

**REPUBLIC OF RWANDA
MINISTRY OF DISASTER MANAGEMENT
AND REFUGEE AFFAIRS**



THE NATIONAL DISASTER MANAGEMENT POLICY

Revision of the 2009 National Disaster Management Policy

June 2012

TABLE OF CONTENT

List of acronyms and abbreviations	4
Foreword.....	5
Introduction.....	6
Chapter I: Vision, Objectives and Principles	7
I.1 Policy Vision	7
I.2 Missions	7
I.3 Policy Objectives.....	7
I.4 Strategies	8
I.5 General Orientation	10
I.6 Guiding principles	11
I.7 Code of conduct	13
Chapter II: Legal & institutional framework	15
II.1 Legal arrangements	15
II.2 National Disaster Management framework.....	15
II.3 Institutional Framework, main stakeholders and structures.....	17
II.3.1. National Disaster Management Executive Committee (NDMEC).....	19
II.3.2. National Disaster Management Technical Committee (NDMTC).....	20
II.3.3. District Disaster Management Committees (DDMC)	20
II.3.4. Sector Disaster Management Committees (SDMC).....	21
II.3.5. National Platform for Disaster Risk Reduction (NPDRR).....	22
II.3.6. MIDIMAR/UN Joint Intervention Management Committee (JIMC)	23
II.4 Main hazards in Rwanda	23
Chapter III: Institutional Responsibilities	24
III.1. Central Government Responsibilities	24
III.2. Public Institutions	24
III.3. Key Responsible Institutions per type of Hazard.....	25
Human Epidemic:	31
Crops and Animal Epidemics:	31
Pandemics:	32
III.4. Key Responsible Institutions per Sector	34
III.5. Private Sector.....	35
III.6. Financial implications	35
Annex I: Main hazards in Rwanda	i

I.1	Floods	i
I.2	Landslide and Mudslide	i
I.3	Volcanic Activity	ii
I.4	Drought.....	ii
I.5	Food Insecurity/Famine.....	ii
I.6	Earthquake.....	iii
I.7	Fires	iii
I.8	Epidemic.....	iv
I.9	Terrorism	iv
I.10	Industrial and Technological Hazards	v
I.11	Mass movement of population	v
Annex II: Disaster Management Terminology.....		vi

List of acronyms and abbreviations

CBO	Community Based Organisation
CS	Civil Society
DDMC	District Disaster Management Committees
DM	Disaster Management
DRR	Disaster Risk Reduction
DRC	Democratic Republic of Congo
DG	Director General
DRA	Disaster Risk Analysis
DRR	Disaster Risk Reduction
EDPRS	Economic Development and Poverty Reduction Strategy
EWS	Early Warning System
GIS	Geographical Information Systems
GoR	Government of Rwanda
HFA	Hyogo Framework for Action
ICT	Information and Communication Technologies
IDPs	Internal Displaced Persons
IO	International Organisations
IT	Information and Technology
MDGs	Millennium Development Goals
MIDIMAR	Ministry of Disaster Management and Refugee Affairs
MINADEF	Ministry of Defence
MINAGRI	Ministry of Agriculture and Livestock
MINALOC	Ministry of Local Government
MINECOFIN	Ministry of Finance and Economic Planning
MININFRA	Ministry of Infrastructure
MININTER	Ministry of Internal Security
MINIRENA	Ministry of Natural Resources
MINISANTE	Ministry of Health
M&E	Monitoring and Evaluation
NDMEC	National Disaster Management Executive Committee
NDMTC	National Disaster Management Technical Committee
NGO	Non-Governmental Organisations
NLC	National Land Center
NPDRR	National Platform for Disaster Risk Reduction
PM	Prime Minister
PS	Private Sector
REMA	Rwanda Environment Management Authority
RDF	Rwanda Defence Forces
RNP	Rwanda National Police
SDMC	Sector Disaster Management Committee
UN	United Nations
UNISDR	United Nations International Strategy for Disaster Reduction

Foreword

Rwanda's disaster profile is dominated by heavy rains, floods, landslides, droughts, fire, earthquakes, diseases and epidemics that disrupt people's lives and livelihoods, destroy the infrastructure and interrupt economic activities and retard development.

The policy emphasizes preparedness of the Government, communities and other stakeholders for Disaster Management activities. It aims at the establishment and strengthening of Disaster Management institutions, partnerships while mainstreaming Gender, Human Rights and Climate Change into Disaster Management activities. The ultimate goal is to increase the resilience of vulnerable groups to disasters. This policy presents the institutional structures, roles, responsibilities, authorities and key processes required to achieve a coordinated, coherent and consistent management of disaster related issues. Finally, this policy provides overarching frameworks for decision-making and coordination across Disaster Management sectors and actors, including government ministries, civil society organizations, international organizations and the private sector.

Disaster Risk Management encompasses a full continuum of aspects including preparedness, mitigation, prevention, relief, recovery and rehabilitation. This policy aims to increase and sustain the resilience of vulnerable communities to hazards through the diversification of their livelihoods and coping mechanisms. This entails a shift from short term plans to sustainable planning mechanisms. This policy aims to strengthen Disaster 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 ultimately aims to alleviate suffering by providing timely and appropriate responses for disaster affected populations.

The Ministry of Disaster Management and Refugee Affairs (MIDIMAR) coordinates all Disaster Management initiatives within a unified policy framework in a proactive manner at national, district and sector levels.

The preparation of this Policy 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 Policy 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.

Introduction

Rwanda is vulnerable to a wide range of natural and man made hazards. A short hazard profile is presented in the Annex I. The domain of Disaster Management has specific terminology detailed in the Annex II.

Over the last decade, the frequency and intensity of natural hazard-induced disasters, particularly floods and droughts, have significantly increased, raising the toll of human casualties as well as economic and environmental losses. Potential consequences of climate change are likely to further exacerbate Rwanda's vulnerability to disasters and the magnitude of their impacts. Risk is the probability of a hazard turning into a disaster, with household's or communities being affected in such a manner that their lives and livelihoods are seriously disrupted beyond their capacity to cope or withstand using their own resources, with the result that affected populations suffer serious widespread human, material, economic and environmental losses. Poor communities are predisposed to disasters due to a combination of factors such as poor settlement planning and lack of proper sanitation infrastructure, especially in flood prone areas.. These factors, coupled with naturally occurring hazards such as droughts, floods, landslides and epidemic outbreaks, among others, currently propelled by the climatic change phenomena, pose extremely high and increasing disaster risks to the Rwandan society.

Although Rwanda's economy, and by extension its population, can be classified as vulnerable to natural and man-made disasters, the country does not have a comprehensive Disaster Management framework and strategies guided by appropriate policy and legislative provisions. Past disasters were managed on an ad hoc basis without clear coordination mechanisms. The support of the international community was a key element in responding to past emergencies. In view of the above, and based on worsening climatic trends affecting the country, the Government recognizes the need to establish an institutional policy and legal framework to effectively manage disasters. The previous Disaster Management policy was adopted in 2009; roles and Responsibilities for Public Institutions dealing with disasters were not described and the National Disaster Management Centre (NDMC) was the main coordination body for Disaster Management (this centre was never created). Today all responsibilities entrusted to the NDMC fall de facto under MIDIMAR framework. Rwanda government and civil society organizations have also actively participated in the development of disaster risk reduction and disaster management treaties, policies, strategies and plans including the 2005-2015 Hyogo Framework for Action under the UNISDR.

The present policy repeals all previous Disaster Management policies. This document will guide the Government of Rwanda for all Disaster Management issues. It outlines the objectives, strategies, roles and responsibilities of every institution which intervenes in Disaster Management in order to achieve an effective Disaster Management system. The 2012 Policy is an in depth revision of the 2009 DM policy. It guides Rwanda toward a more integrated, coherent and coordinated approach to Disaster Management.

Chapter I: Vision, Objectives and Principles

I.1 Policy Vision

Substantially and sustainably reduce losses and alleviate human suffering caused by disaster.

I.2 Missions

The implementation of this policy will lead Rwanda towards achieving the following key goals which support development within the country:

1. Building the resilience of communities, infrastructures and service providers to disasters by reducing their vulnerability and increasing their ability to withstand and minimize the effects of disasters and complex emergencies through adaptation to climate change by enhancing preparedness;
2. Providing fast, coordinated, effective and appropriate responses to disasters and complex emergencies;
3. 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.

The basic principle of Subsidiarity requires that functions and actions should be undertaken at the lowest or least centralized competent level possible. The concept of tiered response suggests that disaster response is by default always handled first by the directly impacted community and families, then the local governments and organisations. When response needs exceed local capacity, then the next highest level assumes responsibility for response.

I.3 Policy Objectives

This policy seeks to establish the guiding principles and architecture for disaster management in Rwanda by presenting the institutional structures, roles, responsibilities, authorities and key processes required to achieve a coordinated, coherent and consistent approach. The policy provides overarching frameworks for decision-making and coordination across disaster management sectors and actors, including government ministries, civil society organizations, international organizations and the private sector. In particular this policy aims to:

- a. Strengthen the legal and institutional framework for the management of disasters, including the promotion of a culture of disaster awareness and for building the capacity for Disaster Management at all levels;

- b. Ensure that institutions and disaster risk management activities are coordinated and are focused to foster participatory partnerships between the Government (including mainstreamed and emergency disaster-related activities by sector Ministries) and other stakeholders, at all levels, including international, regional, sub-regional Eastern African, national and sub-national bodies;
- c. Promote linkages between Disaster Management and sustainable development for the reduction of vulnerability to hazards and disasters.

I.4 Strategies

Disaster Management will have an integrated approach covering all phases of disaster management. The following are strategies that will lead to the implementation of the Disaster Management Policy:

- a. **Strengthen Disaster Management coordination:** The Ministry of Disaster Management and Refugee Affairs (MIDIMAR) will play the coordination role for Disaster Risk Management and will be the central operational actor during all phases of disaster management in collaboration with all stakeholders.
- b. **Set up Strategic Orientation Papers:** The Ministry of Disaster Management and Refugee Affairs (MIDIMAR) shall have a leading role in defining strategies and general orientations for all phases of Disaster Management in Rwanda. MIDIMAR, with the support of all relevant public institutions and partners, will therefore develop relevant strategic orientation papers in line with the present policy, for, at minima, but not limited to, Disaster Risk Reduction, Preparedness, Response and Recovery.
- c. **Focus on Disaster Risk Reduction:** Disaster Risk Reduction is present in all phases of the disaster management cycle and shall be incorporated in all development planning forms, all public and international institutions. While developing a strategic orientation paper related to Disaster Risk Reduction, MIDIMAR will ensure that the Hyogo framework for action is fully implemented and that sufficient resources and efforts are put at all levels of the society, toward building the resilience of communities to disasters.
- d. **Reinforce Risk Assessment capacities:** Activities will be carried out to identify all entities at risk with a particular attention on vulnerable groups and those who become vulnerable in the event of a disaster. A systematic risk assessment (including hazard, vulnerability analysis and Capacity Assessment) for different types of disasters will be undertaken and coordinated by the Ministry of Disaster Management and Refugee Affairs;
- e. **Integrate Disaster Management within Development Planning:** All aspects of Disaster Management will be integrated into the regular development planning undertaken at all levels. Additionally, Ministries and Authorities in Rwanda will earmark a certain portion of the plan budget to carry out preparedness and prevention measures.

- f. Risk Reduction indicators will be used as one of the monitoring indices for developmental activities in Rwanda;
- g. **Strengthen capacity Building:** The Government will consciously promote programs and projects to augment the capacity of the country and its people in all aspects of Disaster Preparedness. Efforts will be made to minimize the vulnerability of disadvantaged groups like women, children, elders, the physically and mentally challenged, and other marginalized groups;
- h. **Reinforce legal instruments:** A Disaster Management Law will be enacted to promote Disaster Management, based on multi-disciplinary, inter-departmental, inter-sectoral and unified command approaches at all levels. The Rwanda National Disaster Management Policy will give statutory backing to some of the essential functions and agencies by defining their roles, duties and responsibilities in all the three stages.
- i. **Empower local government entities:** Due to their close link to the population, local government institutions are strongly involved in Disaster Management. They will be the first to respond in emergencies. Efforts will be made, particularly, to strengthen and empower these institutions and their functionaries, to ensure the effective discharge of their functions;
- j. **Promote community participation:** The Government will actively promote, through its own agencies, NGOs and other stakeholders, community participation in risk assessment (Hazard, Vulnerability and Capacity analysis), mitigation, planning and implementation of response and rehabilitation activities. Since communities face the brunt of any hazard, strengthening their coping mechanism will be prioritised;
- k. **Ensure synergy of efforts:** Active participation of NGOs, Community Based Organizations (CBOs) and other civil society institutions are essential for effective Disaster Management. Therefore, their help and cooperation will be solicited. The NGOs will be encouraged to carry out sustained developmental work with disaster resilience as their central theme, especially in remote, inaccessible and vulnerable areas of the country;
- l. **Ensure efficient coordination:** All agencies involved in emergency relief and other Disaster Management activities will have to operate within the framework laid down in this policy and related law, codes and government notifications in force and guidelines issued from time to time. All agencies at the national and district levels will inform the concerned officials (MIDIMAR) while undertaking any new activities and submit necessary reports requested for or published by the agency. This will help in minimizing overlaps and duplication of efforts and serve to improve coordination.
- m. **Train institutions and other relevant partners:** The government, in order to improve the Disaster Management capacity in the country, will put emphasis on training at all

levels. Institutions, which can impart training in Disaster Management will be supported and strengthened. Officers, posted to key positions in the field, will be trained in Disaster Management. Training and Table Top/Field exercises will be organized for the elected people's representatives, Government officials, NGOs, community leaders, teachers, students and disaster response task forces

- n. Strengthen the communication System:** Constant endeavours will be carried to ensure that the communication systems linking the country, district, sector levels as fail-safe as possible. Communication facilities in cut-off areas will receive special consideration. Simultaneously, alternative standby systems of communication will be put in place in order to ensure that there is no breakdown of communication during extreme events. Ultimately an efficient Early warning system should be a central element of communication before, during and after a disaster.
- o. Make an inventory of Resources:** A detailed inventory of resources, both human and material, available to all stakeholders and required for emergency management functions, will be prepared at the national, district and sector levels;
- p. Streamline environmental protection:** One of the most important components of Disaster mitigation is the protection of the ecosystem. Efforts will be made to preserve and protect these systems with people's cooperation. The Government will promote conservation and restoration measures, especially with the involvement and participation of the communities dependent on such environmental niches;
- q. Mainstream Disaster Management in Education:** To inculcate a culture of safety, Disaster Management will be incorporated in the education system and curricula at all levels.
- r. Encourage research:** a strong link between research and Disaster Management is a key element toward a better understanding of the past and current and future situation helping to define sound way forward, strategies and activities. Research activities related to disaster Management as well as taking into account disaster management in multi-sectoral research programme will be promoted in Rwanda
- s. Revise and Update the Policy:** the Ministry of Disaster Management and Refugee Affairs will revise and update the policy as and when required.

I.5 General Orientation

The National Disaster Management Strategy is in line with other government national development programmes including the Millennium Development Goals, Vision 2020, the Economic Development and Poverty Reduction Strategy and the current Seven Year Government Programmed (2010-2017), the National Decentralization Policy and National Strategy for Climate and Low Carbon Development.

- 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 strategy, 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) to guide Rwanda's medium-term development ambitions from 2008-2012 was adopted by the Government of Rwanda in September 2007. This policy directly contributes to the social protection sector.
- 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 Programmed (2010-2017):** The Seven year programmer addresses Disaster Management. This policy directly contributes to the programmer 4, page 27, and 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."
- f. **The National Strategy for Climate and Low Carbon Development (NSCLCD):** it aims at achieving (i) Energy Security and a Low Carbon Energy Supply that supports the development of Green Industry and Services, (ii) Sustainable Land Use and Water Resource Management that results in Food Security, appropriate Urban Development and preservation of Biodiversity and Ecosystem Services and (iii) Social Protection and Disaster Risk Reduction that reduces vulnerability to climate change impacts. This policy will serve as a guiding framework to link disaster management and Climate Change in Rwanda

I.6 Guiding principles

The following guiding principles will be observed in the implementation of Disaster Management initiatives:

- a. **Public awareness, prevention and interventions based on facts and verifiable information:** Data from the early warning systems and the continuous monitoring of disaster occurrence and trends will be the basis for public awareness, prevention, preparedness and response.

Action: The Government of Rwanda will put a strong emphasis on creating reliable and evidence based analysis on Hazard, vulnerability and capacity assessments.

- b. The primacy of coordination, collaboration and communication:** Adequate coordination and communication, at all levels, amongst stakeholders is critical components of Disaster Management.

Action: The Government of Rwanda will establish an efficient Disaster Management Coordination Mechanism involving the entire humanitarian community.

- c. Multidisciplinary and multi-sectoral approach:** Disasters cut across a wide range of sectors and involve actors from Government, civil society and the international partners. All Public institutions in Rwanda should be involved in Disaster Management and put necessary resources to ensure that Disaster Management is fully incorporated and/or mainstreamed in their respective plans.

Action: The Government of Rwanda will promote a multidisciplinary and multi-sectoral approach to Disaster Management.

- d. Lessons learning and knowledge management:** Over the past years, several initiatives related to Disaster Management have been undertaken in Rwanda.

Action: Building on past experiences and lessons learned, the Government of Rwanda will promote information and experience sharing to improve best practices for Disaster Management.

- e. Increasing partnerships and the role of communities in Disaster Management:** Communities and households bear the brunt of disasters and can respond to them through their traditional coping mechanisms.

Action: The government of Rwanda will promote strategies for Disaster Management based on community consultation, experience and participation. Communities will be encouraged to pool local resources for disaster prevention, preparedness, response, mitigation and recovery. This will strengthen the decentralization of Disaster Management and enhance a bottom-up approach;

- f. Mainstream Climate Change into Disaster Management:** Rwanda's vulnerability to disasters and climate change is rooted in the reliance of the majority of its population on rain-fed subsistence farming practised on steep topography. Given this intimate livelihood dependence on weather conditions, it is critical that climate change is mainstreamed to help guide interventions aimed at reducing vulnerability to potentially adverse impacts.

Action: The Government of Rwanda will ensure that Climate Change is mainstreamed into all Disaster Management related activities using the EAC Climate change policy and the Rwanda National Policy for Climate Change and Low Carbon Development.

- g. Time factor:** the first hours following a disaster (rapid onset) are crucial. A rapid and efficient response may save numerous lives and avoid unnecessary losses.

Action: MIDIMAR and all partners involved in disaster response will put specific effort in establishing and strengthening fast disaster response mechanisms to launch the first response to disasters in a period not exceeding 24 hours or less after a disaster.

- h. Disaster Preparedness focus:** 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. Disaster risk arises when hazards interact with vulnerabilities. The potential for a hazard to become a disaster is determined by a complex relationship between a hazard and the vulnerability and resilience of a population.

Action: MIDIMAR will place specific focus on disaster preparedness activities and develop adequate operational documents with relevant partners

- i. Research and dissemination of information:** Research and information dissemination are key components of effective Disaster Management. Therefore, all stakeholders in Disaster Management have the responsibility to collect, document and disseminate information on their activities and experiences on disasters to other stakeholders.

Action: The Ministry in charge of Disaster Management Affairs will act as a focal point for the coordination and dissemination of research findings on disasters.

- j. Regional and International perspectives:** Some hazards such as drought, epidemics, conflicts and weapons proliferation are not confined within national borders and may have a direct impact on Rwanda. Regional coordination with neighbouring countries and EAC members as well as with Nile Basin Initiative and AU members is an important step toward dealing with cross-borders issues.

Action: The Government of Rwanda will promote linkages with regional and international institutions, in order to facilitate collaboration and the fostering of joint initiatives for Disaster Management.

In addition to the above principles, the government of Rwanda will mainstream Gender and Human Rights in every Disaster Management related matter.

I.7 Code of conduct

The code of conduct in Disaster Management 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 based on facts and verifiable information:** Data from the early warning systems and the continuous monitoring of disaster occurrence and trends will be the basis of disaster response.
- b. The humanitarian imperative:** The right to receive relief assistance during disasters is a fundamental humanitarian principle which should be enjoyed by all citizens of Rwanda.

Relief assistance should be primarily directed to the most vulnerable and given based on needs and vulnerability.

- c. **Aid is given regardless of ethnicity, political or religious affiliation or geographical considerations.**
- d. **Culture and customs will be respected:** Stakeholders will endeavour to respect the culture, structures and customs of the communities and households.
- e. **Disaster relief and recovery must strive to reduce future vulnerabilities to disasters as well as meeting basic needs of victims:** All stakeholders will strive to implement disaster assistance programmes which actively reduce the beneficiaries' vulnerability to future disasters and help them create sustainable lifestyles.
- f. **Stakeholders will reinforce the capacity of local communities to manage the full Disaster management cycle:** All people and communities even during disasters still possess capacities as well as vulnerabilities. Where possible; stakeholders will strengthen these capacities by employing local staff and procuring local resources. All Disaster Management matters should reinforce rather than undermine existing capacities (do not harm principle).
- g. **Involvement of communities in Disaster Management Programs:** The Government and its stakeholders will fully involve communities in the design, management, implementation, monitoring and evaluation of Disaster Management programmes. It is reminded that the people of Rwanda bear the primary responsibility, in the limitation of their resources, in dealing with disasters when they occur.
- h. **Mainstreaming Gender and Children Issues:** In all Disaster Management programmes, Government, partners, stakeholders and communities will take positive cognisance of the excessive impacts which women and children undergo in any disaster.
- i. **Mainstreaming the Concerns of the Disabled and the Elderly:** In most disastrous situations, confusion surrounds many activities, especially in relation to relief and evacuation. This problem particularly affects physically, mentally and visually challenged people, the elderly and the sick. This policy stresses the need of special provisions to cater for these segments of the society in these particular emergencies.
- j. **Human Right Base approach:** Human right is an ultimate principle and should be the core principle of all Disaster Management related programme, activity and planning. As stated in the constitution preamble: “[...] build a State governed by the rule of law, based on respect for fundamental human rights, pluralistic democracy, equitable power sharing, tolerance and resolution of issues through dialogue”.
- k. **Environmental Concerns:** Stakeholders will take into consideration environmental concerns in the design and management of disaster programmes, constantly reviewing the status and trends of the environment to ensure sustainable compliance.

It is clear from the above, that the Government will take a leading role in mainstreaming the principles enshrined/articulated in policy to guide Disaster Management activities and to enable other stakeholder's to harmonise, align and coordinate Disaster Management activities along with the Government needs and priorities. This requires policy, legal and institutional frameworks, with the regular allocation of public resources, which strengthens the government strategy on Disaster Management, in order to achieve the desired goal and objectives.

Chapter II: Legal & institutional framework

This chapter provides the legislative and institutional arrangements for Disaster Management in Rwanda. This policy provides the basis and framework for the formulation of those legislative and institutional arrangements. The Ministry of Disaster Management and Refugee Affairs is established by 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).

This institutional framework should facilitate the coordination and ensure collaborative relationships among stakeholders.

II.1 Legal arrangements

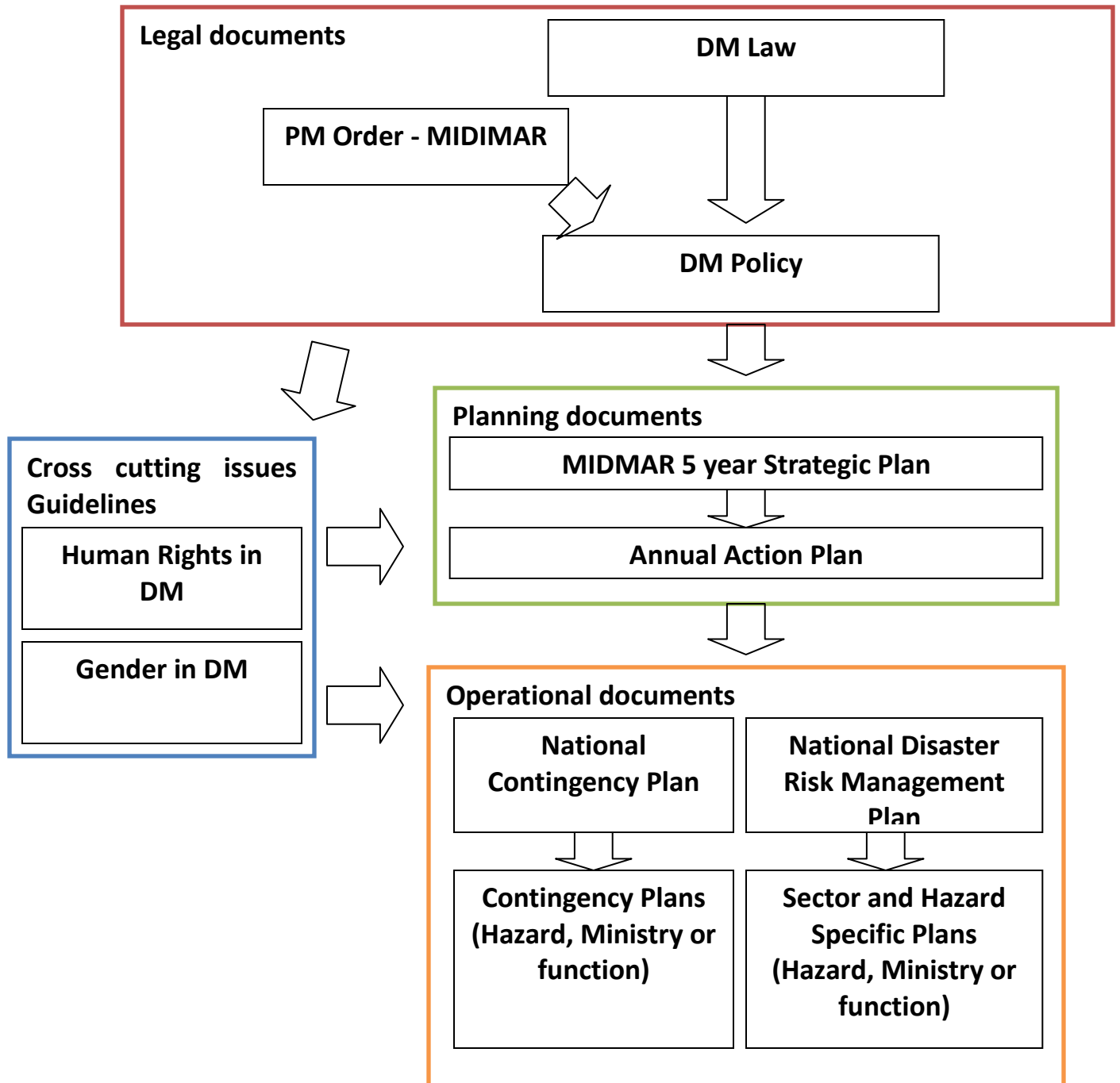
A legal framework will be strengthened through a Law on Disaster Management with provision for:

- a.** Role and responsibilities of Disaster Management bodies;
- b.** Measure undertaken by the Government for Disaster Management;
- c.** Facilitation of international assistance for disaster relief and recovery.

II.2 National Disaster Management framework

The National Disaster Management framework has been designed to ensure coherence between all documents in the Ministry of Disaster Management and Refugee Affairs and directly related to Disaster Management. It is noted that each document shall be in line with current development documents in Rwanda and relevant policy. The below framework is not exhaustive but details the main documents to set up for an efficient management of Disaster.

Other documents, guidelines and plans will be set up according to the needs and requirements.



Disaster Management Law:

The Disaster Management Law establishes in Rwanda and determines roles and responsibilities of government actors dealing with Disaster Management in Rwanda. It provides for the effective management of disasters and for matters connected there with or incidental thereto. The Law sets out procedures, roles and responsibilities related to Disaster Management and the facilitation and regulation of International Disaster Assistance provided to Rwanda in the event of a Disaster on its territory, as well as for International Disaster Assistance transiting through Rwanda's territory to aid a neighboring country affected by a disaster.

MIIDMAR 5 Year Strategic Plan:

The MIDIMAR Strategic Plan is the foundation on which the Disaster and Refugee programmes planning will be based for the next five years. The MIDIMAR Strategic plan 2012 – 2017 provides the overall framework for a holistic approach of Disaster Management and Refugee Affairs in Rwanda. It covers Disaster Risk Reduction, Preparedness, Response, Recovery and Rehabilitation as well as Refugee and Returnee Affairs.

Strategic Orientation Paper:

Strategic orientation papers are documents detailing the Disaster Management Policy overall vision and objectives for specific fields of activities. They are designed to cover Disaster Risk Reduction, Preparedness, Response and Recovery providing clear and concrete orientation for the management of the technical fields listed above.

National Contingency Plan:

The National Contingency plan is a management tool used to analyze the impact of potential crises and ensure that adequate and appropriate arrangements are made in advance to respond in a timely, effective and appropriate way to the needs of the affected population. Contingency planning is a tool to anticipate and solve problems that typically arise during humanitarian response. The National contingency plan describes activities that have to be undertaken by different actors at different moment following a disaster.

National Disaster Risk Management Plan:

The National Disaster Risk Management Plan is a central document for Disaster Risk Management in Rwanda. It is the main operational document describing and detailing the Disaster Management Policy in operational terms. The NDRMP is a living document which shall be revised on a regular basis. The National Disaster Risk Management Plan (NDRMP) aims to further develop and strengthen national preparedness, response and recovery capabilities in Rwanda; it describes roles, functions and responsibilities of the main actors involved in Disaster Management and translate in operational terms the strategies defined in the present policy.

Cross-cutting issues guidelines:

Before, during and after an emergency, cross cutting issues have to be fully taken into account. The Cross-cutting guidelines are designed to provide operational tools to actors working in any disaster management related field in Rwanda.

All the above document will be designed in line with Regional and International agreement with a specific emphasis on the East African Community coordination mechanisms.

II.3 Institutional Framework, main stakeholders and structures

The President of the Republic of Rwanda has the power, provided by the Constitution of Rwanda, of declaring a state of emergency. The Rwanda Defence Force and Rwanda National Police are called upon to play a critical role during emergency response and assist the civil administration when the situation is beyond their coping capability. In practice, the Armed Forces form an important part of the Government's response capacity and are immediate responders in all serious disaster situations. On account of their vast potential to meet any

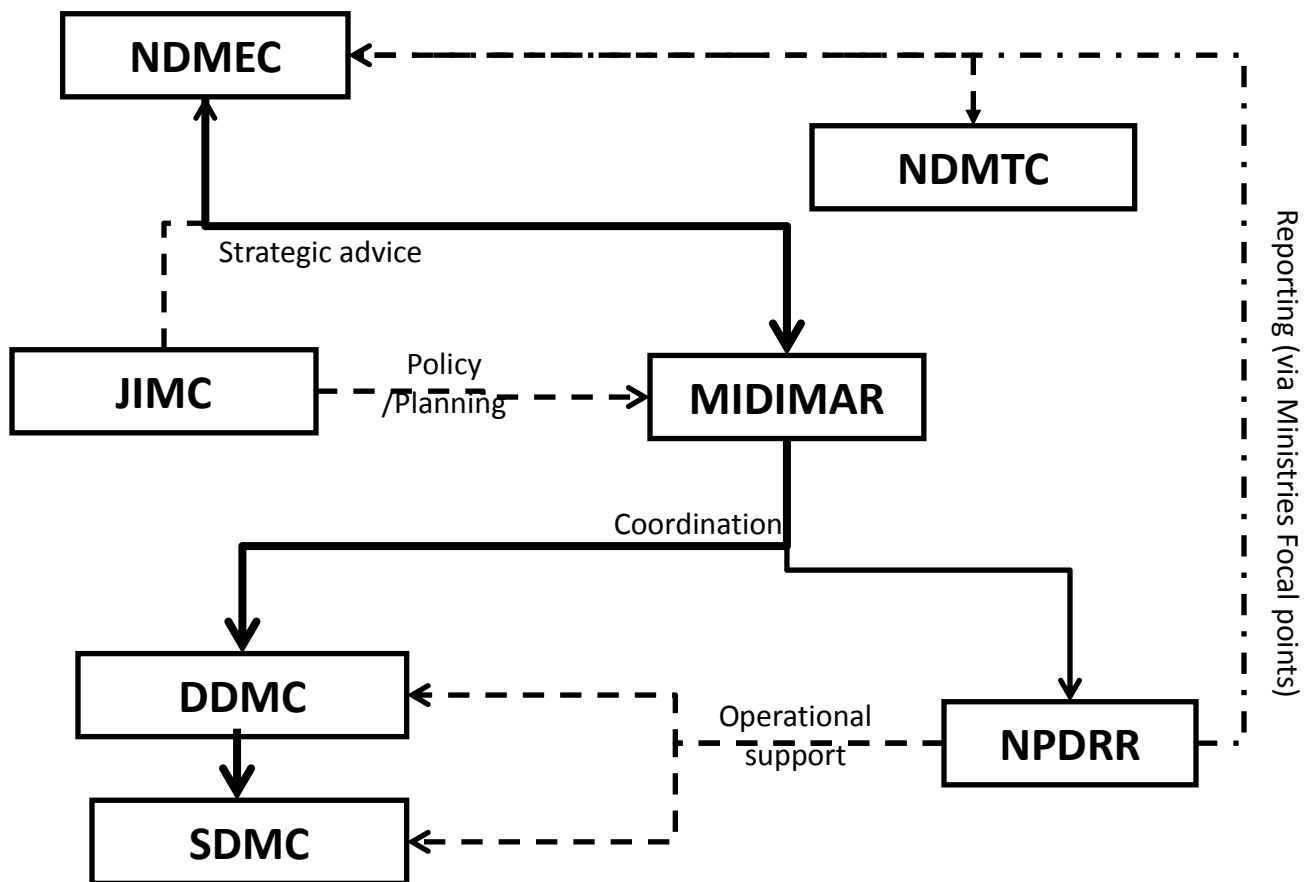
adverse challenge, their speed in carrying out operational responses and the resources and capabilities at their disposal, the Armed Forces have historically played a major role in emergency response. These include search and rescue operations, health and medical facilities, and transportation, especially in the immediate aftermath of disaster. Airlift, heli-lift and trips to provide assistance to neighbouring countries primarily fall within the expertise and domain of the Armed Forces.

Roles and responsibilities of the Ministry of Disaster Management and Refugee Affairs are described in-extenso in the Prime Minister’s order 75/01 of 08/07/2011:

“1° developing a highly proficient mechanism for preventing, mitigating, responding to, recovering, securing, monitoring and responding in a timely manner in order to promote management of natural and man-made disasters including volcanic activity, earthquakes, floods, landslides, mudslides, storms, fire and drought;”

“2° developing a pro-active refugee policy and a mechanism for the management and protection of Rwandan and foreign refugees which permits development of a strategic response to the problems of refugees, in conformity with national laws and international treaties.”

The institutional framework for Disaster Management in Rwanda is presented in the chart below. The functions of the different Stakeholders within the system are described below.



The Ministry of Disaster Management and Refugee Affairs work hand in hand with a broad range of actors from the government, the civil society and the development and humanitarian community. The institutional framework for Disaster Management is composed of the following body:

- National Disaster Management Executive Committee (NDMEC),
- National Disaster Management Technical Committee (NDMTC),
- District Disaster Management Committees (DDMC),
- Sector Disaster Management Committees (SDMC),
- National Platform for Disaster Risk Reduction (NPDRR),
- The UN/MIDIMAR Joint Intervention Management Committee.

II.3.1. National Disaster Management Executive Committee (NDMEC)

The National Disaster Management Executive Committee is the highest DM decision-making body. It sits at the Central Government level and is chaired the Minister responsible for Disaster Management. NDMEC makes decisions on national DM issues, especially during emergencies. In case of a major emergency, the National Disaster Management Executive Committee will be the main advisor committee to government role in conducting the response. The Committee may invite any other institution that may be related to the disaster/incident in question including government and non-government organisations. Membership shall be composed of following Ministers:

- 1) Minister of Disaster Management and Refugee Affairs (Chair),
- 2) Minister of Defence (Vice-Chair),
- 3) Minister of Internal Security (Member),
- 4) Minister of Local Government (Member),
- 5) Minister of Health (Member),
- 6) Minister of Infrastructure (Member),
- 7) Minister of Finance and Economic Planning (Member),
- 8) Minister of Agriculture and Animal Resources (Member),
- 9) Minister of Natural Resources (Member),
- 10) Chief of Defence Staff,
- 11) Inspector General of Police.

The National Disaster Management Executive Committee's responsibilities are to:

- a. Provide policy guidance in relation to national aspirations and oversee disaster preparedness and management in the country.
- b. Advise relevant bodies in preparing, responding and recovering from major emergencies,
- c. orient the Government of Rwanda ways to address Disaster Risk Management,
- d. ensure that response efforts are coordinated within all line Ministries,
- e. take appropriate actions when the impact of the disaster go over the national capacity to cope with it,
- f. report to the president of the Republic of Rwanda for all urgent matters related to disaster management,

- g.** advise H.E. the President on whether to declare a national disaster and subsequently to appeal for international assistance based on information and analysis provided by NDMEC

II.3.2. National Disaster Management Technical Committee (NDMTC)

The Technical Committee is composed of Focal Points from the Line Ministries and Institutions members of the NDMEC. All Ministries part of the National Disaster Management Executive Committee will appoint a permanent focal point in the National Disaster Management Technical Committee. On an ad hoc basis depending on particular needs, and upon approval of the National Disaster Management Executive Committee, other Ministries or Institutions shall be invited to nominate a focal point.

The Technical Committee on Disaster Management is responsible for advising the NDMEC for:

- a.** Planning, developing and implementing policies and programs related to Disaster Management;
- b.** Ensuring an efficient technical advice between all line Ministries in responding to Disasters;
- c.** Advising all relevant public institutions in respective area for purposes of developing and implementing Disaster Management strategies;
- d.** Liaising with all relevant public institutions to ensure that the decisions of the NDMEC are implemented;
- e.** Reporting to the National Disaster Management Executive Committee.

II.3.3. District Disaster Management Committees (DDMC)

A District Disaster Management Committee should be set up in each district of Rwanda. DDMCs are composed at minima of:

- a.** The District Mayor (Chair),
- b.** The District Army Commander (Vice-Chair),
- c.** The District Police Commander (Member),
- d.** The Professional in charge of Disaster Management in the District (Member),
- e.** The District Social protection officer (Member),
- f.** The Director of the District Hospital (Member),
- g.** Rwanda Red Cross District Representative (Member).

District Disaster Management Committees will work in close collaboration with the relevant Local Government structures and Stakeholders in their respective areas; in case of a major event, the DDMC can invite any relevant actor. The District Disaster Management Committee will be responsible for:

- a.** Providing relevant and timely information to the Ministry of Disaster Management and Refugee Affairs for all matters related to Disaster Risk Management.

- b. Coordinating emergency responses in their respective Districts;
- c. Formulating, compiling and coordinating and providing regular updates of District Disaster Contingency Plans;
- d. Appointing lead agencies, through memoranda of understanding, to be responsible for coordinating emergency responses in their respective districts;
- e. Conducting and documenting an inventory on the response capacity for the emergency services;
- f. Supporting and participating in Disaster Management training and needs assessment, in conjunction with local experts, volunteers, trained personnel and other stakeholders;
- g. Monitoring, analysing and evaluating the data for Disaster Management activities at district level under the MIDIMAR leadership;
- h. Conducting, training and public awareness programmes and activities at the district level under the MIDIMAR leadership;
- i. Promoting advocacy for and co-ordination of Disaster Management and DRR programmes and activities, including, especially, the mainstreaming of Disaster Management, DRR and Climate Change in Education, Development Planning and management.
- j. Fostering linkages with non-governmental partners, and with District representatives of line Ministries and Local Authorities.
- k. Working with grassroots community groups, individuals and volunteers, who have experience and / or interest in Disaster Management.
- l. Ensuring post disaster monitoring in line with the guiding documents laid out by the Ministry of Disaster Management and Refugee Affairs.

II.3.4. Sector Disaster Management Committees (SDMC)

The Policy recognises the important role of communities in carrying out Disaster Management activities. Sector leaders will mobilize communities in the identification of causes of their vulnerability to risks and implementation of the risk reduction programmes. SDMCs will be composed of:

- a. The Sector Executive Secretary (Chair),
- b. The Sector Social Affairs Officer (Vice-Chair),
- c. The reserve force commander (Member),
- d. The Sector Army Commander (Member),
- e. The Sector Police Commander (Member),
- f. The Local Defence Force Commander in the Sector (Member),
- g. Head of health centre (Member),
- h. Head of community health workers (Member),
- i. Sector Rwandan Red Cross representative (Member).

The main responsibilities of the Committee will be to:

- a. Collect Early Warning Information and transmit it to Sector and District level;
- b. Collect, document and disseminate disaster information (including the Early Warning information using indigenous knowledge and response), plan and mobilize in order to

- ensure active participation and effective operations of the Committees, in a bottom up decision-making;
- c. Strengthen Local Authorities to play a more active role in Disaster Management. It is recognized that the Authorities have potential resources that can be effectively used to minimize disaster impacts;
- d. Participate in the implementation of intervention to address effects of disaster including search and rescue operations;
- e. Conduct community mobilisation and sensitization before, during and after disasters.

II.3.5. National Platform for Disaster Risk Reduction (NPDRR)

The Rwanda National Platform for Disaster Risk Reduction is elevated under this policy. Humanitarian partners are expected to deliver support to Government institutions and the affected population in a cohesive and coherent manner, in line with the strategies of the Ministry of Disaster Management and Refugee Affairs and in areas of their specific comparative advantage; therefore, a coordination platform has been created in order to ensure an efficient coordination. The National Platform for Disaster Risk Reduction (NPDRR) is composed of line Ministry focal points for disaster management and all organisations playing a significant role in Disaster Management. The NPDRR is chaired by MIDIMAR and co-chaired by the United Nations Resident Coordinator. The composition of the NPDRR and its subsidiary working groups is further explained in the coordination sections of the National Disaster Risk Management plan. The National Platform for Disaster Risk Reduction is composed of all institutions dealing with disaster management, including, but not limited to:

- a. Focal points of all Ministries part of the National Disaster Management Executive Committee,
- b. United Nations Agencies,
- c. International Organisations,
- d. NGOs (International and National),
- e. Red Cross Movement Organisations,
- f. Civil Society Organisations;
- g. private sector,

Other relevant actor may be invited according to the relevance. The complete list of members of the NPDRR will be maintained by a NPDRR secretary. MIDIMAR will appoint a NPDRR secretary placed in the MIDIMAR Single Project Implementation Unit, detached of other duties, to ensure a smooth and efficient coordination of the platform.

The NPDRR role and responsibility will be to support MIDIMAR in:

- Networking and sharing information, experiences and technical expertise nationally, regionally and internationally;
- reviewing policies and relevant plans
- Ensuring a multi-stakeholder participation in the development, updating, and sharing of a Disaster Risk Reduction and Management Information System;
- Act as Disaster Risk Management Platform for Rwanda;

- developing and implementing the national strategy for Disaster Risk Management;
- Monitoring and analysis of hazard risk trends in the country;
- Developing common preparedness, contingency and response plans with relevant public institutions in Rwanda;
- Participating in the assessment of the impacts and needs arising from disasters in Rwanda;
- Collaborating with lead institutions to monitor and respond to disasters.

II.3.6. MIDIMAR/UN Joint Intervention Management Committee (JIMC)

The MIDIMAR/UN Joint Intervention Management Committee (JIMC) is a joint coordination mechanism to facilitate the effective and efficient collaboration between MIDIMAR and the United Nations in Rwanda. The Joint Intervention Management Committee is chaired by the Minister of Disaster Management and Refugee Affairs and co-chaired by the representative of the United Nations in Rwanda.

The Joint Intervention Management Committee consists of representatives at decision making level of MIDIMAR and relevant agencies of the United Nations. The Joint Intervention Management Committee also has an advisory role to the National Disaster Management Executive Committee.

II.4 Main hazards in Rwanda

Rwanda has witnessed a number of natural and man-induced disasters that culminate sometimes into the loss of lives and property and the displacement of people. Famine as a result of drought, earthquake, epidemics, floods, landslide, environmental degradation, technological accident, fire outbreak and lightning are prevalent. This policy, therefore, is an effort to put in place a systematic disaster prevention, mitigation, and preparedness and management framework for the country. Natural hazards in Rwanda are categorised in two main groups: (i) hydro meteorological, namely floods, including those combined with landslides and droughts; and (ii) geological, including earthquakes and volcanic eruptions. Of these, floods and droughts have caused the most serious disasters in terms of the number of people affected. Disasters have had significant environmental and socio-economic impacts, posing a serious threat to livelihoods, food security and economic growth.

Main hazards in Rwanda are detailed in the Annex I of the policy.

Chapter III: Institutional Responsibilities

III.1. Central Government Responsibilities

Disaster Management is, per nature a cross cutting issue touching at all sectors of the society. To ensure an efficient management of disasters; it is of a primary importance that the Government places itself as a central actor involving all public institutions toward a common goal. Measures which the Central Government shall take include measures with respect to all or any of the following matters, namely:

- a. ensure the integration of measures for prevention of disasters and mitigation by Ministries or Departments of the Government of Rwanda into their development plans and projects;
- b. ensure appropriate allocation of funds for prevention of disaster, mitigation, capacity-building and preparedness by the Ministries or Departments of the Government of Rwanda;
- c. ensure that the Ministries or Departments of the Government of Rwanda take necessary measures for preparedness to promptly and effectively respond to any threatening disaster situation or disaster;
- d. cooperation and assistance to other countries affected by major disaster, as requested by them or otherwise deemed appropriate by it;
- e. deployment of military and air forces, other armed forces of the Rwanda Defence forces or any other civilian personnel as may be required for the purposes of disaster management;
- f. establish institutions for research, training, and developmental programmes in the field of disaster management;

III.2. Public Institutions

It shall be the responsibility of every Ministry and Public Institutions of the Government of Rwanda to, in accordance with the guidance of the Ministry of Disaster Management and Refugee Affairs:

- a. take measures necessary for prevention of disasters, mitigation, preparedness and Capacity-building;

- b. integrate into its development plans and projects, the measures for prevention or mitigation of disasters;
- c. respond effectively and promptly to any threatening disaster situation or disaster;
- d. review the enactments administered by it, its policies, rules and regulations, with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness;
- e. allocate funds out of their annual budget for measures for prevention of disaster, mitigation, capacity building and preparedness;
- f. provide assistance to Ministry of Disaster Management and Refugee Affairs for:
 - i. drawing up mitigation, preparedness and response plans, capacity building, data collection and identification and training of personnel in relation to disaster management;
 - ii. carrying out rescue and relief operations in the affected area;
 - iii. assessing the damage from any disaster;
 - iv. carrying out rehabilitation and reconstruction;
- g. make available its resources to the National Disaster Management Executive Committee for the purposes of responding promptly and effectively to any threatening disaster situation or disaster, including measures for:
 - i. providing emergency communication in a vulnerable or affected area;
 - ii. transporting personnel and relief goods to and from the affected area;
 - iii. providing evacuation, rescue, temporary shelter or other immediate relief;
 - iv. setting up temporary bridges and landing places;
 - v. providing, drinking water, essential provisions, healthcare, and services in an affected area;
 - vi. Take such other actions as it may consider necessary for disaster management.
- h. formulating policies preventing the controlling and exploitation of natural resources in ways making natural recharge impossible;
- i. ensure that relevant public servant and other employees of the Government of Rwanda are trained for disaster management;

III.3. Key Responsible Institutions per type of Hazard

Institutions have been identified to cover for each of the hazards that affect the country and are listed below. This policy urges the institution to take responsibility, in collaborating with the Ministry of Disaster Management and Refugee Affairs to monitor, assess, respond and report on risk levels and action being taken to minimize adverse effects. The overall coordination will remain under the direct responsibility of the MIDIMAR. The lead institution is urged to hold, at least on quarterly basis, consultative meetings with responsible institutions and stakeholders. A detailed report will be written on a quarterly basis and addressed to the Prime Minister. This report will highlight the risk status and action being undertaken by each of the responsible institutions.

The development and humanitarian community is a key element of Disaster Management. Diplomatic Missions, the United Nations, International Donors and Non-Governmental

Organisations are important actors in preparing for, responding to and recovering from a disaster. They are involved, along with the civil society, at all level of Disaster Management; their implications is by definition multi-sectoral and are integrant part of the disaster management mechanism for all hazards. Recognizing that coordination mechanisms and a large number of preparedness, response and recovery mechanisms are common to most disasters, the Ministry of Disaster Management and Refugee Affairs will use an all hazard approach for its Disaster Risk Management Planning (including contingency planning). Each hazard comport its specificities; under an overall all hazard approach framework, specific actions will be taken per type of hazard. The following list of policy actions are hazard specific taking into account that most mechanisms are common to all hazard and therefore not recalled.

The co-lead institution for each hazard has the responsibility of working and fully collaborating with the MIDIMAR. 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. In particular the Ministries will:

- a. Put in place all necessary actions required to prepare, respond and recover to a hazard;
- b. Develop a comprehensive risk analysis including for each hazard an identification and a mapping of the hazard, a vulnerability analysis linked with each specific hazard and a capacity assessment;
- c. Ensure that involved public institutions receive relevant information (including early warnings) to efficiently prepare, respond and recover from a disasters triggered by a specific hazard;
- d. Develop adequate contingency plan;
- e. Work with all relevant public institutions to ensure that they are well prepared to respond a disaster linked with a specific hazard including by continuing to operate;
- f. Allocate sufficient resources to achieve these goals;
- g. Act as the last resort services provider in case of disaster and failure of other institutions to provide required relief assistance;
- h. Put in place adequate mechanism in close collaboration with the MIDIMAR to fulfill its mandate;

The Co-lead institution is seen as the best positioned institution to manage the disaster response linked with a specific hazard while MIDIMAR as the lead institution is seen as the best positioned to assess, monitor and disseminate information related to a specific hazard.

The lead is responsible for working in close collaboration with the co-lead institution to ensure that Rwanda is well equipped to prepare, respond and recover from a disaster. Other listed institutions per hazard have the responsibility to cooperate with MIDIMAR and the co-lead in preparing, responding and recovering from a disaster.

Policy Actions are main activities that shall be undertaken by the co-lead institution, under MIDIMAR leadership, to strengthen the management of each type of hazard. They are non-exhaustive but described the main actions to be done. The co-lead institution and other listed members shall fully cooperate with MIDIMAR in putting in place policy actions.

Floods:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs (Lead)
- b. Ministry of Natural Resources (co-lead),
- c. Ministry of Local Government
- d. Ministry of Agriculture and Animal Resources,
- e. Ministry of Health,
- f. Ministry of Finance and Economic Planning,
- g. Ministry of Infrastructures,
- h. Ministry of Health,
- i. Rwanda Environment Management Authority,
- j. National Land Centre,
- k. Rwanda Red Cross,
- l. Local Government.

Policy Action:

- a. Promote awareness in the communities on floods risk reduction measures;
- b. Protect and restore wetlands and watershed;
- c. Ensure proper physical planning of rural and urban settlement;
- d. Gazette flood basins.

Landslide and Mudslide:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs(Lead),
- b. Ministry of Natural Resources(co-lead)
- c. Rwanda Environment Management Authority,
- d. Rwanda Natural Resources Authority, Mines and Geology Department,
- e. Ministry of Finance and Economic Planning,
- f. Ministry of Agriculture and Animal Resources,
- g. Ministry of Infrastructures,
- h. Ministry of Local Government,
- i. Ministry of Health
- j. Ministry of Defence,
- k. Research Institutions,
- l. Rwanda National Police,
- m. Rwanda Red Cross,
- n. Local Government.

Policy Action:

- a. Gazette landslide and mudslide prone areas and prohibit settlement in such risk areas;
- b. Resettle all persons living in land/mudslide prone areas;
- c. Undertake activities to promote forestation programmes;
- d. Enforce relevant laws and policies;
- e. Apply appropriate farming and technologies and land use practices.

Volcanic Activity:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs(Lead),
- b. Ministry of Defence (co-lead),
- c. Ministry of Natural Resources
- d. Ministry of Finance and Economic Planning,
- e. Ministry of Internal Security,
- f. Ministry of Health,
- g. Rwanda Red Cross,
- h. Rwanda Natural Resources Authority, Mines and Geology Department
- i. Rwanda National Police,
- j. Local Government.

Policy Action:

- a. Monitor volcanic activities and make preparedness plan;
- b. Liaise with Volcanic observatory expert for collection and dissemination of information about the status of active volcanoes;
- c. Raise the awareness of the community living volcanic prone areas;
- d. Develop preparedness and contingency plan for response;
- e. Develop evacuation plan that will serve as reference during volcanic eruption;
- f. Develop early warning system for volcanic prone areas.

Drought:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs (Lead),
- b. Ministry of Agriculture and Animal Resources (co-lead),
- c. Ministry of Natural Resources
- d. Ministry of Finance and Economic Planning,
- e. Rwanda Environment Management Authority,
- f. Ministry of Local Government,
- g. Ministry of Health
- h. Ministry of Infrastructure, meteorological department,
- i. Rwanda natural resources Authority-Department of Integrated water Resources Management,
- j. Rwanda Red Cross,
- k. Research Institutions,
- l. Local Government.

Policy Action:

- a. Establish proper mechanism for weather forecast, early warning and drought information dissemination;
- b. Enforce implementation and compliance to environment regulation and laws;
- c. Map and zone drought affected areas and take appropriate measures;
- d. Strengthen research institutions for the development of drought resistant crops and livestock;
- e. Increase the level of Community awareness on the importance of water and need to conserve it particularly with regard to drought;
- f. Promote an integrated approach by concerned government agencies and Non-Governmental Organizations (NGOs) in the implementation of water supply conservation and protection of relevant catchment areas with a view to ensure availability of water in drought affected areas.

Food Insecurity/Famine:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs (Lead),
- b. Ministry of Agriculture and Animal Resources (co-lead),
- c. Ministry of Local Government
- d. Ministry of Finance and Economic Planning,
- e. Ministry of Natural Resources,
- f. Ministry of Health,
- g. Ministry of Education,
- h. Research Institutions,
- i. Rwanda Red cross,
- j. Local Government.

Policy Action:

- a. take appropriate measure to have a sustainable response;
- b. Establish and maintain adequate grain stores for famine prone areas;
- c. During the period of food shortage, provide relief food and non-food commodities to person in need;
- d. Support food-for work/asset programs aimed at preparing land, rehabilitating social infrastructures and other activities necessary for community stability;
- e. Increase production and productivity for food security using improved technologies
- f. Creating community awareness and adoption of high yielding and drought resistant variety of crops and livestock;
- g. Establish measures for creating household, community, Provincial and National food reserves;
- h. Establish a food security monitoring system.

Earthquake:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs(Lead),
- b. Ministry of Defence (co-lead),
- c. Ministry of Natural Resources,
- d. Rwanda Natural Resources Authority,
- e. Rwanda National Police,
- f. Ministry of Finance and Economic Planning,
- g. Ministry of Infrastructures,
- h. Ministry of Health,
- i. Ministry of Local Government,
- j. University and Research Institutions,
- k. Rwanda Red Cross,
- l. Local Government

Policy Action:

- a. Map out earthquake prone areas;
- b. Raise public awareness on earthquakes preparedness;
- c. Develop earthquake resistant building standards;
- d. Ensure adherence to building codes and regulations;
- e. Acquire technology to monitor and detect occurrence of earthquake;
- f. Promote seismic safety activities.

Fires:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs (Lead),
- b. Rwanda National Police (co-lead),
- c. Ministry of Internal Security
- d. Ministry of Defence,
- e. Ministry of Finance and Economic Planning,
- f. Ministry of Infrastructures,
- g. Ministry of Natural Resources,
- h. Rwanda Defence forces,
- i. Ministry of Health,
- j. Rwanda National Police (Fire Brigade),
- k. Rwanda Civil Aviation Authority,
- l. Rwanda Development Board (Department of Tourism),
- m. Rwanda Association of Hotel Owners,
- n. Local Government.

Policy Action:

- a. Establish building codes specifying fire escape routes, fire resistant materials, and fire detection systems;
- b. Raise awareness on the causes and preventive action of fire outbreak;
- c. Equip fire brigade institutions;
- d. Develop partnership with companies, organizations and institutions that have relevant fire- fighting equipment and rescue facilities;
- e. Conduct regular fire drill in public places and institutions of learning;
- f. Establish Provincial fire facilities to correspond with emerging challenges;
- g. Institute a legal framework to stop bush burning;
- h. Instruct all owner of building to install fire fighting equipment;
- i. Conduct regular check on Public building, Hotel, Market places the installation of fire fighting equipment.

Epidemic:

Human Epidemic:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs(Lead)
- b. Ministry of Health Co-lead),
- c. Rwanda National Police,
- d. Ministry of Agriculture and animal Resources,
- e. Ministry of Local Government,
- f. Ministry of Finance and Economic Planning,
- g. Ministry of Natural Resources,
- h. Ministry of Infrastructure, Energy, Water and Sanitation Authority(EWSA),
- i. Rwanda Defence Forces,
- j. Research Institutions,
- k. Districts Hospitals,
- l. Local Government.

Policy Actions:

- a. Improve sanitation and hygiene practices;
- b. Promote research into modern emerging diseases;
- c. Strengthen entomological and surveillance systems;
- d. Create public awareness to the Rwanda Community;
- e. Avail vaccine to emerging diseases;
- f. Strengthen surveillance system from Local to the National level.

Crops and Animal Epidemics:

Responsible Institutions:

- a. Ministry of disaster management and refugee affairs(Lead),
- b. Ministry of Agriculture and Animal Resources (co-lead),

- c. Ministry of Local Government,
- d. Ministry of Internal Security,
- e. Ministry of Finance and Economic Planning,
- f. Rwanda Environment Management Authority,
- g. Research Institutions,
- h. Rwanda National Police,
- i. Local Government.

Policy Action:

- a. Strengthening disease surveillance programs;
- b. Enforce regulation on movement of animals;
- c. Undertake proper case management of the affected animals and plants;
- d. Introduce hybrid and seeds and animals;
- e. Introduce disease resistant plants and animals.

Pandemics:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs(Lead),
- b. Ministry of Health (co-lead)
- c. Ministry of Defence
- d. Ministry of Finance and Economic Planning,
- e. Ministry of Internal Security- Rwanda National Police,
- f. Ministry of Local Government,
- g. Local Government.

Policy Actions:

- a. Strengthen entomological, epidemiologic and diseases surveillance;
- b. Develop proper prevention measures along with public awareness campaigns;
- c. Develop appropriate preparedness and response plans;

Terrorism:

It is noted that the prevention and the management of terrorism does not fall under Disaster Management. This policy only looks at the management of the potential impact of an act of terrorism in the Rwanda territory.

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs(Lead),
- b. Rwanda National Police (co-Lead),
- c. Ministry of Defence,
- d. Ministry of Finance and Economic Planning,
- e. National Intelligence and Security Services

- f. Ministry of Infrastructures
- g. Ministry of Health,
- h. Ministry of Foreign Affairs and Cooperation.

Policy Actions:

- a. Create community awareness on the risk of terrorism;
- b. Strengthen Community Policing;
- c. Inspection and monitoring of borders and entry point into the country;
- d. Develop anti-terrorism media Campaign;
- e. Conduct regular simulation and drill for preparedness purposes.

Industrial and Technological Hazards:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affair (Lead),
- b. Ministry of Commerce and Industries(co-lead),
- c. Ministry of Infrastructures,
- d. Ministry of Health
- e. Ministry of Labour
- f. Ministry of Finance and Economic Planning,
- g. Ministry of Internal Security,
- h. Ministry of Defence,
- i. Ministry of Health
- j. Rwanda Bureau of Standard,
- k. Rwanda Environment Management Authority,
- l. Rwanda National Police,
- m. Local authorities.

Policy Actions:

- a. Enforce proper urban planning standards;
- b. Awareness raising on the handling and management of hazardous material;
- c. Address air pollution emission;
- d. Strengthen supervision of mechanical facilities;
- e. Enforce safety standards and codes in mechanical facilities (factories, construction sites and processing plants);
- f. Enforce laws on inspection, licensing of establishment of plants.

Mass movement of population:

Responsible Institutions:

- a. Ministry of Disaster Management and Refugee Affairs (Lead),
- b. Rwanda National Police (co-lead),

- c. Ministry of trade and Industries,
- d. National Intelligence and Security Services,
- e. Ministry of Finance and Economic Planning,
- f. Ministry of Health,
- g. Ministry of Internal Security,
- h. Ministry of Defence,
- i. Ministry of Local Government,
- j. Ministry of East African Community,
- k. Ministry of Foreign Affairs and cooperation,
- l. Rwanda Red Cross and red Cross Movement,
- m. Local authorities.

Policy Action:

- a. Develop preparedness and contingency plan for response;
- b. Enforcement of relevant laws and policies;
- c. Strengthen regional cooperation for refugee management.

III.4. Key Responsible Institutions per Sector

In case of major emergency it is recommended to have response coordination based on sectors. As seen above, specific institutions have been appointed per type of hazard. In the event of a major disaster requiring international assistance lead institutions for each sector will be the main response actors for specific sectors as presented below in charge of ensuring the technical coordination with international cluster lead:

- a. Camp coordination & Management – MIDIMAR,
- b. Recovery – MINECOFIN,
- c. Education – MNEDUC,
- d. Emergency Shelter – MINALOC,
- e. Emergency Telecommunication – MINICT,
- f. Food Security – MINAGRI,
- g. Health & Nutrition – MINISANTE,
- h. Logistic - MIDIMAR/MINADEF
- i. Protection – MININTER,
- j. Water and Sanitation – MININFRA,
- k. Search, Rescue & Evacuation – MINADEF.

Lead Ministry for each sector have the responsibility of working and fully collaborating with the Ministry of Disaster Management and Refugee Affairs to:

- a. Ensure that all actors involved in a specific sectors work in a coordinated manner;
- b. Ensure that required guidance for work are developed, disseminated and implemented in Rwanda for each sector based on international standards, the local context and on ‘best practice’ experiences;
- c. Establish and maintain surge capacity and standby response capacities;

- d. Establish and maintain stockpiles;
- e. Actively participate in developing a functioning Disaster need Assessment;
- f. Secure access to appropriate technical expertise for all actors working in the specific sector;
- g. Ensure that resources mobilised for a specific sector are used efficiently avoiding overlaps and gaps.

III.5. Private Sector

Private sector actors, have a specific role to play in preventing preparing and responding to disaster especially when working in fields related to basic needs (health, food and water) and competencies keys to disaster response (communication and transport). Private sector actors shall adjust their policies and strategies to integrate Disaster Management principle into their activities. Private sector actors delivering basic commodities to the general public (in extenso food, water and medicines) are obligated to work closely with the Ministry of Disaster Management and Refugee Affairs to ensure their capacity to continue to deliver in case of a major disaster. Private sector actors are obligated to observe the principle of humanity in implementing their economic function in disaster management.

III.6. Financial implications

It is vital to avail sufficient financial resources for the implementation of the National Policy on Disaster Management. Government shall allocate a budget to equip institutions such as MIDIMAR, Ministries/Institutions (RDF, RNP) and Local level for disaster risk management initiatives (prevention, mitigation, Response, and rehabilitation) through specific, regular, development programs. Government institutions shall take the lead to respond to disasters at local level.

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 come from the local administrations(Districts) in affected areas. When the magnitude of the situation overwhelmed the districts capacity to cope with, the second source will be the next highest level of administration above the affected areas. The Ministry of Disaster Management and Refugee Affairs will work closely with the concerned Stakeholders to provide assistance when disasters occur and collaborate regularly and mutually in all process of Disaster Management.

The budget allocated to Disaster Management by MIDIMAR and its various partners, from governmental and non-governmental, bilateral and multilateral cooperation agencies will be used for the implementation of the Five- Year Strategic Plan.

Annex I: Main hazards in Rwanda

Rwanda has witnessed a number of natural and man-induced disasters that have culminated into the loss of lives and property and the displacement of people. Famine as a result of drought, traffic accident, earthquake, epidemics, floods; landslide, environmental degradation, technological accident, fire outbreak and lightning have been prevalent. This policy, therefore, is an effort to put in place a systematic disaster prevention, mitigation, and preparedness and management framework for the country. Natural hazards in Rwanda are categorised in two main groups: (i) hydro meteorological, namely floods, including those combined with landslides and droughts; and (ii) geological, including earthquakes and volcanic eruptions. Of these, floods and droughts have caused the most serious disasters in terms of the number of people affected. Disasters have had significant environmental and socio-economic impacts, posing a serious threat to livelihoods, food security and economic growth.

I.1 Floods

Although floods are common in Rwanda, they have increased in frequency over the past decade. Occurrences in 2005 and 2007, in Musanze and Rubavu, resulted in the damaged of infrastructure, agricultural losses, led to environmental degradation, population displacement and fatalities, Floods in Rwanda 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 run-offs; 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. The impact of floods can be minimized by the forecasting, studying 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 North and Western parts of Rwanda.

I.2 Landslide and Mudslide

Landslides and mudslides are rapid movement of large mass of mud, 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. The areas mostly affected by landside are the North, South and Western parts of the Country. For example, 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 include occurrences in Musanze, Rusizi, Rustiro, Nyabihu and Burera Districts, which resulted in the destruction of houses and crops and the loss of lives.

I.3 Volcanic Activity

The North Western part of Rwanda has a chain of Volcanos, some of which are inactive and others active. In 2002, Nyiragongo volcano erupted in Eastern DRC and caused damage, 400,000 of the Congolese population fled to Rubavu District bordering Goma. The magnitude and extent of the past experience on volcanic activity require preparedness and a contingency plan for Rwanda.

I.4 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 and Virunga National Park in 2009. 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.

I.5 Food Insecurity/Famine

Food security can be defined as the condition when all people, at all times, have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

Food security is normally divided into three aspects: food availability, food access and food utilization. Famine is a severe shortage of food that may lead to malnutrition and death.

Factors contributing to famine are drought and crop failure. Famine generated by drought can compound poverty among peasants, incapacitate the communities from participating in economic development and lower their nutrition status so as a result, the increased frequency of illness, death, loss of livestock and displacement.

Despite rapid and sustained economic growth since the 1994 genocide against Tutsis, the population of Rwanda remains highly vulnerable to food insecurity and malnutrition. Recent studies indicate that in September 2011, more than one of three households in Rwanda (excluding Kigali city) were food insecure as they had either poor or borderline food consumption patterns (10% and 26% of the households respectively). Comparing with studies conducted in 2010 and 2011, the percentages of food insecure households fluctuated between 25 (Mar 2011) and 34 percent (Sept 2011).

I.6 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 Western parts of Rwanda are prone to seismic activity. In 2008, Rusizi and Nyabiheka (both 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. Whereas the probability of occurrence of earthquake can be determined by existing technology, its exact time is not easy to ascertain. This makes it imperative to have adequate preparedness for disasters 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 the construction of resistant shelters, based on enforceable building codes, earthquake warning and preparedness programs must be carried out.

I.7 Fires

Fire hazards include unplanned and massive burning which may cause the destruction of equipment, settlement, property and lives. Hazardous electric wiring, poor construction standards, accidents, and uncontrolled burning of bushes are among many factors that cause fire hazards. Fires are common in industries, congested human settlements, learning institutions and markets places. It calls for the preparedness and management of fire hazards and for the intensification of sensitization and public awareness. Fires incidents in Rwanda are few but have caused considerable damage during their occurrence. Notable incidents include a forest fire in 2009 that spread to the top of mount Muhabura in the Volcanoes National Park, consuming 150

hectares of the park. Another more recent incident was the outbreak in Nyagatare District that consumed 30 hectares of forest and farms.

I.8 Epidemic

An epidemic is defined as the prevalence, in a particular community and at a particular period, of a disease whose magnitude goes beyond the normal/expected levels. Diseases include: cholera, meningitis and other diseases such as diarrhoea, dysentery and typhoid. Massive chemical or alcoholic poisoning may also create a hazardous condition similar to an epidemic. Modern epidemics include avian influenza (bird flu), Ebola Hemorrhagic fever, and malaria. Crops and livestock, to a big extent, can also be hazardous.

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 the creation of an inventory of required equipment.

Human Epidemic: This is a disease or illness which affects human beings at a particular period and the magnitude goes beyond normal level.

Crops and Animal Epidemics: Animal epidemics include swine fever, foot and mouth disease, bird flu, crop diseases epidemics include coffee wilt, banana bacteria wilt and Cassava mosaic.

Pandemics: Disease epidemics occur when there are more cases of that disease than in a normal situation. 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. A pandemic can either be a mild or severe illness and can cause death, and the severity of a pandemic 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.

I.9 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.

I.10 Industrial and Technological Hazards

Rwanda's long term socio-economic development programs focus on agriculture modernization and industrialization. The latter however, increases 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.

I.11 Mass movement of population

Rwanda has experienced several cases of mass movement. The most notable to date include the 1994 Genocide against Tutsis, where a large number of Rwandans were forced out of the country and into neighboring countries. Another case was the return of over one million Rwandans returnees from eastern DRC in 1996.

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.

Annex II: Disaster Management Terminology

The below definitions will serve as a reference for all publications discussing Disaster Management issues. Rwandan government actors and humanitarian actors working in Rwanda are invited to use the below definitions. All definitions, except if mentioned otherwise are in line with the UNISDR definitions and terminology¹.

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.

Climate change²: 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, using 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.

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.

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

² According to the United Nations Framework Convention on Climate Change definition: http://unfccc.int/files/documentation/text/html/list_search.php?what=keywords&val=&valan=a&anf=0&id=10

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

Geological hazard: 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.

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

Natural hazards: 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.

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 provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensures 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.