

REPUBLIC OF RWANDA

MINISTRY IN CHARGE OF EMERGENCY MANAGEMENT



NATIONAL CONTINGENCY PLAN FOR FLOODS AND LANDSLIDES

October, 2018

FOREWORD

This contingency plan covers the planned activities to be undertaken in any case of major floods and landslides with scenarios for the likely occurrence based on the Rwanda risk profile especially in prone areas. The previous rainfall forecast has revealed that most parts of the country receive normal to above normal rainfall between October and December, and March to May. Based on previous experience, the occurrence of above normal rainfall may precipitate the occurrence of excessive rainfall or flash floods in low lying areas and landslides in the hilly topographic areas of the country.

The overall objective of the Contingency Plan for floods and landslides (NCP) is to support the timely, consistent and coordinated response to anticipated floods and landslides thus effectively minimizing the impact of the floods and landslides on human population, livelihoods, lifelines, properties and the environment. This will in turn help reduce the scale of humanitarian needs to the affected population.

The contingency plan shall be implemented at three stages i.e. before the emergency, during and after. Preparedness activities before the emergency are informed by sector response plans. The sectors covered in the contingency plan are Human Settlement and Shelter, Health and Nutrition, Water and Sanitation, Education, Agriculture and Food Security, Infrastructure and Security. Scenario analysis and assumptions are the main determining factors responsible for the scope and depth of the contingency plan.

In order to ensure a coordinated response, guidance is provided on who should carry out rapid assessments and later on disseminate the related information. In the same vein, participation of all cooperating partners and stakeholders are maximized in the plan by encouraging them to isolate activities whose implementation are in a position to support.

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Minister in Charge of Emergency Management

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I wish to thank members who participated in the process of reviewing and updating the National Contingency Plan for floods and landslides from different government institutions: SSP Jean de Dieu RUTAYISIRE from Rwanda National Police, KAYITESI Marie Claire from RUBAVU District, DUSENGIMANA Theophile from the Ministry of Environment, KANYESIGYE Nathan from Rwanda Water and Forest Authority and RUTI Yves from Rwanda Red Cross, NIYORUREMA Didier from the Ministry in Charge of Emergency Management.

I thank also the members of the national platform for disaster risk reduction for their proofreading and technical validation.

I however reiterate the need of collaboration of all stakeholders as their support will also be needed in reviewing and adapting this plan when necessary but more importantly to implement it in order to mitigate floods and landslides risk, prepare and respond to and recover from effects of the mentioned disasters if they occur.

Sincerely,

HABINSHUTI Philippe
Director of Response and Recovery Unit
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LIST OF ABBREVIATIONS/ACCRONYMS

DIDIMAC: District Disaster Management Committees

DASSO: District Administrative Security Support Organ

DDMOs: District Disaster Management Officers

MINEMA: Ministry in Charge of Emergency Management

MINAGRI: Ministry of Agriculture

MINALOC: Ministry of Local Government

MINEDUC: Ministry of Education

MININFRA: Ministry of Infrastructure

MoE: Ministry of Environment

MoH: Ministry of Health

NADIMAC: National Disaster Management Committee

NADIMATEC: National Disaster Management Technical Committee

NCP: National Contingency Plan

NGOs: Non-Government Organizations

NPDM: National Platform for Disaster Management

RAB: Rwanda Agricultural Board

RDF: Rwanda Defense Forces

RHA: Rwanda Housing Authority

RNP: Rwanda National Police

RRC: Rwanda Red Cross

RTDA: Rwanda Transport Development Agency

SEDIMAC: Sector Disaster Management Committees

UN: United Nations

UNDP: United Nations Development Programme

UNISDR: United Nations Office for Disaster Risk Reduction

WASAC: Water and Sanitation Corporation Limited

WFP: World Food Programme

WHO: World Health Organization

1. INTRODUCTION

The frequency, intensity and impact of natural hazard events are growing and causing more disasters with negative impacts on humans, economy and environment. Many areas in the world are prone to one or several natural hazards. Hazard events result in disasters when risk factors such as hazard, vulnerability and inadequate capacity (coping capacities) overlaps in space and time. Avoiding or reducing the impact of disasters can be reached by reducing the Disaster risks. Consequently, focusing on Disaster Risk Reduction is an issue at stake worldwide (*UNISDR, 2005*). Natural hazards by themselves do not cause disasters. It is the combination of an exposed, vulnerable and ill prepared population or community with a hazard event that results in a disaster. Disasters undermine development achievements, impoverishing people and nations and states. In the absence of combined efforts to address root causes, disasters represent an increasingly serious obstacle to the achievement of the Millennium Development Goals.

Floods and Landslides have been amongst the major disasters in Rwanda and have had a great impact on human development, properties, infrastructures as well as environment. Floods and landslide are key disasters that frequently affect localized areas of the country and most of the affected people do not have efficient mechanisms to cope with natural hazards. In addition, the hilly topography and high annual precipitation rates with overexploitation of the natural environment such as deforestation, inappropriate farming and poor housing techniques accelerate the disaster risks and hence result into losses of lives and damages to property from the community exposed to these disaster risks.

In Rwanda, most vulnerable areas prone to landslides and floods are located in the North-Western parts namely Nyabihu, Ngororero, Rubavu, Musanze, Burera and Gakenke. This situation calls upon the Ministry in Charge of Emergency Management together with other disaster management stakeholders to put in a place a contingency plan for floods and landslides all over the country since this will contribute a lot in the process of sustainable management, prevention, mitigation and response to disaster risks.

This contingency plan is developed with scenarios for the likely situation based on the risk and hazard profile and on rainfall forecasts. The rainfall forecast has revealed that most parts of the country currently receive normal to above normal rainfall between March and May and between October and December every year. The Contingency Plan also draws on historical data and experiences of the

occurrence of disasters of floods and landslides as a building block for coming up with planning assumptions and likely scenarios.

The overall objective of the Rwanda National Contingency Plan for floods and landslides is to support the timely, efficient, consistent and coordinated response to anticipated floods and landslides in the rainy season, thus effectively reducing the impacts on human population, livelihoods, lifelines, infrastructure and the environment. This will in turn help reduce the scale of humanitarian needs to the affected population.

1.1. Context

Rwanda is a landlocked country situated in the Great Lakes region of East Africa. It is bordered by Uganda, Tanzania, Burundi and the Democratic Republic of Congo (DRC). It is a small country with an area of 26,338 square kilometres and a population of about 12 million people; Rwanda's population density is considered amongst the highest in Africa.

Known as "the land of a thousand hills", Rwanda is at high elevation, with a geography dominated by mountains and hills, five volcanoes, twenty-three lakes throughout the country and numerous rivers, some forming the source of the River Nile. The variety of the landscapes in this green country is dominated to the north by volcanoes and bordered by Lake Kivu to the west. Its vegetation ranges from dense equatorial forest in the north-west of the country to tropical savannah in the east. There are also high altitude forests. The altitude of Rwanda is in the ranges from 1000-4500m above sea level. The rainy seasons are from March to May and from October to November with the average of 110-200 mm per month.

The country's topography and its natural environment shape to a large extent the natural hazards to which it is prone. Natural hazards in Rwanda are categorized as: (a) hydro-meteorological, (b) geological, and (c) biological and technological. The country is vulnerable to a wide range of natural hazards such as floods, flash floods, landslides/mudslides, drought, storms, lightning, earthquake, volcanic eruption, fires and epidemics. Threats of secondary hazards such as famine resulting from long droughts also remain a potential.

1.2. Plan Scope and Purpose

The Flood and landslide Contingency Plan primarily addresses the Rwanda Operational Area's planned response to floods and landslides situation affecting the County. This contingency plan establishes detailed procedures for response to areas that have flooded and slided or may be jeopardized by potential floods and landslides. The purpose of this Plan is to minimize the loss of life and properties through an organized notification and evacuation process and to provide for re-entry into areas that may have been evacuated and/or damaged.

The objectives the National Contingency Plan for floods and landslides are as follows:

- To improve the management and coordination of preparedness, response and recovery arrangements
- To improve early warning information sharing to ensure effective mitigation and response.
- To ensure timely resource mobilization and response
- To reduce the risk of secondary hazards,
- To ascertain the sector based level of impact of floods
- To ascertain the type and quantities of assistance to be required as a result of the emergency.
- To identify and define roles and responsibilities of all partners involved in emergency response
- To utilize emergency and recovery assistance as baselines towards building long term interventions

1.3. Plan Authority and Activation

The National Contingency Plan for floods and landslides will be implemented upon the decision of the lead Ministry in charge of the management of floods and landslides.

1.4. Public Access to Plan

As a national and public document, this contingency Plan for floods and landslides and other specific disaster events contingency plans are accessible via the Ministry in charge of Emergency Management.

2. FLOOD AND LANDSLIDE VULNERABILITY AND RISK ANALYSIS IN RWANDA

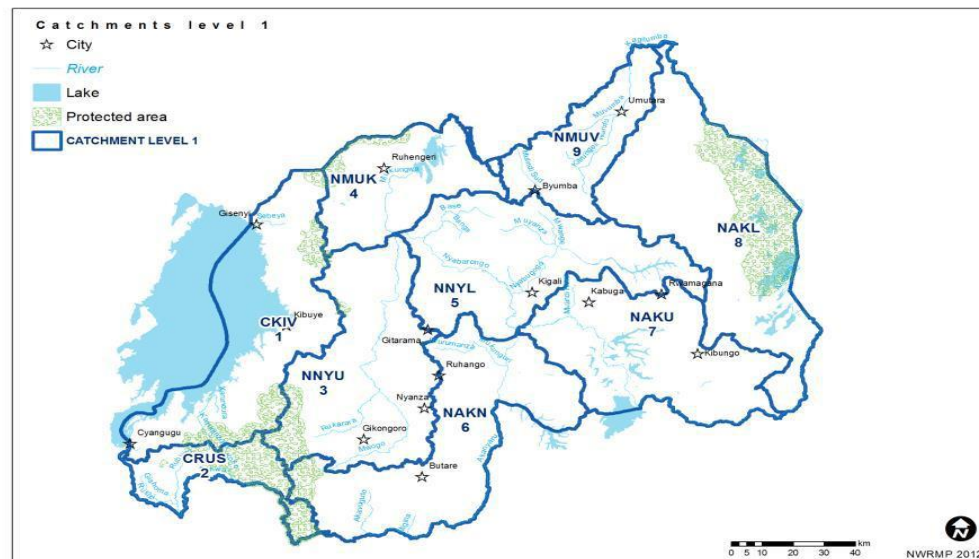
Floods and landslide vulnerability context

The vulnerability of Rwanda to floods and landslides is largely due to its topographic and demographic characteristics. This is further exacerbated by the impacts of climate change such as the increasing variability in rainfall frequencies and intensity causing climatic hazards such as droughts, floods, extreme temperatures and prolonged dry spells.

2.1. National catchment basins/watersheds

Catchment	Code	District	Rivers
Kivu	CKIV	Rubavu, Nyabihu, Rutsiro, Karongi, Nyamasheke and Rusizi	Sebeya
Rusizi	CRUS	Rusizi, Nyamasheke and Nyamagabe	Rusizi, Rubyiro, Ruhwa
Mukungwa	NMUK	Burera, Musanze, Gakenke, Nyabihu and Ngororero	Mpenge, Rwebeya, Mugara, flows from Rugezi marshland
Upper Nyabarongo	NNYU	Ngororero, Rutsiro, Muhanga, Karongi, Nyamagabe, Ruhango, Nyanza, and Huye	Mwogo, Mbirurume, Rukarara
Lower Nyabarongo	NNYL	Gakenke, Muhanga, Rulindo, Kamonyi, Gicumbi, Gasabo, Nyarugenge, Gatsibo, Rwamagana and Kayonza	Nyabugogo
Akanyaru	NAKN	Nyaruguru, Gisagara, Huye, Nyanza, Ruhango, Kamonyi and Bugesera	Akanyaru, Agatobwe, Akavuguto, Giswi
Upper Akagera	NAKU	Bugesera, Ngoma, Kirehe, Rwamagana, Kicukiro, Kayonza and Gasabo	Akagera
Lower Akagera	NAKL	Nyagatare, Gatsibo, Kayonza and Kirehe	Ruvubu, Akagera,
Muvumba	NMUV	Gicumbi, Nyagatare and Gatsibo	Mulindi, Walufu, Muvumba, Ngoma

Figure: The catchment management units proposed for the Rwanda NWRMP.



2.2. Flood and landslides impacts

The impact from any flooding or landslide event will vary based upon a number of factors: source of water; location of water flow; duration/intensity of rainfall or source release; topography; presence and/or effectiveness of flood control systems; changes in land use; vegetation; etc. In any event of floods or landslides, the following are the sectors which are likely to be affected: Human settlement and shelter, Health and nutrition, water and sanitation, education, agriculture and food, infrastructure, and crosscutting issues.

Affected sectors	Factors contributing to vulnerability	Impacts
Human settlement and shelter	<ul style="list-style-type: none"> - Poor quality construction materials - Unplanned settlement sites 	<ul style="list-style-type: none"> - Injuries and loss of life - Destruction of houses - Loss of properties - Mass displacement
Health and nutrition	<ul style="list-style-type: none"> - Damage and contamination of potable water sources; - Long term presence of standing water with 	<ul style="list-style-type: none"> - Loss of life - Outbreak of epidemics and water bone diseases - Increased risk of vector borne diseases

	presence of rodents and insects	<ul style="list-style-type: none"> - Psychological disturbances - Malnutrition
Water and sanitation	<ul style="list-style-type: none"> - Damage of water infrastructure - Damaged sanitation facilities (latrines and septic tanks) 	<ul style="list-style-type: none"> - Lack of clean water; - Outbreak of various waterborne diseases (cholera, dysentery, etc...)
Education	<ul style="list-style-type: none"> - Damages of education infrastructure and school materials - Occupation of schools by displaced people 	<ul style="list-style-type: none"> - Increase in school drop out - Perturbation of education program and curriculum - Temporary closure and relocation of schools
Agriculture and food security	<ul style="list-style-type: none"> - Relief and topography - Lack of erosion control systems - Lack of proper drainage systems - Lack of rainwater harvesting systems in settlements 	<ul style="list-style-type: none"> - Destruction of crops leading to total loss or decrease of yield; - Hunger, poverty; - Loss of pasture; - Deaths and diseases in livestock
Infrastructure	<ul style="list-style-type: none"> - Unsustainable infrastructure development; - Topography and geology suitability 	<ul style="list-style-type: none"> - Damage of essential infrastructures (roads, bridges, electricity, communication, schools, ...) - Disruption of services;
Security	<ul style="list-style-type: none"> - Increase of emergencies 	<ul style="list-style-type: none"> - Increase in criminality - Risk of looting

FLOODS	1	1	3	0	39	0	4	0
LANDSLIDES	0	0	20	1	25	0	4	2
TOTAL	1	1	23	1	64	0	8	2

c) Disaster Damages caused by floods, landslides and heavy rains by Districts to livelihood

District	Deaths	Injured	Houses Damaged	Crops Ha.	Livestock
Bugesera	0	0	0	232	0
Burera	2	3	215	194.5	0
Gakenke	2	1	2	407.5	280
Gasabo	9	5	4	0	0
Gatsibo	5	0	1	45	0
Gicumbi	2	1	56	543.2	89
Gisagara	1	0	0	310	0
Huye	0	0	0	46	0
Kamonyi	3	1	95	368.2	0
Karongi	22	12	141	200	0
Kayonza	0	0	0	20	0
Kicukiro	1	0	1	0	0
Kirehe	3	0	0	479	0
Muhanga	0	0	22	3	0
Musanze	4	0	281	472.7	12
Ngoma	1	0	0	45	0
Ngororero	26	5	923	247.54	38
Nyabihu	7	0	259	172	0
Nyagatare	2	0	7	792	4
Nyamagabe	2	5	14	6.5	0
Nyamasheke	2	5	1	15	0
Nyanza	0	0	1	271.5	0
Nyarugenge	1	0	0	0	0
Nyaruguru	3	2	0	22	0
Rubavu	2	5	1103	166.5	643
Ruhango	2	0	0	312	0
Rulindo	11	2	65	97.5	0
Rusizi	0	0	35	47.8	0
Rutsiro	11	0	36	0	2

TOTAL	124	47	3262	5516.44	1068
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d) Disaster Damages caused by floods, landslides and heavy rains by Districts to infrastructure

District	Class rooms	Health centers	Roads	Churches	Bridges	Admin offices	Water supply	Transm lines
Bugesera	0	0	0	0	0	0	0	0
Burera	1	1	1	0	11	0	0	0
Gakenke	0	0	0	0	6	0	4	0
Gasabo	0	0	0	0	0	0	0	0
Gatsibo	0	0	0	0	1	0	0	0
Gicumbi	0	0	3	0	8	0	4	0
Gisagara	0	0	0	0	0	0	0	0
Huye	0	0	0	0	2	0	0	0
Kamonyi	0	0	0	0	0	0	0	0
Karongi	0	0	0	0	0	0	0	0
Kayonza	0	0	0	0	0	0	0	0
Kicukiro	0	0	0	0	0	0	0	0
Kirehe	0	0	0	0	0	0	0	0
Muhanga	0	0	4	0	1	0	0	0
Musanze	0	0	2	0	0	0	0	0
Ngoma	0	0	0	0	0	0	0	0
Ngororero	0	0	5	0	7	0	0	0
Nyabihu	0	0	1	0	5	0	0	0
Nyagatare	0	0	0	0	0	0	0	0
Nyamagabe	0	0	3	1	6	0	0	0
Nyamasheke	0	0	0	0	0	0	0	0
Nyanza	0	0	0	0	0	0	0	0
Nyarugenge	0	0	0	0	0	0	0	0
Nyaruguru	0	0	1	0	0	0	0	0
Rubavu	0	0	0	0	13	0	0	0
Ruhango	0	0	1	0	0	0	0	1
Rulindo	0	0	0	0	0	0	0	0
Rusizi	0	0	2	0	0	0	0	0
Rutsiro	0	0	0	0	4	0	0	1
TOTAL	1	1	23	1	64	0	8	2

Source: Disaster Communication System/MIDIMAR Assessment

3. SCENARIO and PLANNING ASSUMPTION

3.1. Scenario (January - December 2019)

Type of hazard	Floods and landslides
Likelihood	Almost certain
Magnitude	High (North-Western parts of the country and the city of Kigali) Moderate (Southern Province) Low (Eastern part of the country)
Impact	Medium for most locations on Infrastructure, health, food security, water and sanitation, generally on livelihoods and education
Location and Geographical Area highly prone to floods and Landslides	Western Province (Rubavu, Nyabihu, Ngororero, Karongi, Rutsiro, Rusizi and Nyamasheke), Northern Province (Musanze, Burera, Gicumbi and Rulindo); Southern Province (Kamonyi, Ruhango, Nyanza, Huye, Muhanga) , City of Kigali (Nyarugenge district), Eastern Province(Bugesera District)
Triggers	High levels of rainfall (above normal rainfall), the intensity of rainfall, rising water levels in the river basins (Nyabarongo, Mukungwa, Sebeya, Akanyaru, Nyabugogo), rate of drainage, landuse and landcover type, human activities and Water springing from the ground
Timeframe	January 2019 –December 2019

3.2. PLANNING ASSUMPTION (January - December 2019)

Sector	People /area affected	Deaths	Injuries	Missing	Damages	Consequences
Health and nutrition	325,670	30	150	N/A	6 health centers Sanitation systems Water sources contaminated	Diseases Malnutrition Psycho-social problems
Water and sanitation	150,642	N/A	N/A	N/A	11 Water supply systems 750 Latrines and septic	Water shortage Waterborne diseases

					tanks	
Agriculture and food security	185,000	N/A	N/A	N/A	2,535ha of crops 1,100 Deaths of livestock Loss of pasture	Food shortage (27,988 MT of cereals) Poverty
Infrastructure	Nyabihu Ngororero, Gakenke Rubavu, Kivu belt, Nyarugenge, Kamonyi	N/A	N/A	N/A	13 Roads, 33 bridges, 19 electrical poles, markets, communication facilities	Temporary disruption of services, Economic costs
Human settlement and shelter	Affected: 38,160 Displaced: 7,200	N/A	N/A	N/A	Houses destroyed: 1,309 Houses damaged: 5,628	Displacement and loss of shelter
Education	5,000	N/A	N/A	N/A	10 schools	Disruption of education programs School drop out
Security	325,670	N/A	N/A	10	N/A	Increase in criminalities

4. PREPAREDNESS, RESPONSE AND RECOVERY ACTIVITIES

The main objective of the National Contingency Plan for floods and landslides has been stated in the introduction of this document and is reinforced by sectors based specific objectives i.e. support the timely and coordinated response to anticipated floods and landslides in the 2018-2019 heavy rainy seasons, thus effectively minimizing the impacts of the floods and landslides on human population, livelihoods, properties and the environment.

As per the National Disaster Management Policy of 2012, Disaster Management is the responsibility of everyone. It is line with this that we expect all players ranging from Government Agencies, cooperating partners, the UN System, the Private Sector, Non-governmental organisations (Local and International) and those that are community based to be fully involved in the mobilisation of the required resources to implement the contingency plan:

The Government of the Republic of Rwanda will not take kindly to individual organisations that may choose to unilaterally carry out assessments and later on disseminate their findings without Government clearance.

MITIGATION, RESPONSE AND RECOVERY ACTIVITIES (SECTOR BY SECTOR)

LEAD INSTITUTION	Action	Mitigation	Response	Recovery	INSTITUTION
Ministry in Charge of Emergency Management	✓ Identify and map floods and landslides hazards;	✓		✓	NADIMAC NPDM District
	✓ Develop a comprehensive risk analysis for floods and landslides;	✓		✓	
	✓ Ensure that involved public institutions receive relevant information to efficiently prepare, respond and recover from floods and landslides;	✓	✓		
	✓ Provide relief assistance		✓		
	✓ Put in place all necessary actions required to prepare, respond and recover to a hazard;	✓			
	✓ Receive information, processing it and disseminating it to the stakeholders through the various channels;	✓	✓	✓	
	✓ Review, update and test contingency plan for flood and landslides	✓			
	✓ Organize periodic briefings for stakeholders and raising community awareness,	✓	✓	✓	
	✓ Mobilization of initial supplies and logistics to enable the cooperating partners come on board in responding to the floods and landslides emergencies			✓	
	✓ Organize and conduct trainings for floods and landslides emergency management	✓			
	✓ Activate contingency plan for flood and landslides			✓	
	✓ Coordinate the humanitarian response to ensure that there are no duplications for effective humanitarian response.			✓	
Rwanda Defense	✓ Search, Rescue and Evacuation of victims		✓		Ministry in

Forces	✓ Support in personnel and logistics in relief operations		✓		charge of Emergency Managem nt MINALOC Districts
	✓ Medical support and assistance during emergencies		✓	✓	
	✓ Provide recovery assistance			✓	
	✓ Ensure the public order security	✓	✓	✓	
Rwanda National Police	✓ Search, Rescue and Evacuation of victims		✓		Ministry in charge of Emergency Managem nt MINALOC Districts
	✓ Provide security for displaced people and their properties		✓	✓	
	✓ Support in personnel and logistics in relief operations		✓		
	✓ Conduct trainings	✓			
	✓ Provide recovery assistance			✓	
	✓ Provide safety and security of the community	✓	✓	✓	
National Platform for Disaster Management (NPDM)	✓ Ensure the use of all mechanisms such as flash appeals and consolidates appeals to mobilize resources for the emergency.	✓	✓		Ministry in charge of Emergency Managem nt NADIMAC
	✓ To provide humanitarian assistance for affected people		✓		
	✓ The private sector should contribute to the humanitarian response as part of their responsibility to support the Government		✓		
Ministry of Local Government	✓ Ensure that all districts are providing required assistances to the floods and landslides incidents. (Risk assessment, Early warning, damages assessment, response and recovery activities)	✓	✓	✓	Ministry in charge of Emergency Managem

	✓ Ensure that all information related to floods and landslides are shared in order to promptly respond to the emergency.	✓	✓	✓	nt Districts
District	✓ Disseminate relevant information and assessment findings to relevant and concerned entities		✓	✓	Ministry in charge of Emergency Management Rwanda Red Cross RHA DIDIMAC SEDIMAC
	✓ Provide quick assistance and first aid to affected people for disasters of Level 1 and Level 2		✓		
	✓ Raise community disaster awareness and be involved in Early Warning for floods and landslides	✓			
	✓ Convene DIDIMAC emergency meetings for floods and landslides		✓		
	✓ Identification of site and relocation of displaced people		✓	✓	
	✓ Conduct Prompt assessment in case of floods and landslides incidents		✓		
	✓ Conduct deep assessment on damages and needs of the affected population			✓	
	✓ Assist in search and rescue operations		✓		
Ministry of Environment	✓ Conduct a nationwide assessment of erosion prone areas likely to be affected by floods and landslides	✓			Ministry in charge of Emergency Management RWFA Meteo Rwanda
	✓ Develop guidelines to implement measures to mitigate floods and landslides disasters	✓			
	✓ Ensure proper mechanisms of weather forecast and early warnings	✓			
	✓ Enhance rain water harvesting and water storage to meet water security demands and reduce disaster risk.	✓		✓	

	<ul style="list-style-type: none"> ✓ Ensure that watershed are protected and resilient to extreme events 	✓		✓	
	<ul style="list-style-type: none"> ✓ Gazette flood basins ✓ Availing weather information 	✓		✓	
RWANDA RED CROSS	<ul style="list-style-type: none"> ✓ Develop a comprehensive risk analysis for floods and landslides; 	✓			MINEMA Districts
	<ul style="list-style-type: none"> ✓ Put in place all necessary actions required to prepare, respond and recover to a hazard; 	✓		✓	
	<ul style="list-style-type: none"> ✓ Conduct assessment of disaster damages 		✓		
	<ul style="list-style-type: none"> ✓ Organize and conduct trainings for floods and landslides emergency management 	✓			
	<ul style="list-style-type: none"> ✓ Search, Rescue and Evacuation of affected victims 		✓		
	<ul style="list-style-type: none"> ✓ Provide relief assistance 		✓		
	<ul style="list-style-type: none"> ✓ Conduct family reunification 		✓	✓	
	<ul style="list-style-type: none"> ✓ Provide psychosocial support to affected population 		✓	✓	
MINEDUC	<ul style="list-style-type: none"> ✓ Integrate courses related to disaster management into the curriculum 	✓			MINEMA REB District
	<ul style="list-style-type: none"> ✓ Provide temporary learning facilities and materials 		✓		
	<ul style="list-style-type: none"> ✓ Carryout rehabilitation works on all school infrastructure damaged by floods and landslides 		✓	✓	
	<ul style="list-style-type: none"> ✓ Demobilize and shift school back to original place 		✓		
MINAGRI	<ul style="list-style-type: none"> ✓ Farmer sensitization on flood mitigation measures involving crop/variety selection and conservation farming 	✓			MINEMA RAB Meteo-Rwanda Rwanda-
	<ul style="list-style-type: none"> ✓ Damages control 		✓		
	<ul style="list-style-type: none"> ✓ Assessment of floods prone area 	✓			

	✓ Surveillance of transmittable diseases	✓	✓	✓	Red Cross RNP RDF Districts
	✓ Provide food items to affected population		✓		
	✓ Survey of suspected livestock diseases outbreaks and mapping		✓	✓	
	✓ Awareness creation among livestock owners on disease prevention and control measures in affected districts	✓		✓	
	✓ Livestock vaccinations and treatment for cattle	✓	✓		
	✓ Regeneration of crops			✓	
	✓ Compensation for loss (Crops and Livestock)			✓	
MoH	✓ Community sensitization on personal hygiene	✓			MINEMA SAMU RBC Rwanda Red Cross Districts
	✓ Map out inaccessible areas in the districts		✓		
	✓ Provide medical services including mobile clinics in affected areas		✓		
	✓ Mobilize medical teams and monitor disease outbreaks		✓	✓	
	✓ Support integrated disease surveillance and reporting		✓		
MININFRA	✓ Develop a comprehensive infrastructure risk analysis for floods and landslides	✓		✓	MINEMA Districts RHA RDF Eng Brigade WASAC RTDA REG
	✓ Initial infrastructure rehabilitation (roads, communication, water supply, electricity, bridges,...)		✓		
	✓ Conduct post-disaster need assessment			✓	
	✓ Support in recovery activities			✓	

5. FLOODS AND LANDSLIDES INCIDENT MANAGEMENT CHART

