REPUBLIC OF RWANDA



MINISTRY OF DISASTER MANAGEMENT AND REFUGEE AFFAIRS (MIDIMAR)

National Disaster Risk Management Plan

Published by

Ministry of Disaster Management and Refugee Affairs

PO Box 4386 Kigali/Rwanda <u>www.midimar.gov.rw</u> Enquiries: <u>info@midimar.gov.rw</u>

September 2013

Foreword

Rwanda's disaster profile is dominated by droughts, fire, floods, earthquakes, landslides, heavy rain with strong winds, lightning and thunderstorms, traffic accidents, diseases and epidemics that disrupt people's lives and livelihoods, destroy the infrastructure and interrupt economic activities and retard development.

Disaster Risk Management encompasses a full continuum of aspects including preparedness, Disaster Risk Reduction, mitigation, prevention, relief, recovery and reconstruction. The National Disaster Management Policy (NDMP) specifies the tasks to be performed by organisations/institutions and individuals to deal with identified disaster types. These tasks cover all the cycles of disaster management with a specific focus on Disaster Risk Reduction, Relief and Recovery.

This plan aims at strengthening Disaster Risk Management in Rwanda, in order to preserve life and to minimize suffering by providing sufficient and timely early warning and relevant information to the population on potential hazards that may result in disasters. Disaster Management ultimate goal is to alleviate suffering by providing timely and appropriate responses for disaster affected populations. The Ministry of Disaster Management and Refugee Affairs (MIDIMAR) will coordinate all Disaster Management initiatives within a unified policy framework in a proactive manner at national, district and sector levels.

The preparation of this plan has benefited from the invaluable contribution of experts from various ministries, the United Nations, Red Cross movement and other International Organisations.

It is hoped that the full implementation of this Plan will contribute to the development of a strong system toward effective disaster preparedness, response, recovery and reconstruction, as well as contribute to poverty reduction and sustainable development particularly among the most vulnerable communities.

We therefore encourage all partners in Disaster Risk Management and Disaster Risk Reduction to go through this plan and use it according to different fields of intervention and to specific functions in disaster management so that together we manage to build a disaster resilient country.

MUKANTABANA Séraphine Minister of Disaster Management and Refugee Affairs /MIDIMAR

Contents

Forewor	Forewordiii		
Acronyms viii			
Terminologyxi			
Chapter	Chapter1: Introduction		
1.1.	Structure of the plan2		
1.2.	Relationship with sub-Plans and contingency plans 3		
1.3.	Revision of the plan 4		
1.4.	Key objectives and overall goals 5		
A.Dis	aster risk management goals5		
B. Ma	ain objectives 5		
1.5.	Development planning instrument provisions 6		
1.6.	Guiding principles 8		
1.7.	Code of conduct 9		
Chapter	2: Main hazards in Rwanda10		
2.1.	Introduction 10		
2.2.	Indicative national risk profile per hazard 11		
A. Ste	orms and heavy rains 13		
	oods 13		
C. La	ndslide and mudslide 15		
	lcanic activity 16		
	ought 17		
	rthquake		
	res		
H. Human epidemic 20			
I. Crops and animal epidemics			
J. Terrorism			
L. Mass movement of population 22			
Chapter 3: Overall Management and Coordination			
	3.1. Institutional basis of this plan 24		
	3.2. Organizational structure 25		
3.3. Sł	ared responsibilities for disaster management		

A. Focal points for disaster management	
B. Line ministries and institutions with primary responsibility specific hazard	
3.4. Coordination Mechanisms	
3.4.1. Internal coordination (amongst government actors)	
3.4.2. External co-ordination (within international partners)	
3.4.3. Assessment teams 3.4.4. Cluster coordination	
3.4.5. Cross-cutting issues working groups	
A. Mainstreaming gender	
B. Human rights	
C. Child Protection in emergencies	
4.5. Monitoring and evaluation	38
A. Key areas of focus for monitoring and evaluation	
B. Elements to consider during monitoring and evaluation	40
Chapter 4: Disaster Risk Reduction	41
4.1. Hyogo Framework for Action	41
4.2. Programme of action for the implementation of the	Africa
regional strategy for DRR	42
4.3. Reduction of risks	44
A. Risk assessment and analysis	44
B. Risk management	
-	
Early warning and communication	50
Early warning and communication 4.4. Capacity building and public awareness	50 52
Early warning and communication 4.4. Capacity building and public awareness 4.4.1. Capacity building	50 52 52
Early warning and communication 4.4. Capacity building and public awareness 4.4.1. Capacity building A. Trainings	50 52 52
Early warning and communication 4.4. Capacity building and public awareness 4.4.1. Capacity building A. Trainings B. Equipment	
Early warning and communication 4.4. Capacity building and public awareness 4.4.1. Capacity building A. Trainings B. Equipment C. Resources	
Early warning and communication 4.4. Capacity building and public awareness 4.4.1. Capacity building A. Trainings B. Equipment C. Resources 4.4.2. Public awareness	
Early warning and communication 4.4. Capacity building and public awareness 4.4.1. Capacity building A. Trainings B. Equipment C. Resources 4.4.2. Public awareness Chapter 5: Preparedness and Response	
Early warning and communication 4.4. Capacity building and public awareness 4.4.1. Capacity building A. Trainings B. Equipment C. Resources 4.4.2. Public awareness Chapter 5: Preparedness and Response 5.1. PREPAREDNESS	50 52 52 53 54 55 55 55 55 55 59 59
Early warning and communication 4.4. Capacity building and public awareness 4.4.1. Capacity building A. Trainings B. Equipment C. Resources 4.4.2. Public awareness Chapter 5: Preparedness and Response	
Early warning and communication 4.4. Capacity building and public awareness 4.4.1. Capacity building A. Trainings B. Equipment C. Resources 4.4.2. Public awareness Chapter 5: Preparedness and Response 5.1. PREPAREDNESS 5.1.1. Contingency planning for governmental institutions	

5.1.4. Simulation exercises 6 5.2. RESPONSE. 6 5.2.1. Emergency Organisation. 6 5.2.2. Emergency coordination 7 5.2.3. Response mechanisms. 7 Chapter 6: Recovery and Reconstruction 9 6.1. Post Disaster Needs Assessment (PDNA). 9 6.2. Areas of intervention for recovery and reconstruction 9 6.2.1 Shelter 6 6.2.2. Infrastructure 9 6.2.3. Education 9 6.2.4. Child protection: 9 6.2.5. Health 9 6.2.6. Agriculture (livelihood) 9 6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10 6.3.3. The humanitarian community 10	Local level	
5.2.1. Emergency Organisation 6 5.2.2. Emergency coordination 7 5.2.3. Response mechanisms 7 Chapter 6: Recovery and Reconstruction 9 6.1. Post Disaster Needs Assessment (PDNA) 9 6.2. Areas of intervention for recovery and reconstruction 9 6.2.1 Shelter 9 6.2.2. Infrastructure 9 6.2.3. Education 9 6.2.4. Child protection: 9 6.2.5. Health 9 6.2.6. Agriculture (livelihood) 9 6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	5.1.4. Simulation exercises	68
5.2.2. Emergency coordination 7 5.2.3. Response me chanisms 7 Chapter 6: Recovery and Reconstruction 9 6.1. Post Disaster Needs Assessment (PDNA) 9 6.2. Areas of intervention for recovery and reconstruction 9 6.2.1 Shelter 9 6.2.2. Infrastructure 9 6.2.3. Education 9 6.2.4. Child protection: 9 6.2.5. Health 9 6.2.6. Agriculture (livelihood) 9 6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	5.2. RESPONSE	69
5.2.3. Response mechanisms	5.2.1. Emergency Organisation	69
Chapter 6: Recovery and Reconstruction 9 6.1. Post Disaster Needs Assessment (PDNA)	5.2.2. Emergency coordination	70
6.1. Post Disaster Needs Assessment (PDNA)	5.2.3. Response mechanisms	71
6.2. Areas of intervention for recovery and reconstruction 9 6.2.1 Shelter 9 6.2.2. Infrastructure 9 6.2.3. Education 9 6.2.4. Child protection: 9 6.2.5. Health 9 6.2.6. Agriculture (livelihood) 9 6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	Chapter 6: Recovery and Reconstruction	92
6.2.1 Shelter. 9 6.2.2. Infrastructure. 9 6.2.3. Education 9 6.2.4. Child protection: 9 6.2.5. Health 9 6.2.6. Agriculture (livelihood) 9 6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	6.1. Post Disaster Needs Assessment (PDNA)	93
6.2.2. Infrastructure 9 6.2.3. Education 9 6.2.4. Child protection: 9 6.2.5. Health 9 6.2.6. Agriculture (livelihood) 9 6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	6.2. Areas of intervention for recovery and reconstruction	94
6.2.3. Education 2 6.2.4. Child protection: 2 6.2.5. Health 2 6.2.6. Agriculture (livelihood) 2 6.2.7. Environmental and water resources management 2 6.3. Stakeholder's roles and responsibilities in recovery and 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	6.2.1 Shelter	94
6.2.4. Child protection: 9 6.2.5. Health 9 6.2.6. Agriculture (livelihood) 9 6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and 9 reconstruction process 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	6.2.2. Infrastructure	96
6.2.5. Health 9 6.2.6. Agriculture (livelihood) 9 6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and 9 reconstruction process 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	6.2.3. Education	96
6.2.6. Agriculture (livelihood) 9 6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	6.2.4. Child protection:	97
6.2.7. Environmental and water resources management 9 6.3. Stakeholder's roles and responsibilities in recovery and reconstruction process 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	6.2.5. Health	97
6.3. Stakeholder's roles and responsibilities in recovery and reconstruction process 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	6.2.6. Agriculture (livelihood)	98
reconstruction process 10 6.3.1. Local communities 10 6.3.2. Government 10 6.3.3. The humanitarian community 10	6.2.7. Environmental and water resources management	99
6.3.1. Local communities106.3.2. Government106.3.3. The humanitarian community10	6.3. Stakeholder's roles and responsibilities in recovery and	d
6.3.2. Government106.3.3. The humanitarian community10	reconstruction process	100
6.3.3. The humanitarian community10	6.3.1. Local communities	100
	6.3.2. Government	100
REFERENCES 10	6.3.3. The humanitarian community	101
	REFERENCES	103

National Disaster Risk Management Plan MIDIMAR 2013

Acronyms

AU	African Union
CS	Civil Society
DCS	Disaster Communication System
DDMC	District Disaster Management Committees
DIMS	Disaster Information Management System
DM	Disaster Management
DRR	Disaster Risk Reduction
DG	Director General
DGIE	Directorate General of Immigration and Emigration
NPDRR	National Platform for Disaster Risk Reduction
DRA	Disaster Risk Analysis
EAC	East African Community
EDPRS	Economic Development and Poverty Reduction
EIA EWS FAO FRT GBV GIEWS GIS GOR HEWS HFA ICT	Strategy Environmental impact assessment Early Warning System Food and Agriculture Organisation First Responders Teams Gender Baus Violence Global Information and Early Warning Systems Geographical Information Systems Government of Rwanda Humanitarian Early Warning Service Hyogo Framework for Action Information and Communication Technologies
IDPs	Internal Displaced Persons
IASC	Inter Agency standing Committee
IEWP	International Early Warning Programme
INGOs	International Non-Governmental Organisations
IO	International Organisations
ISAR	Institut des Siences Agronomiques du Rwanda
IT	Information and Technology
JIMC	Joint Interventions Management Committee

MDG MIDIMAR	Millennium Development Goals Ministry of Disaster Management and Refugee Affairs
MIGEPROF	Ministry of Gender and Family Promotion
MINADEF	Ministry of Defence
MINAFFET	Ministry of Foreign Affairs and Cooperation
MINAGRI	Ministry of Agriculture and Animal Resources
MINALOC	Ministry of Local Government
MINECOFIN	Ministry of Finance and Economic Planning
MINEDUC	Ministry of Education
MYICT	Ministry of Youth and Information Communication
	and Technology
MINJUST	Ministry of Justice
MININTER	Ministry of Internal Security
MINISANTE	Ministry of Health
MININFRA	Ministry of Infrastructure
M&E	Monitoring and Evaluation
NDMP	National Disaster Management Policy
NDMEC	National Disaster Management Executive
	Committee
NDRMP	National Disaster Risk Management Plan
NGO	Non-Governmental Organisations
PDA	Personal Digital Assistant
PDNA	Post Disaster Needs Assessment
PS	Private Sector
PSCBS	Public Sector Capacity Building Secretariat
RAB	Rwanda Agriculture Board
RIAM	Rwanda Institute of Administration and
DDC	Management Rwanda Bureau of Standards
RBS RDB	
	Rwanda Development Board
REMA RDF	Rwanda Environmental Management Agency Rwanda Defence Forces
RMA	
RNP	Rwanda Meteorology Agency Rwanda National Police

RNRA	Rwanda Natural Resources Authority				
RRC	Rwanda Red Cross				
SDMC	Sector Disaster Management Committee				
UN	United Nations				
UNDAC	United Nations Disaster Assessment and				
	Coordination				
UNDP	United Nations Development Programme				
UNEP	United Nations Environment Programme				
UNFPA	United Nations Population Fund				
UNHABITAT	United Nations Human Settlements Programme				
UNISDR	United Nations International Strategy for Disaster				
	Reduction				
UNOCHA	United Nations Office for the Coordination of				
	Humanitarian Affairs				
WFP	World Food Programme				
WHO	World Health Organization				
WMO	World Meteorological Organization				

Terminology¹

The below definitions will serve as a reference for all MIDIMAR publications. Rwandan government actors and humanitarian actors working in Rwanda are invited to use the below definition in all their publications.

Acceptable risk: The level of potential losses that a society or community considers acceptable given existing social, economic, political, cultural, technical and environmental conditions.

Asylum seeker²: Any person who is seeking for refugee status in Rwanda

Biological hazard: Process or phenomenon of organic origin or conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Building codes: A set of ordinances or regulations and associated standards intended to control aspects of the design, construction, materials, alteration and occupancy of structures that are necessary to ensure human safety and welfare, including resistance to collapse and damage.

Capacity: The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals.

Capacity development: The process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions.

¹ All definitions, except if mentioned otherwise, are in line with UNISDR agreed definition: <u>www.unisdr.org/we/inform/terminology</u>

² According to the Law relating to refugee

Climate change³: A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Coping capacity: The ability of people, organizations and systems, to use available skills and resources, to face and manage adverse conditions, emergencies or disasters.

Disaster A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.

Disaster risk management: The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

Disaster risk reduction: The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

The disaster risk reduction framework⁴ is composed of the following fields of action:

- Risk awareness and assessment including hazard analysis and vulnerability/capacity analysis;
- Knowledge development including education, training, research and information;

³ According to the United Nations Framework Convention on Climate Change definition:

http://unfccc.int/files/documentation/text/html/list_search.php?what=ke ywords&val=&valan=a&anf=0&id=10

⁴ See: "Living with Risk: a global review of disaster reduction initiatives", UNISDR, page 23

- Public commitment and institutional frameworks, including organisational, policy, legislation and community action;
- Application of measures including environmental management, land-use and urban planning, protection of critical facilities, application of science and technology, partnership and networking, and financial instruments;
- Early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities.

Early warning: The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

Emergency management: The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps.

Epidemic: An epidemic is the occurrence of more cases of a disease or a health event than expected at that place and at that time in a specific population or community

Evaluation: A selective exercise that attempts to systematically and objectively assess progress towards and the achievement of an outcome. Evaluation is not a one-time event, but an exercise involving assessments of differing scope and depth carried out at several points in time in response to evolving needs for evaluative knowledge and learning during the effort to achieve an outcome. All evaluations—even project evaluations that assess relevance, performance and other criteria—need to be linked to outcomes as opposed to only implementation or immediate outputs.

Exposure: People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses.

Geological hazard: A geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage,

loss of livelihoods and services, social and economic disruption, or environmental damage. Geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Hazard: A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Hydro-meteorological hazards: Process or phenomenon of atmospheric, hydrological or oceanographic nature that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Internally Displaced People: Any person who is forced to run away from his or her home because of war, insurgency, human rights abuse or disasters, but who remains inside his or her country's borders.

Land-use planning: The process undertaken by public authorities to identify, evaluate and decide on different options for the use of land, including consideration of long term economic, social and environmental objectives and the implications for different communities and interest groups, and the subsequent formulation and promulgation of plans that describe the permitted or acceptable uses.

Mitigation: The lessening or limitation of the adverse impacts of hazards and related disasters.

Monitoring⁵: The continuous or periodic review and overseeing by stakeholders of the implementation of an activity, to ensure that input deliveries, work schedules, target outputs are proceeding according to plan.

⁵ UNDP Handbook on Monitoring and Evaluating for Results, UNDP Evaluation Office 2002

Natural hazards: A natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Preparedness: The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

Prevention: The outright avoidance of adverse impacts of hazards and related disasters.

Public awareness: The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards.

Recovery: The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

Resilience: The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

Response: The provisions of emergency services and public assistance during or immediately after a disaster in order to, save

lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

Risk: The combination of the probability of an event and its negative consequences.

Risk assessment: A methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.

Structural/non-structural measures:

- Structural measures: Any physical construction to reduce or avoid possible impacts of hazards, or application of engineering techniques to achieve hazard-resistance and resilience in structures or systems;
- Non-structural measures: Any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts, in particular through policies and laws, public awareness raising, training and education.

Socio-natural hazard: The phenomenon of increased occurrence of certain geophysical and hydro-meteorological hazard events, such as landslides, flooding, land subsidence and drought, that arise from the interaction of natural hazards with overexploited or degraded land and environmental resources.

Technological hazards A hazard originating from technological or industrial conditions, including accidents, dangerous procedures, infrastructure failures or specific human activities, that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Vulnerability: The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

Chapter1: Introduction

The Government of Rwanda is committed to attaining internationally agreed development objectives such as the Millennium Development Goals (MDGs) for poverty reduction and sustainable development. The Government of Rwanda's Economic Development and Poverty Reduction Strategy (EDPRS) and Vision 2020 is geared towards this goal.

Disaster mitigation is one of the central elements to drive Rwanda towards sustainable development. This plan confirms the arrangements for disaster risk management and for preparing for and responding to and recovering from disasters within the Republic of Rwanda.

This National Disaster Risk Management Plan (NDRMP) aims to further develop and strengthen national preparedness, response and recovery capabilities in Rwanda. It will enable the country to better prepare for and respond to natural and man-made disasters as well as human-induced emergencies. It has six parts that have been designed to present theoretical and practical core concepts that can be applied to Rwanda realities. The development of the NDRMP incorporates important concepts of the disaster risk reduction framework developed as espoused by the National Disaster Management Policy.

The plan is built on the premise that it should be a clear, practical and actionable document. The explanation of concepts and theories would be more applicable for education and training material developed for disaster management training and capacity building. This National Disaster Risk Management Plan was prepared by the Ministry of Disaster Management and Refugee Affairs (MIDIMAR) in partnership with its stakeholders from both government institutions (line ministries and agencies) and non-government partners. It outlines the activities that have to be carried out by various stakeholder agencies to ensure effective disaster management in Rwanda.

The NDRMP specifies the tasks to be performed by organizations/institutions and individuals to deal with identified disaster types.

1.1. Structure of the plan

Part One provides a broad overview of the key guiding principles and framework of Disaster Risk Management. It also linked this plan with contingency planning in Rwanda. This part includes the goal and objectives of this plan as well as the guiding principles and the code of conduct for Disaster Risk Management in Rwanda. Finally the first part introduces the minimum standards for Disaster Response in Rwanda

Part Two presents the main hazards and risks in Rwanda and short analysis of the vulnerability, exposure and historical impact of the main hazards allowing the reader to have a concrete idea of the hazard profile of Rwanda.

Part Three presents the organizational structure for disaster risk management in Rwanda and matters related to relevant policy and legislation. Rwanda network for Disaster Risk Management is shown

from the national level to the district levels. Roles and responsibilities of various departments and agencies are outlined. This part also looks at monitoring and evaluation arrangements.

Part Four discusses Disaster Risk Reduction and the importance of taking measures at the national and local level to lessen the adverse impacts of disasters. This part approaches hazards and vulnerability monitoring and analysis and on early warning systems. It also looks at procedures for reporting disasters, capacity building and public awareness.

Part Five discusses preparedness and response; and the recommended procedures for assessing and communicating the immediate impact of a disaster. It also looks at coordination of international assistance when this is required (detailed mechanisms for response)

Part Six focuses on the management of recovery and reconstruction activities and what can be learnt and done. It discusses damage assessment (Post Disaster Needs Assessment) and looks at specific actions to be taken for the main concerned sectors; it also provides responsibilities and roles at different levels for the main stakeholders.

1.2. Relationship with sub-plans and contingency plans

This National Disaster Risk Management Plan (NDRMP) is to be used by all districts, agencies and organisations as a guide for the development and maintenance of their own disaster risk management arrangements, plans, and procedures. The needs assessment conducted as part of the development of this plan showed a weak risk management system in place. The government needs to bring disaster risk management to acceptable levels of preparedness and response.

Various government departments are willing to cooperate with MIDIMAR in areas of their competence. The participation of all actors in quarterly national platform for disaster risk reduction (NPDRR) meetings in non crisis times is to be encouraged to facilitate coordination in crisis times.

The development of specific sub-plans is essential to guarantee an adequate emergency response. All Ministries having the lead responsibility for a specific hazard (see Table 2: Lead Ministry per Hazard) or being the lead for a specific cluster (see Table 3: Lead Ministry by sector) should develop adequate Disaster Risk Management document with the technical support of the MIDMAR. These documents will be articulated around the present document. Contingency plans are to be designed to address specific key threats (see section "Indicative National Risk Profile per hazard"). All line Ministries and governmental institutions also need internal contingency planning focused on protection of staff and assets in the event of an emergency. Finally international actors working in Rwanda are invited to develop their own Disaster Risk Management Framework based on this Plan.

1.3. Revision of the plan

This plan should be revised on a regular basis through consultation with all actors involved in Disaster Risk Management in Rwanda. It should be, at minima, revised every two years and more often if necessary (especially in the aftermath of a major emergency or after the creation/modification of the organisational framework for Disaster Risk Management.

1.4. Key Objectives and Overall Goals

A. Disaster risk management goals

The National Disaster Management Policy (2012 revision) provides the following goals for Disaster Risk Management in Rwanda:

- a) Prevention of disasters and their impact on families, infrastructure and the environment;
- Building resilience of families and communities to disasters by reducing their vulnerability and increasing their ability to withstand and minimize the effects of disasters and complex emergencies through adapting to climate change by enhancing preparedness;
- c) Providing fast, coordinated, effective and appropriate responses to disasters and complex emergencies;
- d) Ensuring timely recovery from disasters and complex emergencies, and leaving communities and families in a better position to withstand future hazards.

B. Main objectives

This National Disaster Risk Management Plan is the guiding document that will enable the government to address disaster risk management in Rwanda. The plan is to be used by all government and non-government sectors as the basis for developing and maintaining their own sub-plans, systems and arrangements (e.g., health, transport, agriculture, and public works). It is intended that the plan should be seen as a work in progress, which will be successively revised as improved operational procedures are developed and as the government and non-government sectors further develop disaster risk reduction activities. Based on these overarching goals, the Disaster Risk Management Plan seeks to achieve the following key objectives:

- Strengthen the institutional capacity of MIDIMAR and its stakeholders to effectively implement disaster management programmes;
- Pursue the vision, mission and goals of disaster management laid down by the National Disaster Management Policy;
- Create a cohesive and well coordinated programming framework incorporating Government Agencies and Departments, Non-Governmental Organizations and the private sector in Rwanda;
- Mitigation of the impact of disasters on livelihoods, property, the environment and economic activity;
- Perform appropriate research that will support an effective implementation of the plan and upgrading the scope of the plan to respond to the changing risk environment;
- Integration of Disaster Risk Management into the strategic and operational planning and project implementation of all line functions and role players within the Government.

1.5. Development planning instrument provisions

Disasters can hinder or destroy development, but can also create opportunities for development. Development can cause disasters but can also reduce disaster risks if it is well planned and sustainable. A separate disaster management plan standing on its own and isolated from development planning does not necessarily give evidence of the integration of disaster management into development planning. All departments and role players submitting input to the content of the current and future development planning of the Government are therefore urged to consider the inclusion and integration of disaster risk management into their strategies, operational planning and project implementation. This will ensure the integration of disaster management into development planning, and will ensure that all plans and projects are focused on contributing to disaster risk reduction and disaster preparedness, thus reducing the impact of disasters on lives, property, community activities, the economy and the environment.

As highlighted in the National Disaster Management policy and in the MIDIMAR 5 year Strategic plan, this plan is aligned with:

- a. Millennium Development Goals: The MDGs are particularly important in crisis management, in light of the need to promote stronger links between relief and development. The themes of the MDGs poverty, health, gender equality, education, environmental sustainability and overall human development are all closely linked to the ability of a population to cope with and respond to disasters and crises.
- b. Vision 2020: Vision 2020 outlines the roadmap for development in Rwanda, which includes human development as one of the development pillars. This plan, while addressing each pillar of the vision 2020, integrates Vision 2020's cross-cutting issues as a basis for Disaster Management and Refugee Affairs matters.
- **c. EDPRS:** The Economic Development and Poverty Reduction Strategy (EDPRS) is a guide for Rwanda's medium-term development ambitions.

The EDPRS (200-2012) was adopted by the gourvement of Rwanda in september 2007 and which implementation culminated in 2012 meanwhile the second EDPRS (2013-2018) was launched on the subsequent medium-term devellopment ambitious for the country

- d. The National Decentralization Policy: The National Decentralization Policy underpins the commitment of the Rwandan Government to empower its people to determine their destiny. The existence of decentralized structures down to the lowest level helps to ensure that Disaster Management issues are effectively addressed.
- e. Seven Year Government Programme (2010-2017): The Seven year programme addresses Disaster Management. This policy directly contributes to programme 4, page 27, point 23: "Build disaster prevention, warning and response capacity. Develop prevention and preparedness measures for 90% of hazards and respond in a period not exceeding 24 hours or less after a disaster."

1.6. Guiding principles

The following guiding principles will be observed in the implementation of Disaster Management initiatives. The guiding principles are described in more extensively in the National Disaster Management Policy:

- **a.** The primacy of coordination, collaboration and communication
- b. Lesson learning and knowledge management
- c. Multidisciplinary and multi-sectoral approach
- **d.** Increasing partnerships and the role of communities in Disaster Management
- e. Mainstream Climate Change into Disaster Management
- f. Research and dissemination of information
- **g.** Regional and international perspectives

1.7. Code of conduct

The code of conduct in Disaster Management is defined by the National Disaster Management Policy and seeks to guard the standards of behaviour among the different stakeholders. It aims to maintain a high standard of independence and effectiveness to which the Government of Rwanda aspires. This policy provides the following code of conduct for all stakeholders:

- **a.** Disaster response interventions are based on facts and verifiable information;
- **b.** The humanitarian imperative is respected;
- **c.** Aid is given regardless of ethnicity, political or religious affiliation or geographical considerations;
- d. Culture and customs are respected;
- e. Disaster assistance must strive to reduce future vulnerabilities to disaster as well as meeting basic needs;
- f. Stakeholders will reinforce the capacity of local communities to manage the full disaster management cycle;
- **g.** Involvement of beneficiaries in Disaster Management programs should be ensured;
- h. Mainstreaming women and children issues;
- i. Mainstreaming the concerns of the disabled and the elderly;
- j. Mainstreaming Human Right Based approach;
- **k.** Integrating environmental concerns.

Chapter 2: Main hazards in Rwanda

2.1. Introduction

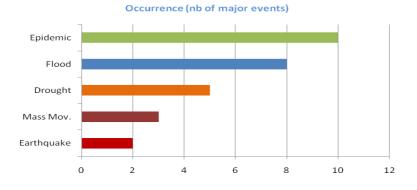
Rwanda has witnessed a number of natural and man-induced disasters that have culminated into the loss of lives and property and displacement. The following have been prevalent: Famine as a result of drought, traffic accidents, earthquakes, epidemics, floods, landslides, environmental degradation, technological accidents, fire outbreaks and lightning. This plan, therefore, is an effort to put in place systematic disaster prevention, mitigation, and а preparedness and management framework for the country. Hazards in Rwanda are categorized in four main categories: hydro meteorological, geological, biological, technological and socio natural. These hazards have the potential to lead to disaster; historical analysis shows that, floods and droughts have caused the most serious disasters in terms of the number of people affected. Flooding and landslide are strong disasters that frequently affect localized areas of the country. The hilly topography and high annual precipitation rates, over exploitation of the natural environment such as deforestation and inappropriate farming on steep slopes and climate change accelerate the disaster risks and hence result into losses of lives and damage to property in the communities exposed to these disaster risks. MIDIMAR was created less than two years ago; few data is available on past disasters. One of the main objectives of MIDIMAR (as defined in its 5 year Strategic Plan) is to develop a comprehensive risk analysis. Below data has been extracted from the MIDIMAR disaster database (only floods, landslides, and heavy rains occurred since the setting up of the Ministry).Next year's update of this document will focus on introducing a more comprehensive risk analysis.

2.2. Indicative National Risk Profile per hazard

Table 1: Disasters in Rwanda from periode 1996 to 2013

Disaster	Date	No Total Affected
Drought	1994	1000000
Drought	1999	894545
Mass movement of population (volcano)	2002	300000
Drought	1996	82000
Flood	2012	150000
Mass movement of population	2012	25000

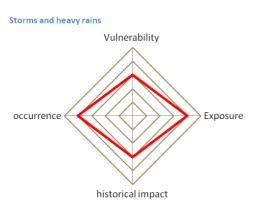
Figure 1: Occurrence of Disaster in Rwanda



⁸EM-DAT: The OFDA/CRED International Disaster Database - <u>www.em-</u> <u>dat.net</u> - Université Catholique de Louvain - Brussels – Belgium; corrected with MIDIMAR data. Table 1 and Figure 1 provide an overview of the top 5 disasters in Rwanda (from 1996) and the occurrence of disasters in Rwanda. It is important to note that epidemic, while having the greatest occurrence, did not lead to a major event. The 2002 volcanic eruption in Goma (DRC) is included as a mass movement of population (the actual volcanic activity was registered on the other side of the border).Landslides do not appear in this chart; they are highly frequent in Rwanda but rarely lead to a Disaster at the national scale.

Below charts highlight the natural hazards identified by MIDIMAR and provide an indication of the vulnerability to a hazard, the exposure of communities, the estimated occurrence and the recorded historical impact. The indicated exposure, vulnerability, occurrence and historical impact are estimations resulting from stakeholders consultation based on the perceptions and experiences of stakeholders involved in disaster management and should not be seen as a scientifically correct result. The risk is the combination of an exposure, a vulnerability and a hazard occurrence probability. In the charts below the historical impact was added to provide balanced understanding between the expected risk and the experience of disasters in Rwanda. The result does, however, provide a working base for disaster management planning as the experiences and opinions of the involved officials should carry some weight. The table illustrates the types of natural disasters that pose the highest risks and their potential impact. The communities at risk can be derived from the risk lists.

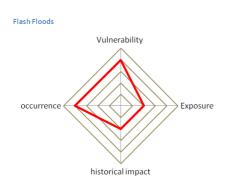
A. Storms and heavy rains



Heavy rains associated with storms are amongst the most recurrent disasters in Rwanda impacting the mainly vulnerable most communities. They cause the destruction of roads transportation and infrastructure and communication networks. Strong winds are a danger

for aviation as well as for tall structures such as towers, masts and cranes. Rwanda experiences heavy rains and storms on a regular basis. These events trigger landslides and flash floods but also directly affect communities in, for example by destroying habitations and infrastructures all across the country. Storms and heavy rains are common, according to available data for two recent years; different districts were affected in four provinces of Rwanda.





Floods are common in Rwanda but have increased in frequency over the past decade. They usually originate from heavy rainfall, which causes rapid and unpredictable surges in the flow of rivers downstream. The two predominant types of floods are: (i) localised floods caused by exceptionally heavy rains and runoffs; and (ii) widespread floods caused by overflowing rivers and their tributaries. Floods can also trigger outbreaks of water borne diseases and malaria, hence compounding community to health hazard. They also cause physical damage by washing away structures, crops, animals and submerging human settlements. For

> example, occurrences in 2005 and 2007, in Musanze and Rubavu, resulted in the damage of infrastructure, agricultural losses, led to environmental degradation, population displacement and fatalities. The impact of floods data minimized by

forecasting, studying of seasonal patterns as well as the construction and maintenance of sufficient drainage systems. Floods can be properly managed through flood plan mapping and survey by air and land. Rwanda experiences both slow and rapid onset floods. They are common in the Northern and Western parts of Rwanda. The most vulnerable areas prone to landslides and floods include the Districts of Northwestern provinces such as Nyabihu, Rubavu, Musanze, Burera and Gakenke.

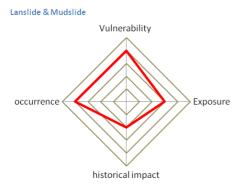
C. Landslide and Mudslide



Landslides and mudslides are rapid movements of a large mass of mud and rock, formed from loose soil and water. They usually follow heavy rainfall and high ground water flowing through cracked bed rock and earthquakes and lead to the

movement of soil or sediment. Landslides and mudslides are very difficult to predict but their frequency and extent can be estimated by use of information on the area's geology, geomorphology, climate and vegetation cover and traditional knowledge. Community settlement on steep slopes and other uncontrolled land use practices increase the likelihood of landslide and mudslide prevalence. In 2010 and 2011, Rwanda experienced several occurrences of landslides and mudslides due the prevalence of heavy rains in some areas of the country. These included occurrences in Musanze, Rusizi, Rustiro, Nyabihu and Burera Districts, which resulted in the destruction of houses and crops and the loss of lives. The areas mostly affected by landside are North and Western parts of the Country.

D. Volcanic Activity

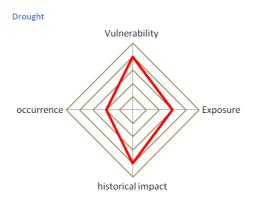


The North Western part of Rwanda has a chain of Volcanoes, some of which are inactive and other active. In 2002, Nyiragongo volcano erupted in Eastern DRC and caused damage, 300,000 Congolese fled to Rwanda (Rubavu) District

bordering Goma. At the time of this eruption Goma was a 400.000 inhabitant city; today it is estimated that more than one million people leave there. Most experts consider that the volcano is likely to strike again in the coming years. The magnitude and extent of past experiences on volcanic activity require preparedness and a contingency plan for Rwanda focusing not only on the direct impact but also dealing with the potential associated mass influx of refugees. Volcanic activity is not yet well known and studied in Rwanda. Partnerships with bordering countries (especially DRC) are currently being developed to strengthen the response and the early warning systems. While leading to mass displacement of population, volcanic activities can also have a direct impact on the community's environment.

E. Drought

Droughts in Rwanda are mainly triggered by a prolonged dry season or a delay in the onset of the rainy season. Recurrent drought incidences over the past decade, between 1998 and 2000 and annually from 2002 to 2005, have caused a serious deterioration in

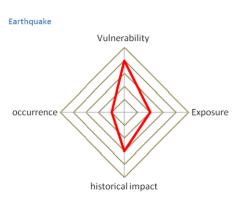


food security. Recurrent droughts have caused crop failures and severe food deficits, threatening the most vulnerable with malnutrition and famine. Drought adversely has an impact on other key sectors. Livestock production has suffered

due to water shortages and there has been a decline in both the quality and quantity of pasture. Moreover, when water levels in northern lakes ebbed due partly to prolonged drought, the reduced hydropower supply caused the first major electricity crisis in the country in 2004, which had serious implications on the national economy. Rwanda's forests have become particularly susceptible to fire hazards due to drought, such as the major fire outbreaks in Nyungwe National Park in 2005. Recurrent droughts are likely to have a significant impact on the environment both in terms of vegetation cover profile and soil conditions. Combined with the potential impacts of climate change, predicting reduced rainfall in the east and southeast, there is growing concern that desertification is gaining a foothold over the savannah landscapes. The occurrence of drought in Rwanda is low when we look at droughts leading to a nationwide food security problem. Nevertheless the occurrence of minor droughts which do not lead to a Food Security problem is higher but not represented in the above chart.

F. Earthquake

An earthquake is a result of a sudden violent movement of the earth's surface, with the potential of causing tremendous loss of



lives and properties. Available seismic information indicates that parts of the Western region of Rwanda are prone to seismic activity. Whereas the probability of occurrence of earthquake determined be bv can existing technology, its exact

time is not easy to ascertain. This makes it imperative to have adequate preparedness for disaster related to earthquakes.

Forecasting based on monitoring of seismic activity, and historical incidence and observation need to be carried out. Besides risk reduction measures such as public awareness and trainings, reduction of structural vulnerability through construction of resistant shelter based on enforceable building codes, and earthquake warning and preparedness programs must be carried out. In 2008, Rusizi and Nyamashek@oth in the western province) were severely hit by a 5.9 earthquake causing 39 deaths, more than 600 injuries and more than 2000 people were left homeless. Today,

All Districts of the western part of Rwanda are prone to earthquakes for two reasons; it is in Volcanic areas which generate tremors that culminate to seismic situation, second it is also in the great rift valley (West Uganda, Goma, former Cyangugu to Rusisi river Cincujumbura)

G.



Fire hazards include unplanned and massive burning which may the destruction of cause equipment, settlement, property and lives. Hazardous electric construction wiring. poor standards, accidents, and uncontrolled burning of bush are among many factors that cause

fire hazards. Fires are common in industries, congested human settlements, learning institutions and markets places .It calls for preparedness and management of fire hazards and for the intensification of sensitization and public awareness. Rwanda experienced a significant number of fires not only in its cities but also in its natural parks. These include the incident of a forest fire in 2009 that spread to the top of mount Muhabura in the Volcanoes National Park, consuming 150 hectares of the park, and more recently the outbreak in Nyagatare District that consumed 30 hectares of forest and farms. Fire response, while focusing on saving lives, is a key component for the protecting the environment.

H. Human Epidemic



An epidemic is the occurrence of more cases of a disease or a health event than expected at that place and at that time. Disease include: Food and water borne diseases (cholera, Typhoid fever, dysentery, others food and water poisoning highly,

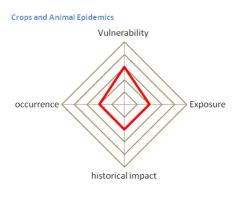
pathogenic viral diseases such as (Yellow fever, Ebola, Influenza, etc meningitis and other health events of public health importance.

Epidemics could be addressed through making contingency plans and structuring emergency health services. It is also important to establish the development of early warning systems through routine surveillance and training in emergency operations. Success of this depends on creation of inventory of required equipment.

A pandemic is a worldwide epidemic of diseases. An influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity. With the increase in global transport, as well as urbanization and overcrowded conditions in some areas, epidemics due to a new influenza virus are likely to take hold around the world, and become a pandemic faster than before. Pandemic can be either mild or severe in the illness and death they cause, and its severity can change over the course of that pandemic. If an Influenza pandemic were to occur

today, we could expect it to spread rapidly due to the interconnected nature of the world and the high level of the global travel. The above graph shows a low occurrence for epidemic because it takes only into account epidemic event that lead to a significant disruption of the society. It is noted that epidemic occurrence in Rwanda is more important but, does have in the past lead to a major disaster.





Animal epidemics include swine fever, foot and mouth disease, bird flu, crop diseases epidemics include coffee wilt, banana bacteria wilt and cassava mosaic. By nature animal epidemic are under the Ministry of Agriculture and Animal Resources responsibility. Nevertheless.

due to the potential associated impact on human lives MIDIMAR is pro-active in evaluating the risk and developing required plans to cope with an eventual situation.

J. Terrorism

Terrorism is a coordinated crime and brutal aggression against government establishment and communities. Rwanda is located in the heart of the Great Lakes Region which has been a centre of armed conflicts and terrorism attack. This region has been characterized by a series of ethnic wars, genocide, civil conflict, coups and poor attempts at democratic transition, since the early 1900s. The insecurity of the area has created the perfect environment for disasters to develop.



K. Industrial and technological Hazards

Rwanda's long term socioeconomic development programs focus on agriculture modernization and industrialization. The later however, increase the risk of industrial hazards such as large scale chemical spillage, pollution and industrial accident.

It is therefore imperative to develop the awareness and preparedness for emergency areas within or near industrial installations. Preparedness involves building the capacity to evacuate people from the associated danger.

L. Mass movement of population

The term "mass movement of population" is used to describe both (i) the sudden and rapid crossing of international borders by large numbers of uninvited foreigners who are seeking safety from acute danger or other threats to their life and liberty and (ii) the sudden and rapid

displacement of people within the borders of Rwanda who are



seeking safety from acute danger or other threats to their life. Furthermore, the definition includes a potential sudden and rapid mass influx of returnees triggered by the entry in force of the cessation clause. Mass movement of population can lead to a major crisis disrupting the livelihood of the local population and affecting every sector of the society including negative impacts to health, water and sanitation, agriculture and safety.

Chapter 3: Overall Management and Coordination

This section describes the institutional arrangements in place to deal with Disaster Risk Management in Rwanda. The organisational structure as well as the role and responsibilities of main bodies are laid down by the National Disaster Management Policy (2011 revision) and will therefore only be summarized in this document.

3.1. Institutional basis of this plan

The following legal requirements inform and provide the mandate for this plan:

- The Constitution of the Republic of Rwanda, 2003 as amended to date,
- The Prime Minister's order 75/01 of 08/07/2011 determining the mission, functions, organisational structure and summary of job positions of the Ministry of Disaster Management and Refugee Affairs (MIDIMAR);
- The draft (2011) Law establishing the Rwanda National Disaster Operational Center and determining its responsibilities, organization and functioning;
- The draft prime minister's order determining the organization, functioning and responsibilities of the Rwanda National Disaster Operational Center;
- The draft National Disaster Management Policy (2011 revision);
- The draft MIDIMAR 5 years Strategic Plan 2012-2017;
- UN General Assembly Resolution 46/182 of 19 December 1991;
- UN General Assembly Resolution 57/578 of 10 December 2002;

- The Hyogo Framework for Action 2005-2015:Building the Resilience of Nations and Communities to Disasters;
- United Nations Millennium Development Goals.

3.2. Organizational structure

The organisational structure for Disaster Management in Rwanda is presented in the chart below. The functions of the different stakeholders within the system are described below.

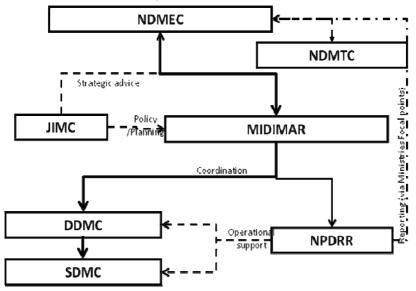


Figure 2: Disaster Management Organisational Structure

Roles, responsibilities and composition of the different bodies, presented in the above graph, are fully described in the National Disaster Management Policy (2011 revision), they will therefore not be repeated here.

3.3. Shared responsibilities for disaster management

The responsibility for reducing disaster risk, preparing for disasters, and responding to disasters is shared among all departments of national and local government, all sectors of the society within the country and, most importantly, all the residents of the country.

A. Focal points for disaster management

Although the Ministry of Disaster Management and Refugee Affairs is assigned with the Disaster Management function, it cannot perform the whole spectrum of disaster risk management activities on its own. Disaster risk management is *everybody's business*. It is required that each Ministry⁹institution and local government structure assign a focal point for disaster management activities. The same applies to international agencies operating within the country.The disaster management activities to be performed include participation in disaster risk reduction as well as preparedness and response. All institutions are encouraged to communicate to the MIDIMAR NPDRR secretary¹⁰ the name and contact details of their Focal Points for Disaster Risk Management on a regular basis. All the focal points are invited to participate to NPDRR meetings and ad hoc events.

⁹ Especially the Ministry part of the National Disaster Management Executive Committee.

¹⁰ The secretary of the NPDRR is the MIDIMAR Disaster Preparedness Operations Manager: <u>h.philippe@midimar.gov.rw</u>

B. Line ministries and institutions with primary responsibility for specific hazard

As defined in the National Disaster Management Policy (see below table) the "lead institution for each hazard have the responsibility of working and fully collaborating with the MIDIMAR to put in place all necessary actions required to prepare, respond and recover to a hazard as well as allocating sufficient resources to achieve these goals. The overall coordination is under the Ministry of Disaster Management and Refugee Affairs responsibility. The lead institution is the last resort services provider and should put in place adequate mechanism in close collaboration with the MIDIMAR to fulfil its mandate and desigrate otheresponsible institutions."

Table 2: Lead Ministry per Hazard

Hazard	Lead and co-lead Ministries		
Floods	MIDIMAR / Ministry of Natural Resources		
Storms and Heavy Rains	MIDIMAR / Ministry of Disaster Management and Refugee Affairs		
Landslide and Mudslide	MIDIMAR / Ministry of Natural Resources		
Volcanic Activity	MIDIMAR / Ministry of Defense		
Drought	MIDIMAR / Ministry of Agriculture and Animal Resources		
Food Insecurity/Famine	MIDIMAR / Ministry of Agriculture and Animal Resources		
Earthquake	MIDIMAR / Ministry of Defense		
Fires	MIDIMAR / Ministry of Internal Security		
Human Epidemic/Pandemic	MIDIMAR / Ministry of Health		
Crops and Animal Epidemics	MIDIMAR / Ministry of Agriculture and Animal Resources		
Terrorism	MIDIMAR / Ministry of Internal Security		
Industrial and Technological Hazards	MIDIMAR / Ministry of Trade and Industries		
Mass movement of population	MIDIMAR / Ministry of Internal Security		

Departments/institutions that are responsible for specific services in normal conditions will remain responsible for such services during disasters. The declaration of a state of emergency¹¹ and the tighter coordination instituted during disasters does not absolve any agency of its assigned responsibilities. The National Disaster Management Policy assigns certain basic responsibilities to key role players. Legislation assigns responsibility for most disaster risks to specific departments or functions.

Role and responsibilities of all public institutions working in Disaster Management should be further described in a separate document annexed to the National Disaster Management Plan. This document should include at minima but not limited to the functions of each key Ministry (MINIRENA, MIDIMAR, MOD, MIINTER, MOH, MINAGRI, MINIICT, etc) and local authorities in terms of coordination, M&E, DRR and Preparedness & Response.

28

¹¹ As provided by the constitution the declaration of the state of emergency is under the responsibility of the President of the Republic of Rwanda (article 110).

Table 3: Lead Ministry by sector¹²

Cluster	Lead Ministry	Co-Lead Partner
Camp coordination &	MIDIMAR	UNHCR / IOM
Management		
Recovery	MINECOFIN	UNDP
Education	MNEDUC	UNICEF / Save the
		Children
Emergency Shelter	MINALOC	UNHCR
Emergency	MINICT	WFP
Telecommunication		
Food Security	MINAGRI	WFP/FAO
Health & Nutrition	MINISANTE	WHO/UNICEF
Logistic	MIDIMAR/MINADEF	WFP
Protection	MININTER	UNICEF
Water and Sanitation	MININFRA	UNICEF
Search, Rescue & Evacuation	MINADEF	UN OCHA and
		UNRC

In addition to the global clusters; specific cross-cutting working groups will be created within the NPDRR framework as followed:

¹² IASC: Global Cluster Coordination – march 2011. It is noted that due to the high seismic risk in Rwanda a specific cluster is established (namely Search, Rescue and Evacuation).

Cross-cutting working groups	Lead Ministry	Co-Lead Partner
Gender and GBV	MIGEPROF	UNWOMEN/UNFPA
Human Rights	MINIJUST	UNDP

Table 4: Cross-cutting working group in Rwanda

3.4. Coordination Mechanisms

3.4.1. Internal coordination (amongst government actors)

The National Disaster Management Executive Committee is responsible for the overall policy and strategy in preparing, responding and recovering from major emergencies¹³ as well as acting as the central advisor board for Disaster Management issues in Rwanda. The Ministry of Disaster Management and Refugee Affairs is the operational coordinator for all Disaster Risk Management issues at national level and responsible for the day-today management of all Disaster Management activities as stipulated in the policy guidelines and in any other instructions which may be given by Minister of Disaster Management and Refugee Affairs. At district levels District Disaster Management Committees (DDMC) is in charge coordinating emergency response in their respective Districts, under the direction of Rwanda National Disaster Operation Centre. Sector Disaster Management Committees (SDMCs) have the same responsibility at sector level.

¹³As defined in the National Disaster Management policy (2011 revision)

3.4.2. External co-ordination (within international partners)

The external coordination includes coordinating with International Donors, United Nations, International Organisations, Diplomatic Missions, NGOs, Red Cross Movement Organisations and Civil Society Organisations. The overall external coordination for Disaster Management is the primary responsibility of the Ministry of Disaster Management and Refugee Affairs. National Platform for Disaster Risk Reduction is seen as the mechanism allowing this coordination. All ad-hoc coordination mechanisms should be set up within this mechanism. It is noted that project implemented between the United Nations and MIDIMAR are under the Joint Intervention Management Committee .

Lead Ministry for each hazard (see Table 2: Lead Ministry per Hazard) will also coordinate with their counterpart agencies, bilateral donor agencies, and partnering NGOs related to the issues concerning the Ministry mandate and responsibilities. However, MIDIMAR will be kept up to date on the issues, concerns and decisions of such coordination dialogues and will remain the overall coordinator between sectors. Ministerial Focal Points for Disaster Management are responsible for prompt sharing with the MIDIMAR on the outcomes of their coordination dialogues as well as advising on issues to be raised by the MIDIMAR and the National Disaster Management Executive Committee for the larger NPDRR coordination forum.

Lead Ministry for each sector will coordinate with the co-lead within the NPDRR framework.

In case of an emergency, each lead and co-lead institutions have the responsibility to designate an emergency coordinator for the different clusters, teams and working groups. The overall emergency coordinator will be the MIDIMAR supported by the United Nations Resident Coordinator or any designated representative.

3.4.3. Assessment Teams

The Assessment Team is a technical group responsible for assessing losses and damages resulting from a disaster as well as conducting Post Disaster Needs Assessments. It is composed of focal point from the National Platform for Disaster Risk Reduction with a thorough understanding of emergency assessment. Each cluster and crosscutting working groups shall be represented in the Assessment Team. To ensure a high level of readiness the team will meet regularly, under the NPDRR umbrella, to prepare adequate procedures (including logistical arrangements) and guidelines in case of emergency. This team is primarily responsible for initial damage and loss assessment; the assessment will also look into humanitarian recovery need as full part of the post disaster needs assessment.

3.4.4. Cluster Coordination

Cluster coordination is primarily designed to be activated for emergency response. Nevertheless it is globally acknowledged that these mechanisms should be active during all phases of Disaster Risk Management to ensure a coherent approach before, during and after an emergency. As described in the Table 3: Lead Ministry by sector, specific ministries have the cluster responsibility. These ministries will be in charge of, with the technical support of MIDIMAR, ensuring the coordination and information sharing within their respective clusters. A representative of MIDIMAR will be participating in each cluster and linking with the National Platform for Disaster Risk Reduction mechanism.

3.4.5. Cross-cutting issues working groups

The cross-cutting working groups are ad-hoc mechanisms composed of experts from different partners in charge of looking at their respective field of expertise and advising other groups in fulfilling their roles and responsibilities. A gender, Human Rights and Child Protection, are some of the cross-cutting issues considered Mainstreaming gender into disaster management is fully described in the MIDIMAR guideline on gender mainstreaming. A similar document for Human Rights is yet to be developed by MIDIMAR.

A. Mainstreaming gender

Gender refers to the culturally based expectations on the roles and behaviours of males and females. The term distinguishes the socially constructed from the biologically determined aspects of being male and female. The Gender working group for disaster management is the main team responsible for this aspect (see Table 4: Cross-cutting working group in Rwanda). Gender has to be mainstreamed in disaster preparedness measures through following points:

Legal infrastructure:

Measures to enhance legal protection in the domain of disaster preparedness should be taken into consideration

- To ensure regularly review policies and plans and take immediate action to mainstream gender into all planning and programmes related to disaster risk management;
- Support research institutions to study the cost-benefit and efficiency of gender-sensitive policies and programmes in disaster risk reduction, climate change adaptation and poverty reduction;
- Establish gender specific data and statistics on impact of disasters, carry out gender-sensitive vulnerability, risk and capacity assessments and develop gender-sensitive indicators to monitor and measure progress.
- Establish Standard Operating Procedures (SOP) for CGV in emergencies

Human development and knowledge dissemination:

- Increase women's participation in programme and project coordination and secure equal access to relief assistance between men and women;
- Increase awareness of the public, governmental institutions, development partners and media on gender sensitive vulnerabilities and capacities in disasters and gender specific needs and concerns in disaster risk reduction and management;
- Ensure women and men's equal access to early warning systems;
- Build and enhance the capacities of professional communities and pertinent national institutions to enable gender mainstreaming into all development sectors.

Key recommendations:

In order to improve the effectiveness and impact of MIDIMAR's actions for the promotion of gender equality in disaster management and refugee related situations, the following actions are recommended:

- Policies, strategies and methodologies for disaster preparedness and response must be people centred and based on consultative and participatory processes which include all stakeholders, with a specific attention to the inclusion of both women and men and their particular needs.
- The constraints to introducing multi-dimensional and intersector approaches in risk assessment and emergency response and management must be identified and addressed to ensure that critical social perspectives are incorporated in policies, strategies and action plans, with an adequate focus on gender equality.
- The value-added of integrating social dimensions, including gender perspectives, in work on disasters must be made explicit. This requires moving beyond a focus on women as victims to an approach which recognizes the contributions and potential of women as well as men.
- The existing research on gender, environmental and disaster management must be systematically compiled in a way that is useful to policy makers and administrators.
- Key areas where more research is needed must be identified and resources made available for initiating research projects. The research activities must be based on participatory processes whereby both local women and men are involved in identifying vulnerabilities and suggesting solutions.
- Collection of sex-disaggregated data must be adopted in all areas of work in emergency situations.

B. Human Rights

Human rights are rights inherent to all human beings, whatever the nationality, the place of residence, sex, national or ethnic origin, colour, religion, language, or any other status. Everybody is equally entitled to our human rights without discrimination. These rights are all interrelated, interdependent and indivisible. Universal human rights are guaranteed by the Rwandan national law, treaties and international law.Refugees,Returnees and people affected by disasters should enjoy the same rights and freedom under the human right international legal framework and national law. Protection shall not be limited to securing the survival and physical security of Refugees, Returnees and people affected by disasters; but, shall include the full range of social, economic and cultural rights would also be secured. All actions resulting from the implementation of this plan should ensure that the following right are secured:

- a) Rights related to physical security and integrity;
- b) Rights related to basic necessities of life;
- c) Rights related to other social, economic and cultural protection needs; and
- d) Rights related to other civil and protection needs.

The guideline to better integrate human rights into Disaster Management activities is currently under development; this section will be therefore further developed during the next revision of this document.

C. Child Protection in Emergencies

It is important to remember and consider that during emergencies, when traditional coping strategies and protective mechanisms are under stress, risks of violence, abuse and exploitation resulting in physical harm increase. In an emergency, in addition to the ordinary risks such as road accidents, burns and falls, children face a number of dangers directly resulting from the disaster. These may range from injury or death, due to floodwater and collapsing of houses to injury or death due to landmines and attacks. In situations of natural disaster children are at greater risk of physical danger as they are less likely to be able to swim and run, are smaller and physically weaker and hence are more likely to be harmed Violence related risks may include: suicide, use of small arms, youth violence, killing, maiming, torture, domestic violence, physical and sexual abuse, hazardous labour, corporal punishment and harmful traditional practices.

Many children who have experienced catastrophic situations may initially show psychosocial reactions such as changes in social relations, behavior, physical reactions, emotions and spirituality such as sleeping problems, nightmares, withdrawal, problems concentrating and guilt are normal and can be overcome with time In developing disaster mitigation, preparedness and response strategies:

- a) The best interest of the child is a primary consideration in all actions concerning children. This means that children's best interests are placed at the heart of all decision-making which impacts on children.
- b) Engage children in activities to identify and prevent disasterrelated risks in their communities.

- c) Ensure that children including those groups of children who typically suffer discrimination are included in community, local and national disaster risk reduction processes, including early warning systems, and measures to prevent physical harm during an emergency
- d) Include physical dangers for children in existing contingency plans
- e) Prepare community sensitisation messages: Sensitisation messages should highlight potential physical risks (e.g., separation of children from their families, which places are dangerous to play in, what landmines and unexploded ordnance look like, etc.) as well as risk-taking behaviour (e.g., how to avoid family separation, how to mitigate the risks of sexual violence when undertaking family chores, how to prepare for aftershocks following an earthquake, and how the community can reduce risks to children)
- f) Identify or map existing organizations, systems or community structures that can be employed to work with children following or during a disaster.

4.5. Monitoring and evaluation

All programs, activities and/or planning must include appropriate, participatory monitoring and evaluation mechanisms that allow timely implementation of corrective measures, capturing the experience and the voices of the target population, building on the demonstrative effects, increasing effectiveness and learning.

Assessing damages and setting relief plans is a key element toward efficient Disaster Risk Management; it is highly recommended that information gathered and produced in assessments might be looked at as a "public good." A similar case can be made for monitoring and evaluation results, given the large number of stakeholders for most projects. Monitoring and evaluation falls under the direct responsibility of the Strategic Planning unit; nevertheless, all actors must set up their own monitoring and evaluation systems and share the results on a regular basis with MIDIMAR and the appropriate cluster lead. All project documents and main evaluation documents will be made available through MIDIMAR to all actors (via the NPDRR) to ensure that there is a dynamic approach of DRM through information and experiences sharing.

A. Key areas of focus for Monitoring and evaluation

- The lead institution (see Table 3: Lead Ministry by sector) should decide how monitoring and evaluation will be carried out within the reconstruction program.
- The lead institution, in consultation with agencies involved • in Disaster Risk Management, should decide how expenditures¹⁴ information on and progress at projects/programmes will be tracked and reported, in order to facilitate consolidation.
- Every actor working in Disaster Risk Management should involve affected communities in monitoring and evaluation activities.
- Lead institution should decide how the results of monitoring and evaluation activities will be shared with the affected community and the general public.
- Affected communities should demand that monitoring and evaluation provide objective project results, which may imply contracting third-party evaluators to conduct them.

¹⁴ Expenditures tracking will be done under the overall management of MINECOFIN

B. Elements to consider during monitoring and evaluation

All Disaster Risk Management programmes/projects evaluation should include, at minima the following:

- Monitoring: to assess whether a program is being implemented as planned. A program monitoring system enables continuous feedback on the status of program implementation, identifying specific problems as they arise;
- Process evaluation: to analyze how the program operates. Focuses on problems in service delivery and enables the proposition of forward looking recommendations;
- Cost-benefit or cost-effectiveness evaluation: to assess program costs (monetary or non-monetary), in particular their relation to alternative uses of the same resources and to the benefits being produced by the program.
- Impact evaluation: to determine whether the program had the desired effects on individuals, households, and institutions, and whether those effects are attributable to the program intervention including forward looking recommendations.

Chapter 4: Disaster Risk Reduction

Disaster Risk Reduction should be incorporated in all development planning forms, all public and international institutions as DRR has been considered as a cross cutting issue in the EDPRS 2. MIDIMAR will ensure that the Hyogo framework for Action and other commitments in different and offical national, reginal and intrnational agreements for action are put at all levels of the sociaty, toward building the resilience of communities to disasters.

4.1. Hyogo Framework for Action

The Hyogo Framework of Action 2005-2015 (HFA) is the consensus strategy adopted by 168 member countries in the UN World Conference on Disaster Reduction in January 2005 in Kobe for spearheading the task of disaster risk reduction globally. The HFA 2005-2015 was developed based on the gap analysis in the national and global efforts in DRR in the preceding decade from 1994-2004.

The goals set by the HFA 2005-2015 are:

- a) Integration of disaster risk reduction into sustainable development policies and planning,
- b) Development and strengthening of institutions, mechanisms and capacities to build resilience to hazards, and
- c) Systematic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery program.

It recommends five priorities for Action, namely:

- 1) Ensure that disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation.
- 2) Identify, assess and monitor disaster risks and enhance early warning.
- 3) Use knowledge, innovation and education to build a culture of safety and resilience at all levels
- 4) Reduce the underlying risk factors
- 5) Strengthen Disaster preparedness for effective response

Preparedness measures contained in this plan will be based on the Hyogo Framework for Action priorities.

4.2. Programme of action for the implementation of the Africa regional strategy for DRR

The Programme of Action for the Implementation of the Africa Regional Strategy for Disaster Risk Reduction was developed in 2005. In early 2005, Africa Advisory Group on DRR was established, and in December 2005, the First African Ministerial Conference on DRR held in Addis Ababa, Ethiopia, adopted the Programme of Action. The Programme of Action was subsequently endorsed by a Decision of the Eight Ordinary Session of the Executive Council of the African Union in Khartoum, Sudan in January 2006.

The joint initiatives among the AU Commission, NEPAD, AfDB and UNISDR Africa have resulted in the following strategic documents, with support from experts, government officials, the UNDP Bureau for Crisis Prevention and Recovery (BCPR) and UNEP:

1) Regional Strategy for Disaster Risk Reduction;

- 2) Programme of Action for the Implementation of the Africa Regional Strategy for Disaster Risk Reduction (2006-2010);
- Guidelines for mainstreaming disaster risk reduction into sustainable development;
- 4) Periodic regional review report on disaster reduction;

Making use of the above document, the government of Rwanda committed to support the goal and objective of the programme of action:

"The overall goal of the extended Programme of Action from 2006 to 2015 is a substantial reduction of social, economic and environmental impacts of disasters on African people and economies, thereby facilitating the achievement of the MDGs and other development aims in Africa. In line with the Africa Regional Strategy and the HFA, the specific objectives of the programme are to:

- Mainstream risk reduction management and climate change adaptation as an integral part of sustainable development, and related programmes.
- Strengthen long term capacities at regional and subregional levels to systematically contribute to building resilience to natural hazards.
- Develop and maintain sustainable mechanisms of coordination at regional and sub-regional levels to support the implementation of the Africa Strategy and the Programme of Action for DRR.
- Strengthen national mechanisms, legislative frameworks and capacities at national levels for mainstreaming and implementing disaster risk reduction strategies and programmes.

- Translate policies and strategies into practical tools for decision makers and practitioners to facilitate the implementation of the Africa Strategy, the Programme of Action and the HFA.
- Develop and mobilise resources to contribute to the implementation of programmes and projects on DRR.
- Embed a holistic approach to systematically incorporate risk reduction measures into design and implementation of disaster preparedness, response and recovery programmes."

All the points of the programme for action shall be taken into account and operationalised by the Ministry of Disaster Management and Refugee Affairs.

4.3. Reduction of Risks

A. Risk assessment and analysis

Risk assessment includes the identification of hazard, the assessment of the vulnerability of populations and the capacity of the society to cope with an event. The first, and perhaps most difficult step in the process, is to identify all hazardous conditions. Risk cannot be controlled unless hazardous conditions are recognized before they cause injury, damage to equipment or other accident.

Once a hazardous condition is recognized it must be evaluated to determine the threat or risk it presents. The level of risk is a function of the probability of exposure to the hazard and the severity of the

potential harm that would be caused by that exposure. Some hazards may present very little risk to people or equipment. Additionally, risk factors include social, economic, physical and environmental vulnerabilities. There are three essential components in the determination of risk, each of which should be separately quantified:

- The hazard occurrence probability: the likelihood of experiencing any natural or technological hazard at a location or in a region
- The elements at risk (exposure): identifying and making an inventory of people buildings or other elements which would be affected by the hazard if it occurred, and where required estimating their economic value
- The vulnerability of the elements at risk: how damaged the buildings or people or other elements would be if they experienced some level of hazard

Risk Assessment and monitoring is a responsibility of all government and non-government sectors. MIDIMAR is supporting various sectors to carry out capacity development activities. While some sectors such as Healthand Agriculture¹⁵have established national to community monitoring systems, many sectors require significant technical development support to establish effective communications between communities, community groups, NGOs, District Administrations and national level government.

MIDIMAR is responsible for receiving, analysing, integrating, interpreting, distributing and coordinating national hazard, vulnerability and risk monitoring data. This information is then used

¹⁵See for example the Food Security and Nutrition Monitoring System of MINAGRI supported by the World Food Programme

to advise government and non-government sectors in relation to appropriate disaster/emergency preparedness, response, recovery and reduction measures. MIDIMAR is planning to establish a Disaster Management Information System (DMIS)¹⁶, which aims at setting up GIS hazard maps for Rwanda's common natural hazards. A disaster database¹⁷ will allow data on hazard type, damage caused and mortality and morbidity to be recorded by disaster event.

MIDIMAR will also look at the Development of comprehensive (national and local) disaster risk profiles for enhancing disaster management in Rwanda in order to identify the disaster prone areas in order to better design targeted and contextualized risk reduction and adaptation programmes and to adapt it to the local context and risks.

 ¹⁶As described in the MIDIMAR 5 year Strategic Plan (outcome 1 – priority 2 – strategic objective 2).

¹⁷idem

Table 5: Risk identification and analysis

Hazards identification	Co/Lead Institution	Main implementers ¹⁸¹⁹	Principal responsibilities
Floods	MINIRENA	REMA, Research and Academic Institutions, DDMCs, RNRA, MININFRA (RMA)	 Hazard identification and mapping Systematic observation of
Landslides and mudslides	MINIRENA	REMA, Research and Academic Institutions, DDMCs, RNRA, MININFRA A (RMA)	 hazard Develop specific contingency plan (schools, hospitals, markets, publics
Heavy rains with winds and storms	MINALOC	DDMCs, RNRA, MININFRA (RMA)	places,) and in specific domain (Land use
Drought	MINAGRI	Research and Academic Institutions, DDMCs, RNRA, MININFRA (RMA)	planning, lakes exploitation, building codes,) • Analysis of
Fires	MININTER	RNP, RDF, MINEDUC, MINISANTE, MININFRA	hazard and impact observations • Vulnerability
Volcanic eruptions	MINIRENA	RDF, RNP, DGIE, Universities, DDMCs, RNRA	assessmentRisk analysis and formulation of

¹⁸ MIDIMAR is the lead institution for all hazards

¹⁹Lead ministry and ministries involved for each hazard are described in the National Disaster Management Policy. The tables (point B, C and D) are the main actors in an operational point of view.

Hazards identification	Co/Lead Institution	Main implementers ¹⁸¹⁹	Principal responsibilities
Earthquakes	MINADEF	RDF, RNP, Universities, DDMCs, RNRA	impacts scenariosSet up a risk information
Human epidemics	MINISANTE	RDF, Universities, DDMCs	management system
Crops and animal epidemics	MINAGRI	RAB, ISAR, DDMCs	
Industrial & technological disasters	MINICOM	RDB, RBS	
Mass movement of populations	MIDIMAR	MINAFFET, DGIE, DDMCs	

B. Risk Management

Risk management encompasses all those activities required to reach and implement decisions on risk reduction or elimination. Once a risk has been characterized, an informed decision can be made as to what control measures, if any, are needed to reduce the risks or eliminate the hazard. Control measures consist of any action for risk reduction or elimination. Usually, however, control measures involve reducing the probability of occurrence or the severity of an incident. Risk management is done at the lowest possible level of administration (Umudugudu: village) with each level accepting responsibility for an appropriate level of mitigation, preparedness, response and/or recovery activity. This includes strengthening and supporting community level initiatives on DRR and encouraging active participation or involvement of people in the process of risk

assessment, planning and implementation of disaster risk management strategies. People in the community or village suffer the most from disaster damage. In practice, they are the first front line responders. The increasing disaster frequency and consequent losses, has resulted in people in the community developing some coping mechanism/strategies based on their existing capacities.

Hazards identification	Co/lead	Partner institutions	Principal responsibilities	
Floods	MINIRENA	REMA, DDMCs, RNRA, MININFRA (RMA)	 Analyze and quantify risks Incorporating risk reduction in new 	
Landslides/Mudslides	MINIRENA	REMA, DDMCs, RNRA, MININFRA (RMA)	development plans • Investing in retrofitting • Set risk transfer	
Storms and heavy rains	MIDIMAR	MINALOC, DDMCs, RNRA, MININFRA (RMA)	 mechanism Investing in protective measures Exploit 	
Drought	MINAGRI	DDMCs, RNRA, MININFRA (RMA)	opportunities for risk reduction as part of recovery	
Fires	MININTER	RNP, RDF, MINEDUC, MININFRA	 Set performance criteria and goals for sectors 	
Volcanic eruptions	MINIRENA	RDF, RNP, DDMCs, RNRA	 Conduct disaster need assessment 	

Table 6: Risk reduction and risk transfer (Mitigation)

Hazards identification	Co/lead	Partner institutions	Principal responsibilities
Earthquakes	MINADEF	RDF, RNP, DDMCs, RNRA	 Set acceptable level of risk Introduce
Human epidemics	MINISANTE	RDF, RBS	hazard risk
Crops and animal epidemics	MINAGRI	RAB, DDMCs	insurance Increase
Industrial & technological disasters	MINICOM	RDB, RBS	research activities
Mass movement of populations	MIDIMAR	MINAFFET	

Early warning and communication

The risk management process cannot be successful without a plan for providing information to the public. The communication plan may include radio and television broadcasts, or the distribution of brochures to the public describing the potential threat in plain, unemotional language. Clear advice should be given on how the alarm will be raised and what to do if that happens. Of course, any public preparedness or information programme needs to be evaluated in the context of the specific local circumstances, including the possibility that too much information may be counterproductive, or even dangerous.

Table 7: Hazard monitoring and early warning system

Hazards identification	Lead Institution	Main implementers ²⁰	Principal responsibilities
Floods	MINIRENA	REMA, DDMCs, RNRA, MININFRA (RMA)	 Establish hazard monitoring system Harmonize
Landslides/ Mudslides	MINIRENA	REMA, DDMCs, RNRA, MININFRA (RMA)	understanding for likely threats, likelihood of
Storms and heavy rains	MIDIMAR	MINALOC, DDMCs, RNRA, MININFRA (RMA)	disasters and their potential consequences for an effective hazard
Drought	MINAGRI	DDMCs, RNRA, MININFRA (RMA)	 monitoring Establish or strengthen the
Fires	MININTER	RNP, RDF, MINEDUC, MININFRA	legislative/legal framework and mechanisms
Volcanic eruptions	MINIRENA	RDF, RNP, DDMCs, RNRA	 Establish proper priorities for
Earthquakes	MINADEF	RDF, RNP, DDMCs, RNRA	warningsDeveloping institutional
Human epidemics	MINISANTE	RDF, RBS	networks with clear responsibilities
Crops and animal epidemics	MINAGRI	RAB, DDMCs	 Establish communication networks/forum for
Industrial & technological disasters	MINICOM	RDB, RBS	dialogueIncrease institutional

²⁰Lead ministry and ministries involved for each hazard are described in the National Disaster Management Policy. The tables (point B, C and D) are the main actors in an operational point of view.

			 partnership through MoUs between agencies and organizations Develop multi- disciplinary research projects and integrated databases Develop an early warning system for each hazard Establish regular monitoring of early warning
Mass movement of populations	MIDIMAR	MINAFFET	

4.4. Capacity Building and Public Awareness

4.4.1. Capacity building

All personnel involved in disaster risk management activities require training. Those with permanent disaster risk management roles, such as MIDIMAR staff, NPDRR focal points, S/DDMC members, and communities should be given priority for capacity building. However, training needs to extend to SDMC and community level as well as to government staff likely to become involved in disaster risk management activities. MIDIMAR, in consultation with DDMCs, is responsible for the management and co-ordination of disaster risk management training activities, including:

- The identification of training needs at national, district, SDMC and community levels;
- Arranging for appropriate training activities to be developed;
- Preparing and conducting an annual programme of national training;
- Develop a system for nomination and selection of participants in training activities,
- Identifying international training activities and opportunities that can help to develop national disaster risk management capabilities and seeking support for the attendance of selected Rwandan disaster risk management staff at such activities;
- Selecting appropriate and qualified persons to attend incountry, regional and international activities;
- Maintaining a training resource register.

A. Trainings

The importance of training for ensuring expeditious assistance to the affected population is widely recognized. Lives can be saved if a strong training component is built into the disaster risk management plans, particularly in the pre-disaster phase. Specific disaster training interventions involve situations both prior to the hazard impact (preparedness) and after the impact (response/emergency assistance and recovery). Training prior to disasters should take into consideration the following:

 Training of the population at risk should include measures of mitigation and preparedness, usually under the responsibility of MIDIMAR as well as other relevant agencies. These measures involve effective means of communicating pre-warning and warning messages through the media

- Disaster risk management plans should be drawn up and rehearsed well in advance of the onset of any disaster. Exercises should include clear and simple messages containing the basics of risk and stress management, including control of such emotions as fear and techniques for maintaining calm at the time of impact. These issues should also be included in risk communication packages.
- Helpers and emergency responders may be involved in many different aspects of assistance at the disaster site.
- Training can be conducted at local level using the network of schools/universities. This type of training is programme oriented in that it is necessary to design and implement emergency norms in conjunction with the preparedness needs of the country.

B. Equipment

Disaster management activities require a complex and different equipment for effective interventions. All institutions involved in Disaster management (MIDIMAR, cluster lead ministries, partners, DDMCs) should seek to acquire the necessary equipment for operations in different and specific areas.

MININFRA and MIDIMAR should establish a mechanism for sharing available equipment during emergency situation and during DRR activities when there is a need. MIDIMAR should be well equipped and staffed for carrying out its responsibilities and help other institutions to perform theirs. MIDIMAR should also conduct an inventory and locations of equipment that can be needed and used in different operations and keep the contacts of people likely to approve their use in various institutions.

C. Resources

All Public institutions in Rwanda should be involved in Disaster Management and plan for necessary resources to ensure that Disaster Management is fully incorporated and/or mainstreamed in their respective plans. They also have to mobilize required resources to be used in prevention and mitigation programs and in recovery and reconstruction in their areas when required. Financing mechanism should be designated with MINECOFIN and with all donors and partners.

4.4.2. Public Awareness

MIDIMAR is responsible for providing advice to the line Ministries and other institutions responsible for assisting DDMCs and implementers institutions to identify, develop and implement national public education and awareness programs. Target audiences should include:

- Vulnerable groups, such as pregnant and feeding women, children, the aged, returnees, refugees and those in hazardprone areas;
- Community leaders;
- Rural families and village communities;
- Urban families;
- District officials and District Disaster Management Committees;

- National Disaster Management Executive Committee members;
- Other key officials and decision makers;
- Non-governmental organizations; and
- Diplomatic and donor community.

The content of public education and awareness programs will vary according to the target audience, the threats and the areas in which they are undertaken. The media used to present the programs should be selected after consideration of the target audience and the acknowledged way of communicating effectively and sustainably with that audience. Media and language appropriate to one audience may be less effective with a different audience.

District Administrators will be responsible for supporting the awareness and education programs by identifying special requirements for their area, disseminating material, and conducting visits to ensure that villagers are familiar with the material and are aware of preparedness measures which must be taken.

TEVELS	TARGETED GROUP AND ACTIVITIES	CAPACITY BUILDING	PUBLIC AWARENESS AND SENSITIZATION	INTERVENERS (Providers)
NATIONAL LEVEL	Targeted group	- MIDIMAR staff - NPDRR focal point	 Decision makers Journalist Engineering and architects council 	 Executive committee International training institutions
	Activities and Tool to be used	- Trainings - Simulation exercises - Equipment purchase	- TV shows - Radios programs - Meetings - Official briefing sessions	 International training institutions PSCBS MIDIMAR/Lead ministries (in each clusters
LOCAL LEVEL	Targeted group	- Local leaders - Army/police - DDMCs/SDMCs - Teachers - Security companies	 Schools and Hospitals Public spaces and Public offices Markets Commercial building Churches Hotels, Bars and Night clubs 	- MIDIMAR - RIAM - NPDRR

Table 8: Public Awareness and Capacity Building Action Plan Framework

	Toolsto be used	 Simulation exercises curriculum programs Meetings Visits to schools and villages by theatre groups and video 	- TV show - Newspaper articles - Meetings - Official briefing sessions	- PCSBS - RIAM - Universities
	Targeted group	- Communities - Local leaders - Schools (Students)	- Communities - Local leaders - Schools (Students)	- - DDMCs - SDMCs
COMMUNITY	Activities and - Messages Tools to be used - Curriculum - Special prog - VCD commu presentation	 Messages Curriculum Special programs VCD community presentations 	- Advertising - Messages during public meetings - Production of posters, pamphlets and hazard maps	- RDNOC - DDMCs - SDMCs

58

Chapter 5: Preparedness and Response

5.1. PREPAREDNESS

Emergency management is the generic name of an interdisciplinary field dealing with the strategic organizational management processes used to protect critical assets and saving life from hazard risks that can cause events like disasters or catastrophes and to ensure the continuance of people's business within their planned lifetime.

Disaster preparedness is the measures taken to reduce casualties, suffering and damages caused by disasters by preparing and organizing prompt and effective response actions when it is needed.

5.1.1. Contingency planning for governmental institutions

The contingency plan is a very practical and useful tool which identifies responsibilities, requirements and gives instructions on who is doing what. Disaster contingency planning is a process that results in an organized, planned and coordinated course of action to be followed in case of a disaster. Such plans clearly identify the institutional and organizational arrangements that come to play, when a disaster strikes. Contingency planning is an essential part of disaster preparedness. A contingency plan needs to be prepared jointly by concerned actors and needs to be adapted to the specific context. The contingency planning process includes:

- Analyzing potential emergencies and their humanitarian impact;
- Prioritizing potential emergencies;
- Developing appropriate plans, including establishing clear goals, setting objectives, policies and procedures to deal with prioritized potential emergencies;
- Ensuring necessary preparedness measures and follow-up actions are taken.

All Ministries and governmental institutions need internal contingency planning focused on protection of staff and assets in the event of an emergency. These plans will focus on ensuring the shift from the current structure and function of "business continuity plan" to the structure and function of working towards the resumption of time-sensitive business operations. Everv government department, office, agency, NGO, institute and organization should have a contingency plan of measures to protect its own assets if there is a disaster threat and to assist its staff to a rapid return to normal service after a disaster. It is recommended that each Ministry or institution Focal Point for Disaster Management is responsible for developing, in collaboration with the MIDIMAR, his/her organization contingency plan. This plan will focus primarily on the following:

- Protect employees and information assets until normal business operations are resumed,
- Ensure continuation of business focusing on life saving activities and/or all activities that can impact or threaten human life,

- Ensure that capability exists to respond to an incident within the organisation and that sufficient mechanisms exists to allow external assistance,
- Ensure efficient coordination and communication with authorities in charge of Disaster Risk Management and especially the Rwanda National Disaster Operation Centre and the Ministry of Disaster Management and Refugee Affairs.

5.1.2. Early Warning and Disaster Reporting Systems

A. Early warning analysis and monitoring

Early warning systems can be extremely effective in saving lives and property and protecting the vulnerable when natural hazards threaten.

According to UNISDR, Early Warning System is the set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

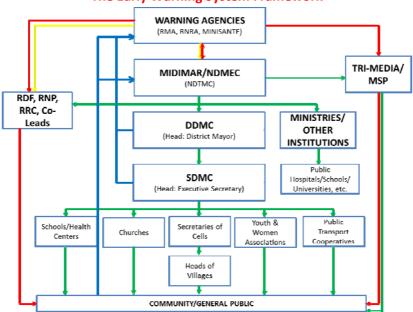
Key elements of an effective early warning system include:

- 1. Risk Knowledge
- 2. Monitoring and Warning
- 3. Decision, Dissemination, and Communication
- 4. Response Capability

National Disaster Risk Management Plan MIDIMAR 2013

Early warning system is an important element of disaster preparedness. It is through an effective and functioning early warning system that lives are saved, properties and critical resources protected and ultimately risks reduced.

The Early Warning System of Rwanda is currently being developed. It has undergone national and district level consultations. It will still undergo a series of consultations for finalization and enhancement. For the purpose of this plan, the initial system being pilot-tested in four Districts is presented here as follows:



The Early Warning System Framework

The key to achieving effective response from participating organisations and the community is to have reliable and effective

warning systems in place. Advice of a developing hazard or of the occurrence of a disaster will come from two main sources (top-bottom and bottom-up mechanisms):

- The Scientific Warning Agencies (Top-Bottom)
- Community or General Public (Bottom-Up)

The flow of warning and feedback about impending hazard threat will flow through a range of stakeholders and institutions as shown in the diagram above. The Early Warning System being developed and finalized encompass the details of how warning information are generated through forecast, detection and analysis by scientific warning agencies to translating the warning information into warning advisory and the flow of warning dissemination including recommendations for appropriate response actions to be taken by the authorities, the people and the communities. The Early Warning Standard Operating Procedures, Protocols and Roles and Responsibilities are detailed in the separate EWS Document being finalized. The EWS section of this plan will be updated as soon as the national EWS Framework is finalized and approved.

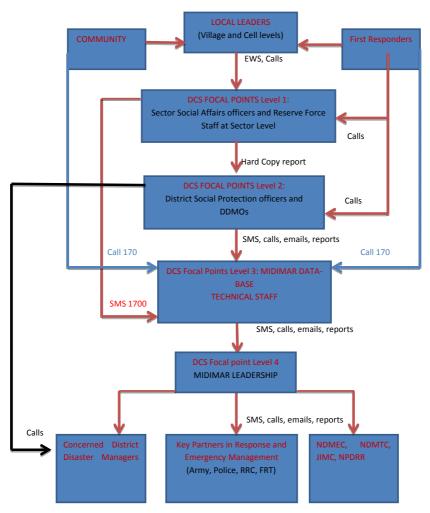
B. Disaster Monitoring and Reporting System

There is also an established Disaster Monitoring and Reporting System maintained and managed by the MIDIMAR. A number of Disaster Monitors at Sector and District Levels were provided with telecommunication equipment (cell phones and laptops). The Disaster Monitors are designated to provide daily report and feedback to MIDIMAR through a communication system. The MIDIMAR is able to monitor, record, report and provide appropriate response actions for any emergency or disaster which has occurred.

Aside from the Disaster Monitors, any official or other person becoming aware that a disaster or major emergency has occurred

should report the situation to the nearest Sector, District Official, police officer or fire service officer. Contact details for all these points should be widely promulgated to departments, agencies and the public throughout the country. In Rwanda, the national Disaster reporting system and the National communication system are merged within one framework.

Departments and organizations should assist in this communication process by ensuring that all relevant information is forwarded to the MIDIMAR and other concerned institutions (public and private). In addition, all disaster management focal points in the districts should ensure that they are contactable at all times and particularly after normal working hours. Personal mobile phones should be kept charged and turned on at all times. The Disaster reporting system in Rwanda is as follows:



DISASTER COMMUNICATION AND REPORTING SYSTEM FRAMEWORK

Local government institutions and partners should support the communication process by ensuring that all relevant information is forwarded to MIDIMAR. In addition, all disaster management focal points in sectors and districts should ensure that they are contactable at all times and particularly after normal working hours.

At the time of the writing of this document the early warning system is under development; therefore this document does not provide a comprehensive description of the early warning system in Rwanda. The next revision of the National Disaster Risk Management Plan will provide a clear overview of the developed system.

C. Communication during Emergencies

In both technological and natural disasters, how the press conveys information to the public can magnify or reduce psychosocial distress for the "at risk" population.

During emergency situations, information should be controlled by a single public spokesperson who openly cooperates with the press the spokesperson should be truthful and straightforward with the press in order to maintain credibility and trust; therefore, the spokesperson should be clear about what is not known, as misconceptions are likely to lead to inappropriate responses by the press, the public and other partners in an emergency response.

5.1.3. Preparedness measures at national and local level

In disaster preparedness as in other phases of disaster management cycle, measures to be taken at national level are linked to guidelines development coordination and monitoring activities while at local level, main activities concern organization and implementation of disaster management key actions.

During rain seasons there are threats from floods, landslides, thunderstorms and destructive winds. Other hazard such as earthquakes, volcanic eruptions, fires etc, can strike at any time. Therefore, the following preparatory actions should be taken.

National level

MIDIMAR should:

- Convene NPDRR meetings on a regular basis (a least once a month) to discuss preparedness and any changes needed to plans and procedures (including updated risk assessment)
- Maintain an up to date contact list for all NPDRR members, DDMC and SDMC
- Strengthen public warning and information systems
- Check the national stockpiles of relief supplies and replenish as necessary
- Update and/or develop assets mapping for hazard logistics
- Request departments and agencies to update their record of stockpiles of supplies that might be required to relief operations
- Check that reception storage arrangements for incoming supplies are still applicable

• Develop/update community guidelines for disaster preparedness (for earthquakes, floods and other hazards) and organize public awareness campaign supported by educational material

Local level

District Disaster Management Committees (DDMC) and Sector Disaster Management Committees (SDMC) should in their respective areas:

- At least two times a year, convene meetings to discuss readiness for disasters, brief on any changed arrangements and identify any changes needed.
- Confirm contact details for DDMC and SDMC members, key agency representatives at local level key staff, and District leaders (civil and armed) and communicate them to the MIDIMAR
- Check and test emergency communications arrangements in the district;
- Check district stockpiles and arrange replenishment as necessary;
- Request agencies to update their records of stockpiles of supplies that might be required for relief operations;
- Confirm public warning and information system details;
- Make sure that the community knows the evacuation routes to be used in any disaster event, safe refuges from flood and the routes to those refuges, and locations where basic items will be made available to survivors of a disaster.

5.1.4. Simulation exercises

MIDIMAR are responsible to set up on a regular basis simulation exercises to test the capacity of the Disaster Response system to

deal with an emergency. Simulation exercises should involve every relevant actor at all level (multi-sectoral and multi-layered approach) and should be followed by a lesson learned exercise. Simulation exercise will be conducted at national and at local level including exercises at community level.

5.2. RESPONSE

5.2.1. Emergency organisation

In the event of a disaster or other circumstances which bring about the need for contingency operations plan, different activities will be undertaken through contingency organization that will operate in phases of response. Each phase involves exercising procedures of the Contingency Plan and the teams executing those plans. The teams associated with the plan represent functions of a cluster or support functions developed to respond. Each of the teams is comprised of individuals from different partners with specific responsibilities or tasks assigned by NPDRR, which must be completed to fully execute the plan when disaster occurs. Primary and alternate team leaders, who are responsible of technical response, lead each team for a coordinated response. Team leaders must ensure that the distribution of assistance is done as planned in close collaboration with local disaster committees (DDMC and SDMC).

The National Emergency Operation

The Emergency TEAM organization's primary duties are:

- To ensure that a feasible capability exists to respond to an incident;
- To manage all response activities;

- To support and communicate with employees, system administrators, security officers, and managers;
- To accomplish rapid and efficient resumption of timesensitive business operations, technology, and functional support areas;
- To ensure regulatory requirements are satisfied;
- To streamline the reporting of response and recovery progress between the teams and management of each system.

5.2.2. Emergency Coordination

A coordinator should be appointed by MIDIMAR to monitor and coordinate the team on grounds. Additionally, this person will coordinate strategy development with Cluster Leaders. The Contingency Planning Coordinator should work closely with technical managers of teams to ensure the viability of the Contingency Plan. The emergency coordinator will manage emergency teams that are not specific. It is recommended that the individual(s) appointment(s) be documented in writing, and that specific responsibilities be identified and included in their job descriptions.

In emergency situations, the coordination should be done by MIDIMAR to organize the clusters coming from different agencies (see Table 3: Lead Ministry by sector). The following are suggested teams that will be assigned to execute the contingency plan. Each team will have a roster and task list of actions and responsibilities generated by report database to be reported and registered into the MIDIMAR database The following are the teams to intervene in disaster management based on clusters:

- Search, Rescue & Evacuation,
- Camp coordination & Management,
- Logistic,
- Protection,
- Emergency Shelter,
- Emergency Telecommunication,
- Food Security,
- Health & Nutrition,
- Education,
- Water and Sanitation,

5.2.3. Response Mechanisms

Emergency response constitutes immediate actions that have to be taken to meet the requirements of the victims in the event of manmade and natural disasters. These include the provision of food, water, shelter, clothing, counselling, medical care and security. The importance of the inclusion and participation of disaster affected people in the actions and decisions that concern them directly cannot be underestimated. There is a need to empower MIDIMAR, first responders (SDMC) and NPDRR following clusters to undertake emergency response activities when the need arises. The following are the clusters to be developed It is of a primary importance that, during an emergency response, the work of all organisations involved in the response is not delayed by legal and administrative hurdles. The Ministry of Disaster Management and Refugee Affairs, in collaboration with relevant government entities and close development and humanitarian

National Disaster Risk Management Plan MIDIMAR 2013

partners, should develop adequate instrument (law, rules and regulations) to facilitate the provision of disaster relief including but not limited to: customs accelerated for relief facilities process during an emergency, visa for foreign relief works, recognition of diplomas for foreign relief workers, telecommunication equipment expedite measures, etc

Members of each cluster will be designated by NPDRR considering their responsibilities and the nature of interventions in the country. These clusters will work closely with SDMC and DDMC and the operational coordination will be led by MIDIMAR.

1. Storage

Response may require appropriate equipment which will facilitate efficiency management of interventions on ground. MIDIMAR has to set a strategic store of food and non-food items for a quick response to be used immediately when disaster occurs. MIDIMAR will also mobilize partners (WFP, Rwanda Red Cross, etc.) to avail their resources allocated to management of disasters when necessary for gathering support for effective response. MIDIMAR have also to identify the stores available in different public institution like MINADEF, MININFRA, and POLICE to be mobilized when disaster occurs according to the emergency situation.

2. Evacuation plans

Village committees, as part of their preparedness for disasters and major emergencies, should identify safe refuge from any hazard and safe routes to these refuge. The decision to use these refuge must be made at the local level since it is unlikely that there will be enough information even at sector and cell level to instruct people to evacuate to refuge. The identification of locations that can be used as evacuation centres is the responsibility of District Administrators working with sector and cell leaders. The public should be informed of the location of shelters and the conditions under which they will be made available as a threat develops. The location of shelters, management responsibilities and location of any keys required should be documented and made available to relevant officials as a threat develops. Arrangements should be made for the provision of support to the shelters, although it is suggested that users should be encouraged to be self sufficient for the first few days of use.

3. Camp coordination and management

During emergencies, disaster affected people leave their locality to safe and secure camps identified for effective assistance. In this situation the responsible institutions (MIDIMAR) have to ensure that the camps are effectively managed and coordinated, with special attention to gender issues (e.g. prevention of gender-based violence). MIDIMAR through have to nominate the managers of the camp

4. Education

Education supports children's resilience by nurturing their psychosocial and cognitive development, and during times of crisis and emergency, it may help restore a sense of normalcy, dignity and hope by offering structured activities. The components and

associated approaches to education programming are reflected in the INEE Minimum Standards for Education, which should be used in conjunction with these standards when planning, implementing or advocating for child protection responses that involve formal or non formal learning opportunities for children. Management of emergency situation has to ensure continuity of education. MIDIMAR and partners intervening in education have to ensure that alternative education is maintained during and after emergency. A special focus should be put in ensuring girls can continue attending school, as they are often the first ones to suffer from drop-out etc. Special measures should be taken to ensure that all children can be educated in a safe and friendly environment and they not run any risks of assault on their way to class or at school.

5. Emergency shelter

Emergency response requires temporary shelter for person affected by disasters Concerned Partners (UNHCR, Red Cross, etc) have to ensure if shelters are available for effective response based on Assessment reports that provide the number of persons needing shelter. In distribution of shelter (tent), 4-6 people should get one tent ideally for the same family.

6. Emergency telecommunication (ICT)

Effective response requires effective communication to timely manage the situation on ground throuh exchange of information. During emergenc a communication system should be well set and managed timely by all partners intervening in management of the situation. DDMC and SDMC should be equipped to provide information on time within one hour after the occurrence of a disaster event.

7. Food security

Food security responses should aim to meet short-term needs, reduce the need for the affected population to adopt potentially damaging coping strategies and contribute to restoring longer-term food security. Food security is an important issue during a disaster and therefore needs specific attention. The first responders have to intervene with food items. MIDIMAR has to mobilize food items from strategic stores and exhort responsible partners to avail their food assistance.

for a effective response provision of food to the affected population requires some principles to be followed. The following are to be noted in a food aid programme:

- Food assistance is given following disasters which have significant effect on food crops,
- Food assistance is provided free of cost to the beneficiary for a minimum period of three (3) to four (4) months.
- Vulnerable peoples (pregnant women, children, the aged, the sick, the wounded and physically challenged, etc) are to be given priority attention when distributed relief and this should be given timely, regularly and in a gender-sensitive way (e.g. by handing out vouchers to women) and without putting extra burden on the receivers.

Different items in terms of special relief considering the needs and people's conditions should be respected to empower good life and to enhance social welfare of the affected population.

Distribution is based on some or all of the following propositions:

- A family/household size on the average is up to six (6) people.
- Any additional member to the six (6) people is entitled to family size ration
- Food items are allocated to each member of the family. A newly born baby is also entitled to a full ration (plus supplementary ration).
- Condiments are to be provided.

8. Health and nutrition

There should be approximately one small clinic per 10,000-35,000 people and there should be one referral hospital facility with surgical capacity for every 250,000-500,000 people. Mortality and morbidity should be monitored using generally accepted international standards and methods. Related to the nutrition needs. during response, a food ration ideally should provide a minimum of 2,100 kilocalories per person per day. The survival energy level for an adult is a minimum of 1,000 kilocalories per day. For supplementary feedings add what is needed to reach the total of 2,100 kilocalories per day, as well as special food (including micronutrient rich food) to treat severely malnourished individuals. Monitor malnutrition using international standards is required in response cases to ensure and effectiveness of success coordination of response toward the affected population. Under the health component, actions should also be included to address reproductive health, HIV/AIDS, and family planning needs, especially of the most vulnerable populations (pregnant women, children, sex workers, persons living with HIV, adolescents...). The Minimum Initial Service Package (MISP) should be introduced in the

early phases of a crisis and gradual move to comprehensive reproductive health services assured in the recovery phase. Clinical management (incl. provision of PEP kits, emergency contraceptives...) for rape survivors is also an essential part of the health component.

9. Logistics and transport

To ensure affective response, there is a crucial need to take care of logistics facilities in needed for emergency response operations requiring transport of humanitarian aid, personnel and equipment to the disaster site. Therefore, logistics and transport issues are crucial to a successful response. The following aspects of logistics and transport should be considered in planning of response in a case of emergency.

- Normal aid delivery routes to anticipated disasters areas and affected populations should be defined,
- Availability of storage site should be determined timely to manage the issues in intention of conducting effective response,
- The specification of transportation modes (road, railway, air if there is any) and issues such as availability and cost of all event should be defined,
- Avail vehicles and fuel to be used in emergency cases is crucial point in the emergency cases,
- Avail food and non-food items to supply population in emergency cases
- Identification of spare parts that may be needed for vehicles and all preliminary arrangements should be made.

Airports to be used in the event of emergency to respond effectively should be determined and well prepared at the real time.

10. Water and sanitation

In order to achieve the maximum benefit from a response, it is imperative that disaster-affected people have the necessary information, knowledge and understanding to prevent water and sanitation-related diseases and to mobilize their involvement in the design and maintenance of those facilities. Ideally each person should be provided with 15 litres of potable water per day to cover drinking, cooking and personal hygiene needs, during response there should be one water point per 250 people and the maximum distance from any shelter to the nearest water point should be 500 meters. Each family should have two water collecting vessels of 10-20 litters, plus water storage vessels of 20 litters. Therefore, a maximum of 20 persons per toilet is required. Use of toilets is arranged by household and should be segregated by sex. Showers and toilets should also be lockable to decrease the risk of GBV. Toilets should be no more than 50 meters from dwellings or no more than a one minute walk. Toilets should be at least 30 meters away from any groundwater sources and the bottom of the latrine should be at least 1.5 meters above the water table. Sanitation and hygiene are integral part of WASH and should be taken into account at all stages of Disaster Management via the assistance of specialized actors from the government and from

development and humanitarian partners.

11. Security and protection

Sites should be planned and managed in such a way that they do not trigger any insecurity or violence during and after emergency situation or any hazards. Beneficiaries will be involved in the management of the sites – ensuring equal participation of men and women – to enhance site security and hygiene (cleaning and vector control). The MIDIMAR and camp coordinator will be involved in protecting and securing the IDPs or Refugees in the site location. The overall management of the sites will be the primary responsibility of the District Disaster Management Committee (DDMC) which will ensure that services are delivered according to agreed standards in a coordinated manner. For information sharing and to avoid duplications, coordination meetings will be held at regular intervals agreed to by all stakeholders in the camp and the chairpersonship of the District Police Commander (DPC).

12. Child protection

The following are operating procedures for child protection responses in emergencies:

- Agree on what data needs to be collected from children, caretakers and community leaders
- Design or identify the most appropriate information management system
- Through data collection, identify any external factors which may pose additional threats to children
- Collect data, with all relevant actors, on the main environmental and man-made risks
- Establish safe community spaces for children to gather and play

National Disaster Risk Management Plan MIDIMAR 2013

- Establish community messaging or practical measures to avoid "losing" children, such as attaching identification tags to babies and young children, and teaching young children vital information about their family identity and the location of emergency meeting points. This can be done through simple songs, stories and play/activities. Relevant and locally available information and communication technology (ICT), such as radio and text messaging may also be used to keep families informed
- Mobilize communities to disseminate messages on physical safety of children
- Engage children and youth as leaders to educate communities about risks and prevention
- Integrate risk reduction education into formal and non formal education programmes. Risk education and information activities can be most effective if designed and delivered by children and youth themselves
- Support the availability, use and quality of victim assistance programs
- In camp construction/management ensure that child related risks are taken into account
- Assess the context for unaccompanied and separated children (UASC) and rapidly design and disseminate a referral mechanism with common registration, tracing and family re-unification components which should include identified locations for parents and children to report separation. (ICRC or local Red Cross should be consulted)
- Assure strategies to prevent and respond to sexual violence are incorporated into all programmes and children who have experienced sexual violence have access to age appropriate information as well as safe and responsive care
- Support girls and boys who may need additional attention: separated children, children on the streets, children (formerly or not) associated with armed groups, pregnant

girls, children in institutions, children born as a result of sexual violence, children with disabilities.

13. Search, rescue and evacuation

Major emergencies and disasters often result in deaths and injuries, and the disaster victims should be searched and rescued and then evacuated out of the danger site in intention of saving their life. Some people in emergency situations can get traumatized and they may need urgent psychological care. The operation of search and rescue may require armed forces and disaster operation specialists coming from different institutions either government, private or humanitarian agencies. One of the priority social welfare tasks in many relief operations is to quickly initiate a search for missing people and reunite lost family members. During response phase, some activities should be defined and determined to the intention of separating of sectors for implementation and dividing responsibilities when distributing relief and other necessities for emergency.

14. Financial considerations

At the National level, Government institutions should take the leading role in responding to disaster. The Executive committee will mobilize relief assistance if the affected areas and communities are unable to cope with the disaster situation. The primary source of funding for disaster responses shall be from local administrations (Districts) in affected areas. The second source will be the next highest level of administration above the affected areas. The Ministry of Disaster Management and Refugee Affairs will closely work together with the concerned Stakeholders to provide assistance when disaster occursand regularly collaborate mutually in all process of Disaster Response. Every public and private institution in responsibility will be requested to allocate funds (depending on its budgetary possibilities) to support the response to emergency cases.

Cluster	Task/Activities	Lead institutions	Partners
Camp coordination & management	 Coordinate all activities in camps Coordinate all intervention of partners in the 	MIDIMAR	UNHCR, DGIE, RED CROSS
	camps Regularly reporting 		
Education	Ensure the continuity of education	MINEDUC	UNICEF, ACTION
	 Provide basic education 		AID
	 Provide temporary schools and materials 		
	Follow the INEE Minimum Standards in planning		
	and implementing education interventions, with		
	special attention to INEE Minimum Standard on		
	Protection and Well-being		
	 Provide training to educators on the impact of 		
	crisis on children, their resilience and		
	interventions to assist those children needing		
	additional care		
Cholton	· · · · · · · · · · · · · · · · · · ·		
cinergency snerter	 Avail and distribute sherer to disaster victims 	INIINALUC	UNTUCK, AUKA,
	 Support shelter and settlements actors to 		AHA, RED CROSS
	mainstream child protection actions into shelter		
Emergency	Ensure effective communication from sector	MINICT	WFP
•			

Table 9: Tasks to be performed in an Emergency by cluster

Cluster Task/A Telecommunication leventer • Program	Task/Activities	Lead institutions	Partners
•			
• Pro	level to national level		
ma	Provide communication facilitation and		
	maintenance		
Food Security Mo	Mobilization, Avail and distribution of food items	MINAGRI	WFP
• Mo	Monitor the effects of distributions to ensure		
the	they are reaching the intended beneficiaries and		
vuli	vulnerable groups,		
Sup	Support and supply distribution teams with the		
info	information needed to have child headed		
hor	households, and unaccompanied and separated		
chil	children, issued ration cards in their own names		
tor	to receive distributions of food and NFIs as		
nec	necessary, in a way that does not cause further		
sep	separations.		
Ens	Ensure that nutrition programmes and		
ass	associated livelihood activities take into account		
the	the impact that these can have on child care		
pra	practices.		

Cluster	Task/Activities	Lead institutions	Partners
Health & Nutrition	Necessary drug stock on-site	MINISANTE	WHO UNICEF,
	Have available personnel to provide basic care or		UNFPA
	treatment to the affected population		
	 Special food is prepared to treat severely 		
	malnourished individuals.		
	 Monitor malnutrition using international 		
	standards is required in response		
	 Ensure child friendly safe and confidential 		
	services are in place to prevent and to respond		
	to child victims/survivors of violence, abuse,		
	exploitation and neglect (including GBV)		
	 Identify and address the different barriers 		
	preventing girls and boys from accessing health		
	services, as well as girls' and boys' distinct health		
	needs and health-seeking practices		
	 Design outreach services for children, including 		
	children with disabilities, minority or marginalized		
	children and adolescents, so they can access health		
	services available (e.g., immunization, HIV-related		
	services, family planning, etc.)		
	Ensure specific child survival health interventions		

Cluster		Task/Activities	Lead institutions	Partners
		 for children under five years of age (See nutrition, wat-san and health sphere standards) (e.g., vaccination campaigns or promotion of exclusive breastfeeding) Ensure that beneficiaries receive adequate information about the availability and purpose of nutrition programmes, and how to access these services. 		
Logistics a transportation	and	 Avail equipments and material Provide Transport means at time 	MIDIMAR/MINADEF	RDF, WFP
Protection a security	D L L	 Ensure sarety and security for the affected people, Ensure protection measures to avoid any violence in the camps/sites Strategies to prevent and respond to sexual violence are incorporated into security programmes. Women and children who have experienced sexual violence have access to age appropriate information as well as safe and responsive care. 		RDF RDF
		address their specific safety concerns and reduce		

National Disaster Risk Management Plan MIDIMAR 2013

Cluster	Task/Activities	Lead institutions	Partners
	risks to safely accessing resources and services in		
	the community.		
	 Establish referral networks and protocols for 		
	safe, confidential and effective referrals and		
	information sharing practices across service		
	providers.		
	 Advocate with stakeholders on preventative 		
	measures such as protection of separated		
	children, lighting, safe areas and not co-housing		
	children and unrelated adults		

National Disaster Risk Management Plan MIDIMAR 2013

	Cluster	Task/Activities	Lead institutions	Partners
_	Child Protection	Agree on relevant data needed and design data	MIDIMAR	UNICEF / save
		collection tools		the Children
		 Identify groups of children vulnerable to 		
		violence, exploitation, neglect or abuse.		
		Establish referral networks and protocols for safe		
		and effective referrals and information sharing		
		practices across service providers.		
		 Ensure children have access to relevant services 		
		in coordination with CP sub-cluster and existing		
		services.		
		 Ensure a coordinated inter-agency response to 		
		child protection cases and violations		
		 Ensure activities to identify, trace, provide 		
		interim care and re-unify separated		
		unaccompanied children are in place.		
		 Ensure strategies to prevent and respond to 		
		sexual violence are incorporated into all sector		
		responses and children who have experienced		
		sexual violence have access to age appropriate		
		information as well as safe and responsive care		

88

National Disaster Risk Management Plan MIDIMAR 2013

Cluster	Task/Activities	Lead inst
Water and Sanitation	 Provide sustainable access to safe water, sanitation and hygiene facilities separated by sex, designed for children needs, culturally appropriate, and accessible for children and adults with disabilities. Address children and women's needs when assessing, locating and designing water, sanitation and hygiene facilities and services (e.g. water distribution points, latrines, bathing, etc.) especially in relation to specific risks for safety and security of women and girls. Disseminate age and gender-specific messages to help children understand the importance of hygiene behaviours. 	MININFR
Search, Rescue & Evacuation	 Quickly initiate a search and Rescue for missing people and reunite lost family members. Evacuation of disaster victims in a safe place 	MINADEF

²¹ It is noted that at the early stage of the emergency the MIDIMAR will support MININFR.

15. International assistance

Requests for international assistance will be submitted when there is a declaration of state of emergency by the President of the Republic of Rwanda or a declaration of a local emergency by the Minister of MIDIMAR. International actors having existing agreement with the Rwandan Government can be called upon locally, within the scope of their agreement, to respond on a ad hoc basis to localized events. It has become clear that there are needs that cannot be met from national resources. NGOs and other agencies already present in the country. Requirements for international assistance will be determined by MIDIMAR, which will submit requests through the Ministry of Disaster Management and Refugee Affairs (MIDIMAR). MIDIMAR will be responsible for providing detailed information on needs and reception arrangements to assist donors to meet requests as guickly and effectively as possible. All departments and organizations that require international assistance must submit their needs to MIDIMAR for consideration. Coordination of international assistance can impose a heavy additional workload on a response. Assistance with this coordination can be obtained from Central level of the government (MIDIMAR).

16. Humanitarian Charter and Minimum Standards in Disaster Response

The Sphere Project was launched in 1997 by a group of humanitarian NGOs and the Red Cross and Red Crescent movement. Sphere is three things: a set of standards, a broad process of collaboration, and an expression of commitment to quality and

accountability. The project has developed several widely accepted tools, the key one being the handbook. The handbook outlines clear minimum standards in a range of key areas such as water, sanitation, nutrition, protection and education. Referring to the Sphere standards when developing a response plan can make sure that planned assistance will meet minimum standards. As many donors and international organisations have also agreed to abide by the Sphere standards, referring to them in developing national response plans can also be a tool for making sure that all stakeholders are working towards the same goal and that aid is delivered in an accountable and consistent manner.

All actors working in Disaster Response in Rwanda should demonstrate, before a project is authorized, that they meet, at minima, the sphere standards. It is noted that reaching the Sphere Standards is a minimum and not a goal by itself. All involved actors shall whenever it is possible go over the minimum standards and provide services of a high quality.

17. Customs, immigration and quarantine

MIDIMAR has to work closely with local authorities for effective management of some problems which can occur during a disaster. This includes details of the type, quantity, source, and means of transportation, arrival point, and estimated time of arrival and whether or not the assistance is Disaster Management Assistance Endorsed by the MIDIMAR. When official request for international assistance has been accepted, MIDIMAR in collaboration with MINECOFIN make the necessary arrangements for assistance endorsed by the MIDIMAR.

Chapter 6: Recovery and Reconstruction

Disaster recovery activities start while emergency response actions are in progress. Unlike the response phase of an emergency, where all efforts tend to have a singular focus on rescuing and saving lives, the function of recovery is characterized by a complex set of issues that can have long lasting effects on the community. Recovery is best achieved when the community is involved in all recovery process. Recovery extends beyond restoring physical assets or providing welfare services.

Recovery Goal: Ensuring timely recovery from disasters and complex emergencies, and leaving communities and families in a better position to withstand future hazards as well as building back better. Recovery involves the activities that apply to get the affected community and the nation at large back to normal. This phase involves a complex set

of decisions and actions relative to rebuilding homes, replacing property, resuming employment, restoring businesses and permanently repairing and rebuilding infrastructure that must be done by individuals, communities and government.

Disaster recovery involves completely, rebuilding society and rehabilitating the people. It requires concerted efforts between the government and the private sector. It is a continuous process of individuals, groups, and communities managing hazards, to avoid or ameliorate the impact of disasters where actions taken depend partially on the perceptions of risks. Rehabilitation and reconstruction after major disasters is a long term process. It cannot be achieved without leadership and commitment from government. Lessons from other disasters around the world demonstrate the importance of government involvement in facilitating and coordinating rehabilitation and reconstruction efforts. In Rwanda, the disaster recovery phase focuses on reconstruction of damages (shelters, classrooms, hospitals, health Centres ...) destroyed by disasters.

6.1. Post Disaster Needs Assessment (PDNA)

In view of the above, MIDIMAR identified a need to develop a methodology to assess damages and post disaster recovery needs in a way that can provide a framework for the planning of coordinated recovery efforts across different sectors (shelter, livelihoods, governance, environment, etc.) with a risk reduction focus. The PDNA will look into damages and losses as well as the human recovery needs (HRNA: Human Recovery Needs Assessment). These two components will constitute to the PDNA. A PDNA guideline is to be developed by the Ministry of Disaster Management and Refugee Affairs in close collaboration with government and development partners.

The government of Rwanda decided to integrate the PDNA within its Disaster Risk Management framework. The PDNA is under the responsibility of the Assessment Team of the National Platform for Disaster Risk Reduction. The primary purpose of the PDNA is to provide the technical overview to all actors (national and local authorities, international agencies and local communities) in the recovery process. Thus, the PDNA will:

- Serve as a planning and coordination framework for a multistakeholder, mutually agreed recovery strategy, owned by the government and supported by the international community;
- Identify prioritized benchmarks, outcomes and desired results as early efforts are made to repair and restore social, physical, institutional and economic systems;
- Inform and guide the decision-making process within the donor community with regard to commitments and pledges for recovery, from initial contributions during the humanitarian phase, through to contribution channelled through reconstruction conferences, consultative groups and other resource mobilization mechanisms; and,
- Provide the foundation for the formulation of early recovery programmes in each sector and geographic area, identifying opportunities for risk reduction.

6.2. Areas of intervention for recovery and reconstruction

6.2.1 Shelter

Rehabilitation and reconstruction of shelter is among the highest priority activity, in addition to providing a basic human need, it is also expected that the process of organizing all levels of the community for this task should create a platform for various community rebuilding activities. It should also provide the basis for livelihood programmes to assist communities in returning to selfsufficiency. In addition, some villages may need to consider relocation from vulnerable situations such as landslide, floods and Earthquake risk areas. Often, in the aftermath of a disaster, there is a growing concern among experts and government officials to promote a safer location for settlement of people at risk. Experience shows, however, that resettlement of population on new sites are a complex issue and presents major challenges. If resettlement is being considered as an option, the following issues must be analyzed:

- A resettlement programme should go beyond the provision of housing and should address other needs of the population such as social infrastructure, livelihoods and economic activities
- The programme needs to take into consideration the fundamental issues of disaster management and risk reduction. This requires more in-depth analysis of the new site with regard to hazards and risks. Risk mapping should be prepared prior to development of new site to avoid rebuilding risks
- Since people have often strong economic, social and cultural reasons that influence their choice of settlement and housing, it is important that the relocation decisions and selection of resettlement sites are made in a consultative manner with full participation of the affected communities. Communities need to be prepared and informed before they agree to accept voluntary relocation.

For shelter, recovery programs will focus on the rehabilitation of houses of affected household. Community member will play critical role in the construction of their houses and agencies involved in shelter and construction will work in partnership with beneficiaries for the ownership. The Ministry of Infrastructure and Local Government (Rural Settlement Task force within MINALOC) will take lead in designing shelter standard and orient all stakeholders involved in shelter and construction.

6.2.2. Infrastructure

Rehabilitation of damaged infrastructure should be seen as an opportunity to reduce the development deficit, to fulfil unmet needs and development objectives and to reduce disaster risk. Consultation of affected communities, both men and women, is crucial to allow them to indicate what their priorities for reconstruction are. The rapid rehabilitation of primary infrastructure such as primary roads, bridges, water supply and sanitation systems, primary power generation and distribution facilities, irrigation and agricultural facilities, health, education and other social facilities, can contribute to a swift restoration and development of the affected region. The key for an effective rehabilitation phase is an accurate and thorough damage assessment.

6.2.3. Education

The re-instatement of school facilities is a fundamental need following a disaster, to provide for the resumption of interrupted schooling. Schools are critical community gathering places after a disaster and often seen as a temporary shelter. At the commencement of rehabilitation and reconstruction activities, both for school programs and physical works provides a strong signal of government support to communities. In most cases the education areas is severely affected in disaster situation, recovering education sector will focus on the provision of education infrastructures (school construction), books and basic materials provision and availability of education staff whenever they were affected or displaced by disaster situation. The Ministry of Education will take the leading role in recovery and reconstruction of damaged schools and classrooms, and mobilize partners to support the recovery process, especially those with interventions in the area of education.

6.2.4. Child Protection

Despite the fact that an emergency has ended, its effects on children may continue. Continued support to families and communities to ensure protection of children may be needed as these mechanisms may have been weakened or destroyed as a result of the emergency. Continued follow-up of re-unified children is needed to assure that their rights are being upheld lie: that they are receiving access to education, health-care, and parental care. It is also important to assure relevant coordinated services confirmes to vulnerable groups of children with particular emphasis on street and working children and those lacking parental care and that services exist to address the psychosocial effects of the disaster for children. All attempts should be made to build on or support existing protection structures for children such as Ministries of Social Welfare.

6.2.5. Health

There are two components to the health sector rehabilitation and reconstruction. It includes:

- 1. Health facilities such as hospitals, clinics and housing;
- 2. Health services, comprising the provision of expanded operational programs for Immunization, health services (incl. comprehensive reproductive health services), mental health, health promotion and rural water supply and Sanitation.

The health area is critical during emergency response whether the affected population is in displacement camps or not. The Ministry of Health will take the lead in the recovery and reconstruction in the aftermath of disaster and mobilize support from partners working in

the health sector (World Health Organization, Global fund, Centre for Disease Control and Prevention etc...).

6.2.6. Agriculture (livelihood)

Recovery programmes should contribute to improvement the living conditions of the affected population. Specific issues that may need addressing:

- Agriculture and livestock production, through the provision of seeds, tools, micro- credits, and other means;
- Small business through the provision of credits or other means;
- Recovery of and improvement of productive social infrastructure such as roads, markets, etc. which will support the economic activities.

The loss of tools, equipment, and other livelihood basics in affected areas will limit the resumption of community livelihood activities. The livelihoods programs are an attempt to restart some of the basic activities that have been disrupted by disaster. The restoration of economic and basic livelihood activities and accessibility in affected areas is a key expected outcome. Communities that relied on subsistence agriculture need to return as soon as possible to their pre-disaster situation. In the short term the economic impact is often less important than that the health, livelihood and general well- being of isolated communities. The early restoration of vegetable, fruit and livestock production is critical towards achieving these goals. The objective is to restore the capacity of communities to return to normal activities as soon as possible. Therefore, the restoration of agriculture and livelihood sector will focus on the provision of seeds, tools and availing land for agriculture sector in case of relocation of household, the livelihood sector will focus on microcredit and empowerment of affected population (both men and women) for employment other than

agriculture sector, they should also be encouraged to form and join cooperatives.

6.2.7. Environmental and water resources management

The cause-effect relationship between environmental degradation, poverty and disasters is complex and has been the subject of many studies. The continuous degradation of highly sensitive ecosystems leads to the increased occurrence and magnitude of landslides and floods with major physical, economic and social consequences. Thus, recovery should be used as an opportunity to enhance the management of water and environmental resources in order to reduce one of the major causes of future disasters. Several environmental restoration activities are, by their nature, significant contributors to reducing disaster risk and must be seriously taken into consideration in recovery planning. Disaster-affected and disaster - prone areas and populations shall benefit as a matter of highest priority from development investments in the post-crisis period.

Cleaning of watersheds, protection of wetland, reforestation, reparation of landslide affected areas and mining site programs will be of high priority during the rehabilitation of environment. Post-disaster activities shall ensure the development of livelihood security and mitigate medium and long-term consequences of disasters, thereby reducing vulnerability. Rehabilitation measures shall be integrated with development programs. The Ministry of Natural Resources will take the leading role in the rehabilitation of the environment in disaster affected areas, it will also mobilize partners with interventions the environment sector.

6.3. Stakeholder's roles and responsibilities in recovery and reconstruction process

Following a major disaster, government frequently seeks external support, initially from the humanitarian community. These same institutions are also involved in an increasing number of smallerscale disasters, albeit in different ways. It is essential that these stakeholders work together in post-disaster reconstruction and that each understand the capacities, roles, responsibilities, and contributions of the others.

6.3.1. Local communities

Local community in an affected area is the first responder during an emergency and the most critical partners in reconstruction, undertaking majority of work for their own recovery, without governmental or humanitarian support. A good reconstruction planning is one that focuses on empowering communities, families, and individuals to rebuild their housing, their lives, and their livelihoods. To make this work, community members should be partners in policy making and leaders of local implementation. They may need support to play these roles.

6.3.2. Government

MIDIMAR is responsible and accountable for managing a disaster response and for establishing a policy to guide the reconstruction program. In case of a large-scale emergency, the National Platform for Disaster Risk Reduction will become the main coordination mechanisms for reconstruction and rehabilitation under the overall coordination of MIDIMAR.

6.3.3. The Humanitarian Community

The Coordination of the recovery and rehabilitation programs is the responsibility of government; however, support is often offered by the humanitarian community (UN Agencies, NGOs Red Cross and Red Crescent Movement). The international community will operate within the National Platform for Disaster Risk Reduction framework under the Recovery lead overall management.

SECTOR	ACTIVITIES	LEAD INSTITUTION	PARTNERS
Shelter	To build houses for affected population and relocate them to safe areas	MIDIMAR	MINALOC, MIDIMAR, UN- HABITAT, Community, MININFRA
Education	To put in place education facilities (buildings and laboratories curricula Staff)	MINEDUC	MININFRA, MIDIMAR, UNICEF, WORLD VISION, SAVE THE CHILDREN, MIGEPROF
Child Protection	Assure Child Protection is integrated into all recovery activities. Continued services for recovery exist for emergency affected children and their carers.	MIDIMAR	UNICEF, SAVE THE CHILDREN, MIGEPROF
Infrastructure	To build or reconstruct road, bridge, water and sanitation facilities.	MININFRA	MINECOFIN, MIDIMAR, MINIRENA, MINADEF

Table 10: Activities and sectors for recovery

SECTOR	ACTIVITIES	LEAD INSTITUTION	PARTNERS
Health	To build or reconstruct Health Facilities(Hospitals, Health Centre) To organize and coordinate health services(staff, trauma- counselling, equipment, Drugs	MINISANTE	MINECOFIN, WHO, MIDIMAR, MINADEF
Agriculture	To put in place agriculture infrastructures (irrigation systems, terracing. To offer Agriculture tools, seeds, inputs, fertilizers and drugs	MINAGRI	MIDIMAR, FAO, WFP
Environment ²²	To protect Watershed, to rehabilitate environment area damaged, cleaning Westland	MINIRENA	UNEP, MIDIMAR, MINADEF

²²It is noted that even if environment is a Global Cross-Cutting Issues Coordination cluster; it is not a sector as such in Rwanda. Nevertheless it will be considered for recovery.

REFERENCES

- 1. National Disaster Management Policy, 1st version, MININTER, 2009
- 2. National Disaster Management Policy, Reviewed version, MIDIMAR, 2012
- 3. MIDIMAR annual report, 2010-2011
- 4. MIDIMAR, Annual report, 2011-2012
- 5. MIDIMAR, Annual report, 2012-2013
- 6. Economic Development and Poverty Reduction Strategy II, MINECOFIN, 2013
- 7. Vision 2020 Progress and Way Forward, MINECOFIN 2011
- 8. HYOGO Framework For Action, 2005-2015, UNISDR, 2008
- 9. MININFRA, Rwanda Building Control Regulations, Kigali, December 2010