

REPUBLIC OF RWANDA

MINISTRY IN CHARGE OF EMERGENCY MANAGEMENT
(MINEMA)



NATIONAL CONTINGENCY PLAN FOR VOLCANIC ERUPTION

January, 2019

FOREWORD

Volcanic eruption is one of natural disasters that affect millions of people every year. Western part of Rwanda is located nearby a region prone to volcanic activity in Eastern DRC where two active volcanoes, Nyamulagira and Nyiragongo may enter into activity at any moment. In 2002, Nyiragongo Volcano erupted and estimated 400,000 people fled to Rwanda. Even though lava flow did not reach the Rwandan territory, impacts were significant to Rwanda due to a huge number of people who fled to our country.

Disaster management focuses on effective preparedness for, and responds to various disasters and crises of all magnitudes, including volcanic eruption. Strengthening disaster preparedness is thus critical to save lives, protect livelihoods and strengthen recovery from disasters and crises. In order to avoid gaps that may exist in saving lives of affected people, a better integration of diverse practices of contingency planning for volcanic eruption is compulsory for emergency preparedness and response.

Contingency planning ensures that we know what to do when a disaster strikes, and have the systems and tools to respond fast. It means anticipating the types of disasters we might face and knowing practically how to manage disasters when they do strike. The 2002 volcanic eruption and the mass movement of the people who fled to Rwanda is an experience from which lessons must be learned in order to be prepared to other eventual incidents, and a contingency plan for volcanic eruption is one of the best tools to be put in place.

KAMAYIRESE Germaine
Minister in Charge of Emergency Management

ACCRONYMS

CP: Contingency Plan

DIDIMACs: District Disaster Management Committees

DDMOs: District Disaster Management Officers

DRC: Democratic Republic of Congo

EOC: Emergency Operations Committee

EWSA: Energy, water and Sanitation Authority

Eng Rgt: Engineering Regiment

JIMC: Joint Intervention Management Committee

IDPs: internally displaced persons.

MINEMA: Ministry in Charge of Emergency Management

MINALOC: Ministry of Local Government

MINEDUC: Ministry of Education

MININFRA: Ministry of Infrastructure

MINIRENA: Ministry of Natural Resources

MoH: Ministry of Health

NCPVE: National Contingency Plan for Volcanic Eruption

NADIMAC: National Disaster Management Committee

NADIMATEC: National Disaster Management Technical Committee

NDMP: National Disaster Management Plan

NDML: National Disaster Management Law

NDRMP: National Disaster Risk Management Plan

NCPE: National Contingency Plan for Earthquake

NGOs: Non-Government Organizations

NPDM: National Platform for Disaster Management

NSRR: National Strategy for Response and Recovery

OVG: Observatoire Volcanologique de Goma

RAB: Rwanda Agricultural Board

RBA: Rwanda Broadcasting Agency

RDF: Rwanda Defense Forces

RHA: Rwanda Housing Authority

RMB: Rwanda Mines, Petroleum & Gas Board

RNP: Rwanda National Police

RRC: Rwanda Red Cross

RSB: Rwanda Standard Board

RTDA: Rwanda Transport Development Agency

SEDIMACs: Sector Disaster Management Committees

UN: United Nations

UNDP: United Nations Development Programme

WFP: World Food Programme

WHO: World Health Organization

ACKNOWLEDGMENT

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I wish to acknowledge and thank the following individuals, who were very resourceful during the process of compiling this plan. In particular I thank resource persons from the Rwanda Red Cross namely Dr. DUSHIME Dyrckx and Ms. MURUNGI Angelique for their supportive contribution. I thank the technical personnel from the Ministry in Charge of Emergency Management especially Mr. HISHAMUNDA Alphonse and BUDEDERI Eric.

I thank also the members of the National Platform for Disaster Management (NPDM) for their valuable advices and inputs during the finalization and validation of this contingency plan.

I would like to request their full collaboration if it comes to activate this documents for the benefits of the population that may be affected by volcanoes eruptions.

HABINSHUTI Philippe
Director of Response and Recovery Unit
Secretary of the National Platform for Disaster Management

EXECUTIVE SUMMARY

The Contingency Plan developed by the Ministry in Charge of Emergency Management in partnership with the Rwanda Red Cross and member of the National Platform for Disaster Risk Reduction is inspired by the experience of volcanoes eruption effects in past especially in 2002 and 1977 mainly.

By assuming that the volcanoes in Rwanda are “sleeping” and the related risks approaching zero, we know that NYAMULAGIRA and NYIRAGONGO on DRC side are still active and the eruption signs are perceptible regularly. The effects of their eruption can be catastrophic for Rwanda by directly affect population near the border, causing massive accident especially if we consider the CO₂ in the Lake Kivu and also the environmental effect due to the proximity of the above mentioned volcanoes with the City of Rubavu.

This is the reason for MINEMA and partners to develop this contingency plan in order to put in place effective preparedness measures and anticipate response mechanisms. The implementation of this plan will be combined with the implementation of the contingency plan for mass population influx as one of the main effect of the possible eruption.

This plan provides clearly roles and responsibilities of different partners and humanitarian actors during a volcano crisis. The testing through simulation will help to keep it updated and to ensure its applicability in a case of volcanic eruption. In addition to the plan different sector plan should be developed by relevant Ministries in order to have a comprehensive response mechanism to the volcanic eruption context as defined below in the scenario development.

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I. INTRODUCTION

Volcanoes are found worldwide and significant numbers of people often live in close proximity to them. The fertile volcanic soil is good for agriculture and is attractive for the establishment of towns and villages.

The North-West part of Rwanda has a chain of Volcanoes, some of which are inactive and others active. The chain of 8 volcanoes comprises of 2 active volcanoes are located in Eastern DRC (Nyamulagira & Nyiragongo) and 6 remaining inactive volcanoes are Gahinga, Muhabura, Bisoke, Karisimbi, Mikeno and Sabyinyo.

Rubavu district located in the western province of Rwanda shares borders with the city of Goma in Northern-Kivu province of the DRC, its population is estimated to 403,662. The district lies on the shores of Lake Kivu, around the city of Gisenyi, and just across the border from the city of Goma. It is also close to Nyiragongo volcano which is an active volcano affecting the population of both cities (Gisenyi and Goma).

The City of Goma is exposed to permanent risks related to natural disasters due to its proximity to active volcanoes namely Nyiragongo and Nyamulagira this lead to the mass movement of population to impacted Rubavu District.

In this context, volcano related risk prevention is a priority for the national disaster management framework for better preparedness measures and effective response. It is an essential component in improving the living conditions of the population. There is a need to develop a National contingency plan for volcanic eruption which will reflect the reality of the probable scenario to happen including prevention measures, preparedness plans and effective response through coordination mechanism to manage the emergency.

II. PURPOSE

The purpose of this contingency plan is to organize effective preparedness for response and coordination mechanisms of the activities to be carried out to manage a volcanic eruption crisis.

This will be possible through the following:

- Understanding of the context and framework for action;
- Determination of the level of intervention and actions to be carried out;
- Determine key roles and responsibilities of the involved stakeholders.
- Set up a coordination mechanisms

III. RISK IDENTIFICATION

3.1. Risk overview

Volcanic eruption affects the population and infrastructure in many ways. Immediate trauma injuries may be caused if there is contact with volcanic material. The super-heated ash, gases, rocks, and magma can cause burns severe enough to kill immediately. Falling rocks and boulders also can result in broken bones and other crush-type injuries. Breathing the gases and fumes can cause respiratory distress. Health facilities and other infrastructure can be destroyed in minutes if they lie in the path of pyroclastic flows and lahars (mudflows containing volcanic debris).

Although recent decades have seen remarkable progress in monitoring active volcanoes, volcano risk is increasing due to rapid urbanization and the high density of populations living on volcano slopes and valleys. Populations living close to a volcano with no monitoring and early warning systems are the most vulnerable to volcano eruption. Poor people are among the most vulnerable as they are often economically constrained to live in high-risk zones such as on the slopes of an active volcano or in nearby valleys and less prepared to cope with disasters.

People living near volcanoes will be the most vulnerable and forced to abandon their land and homes, sometimes forever. People living far away from the eruption can be also affected as their cities and towns, crops, industrial plants, transportation systems, and electrical grids will be damaged.

Rubavu District is bordering with Goma (DRC) exposed to risks resulting from the interaction between natural threats (environmental degradation) and anthropogenic (unplanned urbanization, several fuel stations, development of main infrastructure as well construction of houses under the high line electric voltage). Urban planning standards are not met; there is a lack of sufficient roads and this leads to the complexity of evacuation in case of volcanic eruption.

3.2. Volcanic hazard

The volcanic hazard assessment requires continuous monitoring of the volcanic zone. This requires the expertise of scientists, including those of the Rwanda Mining, Petroleum and Gas Board with the support of Observatoire Volcanologique de Goma (OVG) and international monitoring network.

It is difficult to accurately predict a volcanic eruption. However, if the surveillance is being strengthened and diversified with the appropriate equipment, it is appropriate to reduce the margin of error. It should also consider the potential risks of seismic activity in the western region of the East African rift that could influence volcanic activity and cause the destruction of infrastructure.

There is also the existence of a large number of fractures in the southern flanks of Nyiragongo volcano and new appearances in 2002 eruptive cracks near or in the city of Goma which would escape the lava flows, increasing the vulnerability of population.

3.3. Nyamulagira volcano

3.3.1. Historical background

Nyamulagira volcano is one of two active volcanoes of the Virunga volcanic chain and is ranked among the most active volcanoes in the world, probably the most active in Africa. It peaks at 3056 m and is located 15 km northwest of Nyiragongo. From the early 20th century, Nyamulagira volcano has erupted 52 times and lava destroyed thousands of Km area both in the Virunga National Park and population areas like the city of Sake. It was crossed by several lava flows from eruptions of Nyamulagira volcano, the most important was that of 1938 to 1940. This eruption Tshambene had by that time, sectioned Lake Kivu and created what is called Today the lake (or array) of Sake. This eruption had the effect draining the permanent lava lake, once observed since 1914 in the central crater of the volcano Nyamulagira.

Also in 1938, Nyamulagira observed a large rainfall, which in normal times, was 150 mm/month; before the eruption, it increased from 400 mm to 800 mm / month. This rainfall is the result of the presence of large amounts atmosphere of steam and volcanic dust that would help condensation which will permit a major rainfall. After the eruption of November 6th, 2011, an intense activity was recorded in the central crater of Nyamulagira. This activity led to the birth of a small lava lake identified on 22nd June 2014 and an issuance of a large volume of gas plume. Such activity would have consequences to disturb eruptive cycle as we know it, with regular eruption every two/three years, a sharp deterioration of the environment with a strong volcanic plume pollution and possible reduction of agro-pastoral production. Other effects would follow.

On Rwandan side, Nyamulagira volcano affects the environment component, health, hygiene and sanitation measures can be respected to avoid some disease which can be provoked by the volcano effects to the community near volcano.

3.3.2. Characteristics of Nyamulagira Volcano

- Altitude: 3056 m;
- Diameter: 2500 m;
- Frequent and long eruptions (Hawaiian type);
- The lavas are low in silica;
- Most eruptions occur on the flanks of the volcano (25 July 2002; 8 May 2004, November 27, 2006, January 2, 2010 and November 6, 2011 etc.);
- Eruptions are often preceded by seismic swarms.

3.4. Nyiragongo Volcano

3.4.1. Historical background

From the last century, Nyiragongo has had two eruptions on January 10th, 1977 and January, 17th 2002. The first was stopped at Munigi, 2 km above the international airport of Goma, killed almost 500 persons; the second penetrated the city of Goma in two axes destroying at least 13

% of the city and a portion of the airport before being introduced into the Lake Kivu. It caused 147 deaths and swept between 12000 and 15000 houses resulting in hundreds thousands of internally displaced persons (IDPs).

The eruption of 17th January 2002 was due to tectonic movement (rifting). From this movement, the existing magma column in the crater of Nyiragongo emerged directly from fractures by 8 points at different altitudes between 2700 and 1500m. This is the dish that has spread slowly for fifteen hours in the city of Goma. It has been estimated that about 20 million m³ of lava were dumped on the city.

The eruption of January 2002 seems to be a combination of two different phenomena: a rift with the appearance of fractures (purely tectonic activity) and volcanic (lava).

The presence of fractures in almost the entire city of Goma and Gisenyi District is a high risk for buildings constructed in both cities. If the extension of the lava flow to the lake, such as the eruption of 2002, and it takes several days or weeks, there may be risk of a gas explosion that would affect the city of Goma and Rubavu District.

The last eruption of Nyiragongo volcano in 2002 located in Democratic Republic of Congo caused displacement of 400,000 Congolese people that fled in mass to Rwanda, Eastern of Goma (Sake) and Bukavu Southern-Kivu province of DRC. Goma today's population is estimated to 1,000,000.

3.4.2. Characteristics of Nyiragongo Volcano

- Nyiragongo volcano rises to 3,470 m is the effusive type with very fluid lava;
- Its diameter surrounds 1,300 m;
- It is one of six volcanoes in the world with a permanent lava lake;
- It is affected by the seismic activity of the rift;
- 2 eruptions of Nyiragongo in 1977 and 2002 were preceded by earthquakes weeks before;
- 1977 Nyiragongo eruption triggered by Ngweshe earthquake of December 5, 1976 (Mb= 5.1);
- Eruption of January 17, 2002 triggered by Rutshuru earthquake of January 6, 2002 (Mb=4.6);
- Eruption intra-crater of 23 June 1994 triggered by Masisi earthquake of 05 February 1994 (Mb =6.21);
- On April 15, 1995 a new strong earthquake Masisi (Mb =5) was followed by a sudden increase in the level of the lava lake;
- Earthquake of October 24, 2002, from 3 February 2008 had a significant impact on fractures of Nyiragongo (extension 2 cm);
- Cracks south of Nyiragongo spread to the cities of Goma/DRC and Rubavu / Rwanda and into Lake Kivu.

IV. PHASES OF VOLCANIC ACTIVITY AND WARNING CODES

Level	Description	Behavior / Preventive measures
Green	The volcano is in its normal state Non-flowing or, after a change to higher level of alert: Volcanic activity is considered to have ceased and volcano has returned to normal, non-eruptive	-The population goes about his business -Education Phase risk -Preparation phase
Yellow	The volcano shows signs of high volatility than its normal state or, after a change to higher level of alert: Volcanic activity has decreased significantly but continues to be monitored closely	- The volcano is active but the danger is not yet there -People can go about their business and must follow the information -Inform the public about the color changes -Listen to the radio
Orange	The volcano has a high volatility with a growing potential for eruption or, Volcanic eruption being emission free or low emission of ash and other volcanic products	Pre-Alarm: -The evacuation of vulnerable (elderly, disabled, sick, pregnant women, families, etc.) -Inform the public about the color change -Increase awareness -Listen to the radio
Red	Imminent eruption forecasting, with significant emission of ash and volatiles in the atmosphere. Current rash significant of volcanic products in the atmosphere.	-Inform the public -Evacuation of the entire population in high risk area through exit routes to the provisional (host) sites

V. SCENARIO AND ASSUMPTIONS

This scenario is provided for planning purposes only and is not intended to be representative of what may or may not happen in a real volcanic eruption, which is impossible to predict with certainty. Volcanic eruption impact and its aftershocks are dependent on a variety of factors. In as much, these scenarios are supplied to help the responders to think through a planning process of how the country reacts during a volcanic eruption crisis.

The table below shows in details the two scenarios for Nyamulagira and Nyiragongo Volcanoes, the emergency situation, and probability of occurrence, location of sensitive areas and effects / consequences of potential volcanic eruptions.

Table 1: Scenarios for Nyamulagira and Nyiragongo Volcanoes

NYAMULAGIRA			
Criteria	Less Probable	Probable	Most probable
Emergency Situation	The volcano is far from Rwanda and there is no emergency situation	No emergency situation	No evidence of emergency situation.
Effects/consequence	-Effects to environment (air pollution) -Impacts to population of DRC (few people) coming to Rwanda	-Effects to Environment (air pollution) -Impacts to the population of DRC coming to Rwanda	-Possible disturbance of aeronautics
Location of very /sensitive affected zones	Boardering sectors of Rubavu Districts: Bugeshi, Rubavu, Busasamana, Gisenyi and Cyanzarwe	Boardering sectors of Rubavu Districts: Bugeshi, Rubavu, Busasamana, Gisenyi and Cyanzarwe	Boardering sectors of Rubavu Districts: Bugeshi, Rubavu, Busasamana, Gisenyi and Cyanzarwe

NYIRAGONGO

Criteria	Less Probable	Probable	Most probable
Emergency situation	<p>Phreato magmatic eruption (in or at the edge of the Lake Kivu) causing large explosions with possibility of a gaseous eruption</p> <p>Nyiragongo may erupt through fissure found in Rwanda or through the ones scattered near Rwandan territory</p>	<p>Fissure eruption and lava flows on the southern slopes, passing through the cities of Goma and Rubavu and reaching Lake Kivu (Eruption type of 2002 and 1977)</p>	<p>-Activity of the lava lake in the crater</p> <p>-Possible small lava flow is limited to the Park</p> <p>-Activity type of the la lava lake</p>
Effects/Consequences	<p>Death of people and animals by suffocation and directly by the volcanic products of explosion</p> <p>Mass movement of population (1,000,000 people)</p> <p>Injury cases would be registered</p>	<p>Deaths of people at small scale,</p> <p>Mass movement of population (800,000 people)</p> <p>Injury cases would be registered</p> <p>Several children and the elderly would be missing</p> <p>Destruction of infrastructure and</p>	<p>Deaths of people at small scale,</p> <p>Mass movement of population (600,000 people)</p> <p>Some injury cases would be registered,</p> <p>Few children and the elderly would be missing</p> <p>Pollution of the atmosphere and</p>

	<p>Several children and the elderly would be missing</p> <p>Destruction of infrastructure and the ecosystem</p> <p>Disruption of the lake navigation, air and land transport</p> <p>Possible explosion of fuel stations</p> <p>Air pollution</p> <p>CO₂ explosion</p>	<p>ecosystem,</p> <p>Possible explosion of fuel stations,</p> <p>Respiratory, skin and conjunctivitis pathologies,</p> <p>Disruption of air navigations, terrestrial and lake transport</p> <p>Impact on lake Kivu ecosystems</p> <p>Impact on Gorilla environment safety</p>	<p>water by gas, ash, slag</p> <p>Possible disturbance of air navigation</p> <p>Destruction of the environment by acid rain</p> <p>Pathologies linked to the pollution</p> <p>Effects on water quality</p> <p>Impact on local people and their socio economic activities</p>
Location of sensitive areas	Western Province Part of Northern Province	Western Province Part of Northern Province	Western Province Part of Northern Province
Probable duration of emergency phase	<p>-From a few weeks to 6 months</p> <p>-emergency response: During the period of eruption</p> <p>-Post-emergency: 6 months</p> <p>-Rehabilitation: after the period of eruption 12 months</p>	<p>-From a few weeks to 6 months</p> <p>-emergency response: During the period of eruption</p> <p>-Post-emergency: 6 months</p> <p>-Rehabilitation: after the period of eruption 12 months</p>	<p>One week to 3 months</p> <p>-emergency response: During the period of eruption</p> <p>Post-emergency: 1 month</p> <p>Rehabilitation : after the period of eruption</p>

VI. CRISIS MANAGEMENT AND RESPONSE

6.1. National Response Plan

6.1.1. Objectives

Based on the NDMP and the NDML, humanitarian agencies will support the Government in mounting a timely, consistent and coordinated response to the crisis in order to save lives and to respond to the humanitarian needs of the affected population.

6.1.2. Strategies

To achieve this objective, the following strategies will be used:

- The Government will work through a sector-based approach, as defined in the Rwanda National Disaster Management Plan.
- Engaging Humanitarian organizations in direct implementation in response to the “humanitarian imperative” based on the frameworks set down by Government, MINEMA, JIMC, NPDM, DIDIMACs
- All humanitarian actors must respond in accordance with recognized international standards.
- The response must involve the participation of the affected communities’ leaders and the opinions of the beneficiaries at the earliest opportunity.
- GoR to monitor the evolution of the volcanic activity and inform the international community accordingly

6.1.3. Guiding Principles for response

Humanitarian action is grounded on the basic principles of humanity, neutrality, and impartiality. Additionally, humanitarian organizations must embrace fully the principles of accountability and ‘do no harm’.

The Guiding Principles and Code of Conduct contained in the National Disaster Management Policy will be rigorously applied by all stakeholders.

6.2. Coordination of Volcanic Eruption Response Activities

The response coordination will be made through disaster management committees with respect of the level of decision to be taken. The concerned DM committees are the National Disaster Management Committee (NADIMAC) at high level, the National Disaster Management Technical Committee (NADIMATEC) and the District Disaster Management committee (DIDIMAC) at implementation level.

The two committees at implementation level involve the non-government humanitarian actors to constitute the National Platform for disaster management and the emergency operation committee.

The sequence of decision making and activities will be referring to the NDMP and the National Strategy for Response and Recovery (NSRR).

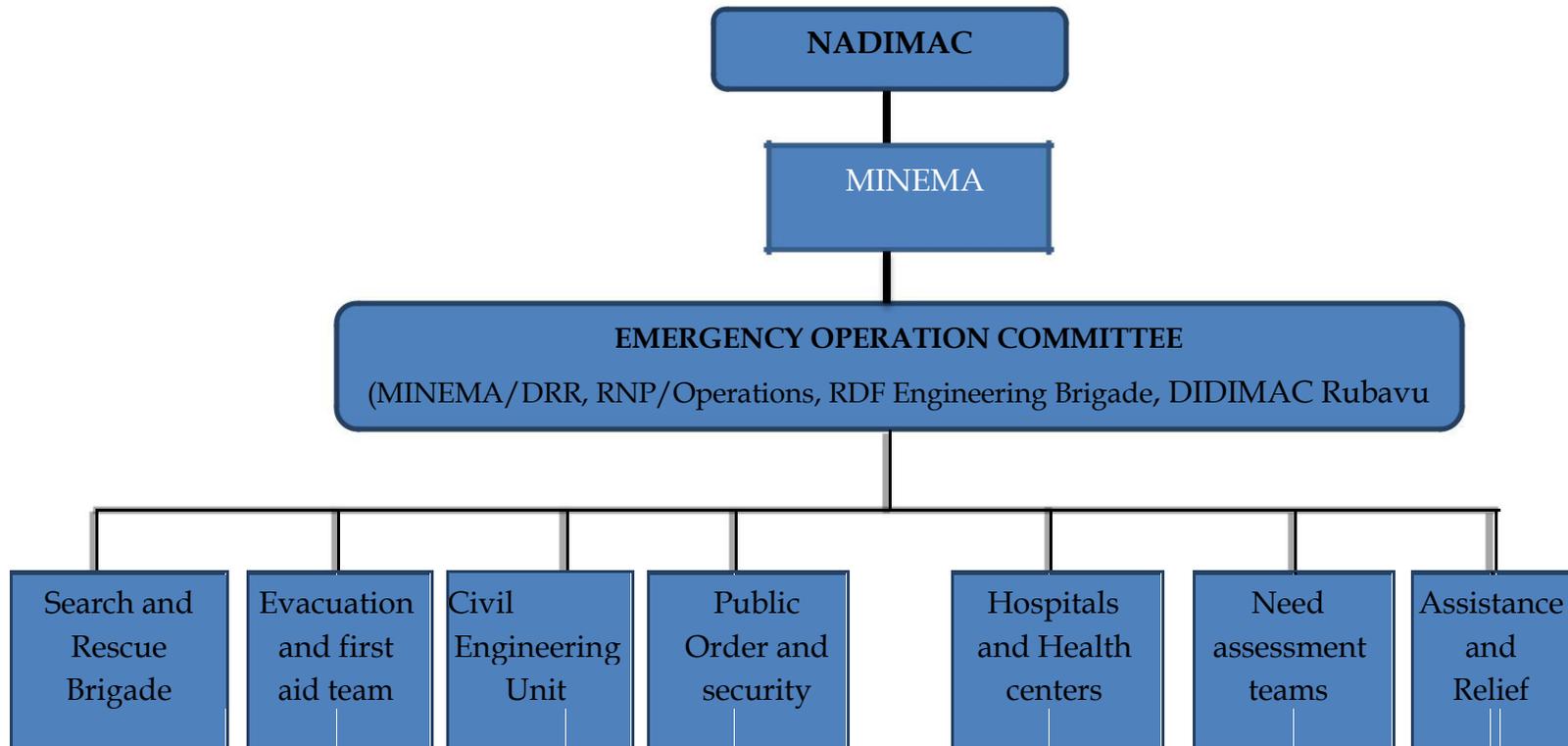
6.3. Decision Making Process

If the crisis is confirmed, the alerts will be triggered and the NCPVE will be immediately activated. This will be enabled by the DIDIMAC but the final decision shall be taken by the NADIMAC. The following actions will be taken during the activation of the NCPVE:

- The Chairperson of the DIDIMAC will convene all DIDIMAC members and identify other resource persons in the staff of humanitarian operating in the area according to their specific skills and capabilities. A crisis response team will then be put in place.
- The crisis response team members will coordinate required clusters/sectors until the end of the operations (Emergency Shelter, Logistics, WASH, Health, Protection, NFI, Food and nutrition, Security ...)
- The DIDIMAC chairperson will report to the NADIMAC on the situation, humanitarian access and other issues related to security for them to take appropriate decisions.
- The MINEMA will convene and set an operation center in the area and work closely with the DIDIMAC to perform the partnership between the district teams and NPDM teams.
- To set an Emergency Operations Committee (EOC) that will gather the NPDM Responders and the DIDIMAC members.

- The sector plans will be activated by the NADIMAC and special focal points appointed for its implementation.

6.4. Volcanic Eruption Operational management Structure



6.5. Management of Operations

6.5.1. Preparedness plan

Once there is an orange alert for a volcanic eruption, the EOC will take all necessary actions to enhance preparedness measures including setting an evacuation plan, resource inventory, hosting sites determination, increasing public awareness.

6.5.2. Operational Response

Once the confirmation of volcanic eruption is issued the NCPVE should be activated by MINEMA and the sector plans be activated by NADIMAC. The pre assessment teams should ensure the evaluation of elements at risk and needs determination and start to implement the evacuation plan.

Members of the EOC should start to provide assistance to the affected population according to the National Response and Recovery Strategy. There is one response framework, non-government humanitarian actors' work with the government responders through the NPDM

6.5.3. Communication and Information Sharing

Once the NCPVE activated, the EOC is responsible to collect, verify and compile all the information regarding the crisis. Collection and validation of information provide a general assessment of the crisis and will help to identify response and recovery needs ahead of time and determine actions that require external experts. The rapporteur appointed by EOC will facilitate the exchange and collection of information among key partners and ensure the liaison with the NADIMAC and with the media.

The information management procedures are as follow:

1. All information must be transmitted by the Liaison officer appointed by the EOC who is also responsible for the collection and consolidation of data and transmission to all parties concerned.

2. Any information is validated by the Head of EOC before transmission and sharing
3. The media will be managed and helped by the EOC in order to minimize the risk for them to interfere with response activities.

6.6. Roles and Responsibilities for responders

The MINEMA holds the responsibility to harmonize the work of humanitarian actors especially for coordination of assistance during an emergency and information sharing.

The Contingency plan for volcanic eruption is activated by the MINEMA based on confirmation of an imminent volcanic eruption to operationalize cross-sectoral rapid assessment, to propose the emergency response observed after assessments and manage information with the support of the international humanitarian community

Following the chart above, coordination will be done by the Ministry in Charge of Emergency Management (MINEMA), which has the primary responsibility of the response to crises and disasters. Specifically, the Disaster response unit will handle the response in partnership with the Rwanda National Police and the Rwanda Red Cross.

The following table shows in details the activities required for response and related roles and responsibilities.

PREPAREDNESS STEPS FOLLOWING VOLCANIC ERUPTION			
I. WARNING			
	Activity	By who?	Phase
1	Review share and test the NCPVE through simulation exercise and awareness campaigns	MINEMA, RRC, NISS, Rubavu District	Yellow and Orange
2	Identification and preparation of assembly sites in case of an imminent eruption	MINEMA, Rubavu District, NISS, RRC, UNHCR and OIM	Orange
3	Map available strategic stores	MINEMA, RRC	Orange
4	Awareness campaign on readiness measures	MINEMA, Rubavu District, RRC	Orange
5	Identification of vulnerable people and determine special intervention roadmap.	MINEMA, Rubavu District, RRC	Orange
6	Establish agreement with DRC on handling joint issues	MINAFFET, MINEMA, RUBAVU District	Orange
	Mobilize additional stand by teams, FRTs and volunteers and provide rapid training		
7	Monitor the evolution of the volcanic activity	MINEMA, RRC, NPDM	ALL

II. ON THE ISSUANCE OF THE RED ALERT			
8	Contingency plan activation	MINEMA	RED
9	Appoint special focal point for EOC	MINEMA, NADIMAC, District	RED
10	Response planning meeting	MINEMA, NPDM Rubavu District	RED
11	Emergency declaration, activate alarms to authorize evacuation	MINEMA, NADIMAC, Rubavu District, RRC, RNP	RED
12	Activate the sector plans	MINEMA, NADIMAC	RED
13	Mobilize additional FRTs and volunteers	MINEMA, Rubavu District, RRC	RED
14	Avail additional communication tools	MINEMA	RED
15	Deploy a joint mission to determine needs in affected areas	MINEMA, NADIMAC, Western Province, Rubavu District	RED
16	Initiate first aid based on the joint assessment	MINEMA, NPDM	RED
17	Invite expert in volcanology and get technical advices	MINEMA, NPDM	RED
18	Reinforce security in the region	RNP, RDF, DGIE	RED
III. DAY OF VOLCANIC ERUPTION			
19	Increase the number of reception points	DGIE, RNP	RED
20	Increase security screening at the entry points and improve border monitoring and control	RNP, RDF, NISS, MINAFFET	RED

21	Report to the High level response team on status based on joint assessment	EOC	Red
22	Review the response plan if necessary	EOC	RED
23	Deploy additional staff required in case of need	EOC	RED
24	Suspend non-priority activities that are underway	NADIMAC	RED
25	Provide assistance based on identified needs	EOC, NPDM	RED
IV. FIRST TWO WEEKS			
26	Conduct deep assessment and identify response gaps and plan for three and six months interventions	MINEMA, NPDM	RED
27	Facilitate administrative procedures to ease importation of humanitarian relief	NADIMAC	RED
28	Identification of new reception sites and decide on declaration of the state of emergency and involving humanitarian community worldwide	NADIMAC, MINEMA,	RED

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