distributions to affected families ii) Provide direct cash transfers or vouchers iii) Conduct rapid needs assessment iv) Provide supplementary food to most vulnerable groups (PLW, persons living with HIV/TB etc.) v) Set up distribution sites vi) Organize community and sensitization drives	Number of people receiving food assistance or cash Report of needs assessment Number of people reached Number of distribution sites Number of people reached with key messages	10, 00-20, 000
Activation threshold Activation depends on the magnitude/severity of the epidemics and if it exceeds the available capacity of the national resources to respond (such an event may be designated as a National Disaster).		
Fire	Number of people receiving food assistance or cash Report of needs assessment	10,000 people

i) Distribute ready to eat meals or general food distributions to affected families ii) Conduct rapid needs assessment iii) Set up distribution sites	Number of distribution sites	1 As needed
Activation threshold ● Less than >200 families affected		
Conflict I. Dialogue/ Negotiation II. Conduct Press Conferences III. Joint Security Response Planning Meeting	Number of dialogue and negotiation conducted Number of press conferences conducted Number of attendance in joint security response planning meeting	Population affected
Activation threshold ● Less than >200 families affected		

Note that the activation threshold is for the sector and this will help determine national threshold for plan activation.

Sector Budget

Actions	Cost	Available	Gap
(Example) Pre-positioning of relief items			
- Seed distribution	$150000	$40000	$110000

Stock inventory(Use template below)

This will also be helpful for budget preparation and resource mobilization. The table can be completed for each type of hazard considering that requirements for different disasters are not the same.

Type of stock needed	Existing stock quantity	Estimate number of people to be targeted	Stock Gaps	Comments
e.g. Aqua tabs				
Tents				

3. Health Response Plan

Sector Lead: MoH/NPHIL. **Contact person:** Nathaniel K. Dovillie**; Email:** nkdovillie@gmail.com

Co-leads: contact person Mike Luke;bigboy1977m@gmail.com:Eddie Farngalo; email:wonkehmie@gmail.com

Sector Members:

The primary focus of the Health sector in an emergency will be to ensure essential medical coverage to affected people by providing medicine and immediate mobilization of human resource. Revitalization of primary health care (including Minimum Initial Service Package for Sexual and Reproductive Health), surveillance and management of communicable diseases is also a priority to avoid a second disaster.

Priority Response Activities, Indicators, Targets, and Time Frame

Priority preparedness activities	Indicator	Target	Time Frame
Coastal Erosion i) Map out Coastal erosion prone communities including population ii) Update sector's resources iii) Train and establish district, county, and national level multi-disciplinary rapid response teams iv) Procure and preposition emergency medical drugs and supplies appropriately	Assessment report updated Matrix of Sectors resources Number of people trained Distribution list and locations of supplies per communities	9 Coastal Counties Based on each core function area 2 million people	2nd Quarter 2022
Floods: i) Update health risk assessment findings by NDMA on the most vulnerable areas ii) Update sector's resources iii) Train and establish district, county, and national level multi-disciplinary (one health) rapid response teams iv) Procure and preposition emergency medical drugs and supplies as appropriate v) Develop and update health packages vi) mobilize health logistics, treatment, equipment and supplies	Vulnerability map (Number of proximal health facilities and Number of essential medical supplies available) Matrix of available resources Number of people trained Distribution list and locations of supplies per communities	15 counties 20-30 actors mapped 100- 200 healthcare facilities 100 people	2nd and 3rd quarters 2022
Windstorm: **i)**Update health risk assessment findings by NDMA on the most vulnerable areas ii)Update sector's resources iii)Train and establish district, county, and national level multi-disciplinary (one health) rapid response teams iv)Procure and preposition emergency medical drugs and supplies as appropriate v)Develop and update health packages	Vulnerability map (Number of proximal health facilities and Number of essential medical supplies available Matrix of available resources Number of people trained	15 counties 10-20 actors mapped 10-20 healthcare facilities 100 people	2nd and 3rd quarters 2022

vi)mobilize health logistics, treatment equipment and supplies	Distribution list and locations of supplies per communities		
Epidemics i)Conduct resource mapping ii)Train district, county, and national level multi-disciplinary rapid response teams iii)Procure and preposition emergency medical drugs and supplies as appropriate iv)Identify isolation/ Holding centers v)Identify laboratories for testing of specimens vi)Develop/update existing SOPs vii)Review and update data collection and reporting tools viii)Heighten surveillance at all levels in counties/districts/communities ix)Identify surge team and conduct orientation Organize a mechanism for research during response	● Number of isolation/holding centers identified ● Number of functional laboratories identified ● Number of SOPs and data collection tools developed/updated ● Number of suspected cases reported through the surveillance system ● Number of persons on response teams orientated	All epidemic-prone communities/villages/towns, cities/Counties	1st quarter of 2022
Fire ii) Update sector's resources iii) Train and establish district, county, and national level multi-disciplinary rapid response teams iv) Procure and preposition emergency medical drugs and supplies as appropriate	Matrix of available resources Number of people trained Distribution list and locations of supplies per communities	50 actors mapped 100 people	2nd quarter 2022
Conflict I. Health promotion, awareness and sensitization II. Disease surveillance and out breaks prevention III. Assure efficient healthcare provision	Number of media engagements Number of disease(s) of epidemics potential detected and prevented	Population at all levels All borders' counties Mapping (GIS)	All quarters 2022

Early Warning Information and Monitoring Responsibility

Early Warning information	Monitoring Responsibility
Coastal Erosion i) Increased sand mining ii) Establishment of communities along the sea beach (mostly hut) iii) Increase sea level rise	NDMA, EPA, LME, MPW
Floods i) Congested temporary shelters – large number of children ii) Open defecation iii) Increase in number of diarrhea, Malaria and ARI cases above recommended threshold iv) Increase in Mosquitoes and pest infestation	MoH, NPHIL
Windstorm **i)**Congested temporary shelters – large number of children ii)Open defecation iii)Increase in number of diarrhea, malaria and Acute Respiratory Track Infection (ARI) cases above recommended threshold iv)Increase in Mosquitoes and pest infestation	MoH, NPHIL
Epidemics I. Report of a confirmed case of any epidemic-prone disease in any of the Counties II. Outbreak in neighboring Countries	MoH, NPHIL
Fire i) Destruction of homes / properties by fire	Fire Service Department
Conflict I. Mix reaction and fear in the general population II. Gradual increase in detected pathogen III. Plan demonstration due to increase in health concerned IV. Plan strike action by health workers	MOH/ NPHIL/ MOJ/ Joint Security

Priority Response Activities, Indicators, and Targets

Priority Response Activities	Indictor	Target
Coastal Erosion i) Provide emergency healthcare services to affected populations ii) Conduct rapid needs assessments iii) Promote hygiene/health education	Number of victims supported Report of assessment Number of people reached	30,000
Activation threshold ● 1 community eroded with more than 5000 people affected		
Floods i) Conduct rapid needs assessments ii) Distribute diarrhea kits iii) Promote hygiene/health education iv) Provide emergency health care to affected people (proximal health facility and mobile clinic services)	Report of the assessment Number of kits distributed Number of people reached or treated	50,000

v) Respond to communicable disease outbreak		
Activation threshold ● 1 suspected case of cholera		
Windstorm i)Conduct rapid needs assessments ii)Distribute diarrhea kits iii)Promote hygiene/health education iv)Provide emergency health care to affected people (proximal health facility and mobile clinic services) v)Respond to communicable disease outbreak	Report of the assessment Number of kits distributed Number of people reached or treated	50,000
Activation threshold ●		
Epidemics I. Conduct resource mapping II. Train and establish district, county, and national level multi-disciplinary rapid response teams III. Procure and preposition emergency medical drugs and supplies as appropriate IV. Identify isolation/ Holding centers V. Identify laboratories for testing of specimens VI. Develop/update existing SOPs VII. Review and update data collection and reporting tools VIII. Heighten surveillance at all levels in counties/districts/communities IX. Identify surge team and conduct orientation	Number of isolation/holding centers identified Number of functional laboratories identified Number of SOPs and data collection tools developed/updated Number of suspected cases reported through the surveillance system Number of persons on response teams orientated	All epidemic-prone communities/villages/towns, cities/Counties
Activation threshold Activation depends on the magnitude/severity of the epidemics and if it exceeds the available capacity of the national resources to respond (such an event may be designated as a National Disaster).		
Fire i) Conduct rapid needs assessments ii) Distribute diarrhea kits iii) Promote hygiene/health education iv) Provide emergency health care to affected people –surgical or clinical treatment to critical injured people	Report of the assessment Number of kits distributed Number of people reached	10,000
Activation threshold ● 5 injured		
Conflict **i)**Continuous awareness and sensitization	**Number** of awareness conducted	General Public

ii)Joint Security Meetings iii)Health Leadership negotiation with health workers	Number of joint security meetings conducted Number of leadership negotiation meetings with health workers	Healthcare workers

Note that the activation threshold is for the sector and this will help determine national threshold for plan activation.

Sector Budget

Actions	Cost	Available	Gap
(Example) Pre-positioning of relief items			
- Seed distribution	$150000	$40000	$110000

Stock inventory (Use template below)

This will also be helpful for budget preparation and resource mobilization. The table can be completed for each type of hazard considering that requirements for different disasters are not the same.

Type of stock needed	Existing stock quantity	Estimate number of people to be targeted	Stock Gaps	Comments
e.g. Aqua tabs				
Tents				
Diarrhea kits				
Essential drugs and medical supplies				
Insecticide Treated Nets (ITNs)				
Diarrhea kits				

4. Logistic Response Plan

Sector Lead: GSA **Contact person:** Benjamin S. Kandakai**; Email:** benkandakai@gmail.com

Co-lead: ……contact person……email…….

Sector Members:

The Logistic sector will ensure necessary support to other sectors for effective response to those affected by disasters.

Priority Response Activities, Indicators, Target, and Time Frame

Priority preparedness activities	Indicator	Target	Time Frame
Coastal Erosion (i) Identify sites for temporary storage facilities (ii) Map capacities and resources available from logistic actors (iii) Identify transportation needs and means of easy delivery (iv) Identify and sign MoUs with suppliers (v) Procure, preposition NFIs	Number of sites identified A matrix of available resources Strategic Plan with defined scenarios Number of suppliers identified Number copy of signed SOPs with suppliers Stock in store (in MTs or pieces)	5 sites 1 matrix Joint plan on Sop At least 100	2nd quarter 2022
Floods: (i) Identify sites for temporary storage facilities (ii) Map capacities and resources available from logistic actors (iii) Identify transportation needs and means of easy delivery (iv) Identify and sign MoUs with suppliers (v) Procure, preposition, MIs and NFIs	Number of sites identified A matrix of available resources Strategic Plan with defined scenarios Number of suppliers identified Stock in store (in MTs or pieces)	10 sites 1 matrix Joint plan on Sop At least 100	2nd and 3rd quarters 2022
Windstorm: **(i)**Identify sites for temporary storage facilities (ii)Map capacities and resources available from logistic actors (iii)Identify transportation needs and means of easy delivery (iv)Identify and sign MoUs with suppliers (v)Procure, preposition FI, MIs and NFIs	Number of sites identified A matrix of available resources Strategic Plan with defined scenarios Number of suppliers identified Stock in store (in MTs or pieces)	2-5 sites 1 matrix Joint plan Signed MoU	2nd and 3rd quarter 2022
Epidemics (i) Identify sites for temporary storage facilities (ii) Map capacities and resources available from logistic actors (iii) Identify transportation needs and means of easy delivery (iv) Identify and sign MoUs with suppliers	Number of sites identified A matrix of available resources Strategic Plan with defined scenarios	15 sites 1 matrix Joint plan on Sop	2nd quarter 2022

v) Procure, preposition FI, MIs and NFIs	Number of suppliers identified Stock in store (in MTs or pieces)	At least 100	
Fire (i) Map capacities and resources available from logistic actors (ii) Identify transportation needs and means of easy delivery (iii) Identify and sign Sops with suppliers vi) Procure, preposition WASH supplies	A matrix of available resources Strategic Plan with defined scenarios Number of suppliers identified Stock in store (in MTs or pieces)	1 matrix Joint plan on Sop At least 100	2nd quarter 2022
Conflict I. Identify sites for temporary storage facilities II. Map capacities and resources available from logistic actors III. Identify transportation needs and means of easy delivery IV. Identify and sign SoPs with suppliers V. Procure, preposition NFIs	Number of sites identified A matrix of available resources Strategic Plan with defined scenarios Number of suppliers identified Stock in store (in MTs or pieces)	15 sites 1 matrix Joint plan on Sop At least 100	All quarters in 2022

Early Warning Information and Monitoring Responsibility

Early Warning information	Monitoring Responsibility
Coastal Erosion i) No of homes/property destroyed ii) Rise in sea level and violent storms	Min of Transport NDMA, EPA, GSA/Maritime
Floods i) Meteorological report indicating projected intensity and forecast of rainfall – 24hrs ii) Monitoring reports by the River Basin Authorities	GSA, NDMA, MoT
Windstorm I. Meteorological report indicating projected intensity and forecast of windstorm – 24hrs II. Monitoring reports of wind speed and direction	GSA, NDMA, MoT
Epidemics i) Increased impact on livelihood	MoH, NPHIL
Fire i) Number of households affected	Fire Service
Conflict I. Dissatisfaction of the general public II. Plan Demonstration	GSA/ MOJ/ Joint Security

Priority Response Activities, Indicators and Target

Priority Response Activities	Indictor	Target
Coastal Erosion i) Provide necessary logistic support to partners intervening ii) Support rescue efforts iii) Support the Shelter sector with provision of shelter materials iv) Conduct assessments to establish access difficulties and transport needs v) Identify storage facilities within affected areas	Log of support/materials supplied Number of people rescued Number of shelter materials disbursed Assessment report Number of storage facilities	Number of people affected
Activation threshold ● 5,000 people affected		
Floods i) Provide necessary logistic support to responders and partners intervening ii) Support rescue efforts iii) Support the Shelter sector with provision of shelter materials iv) Conduct assessments to establish access difficulties and transport needs v) Identify storage facilities for prepositioning of materials (FI, MI, NFI) within affected areas) vi) Supply responders with needed PPEs and safety devices	Log of support/materials supplied Number of people rescued Number of shelter materials disbursed Assessment report Number of storage facilities Number of PPEs issued to responders	10-20 vehicles 2-5 storage facilities (warehouses) PPEs to serve 200-300 responders
Activation threshold ● >**50** families displaced		
Windstorm i)Provide necessary logistic support to responders and partners intervening ii)Support rescue efforts iii)Support the Shelter sector with provision of shelter materials iv)Conduct assessments to establish access difficulties and transport needs (i)v) Identify storage facilities for prepositioning of materials (FI, MI, NFI) and supplies within affected areas (ii)Supply responders with needed PPEs and safety devices	Log of support/materials supplied Number of people rescued Number of shelter materials disbursed Assessment report Number of storage facilities Number of PPEs issued responders	5-10 vehicles 2-4 storage facilities (warehouses) PPEs to serve 25-50 responders
Activation threshold ● >**25** families displaced		
Epidemics i) Provide necessary logistic support to partners intervening (iii) Conduct assessments to establish access difficulties and transport needs (iv) Identify storage facilities within affected areas	Log of support/materials supplied Assessment report Number of storage facilities	
Activation threshold		

Fire i) Provide necessary logistic support to partners intervening ii) Support rescue efforts iii) Conduct assessments to establish access difficulties and transport needs iv) Identify storage facilities within affected areas	Log of support/materials supplied Number of people rescued Assessment report Number of storage facilities	
Activation threshold		
Conflict I. Provide necessary logistic support to partners intervening II. Conduct assessments to establish access difficulties and transport needs III. Identify storage facilities within affected areas	Log of support/materials supplied Assessment report Number of storage facilities	Affected population
Activation threshold		

Note that the activation threshold is for the sector and this will help determine national threshold for plan activation.

Sector Budget

Actions	Cost	Available	Gap
(Example) Pre-positioning of relief items			
- Seed distribution	$150000	$40000	$110000

Stock inventory

This will also be helpful for budget preparation and resource mobilization. The table can be completed for each type of hazard considering that requirements for different disasters are not the same.

Type of stock needed	Existing stock quantity	Estimate number of people to be targeted	Stock Gaps	Comments
e.g. Aqua tabs				
Tents				

5. WASH Response Plan

Sector Lead: WASH **Contact person:** Salia Kamara**; Email:** skamara1983@gmail.com

Co-lead: NPHIL contact person: Wataku Kortimai email: wkortimai62@yahoo.co.uk

Sector Members:

- Ministry of Public Works
- Liberia Water and Sewer Cooperation
- Environmental Protection Agency
- International Non-Governmental Organizations (i.e. WHO, USCDC, UNICEF, UNDP, WHH, AAH, USAID, Water Aid, Concern Worldwide, etc.
- Local Non-Governmental Organizations

The WASH sector's primary focus will be to meet immediate needs of affected people depending on assessment reports. Major areas of intervention will include provision of safe drinking water; sanitation and hygiene promotion; solid and liquid waste management and vector control.

Priority Preparedness Activity, indicator, target and time frame

Priority preparedness activities	Indicator	Target	Time Frame
Coastal Erosion i) Identify actors in WASH sector and map out capacities and resources available ii) Conduct market surveys to identify vendors and service providers iii) Develop tools/checklist for needs assessments iv) Develop Sops for distributions v) Procure, preposition NFIs	Matrix of available resources and Sops on activating support Assessment report Tools/checklists developed MT/pieces of NFIs in stock	25 000 affected people	2nd quarter 2022
Floods: i) Identify actors in WASH sector and map out capacities and resources available ii) Conduct market surveys to identify vendors and service providers iii) Develop tools/checklist for needs assessments iv) Develop Sops for distributions v) Procure, preposition NFIs	Matrix of available resources and Sops on activating support Assessment report Tools/checklists developed MT/pieces of NFIs in stock	50 actors registered At least 1 report produced 1 tool 1000 MT?	2nd quarter 2022
Epidemics i) Identify actors in WASH sector and map out capacities and resources available ii) Conduct market surveys to identify vendors and service providers iii) Develop tools/checklist for needs assessments iv) Develop and distribute Sops to guide response v) Procure and distribute WASH supplies	Matrix of available resources and Sops on activating support Assessment report Tools/checklists developed MT/pieces of WASH supplies in stock	50 actors registered At least 1 report produced 1 tool 1000 MT?	2nd quarter 2022

Fire i) Identify actors in WASH sector and map out capacities and resources available ii) Conduct market surveys to identify WASH supplies vendors and service providers iii) Sign MoU with WASH supplies vendors iv) Develop tools/checklist for needs assessments v) Develop SoPs for distributions vi) Procure and distribute WASH supplies	Partner Matrix of available resources and Sops on activating support Assessment report Tools/checklists developed MT/pieces of NFIs in stock	30-50 actors registered At least 1 report produced 1 tool 1000 MT	2nd quarter 2022
Windstorm: **i)**Identify actors in WASH sector and map out capacities and resources available ii)Conduct market surveys to identify WASH supplies vendors and service providers iii)Sign MoU with WASH supplies vendors iv)Develop tools/checklist for needs assessments v)Develop Sops for distributions vi)Procure, preposition NFIs	Partner Matrix of available resources and Sops on activating support Assessment report Tools/checklists developed MT/pieces of NFIs in stock	10-20 actors registered At least 1 report produced 1 tool 1000 MT?	2nd and 3rd quarter 2022
Conflict I. Identify actors in WASH sector and map out capacities and resources available II. Conduct market surveys to identify vendors and service providers III. Develop tools/checklist for needs assessments IV. Develop SoPs for distributions V. Procure, preposition NFIs	Matrix of available resources and Sops on activating support Assessment report Tools/checklists developed MT/pieces of NFIs in stock	50 actors registered At least 1 report produced 1 tool 1000 MT?	All quarters 2022

Early Warning Information and Monitoring Responsibility

Early Warning information	Monitoring Responsibility
Coastal Erosion i) No of homes/property destroyed ii) Rise in the sea level	Min of Transport NDMA, EPA, Community Groups
Floods i) Limited sources or access to clean water ii) Open defecation	WASH commission, NPHL,MPW

Windstorm I. Population displacement with overcrowded camps II. Limited sources or access to clean water III. Open defecation	WASH Commission, NPHIL, MPW
Epidemics i) Increase in diarrheal diseases above recommended threshold ii) No auto clean water	MoH,NPHIL
Fire i) Destruction to water supply	Fire Service
Conflict I. Population Dissatisfaction of inadequate WASH services	WASH, MOJ/ Joint Security

Priority Response Activities, Indicators and Target

Priority Response Activities	Indictor	Target
Coastal Erosion i) Distribute aqua tabs ii) Trucking of safe water to displaced populations iii) Dig/provide pit latrines iv) Promote hygiene and health educational messages	Number of people supported Number of latrines constructed Number of people reached with hygiene promotion messages	25,000 people Number of latrines 50,000 people
Activation threshold ● >100 families displaced in camp setting		
Floods i) Distribute aqua tabs ii) Trucking of safe drinking water to displaced populations iii) Dig/provide pit latrines iv) Promote hygiene and health educational messages and health and hygiene kits (hand washing soap, bucket) and dignity kits v) Provide vector and pest control items vi) Distribute drinking water storage containers (Jerry cans, ect)	Number of people supported Number of latrines constructed Number of people reached with hygiene promotion messages Number of water points provided Number of wells and water points chlorinated Number of WASH kit issued	0-50 units of 8 cubicle latrines 10000 WASH kits 100 wells and hand pumps
Activation threshold ● >200 families displaced and in camp setting		
Windstorm **i)**Distribute aqua tabs ii)Trucking of safe drinking water to displaced populations iii)Dig/provide pit latrines iv)Promote hygiene and health educational messages and kits (hand washing soap, bucket) v)Provide vector and pest control items	Number of people supported Number of latrines constructed Number of people reached with hygiene promotion messages	500-1000 people 5-20 units of 8 cubicle latrines 100 WASH kits

vi)Conduct mass chlorination of wells and hand pumps vii)Distribute drinking water storage containers (jerry cans etc)	Number of water points provided Number of wells and water points chlorinated Number of WASH kit issued	10 wells and hand pumps
Activation threshold ● >20 families displaced and in camp setting		
Epidemics i) Distribute aqua tabs ii) Trucking of safe water to affected populations iii) Dig/provide pit latrines iv) Promote hygiene and health educational messages	Number of people supported Number of latrines constructed Number of people reached with hygiene promotion messages	50,000 people 10-50 units of 8 cubicle latrines 200,000 people
Activation threshold confirmed case of cholera above recommended threshold		
Fire i) Distribute aqua tabs ii) Trucking of safe water to affected populations iii) Dig/provide pit latrines iv) Promote hygiene and health educational messages	Number of people supported Number of latrines constructed Number of people reached with hygiene promotion messages	500 families Xxx latrines 50,000 people
Activation threshold Burning of homes/properties		
Conflict I. Plan and distribute safe drinking water, IPC materials, toilet facilities to communities and healthcare institutions II. Joint security planning meetings	Numbers of IPC materials distributed to communities and healthcare institutions Minutes of joint security meetings	population affected

Note that the activation threshold is for the sector and this will help determine national threshold for plan activation.

Sector Budget

Actions	Cost	Available	Gap
(Example) Pre-positioning of relief items			
- Seed distribution	$150000	$40000	$110000

Stock inventory (Use template below)

This will also be helpful for budget preparation and resource mobilization. The table can be completed for each type of hazard considering that requirements for different disasters are not the same.

Type of stock needed	Existing stock quantity	Estimate number of people to be targeted	Stock Gaps	Comments
e.g. Aqua tabs				
Tents				

6. Education Response Plan

Sector Lead:…….. Sector contact person:……., email……

Co-lead:……contact person……email…….

Sector Members:

The main objective of the Education sector is to ensure continuous learning of the affected children during an emergency

Priority Preparedness Activity, indicator, target and time frame

Priority preparedness activities	Indicator	Target	Time Frame
Coastal Erosion i) Conduct assessments to identify actors in the sector ii) Map capacities and resources available iii) Develop tools/checklist for needs assessments iv) Procure, preposition NFIs (school in the box)	Number of actors identified Number Matrix of resources Checklist determined Number of students/school assisted	At least 10-15 actors mapped 1 based on MIRA 50-100 schools	2nd quarters 2022
Floods: i) Conduct assessments to identify actors in the sector ii) Map capacities and resources available iii) Develop tools/checklist for needs assessments iv) Procure, preposition NFIs (school in the box) v) Identify learning spaces (structures to be used)	Number of actors identified Matrix of resources Checklist determined Number of students/school assisted package	At least 10-15 actors mapped 1 based on MIRA 50-100 schools	2nd and 3rdquarters 2022

	Number of learning spaces identified in flood prone areas		
Windstorm: **i)**Conduct assessments to identify actors in the sector ii)Map capacities and resources available iii)Develop tools/checklist for needs assessments iv)Procure, preposition NFIs (school in the box) v)Identify temporary learning spaces (structures to be used)	Number of actors identified Matrix of resources Checklist determined Number of students/school assisted package Number of temporary learning spaces identified in flood prone areas	At least 50 actors mapped 1 based on MIRA 5-10 schools	2nd and 3rdquarter 2022
Epidemics i) Conduct assessments to identify actors in the sector ii) Map capacities and resources available iii) Develop tools/checklist for needs assessments iv) Procure, preposition WASH supplies (school in the box)	Number of actors identified Matrix of resources Checklist determined Number of students/school assisted	At least 50 actors mapped 1 based on MIRA 500 schools	2nd quarter 2022
Fire i) Conduct assessments to identify actors in the sector ii) Map capacities and resources available iii) Develop tools/checklist for needs assessments iv) Procure, preposition WASH supplies (school in the box)	Number of actors identified Matrix of resources Checklist determined Number of students/school assisted	At least 50 actors mapped 1 based on MIRA 500 schools	2nd quarter 2022
Conflict **i)**Conduct assessments to identify actors in the sector ii)Map capacities and resources available iii)Develop tools/checklist for needs assessments **iv)** Procure, preposition NFIs (school in the box)	Number of actors identified Matrix of resources Checklist determined Number of students/school assisted	At least 50 actors mapped 1 based on MIRA 500 schools	All quarters 2022

Early Warning Information and Monitoring Responsibility

Early Warning information	Monitoring Responsibility
Coastal Erosion i) Number of schools affected	Min of Transport NDMA, EPA, Community Groups
Floods i) Number of students displaced ii) Number of schools destroyed	NDMA, MOE
Windstorm I. Number of students displaced II. Number of schools destroyed	NDMA, MOE
Epidemics i) Number of schools closed	MOH,NPHIL
Fire i) Number of schools destroyed in fire	Fire Service
Conflict I. Dissatisfaction among teachers/ students in public schools II. Plan protest among teachers/ students in public schools	MOE/ MOJ

Priority Response Activities, Indicators and Target

Priority Response Activities	Indictor	Target
Coastal erosion i) Distribute school in box to affected schools ii) Conduct rapid needs assessment iii) Set up temporary learning spaces	Number of students/schools assisted Mission report Number of temporary learning spaces constructed	200 schools 1 10
Activation threshold 10 schools destroyed		
Floods i) Distribute school in box to affected schools ii) Conduct rapid needs assessment iii) Set up temporary learning spaces iv) Distribute uniforms and learning materials to affected students	Number of students/schools assisted Mission report Number of temporary learning spaces constructed Number of students issued learning materials and uniforms	50-100 schools 1 report 100 spaces
Activation threshold ● Less than>10 schools destroyed Less than>5000 people displaced		

Windstorm i)Distribute school in box to affected schools ii)Conduct rapid needs assessment iii)Set up temporary learning spaces iv)Distribute uniforms and learning materials to affected students	Number of students/schools assisted Mission report Number of temporary learning spaces constructed Number of students issued learning materials and uniforms	50-100 schools 1 report 100 spaces
Activation threshold ● Less than >5 schools destroyed Less than>5000 people displaced		
Epidemics i) Distribute school in box to students in affected schools ii) Conduct rapid needs assessment iii) Set up temporary learning spaces iv) Hire teachers and care givers	Number of students/schools assisted Mission report Number of spaces constructed Number of teachers hired	500 students 1 mission 150 spaces 1000
Activation threshold >100 schools closed		
Fire i) Distribute school in box to affected schools ii) Conduct rapid needs assessment iii) Set up temporary learning spaces	Number of students/schools assisted Mission report Number of temporary learning spaces constructed	100 schools 1 report 50 spaces
Activation threshold Less than >50 schools burned		
Conflict I. Dialogue / negotiation among teachers and students in public schools/ universities II. Plan Joint security meetings	Number of dialogues and negotiation held Minutes meeting	All public schools/ universities
Activation threshold Less than >50 schools closed		

Note that the activation threshold is for the sector and this will help determine national threshold for plan activation.

Sector Budget

Actions	Cost	Available	Gap
(Example) Pre-positioning of relief items			
- Seed distribution	$150000	$40000	$110000

Stock inventory(Use template below)

This will also be helpful for budget preparation and resource mobilization. The table can be completed for each type of hazard considering that requirements for different disasters are not the same

Type of stock needed	Existing stock quantity	Estimate number of people to be targeted	Stock Gaps	Comments
e.g. Aqua tabs				
Tents				

7. Protection Response Plan

Sector Lead: …….. Sector contact person:……., email……

Co-lead: ……contact person……email…….

Sector Members:

The overall objective of the Protection sector is to ensure protection of rights guaranteed by the International Human Rights Law, International Human Laws and National Laws during an emergency; in particular for the most vulnerable in the community i.e. women, children, minorities, disable etc. The aim is to protect affected populations from risks of violence, exploitation, abuse, discrimination and neglect.

Priority Preparedness Activity, Indicators, Target and Time Frame

Priority preparedness activities	Indicator	Target	Time Frame
Coastal Erosion i) Conduct assessments to identify actors in protection sector ii) Map capacities and resources available iii) Develop tools/checklist for needs assessments iv) Develop SoPs for reporting and referral mechanisms in cases of GBV v) Procure, preposition NFIs	Number of actors registered Matrix of capacities Available checklist Copy of SoP on reporting and referrals MTs/pieces of NFIs	20 1 matrix Agreed template 1 agreed SoP 500 MT	2nd quarter 2022
Floods: i) Conduct assessments to identify actors in protection sector ii) Map capacities and resources available iii) Develop tools/checklist for needs assessments iv) Develop SoPs for reporting and referral mechanisms in cases of GBV v) Procure, preposition NFIs vi) Provide SGBV support services (reporting and counseling, treatment, etc)	Number actors registered Matrix of capacities Available checklist Copy of SoP on reporting and referrals MTs/pieces of NFIs Number of SGBV managed (counseled)	10-15 actors 1 matrix Agreed template 1 agreed SoP 100-200 SGBV kits and NFIs	2nd and 3rd quarter 2022

Windstorm: **i)**Conduct assessments to identify actors in protection sector ii)Map capacities and resources available iii)Develop tools/checklist for needs assessments iv)Develop SoPs for reporting and referral mechanisms in cases of GBV v)Procure, preposition SGBV NFIs	Number actors registered Matrix of capacities Available checklist Copy of SoP on reporting and referrals MTs/pieces of NFIs	5-10 actors 1 matrix Agreed template 1 agreed SoP 10-20 SGBV Kits and NFIs	2nd and 3rd quarter 2022
Epidemics i) Conduct assessments to identify actors in protection sector ii) Map capacities and resources available iii) Develop tools/checklist for needs assessments iv) Develop SoPs for reporting and referral mechanisms in cases of GBV v) Procure, preposition NFIs	Number of actors registered Matrix of capacities Available checklist Copy of SoP on reporting and referrals MTs/pieces of NFIs	50 1 matrix Agreed template 1 agreed SoP 500 MT	2nd quarter 2022
Fire i) Conduct assessments to identify actors in protection sector ii) Map capacities and resources available iii) Develop tools/checklist for needs assessments iv) Develop SoPs for reporting and referral mechanisms in cases of GBV v) Procure, preposition WASH supplies	Number actors registered Matrix of capacities Available checklist Copy of SoP on reporting and referrals MTs/pieces of NFIs	20 1 matrix Agreed template 1 agreed SoP 500 MT	2nd quarter 2022
Conflict **i)**Conduct assessments to identify actors in protection sector ii)Map capacities and resources available iii)Develop tools/checklist for needs assessments iv)Develop SoPs for reporting and referral mechanisms in cases of GBV v)Ensure the implementation of legal international instrument on Human Rights and Humanitarian Law vi)Conduct community policing engagements	Number of people supported Report of the assessment Number of cases addressed Number of community policing engagements conducted Number of legal instruments implemented	50,000 population in all sectors	All quarters of 202**2**

Early Warning Information and Monitoring Responsibility

Early Warning information	Monitoring Responsibility
Coastal Erosion i) Number of homes/property destroyed ii) Rise in sea level	Min of Transport NDMA, EPA, Community Groups
Floods i) Number of people displaced in camp settings	NDMA, MGCSP, MOJ, MOH
Windstorm I. Number of people displaced in camp settings	NDMA, MGCSP, MOJ, MOH
Epidemics i) Increase in diarrheal diseases above recommended threshold	MoH
Fire i) Reports of people denied access to legal services	Legal Services, MoGFA
Conflict **i)**Increase in community crimes ii)Arbitrary Killings/ Auspicious Deaths iii)Increasing SGBV/ Rape cases iv)Proliferation of Ghettoes	MOJ/ Joint Security / MOGSP/ MOH

Priority Response Activities, Indicators and Target

Priority Response Activities	Indictor	Target
Coastal Erosion i) Distribute NFI (dignity kits, pep smear etc.) ii) Conduct rapid needs assessment iii) Set up reporting and referral mechanisms	Number of people supported Report of the assessment Number of cases addressed	5,000 1 1000
Activation threshold ● Less than>100 people affected ● Less than>50 houses destroyed		
Floods i) Distribute NFI (dignity kits, pep smear etc.) ii) Conduct rapid needs assessment iii) Set up reporting and referral mechanisms iv) Provide Psychosocial support including child friendly spaces v) Family tracing and reunification vi) provide SGBV support services (reporting and counseling, treatment etc)	Number of people supported Report of the assessment Number of cases addressed Number of people supported Number of families reunited Number of SGBV managed (counseled)	10,000 1 1000 5,000 50
Activation threshold ● Less than> 1000 displaced		

Windstorm i) Distribute NFI (dignity kits, pep smear etc.) ii)Conduct rapid needs assessment iii)Set up reporting and referral mechanisms iv)Provide Psychosocial support including child friendly spaces v)Family tracing and reunification vi)Provide SGBV support services (reporting and counseling, treatment etc)	Number of people supported Report of the assessment Number of cases addressed Number of people supported Number of families reunited Number of SGBV managed (counseled)	 1,000 1 10-100 50 5-10
Epidemics i) Distribute NFI (dignity kits, pep smear etc.) ii) Conduct rapid needs assessment i) Set up reporting and referral mechanisms ii) Provide psychosocial support	Number of people supported Report of the assessment Number of cases addressed Number of people supported	10,000 1 1000 5,000
Activation threshold ● Less than>2 confirmed case(s) of GBV		
Fire i) Conduct rapid needs assessment ii) Set up reporting and referral mechanisms iii) Provide psychosocial support	Report of the assessment Number of cases addressed Number of people supported	10,000 1 1000
Activation threshold ● At least 10 people reporting discriminations		
Conflict i) Increase Intelligence gathering/ community policing engagements ii)Awareness and sensitization activities	Number of intelligence gathered and arrested Number of community participants in awareness and sensitization Minutes of townhall meetings held with communities	50,000 community dwellers
Activation threshold ● At least 10 people reporting discriminations		

Note that the activation threshold is for the sector and this will help determine national threshold for plan activation.

Sector Budget

Actions	Cost	Available	Gap
(Example) Pre-positioning of relief items			
- Seed distribution	$150000	$40000	$110000

Stock inventory

This will also be helpful for budget preparation and resource mobilization. The table can be completed for each type of hazard considering that requirements for different disasters are not the same.

Table 16. 5

Type of stock needed	Existing stock quantity	Estimate number of people to be targeted	Stock Gaps	Comments
e.g. Aqua tabs				
Tents				

Annex 2: Contact list

Name	Organization	Sector	Sector Function (*Sector Lead, Co-Lead)*	Telephone	Email

Annex 3: Need Assessment Template

Rapid Assessment: https://ee.humanitarianresponse.info/x/YHqI

Access to KOBO: (http://www.kobotoolbox.org)

Annex 4: Minimum reports to be produced within 14 days of an emergency

Four main products are produced within the first two weeks of an emergency. All four complement each other and have the purpose of ensuring that regular up-to-date information is made available to decision makers timely. Please see guidance/templates for each of the four reports for more information.

Product	Time of Issuance
1. Flash update	Hours after an emergency. It is discontinued once a sitrep is issued
2. Situational Analysis	Within seventy-two (72) hours of an emergency based on secondary data and available primary data. It determines whether an assessment is required and if so where it needs to be done
3. Situation Report (Sitrep)	It is the main report of an emergency. It should provide an update on the current needs, response and gaps in a given emergency. A Situation Report should primarily be issued during the acute phase of an emergency (complex emergency or natural disaster), i.e. at the onset of a new crisis or deterioration of an ongoing emergency. The issuance of a sitrep should be based on certain set triggers as set by a country e.g. number of affected people in relation to the total population in an area, number of dead or injured
4. Assessment Report	Within fourteen (14) days of an emergency. A sitrep will be issued regularly, typically once a day for a big emergency before the report comes out to provide planning information for stakeholders

Annex 5: Contributor and Editor

The core team involved in the authoring and updating of the document include:

1. Hon. Henry O. Williams…….…… Executive Director, **NDMA**
2. Mr. Augustine Kollie…… …. DRM Coordinator, RR&L, **NDMA**
3. Mr. Jonathan A. Wordsworth…..……DRM Coordinator, R&EW, **NDMA**
4. Dr. Ralph W. Jetoh……. Deputy Director, DIDE/**NPHIL**
5. Mr. Advertus Nyan Mianah…….... Surveillance Coordinator, DIDE/**NPHIL**
6. Mr. Nathaniel K. Dovillie……..….. EPR Coordinator, DIDE, **NPHIL**
7. Mr. Emmanuel Dwalu…… .. Epidemiologist, EPR/DIDE, **NPHIL**
8. Mr. Alvan Coker, EPR Officer……..……... EPR/DIDE, **NPHIL**
9. Mr. Amos F. Gborie, Director…..…… DEOH, **NPHIL**
10. Hon. George P. Jacobs……..…. Assistant. Minister for Planning, **MoH**
11. Dr. Anderson Flomo, Jr……..…… Quality Management Unit, **MoH**
12. Hon. Leelia R. Andrews……..... Deputy Min. Technical Services, **MoA**
13. Mr. Eddie MiawayFarngalo……..……. Director, CV Epi Unit, **MoA**
14. Mr. Roland Varkpeh, Director……..…….. Animal Production Unit, **MoA**
15. Mr. Steve N. Davis……..…….. Wildlife Licenses & Permit Officer, **FDA**
16. Mr. Levi Z. Piah……..… National Focal Point, Ramsar Convention**, EPA**
17. Mr. Zizi A.S. Kpadeh….. Director, Aquaculture & Inland Fisheries, **NAAFA**
18. Mr. Sonpon B. Sieh…… … One Health Coordinator, **MoH**
19. Major Joseph B. N Kowo Jr, Commanding Officer……**AFL/MoD**
20. Commissioner Samuel G. Ford, Assist. Commissioner……**CSS/LNP**
21. Mr. Augustine Koryon, Technical Advisor……..**...GIZ/RPPP/HSSEP**
22. Mrs. Mercy D. Blyden, Technical Advisor……**GIZ/HSSEP**
23. Mr. Abraham J. Paasewe……. Assistant Coordinator, RR&L, **NDMA**
24. Ms. Makenma Jabateh,Adm. Assistant…… Department of Operation, **NDMA**

Fairnoh Theo Gbilah, Consultant-**GIZ**...Edited and Formatted the Multi-Hazards Contingency Plan

Annex 6: Sources/References

- National Disaster Risk Management Policy of Liberia 2012, NDMA
- Multi-Hazard Contingency Plan 2018, NDMA
- Vulnerability Risk Assessment and Mapping exercise (VRAM) June 2021, NPHIL
- National Disaster Risk Reduction and Resilience Strategy 2020-2030, NDMA
- National Disaster Management Action Plan for Disaster Risk Management in Liberia
- Cadre Harmonizes assessments conducted in October 2017
- Global Human Development Index scale 2021
- Notre Dame Global Adaptation Initiative on Climate Change vulnerability 2021
- NDRC(Now NDMA) and WFP Baseline Survey on Disaster Risk Vulnerability and Capacity 2013
- Index for Risk Management (INFORM) tool
- United Nations Office for Disaster Risks Reduction (UNDRR)