

DREF operation final report

 International Federation
of Red Cross and Red Crescent Societies

Democratic Republic of Congo: Nyiragongo and Nyamuragira volcano eruption alert in Goma

DREF operation n° MDRCD007
GLIDE n° VO-2009-000076-COD
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The International Federation's Disaster Relief Emergency Fund (DREF) is a source of un-earmarked money created by the Federation in 1985 to ensure that immediate financial support is available for Red Cross Red Crescent response to emergencies. The DREF is a vital part of the International Federation's disaster response system and increases the ability of National Societies to respond to disasters.

Summary: CHF 63,780 was allocated from the Federation's Disaster Relief Emergency Fund (DREF) on 15 April, 2009 to support the National Society in delivering assistance to some 1,000,000 beneficiaries, and to strengthen their capacity to face an eventual eruption of Nyiragongo and Nyamuragira in Goma.

Thanks to these funds all of the activities planned for this operation have been carried out. This contributed to reaching over 500,000 people in the city of Goma and its surroundings. The volcano eruption preparedness and response capacities of the Red Cross of the Democratic Republic of Congo (RCDRC) and Government, as well as the local communities have been built through training and sensitization sessions, production and installation of sign boards, the setting up of an emergency operations centre, and the consolidation of ties between the Red Cross societies of DRC and Rwanda.



Red Cross of DRC Volunteers field test in site selection and planning in Goma / Red Cross of DRC

The major donors to the DREF are the Irish, Italian, Netherlands and Norwegian governments and ECHO. Details of all donors can be found on <http://www.ifrc.org/what/disasters/responding/drs/tools/dref/donors.asp>

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[or here to view contact details>](#)

The situation

Due to its location in the rift valley, the city of Goma in the North Kivu province of the Democratic Republic of the Congo is constantly at risk of seismic and volcanic disasters with potential methane gas explosions in Lac Kivu. The vulnerability of the city is further worsened by deforestation, environmental degradation, uncontrolled urbanisation and anarchical concentration of populations in urban areas as well as high levels of poverty coupled with armed conflicts. Hence, disaster risks management becomes a key component of any plan to improve the living conditions of the populations, and as such should be integrated into the development of all public policies of the State, and in any process to identify the intervention priorities for the development of Goma.

Goma and its surroundings have been threatened by unusual activity of the Nyiragongo and Nyamuragira volcanoes. In March and April 2009, reports from the Observatoire Volcanologique de Goma (OVG) (the Volcanic Monitoring Agency) revealed that both volcanoes have been developing intensive pre-eruption indicators, similar to those that preceded the last eruption of the Nyiragongo volcano in January 2002. Such indicators included recurrent appearance of typically volcanic earthquake swarms on the one hand and episodes of volcanic tremors with high amplitude at the Rusayo seismic station on the other. Though scientists were divided on the matter, it was reported that the eruption of the Nyiragongo could be imminent.

The eruption of the Nyiragongo that took place on 17 January 2002 destroyed half of the city of Goma and caused the displacement of about 400,000 people into the city of Gisenyi, in Rwanda. Since then, several parameters have changed. It is now estimated that over 800,000 inhabitants live in Goma while 65,000 people live in the city of Gisenyi (Rwanda) and 288,000 other in the district of Rubavu. Therefore, any eruption of the Nyiragongo could put at risk the lives and the livelihood of about 1,000,000 people. The internally displaced persons who were living in the various sites of the Nyiragongo territory, in Kibati to be more precise, are still there.

Taking into consideration the fact that most of the volcanic eruptions that have occurred so far have always been preceded by seismic, geodesic, geochemical and geothermal pre-eruption indicators, the tectonic and volcanic activity needed to be closely monitored in order to avoid any unpleasant surprise. Moreover, it should be noted that despite the high risk associated with these volcanoes, the emergency interagency plan that was developed after the 2002 Nyiragongo eruption, as well as the Red Cross DRC plan of action, had all remained outdated and needed to be updated.

Red Cross and Red Crescent action

In coordination with provincial authorities, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and other key partners and with the technical and financial support from the Federation, the Red Cross of DRC updated its emergency plans, set up an emergency team to monitor the situation and shared the response information in a timely manner. The National Society also made available the logistics means needed to identify resettlement sites for displaced persons updated the early warning system and evacuation plan. It sensitized as well the populations to the risks of volcano and to the evacuation plan. This was based on the responsibilities that were given to the Red Cross within the framework of the preparedness.

All of the activities planned and carried out by RCDRC with the funds that were allocated from the International Federation's DREF were essentially aimed at increasing the knowledge and preparedness of targeted communities and the North Kivu Branch, with the view to reduce the risks of a potential volcano eruption on the populations.

Achievements against objectives

DRC Red Cross North Kivu Branch Volcano eruption preparedness

Objective: To improve the operational activities of the Red Cross of DRC/North Kivu in terms of response in the event of a massive population displacement.

Activities planned:

- A workshop to update the contingency plan will be conducted. This workshop will gather authorities from the DRC and Rwandan Red Cross, the Federation, ICRC and local authorities from both countries (25 people).
- Setting up of a Centre for emergency operations and procedures in Goma, Gisenyi and Bukavu.
- Updating of the warning system: the warning chain, which starts from the OVG up to families and

volunteers, community representatives and warning signs will be worked out and tested (30 people).

- Identification of evacuation walkways, entrance/exit ways (Rwandan border) and camps for displaced people in cooperation with Rwandan Red Cross and local authorities.
- Updating of the evacuation plan from high risk areas to temporary shelters, with involvement of local authorities, Red Cross of DRC volunteers and community representatives (20 people).

Impact

1- Updating contingency plans

During a three-day workshop that brought together representatives from DRC North Kivu provincial Government and Rwanda, executives and volunteers from both the Red Cross Societies of DRC and Rwanda, the International Federation, ICRC, the provincial Civil Protection Coordination, the Goma Volcanic Monitoring Agency or “Observatoire Volcanologique de Goma” (OVG), the Police, the Army, and leaders from communities most at risk, participants reviewed the 2002-2003 plan thoroughly and aligned it with the International Red Cross and Red Crescent Movement’s plan. As a result of this, both humanitarian actors and provincial authorities now have a reference document on which they can rely to choose useful orientations and provisions for coordinated and efficient management of the risks associated with volcanic eruption.

After the presentation of the International Red Cross and Red Crescent Movement’s plan to the North Kivu provincial authorities, the national Minister of Scientific Research organized another workshop at the OVG to harmonize the plans of all international organizations with that of the Red Cross societies of DRC and Rwanda, with the view to come out with a national contingency plan which defines the roles and responsibilities of each humanitarian actor in the event of a volcanic eruption. The various actors targeted included the Red Cross, international organizations and UN agencies, DRC Government (police, army, and civil protection).

2- Setting up of a Centre for emergency operations and procedures

In a workshop with representatives from the same institutions as mentioned above, an Emergency Operations Coordination Centre (EOC) comprising a decision-making organ, a communication organ and an operations organ was set up. Operations procedures were also agreed upon during the same workshop. The EOC which is based at the headquarters of the North Kivu provincial Red Cross branch is the unit in charge of coordinating both the operations and procedures to facilitate decision making, operations coordination and communication during disasters.

The setting up of the EOC has been a new experience of the Red Cross of DRC within its disaster management system. Therefore, a few questions have been raised about how it was going to function and who would hold the decision-making power. It should be noted that the procedure to activate and deactivate the EOC is an integral part of the system governing the powers of the Executive Committee of the Red Cross society of the Democratic Republic of the Congo. In fact, the President of the National Society is a member of the Executive Committee and in line with section 28 of the constitution; he is the highest ranking personality of the National Society. Still in conformity with the same section 28, the president shall represent the Red Cross Society of DRC within the decision-making organ of EOC which comprises RCDRC, the International Federation and ICRC. The EOC can only be activated if, based on the level of alert, the Government competent authority has sounded the alarm.

The North Kivu Branch of the DRC Red Cross has now understood that in order to achieve a coherent impact, the response needs to be proportional to the scope of the disaster. Thus, they have understood the need to seek the assistance from various partners, and ensure proper coordination and supervision of operations if smooth management of disasters must be achieved. Details on the functioning of the EOC are described in the emergency operations procedures.

3- Updating the warning system

A workshop was organized to review and update the overall early warning and alert system of the National Society under the umbrella of OVG. To reach out more people in the areas most at risk, 30 new sign boards (billboards) were set up and 10 old ones were rehabilitated. The early warning information dissemination chain now includes the OVG, provincial authorities, sirens, more than 40 sign boards, Red Cross volunteers organized in clusters of 10 households, community relays and leaders (heads of neighbourhoods, cells and families). The Goma populations in particular and those in zones at risk have been becoming increasingly interested in sign boards indicating the level of alert, and the measures to be taken. In fact, such measures have become the topics of all discussions in the media and in the street. Local, national and international

newspapers, groups of young people and women as well as Government have issued messages to encourage the initiative.

4- Developing and testing evacuation plans

During the above-mentioned workshop, local authorities, Red Cross volunteers, community relays and heads of neighbourhoods contributed to develop a document describing the evacuation system, the alert level and the maps of zones at risk. This document has been put at the disposal of both provincial Government authorities and Red Cross provincial authorities. The plan included identification and mapping of resettlement sites, evacuation routes and exits, as well as Red Cross outposts installed along the evacuation routes to assist and provide relief to the populations as the case may be. Following these activities, Government provincial authorities have shown particular interest in Red Cross work. In fact, they have acknowledged the leading role of the Red Cross in the area of disaster management within the province. They have applied as well to the Red Cross of DRC for the training of civil protection agents on disaster management. The activities carried out contributed to building the disaster management capacities of the North Kivu Red Cross branch as they are now capable of effectively and efficiently managing massive populations' displacement (EOC has been set up to coordinate operations). The branch has also been equipped with a generator and first aid materials, and their executives and volunteers have acquired new skills and competence. Local and national authorities have owned this tool developed by RCDRC, which will serve as an example or a working document for developing a nation-wide plan. The emergency response tools are tested in the event of any small scale disaster in the city of Goma, and the results gathered so far have enabled the authorities of the RCDRC to have a thorough knowledge of these tools.

Community disaster awareness and preparedness

Objective: To improve the level of information, knowledge of target populations for a better understanding of warning and evacuation processes, and the related measures taken.

Activities planned:

- Retraining of community representatives and those in charge of sensitizing within Red Cross of DRC/North Kivu. Eighteen (18) areas, three IDP camps, two volunteers and three community members for each area will be mobilized, with technical and material support from ICRC.
- Sensitization campaign in high risk areas for the dissemination of warning signs, communication about the most suitable behaviour in case of emergency, about evacuation walkways and camps for the displaced.
- Simulation exercise to test the warning system and evacuation plan, in cooperation with authorities and target communities and with participation of partners of the Red Cross Movement, local authorities (OVG, DPC, police) and other actors.
- Workshop for synthesis and information sharing with authorities and communities.

Impact

1- Retraining community sensitization agents and animators

Researchers from the OVG and the International Federation's field delegate conducted a two-day training workshop that brought together about 30 participants, including Red Cross volunteers and community relays. The workshop enabled participants to:

- Acquire the skills needed to provide adequate response in terms of what to do in the event of an alert to a volcano eruption;
- Be able to use available tools and carry out a sensitization activity using the planning form;
- Be able to avoid communication deadlock by carrying out practical exercises.

2- Sensitization campaigns in high risk areas

In line with the plan of action as stated in the operations update of 15 July 2009, sensitization activities continued until late August 2009, and about 70% of the targeted populations were directly or indirectly reached in the city of Goma and its surroundings. Sensitization was conducted in 18 neighbourhoods of Goma, and in each of the neighbourhoods, 6 sensitization agents conducted 10 sensitization sessions under the supervision of 4 Red Cross volunteers. This resulted into 180 sensitization sessions conducted by 108 sensitization agents.

Although the sensitization activities were delayed by the production of leaflets, Red Cross volunteers succeeded in distributing 7,500 leaflets out of the 8,000 that had been produced. The remaining 500 leaflets have been kept as a strategic stock to be used as North Kivu Red Cross volunteers and community relays intend to continue sensitization activities, even after the operation will have ended. It should be noted that sensitization is a routine community-based activity integrated into the community-based programmes of the

national society (youth's associations, churches, etc.). The people who have been reached through this operation know exactly the various levels of alert, the evacuation routes, hospitality sites, and the measures that have been taken by RCDRC to assist vulnerable people whatever the case may be.

3- Simulation exercise to test the warning system and evacuation plan

A simulation exercise was organized to test the newly developed systems, including the early warning system, the emergency operations centre (EOC), the emergency operations procedures, evacuation plans, and the capacities of Red Cross volunteers. The exercise that was organized on 24 May 2009 in Kibumba, a locality situated 30 km from North Goma, brought together 200 Red Cross volunteers, 700 community members, 20 civil protection agents, the police, the army and the OVG, the media, provincial and local authorities (Administrator of the Territory). Lessons learnt from the exercise helped fine tune emergency operations procedures and develop measures to improve clarity of evacuation instructions for the population during a review and information sharing meeting that was held with provincial authorities. The contingency and evacuation plans have been updated based on the lessons learned and the best practices of the simulation exercise.

4- Workshop for synthesis and information sharing with authorities and communities

The workshop that was organized simultaneously with the launching of the sensitization campaign took place in the meeting room of North Kivu Governor's Office, and brought together about 30 participants from the OVG, Civil Protection, personnel from the Governor's Office, the personnel and volunteers of the North Kivu branch of the DRC Red Cross, the International Federation's Delegate, and a few heads of neighbourhoods. This workshop enabled participants to identify the following challenges that have already been included in the respective plans of action of the Red Cross, Government authorities and other partners. The challenges included:

- The need to ensure the safety of the people and their property during evacuation operations. The acting Governor said it would be very difficult to ensure total safety during such operations because the security system as it is now cannot meet that challenge;
- The need to build the massive populations management capacities of civilians and DRC Red Cross to enable them to act efficiently in the event of a volcano eruption;
- The problem of selecting and preparing hospitality sites;
- The problems associated with the management of OVG agents in terms of providing them with equipment and paying their salaries in order to ensure the achievement of reliable results and daily surveillance;
- The problem of prepositioning relief materials during evacuation, including water, high-calorie biscuits, transportation of the most vulnerable (logistics means).

Conclusion

Thanks to the funds provided by the International Federation from its DREF, the North Kivu branch of the DRC Red Cross carried out activities that brought some results. In the field of sensitization, about 500,000 people have been sensitized and are now capable of naming the 4 levels of alert and determining the action to be taken at each level. Thanks to the advocacy and sensitization activities carried out by the Red Cross, the Goma provincial authorities are now aware that there is an imminent danger of volcano eruption and have owned the problem. In fact, a national Minister even travelled to Goma and met all humanitarian actors, especially the North Kivu branch of the DRC Red Cross that seized the opportunity to show its know-how and capacities in the area of emergencies. These results have been preceded by some capacity building. Indeed, the emergency response operational and institutional capacities of the North Kivu branch of RCDRC have been built (50 executives trained) through the setting up of an emergency operations and operational procedures centre, the strengthening of community sensitization capacities, the training of 30 volunteers, first aid workers and community relays, the strengthening of the capacities of the Civil Protection Department, the Police, the Army, the training of about 20 additional persons through practical exercises, the availability of a contingency plan, a Goma evacuation plan, and operations procedures. The authorities of the North Kivu branch of the Red Cross Societies of DRC and Rwanda have been also working in close collaboration, and have been sharing information as they have understood that they both share the same fate. Their respective contingency plans are complementary and interdependent. Moreover, two Federation zone offices (East Africa, and West and Central Africa, Red Cross and Rwanda), the Yaoundé Federation Regional Representation and the DRC Federation country representation are all working in close collaboration to assist the RCDRC and Red Cross Society of Rwanda in their efforts to prepare the populations to face a potential volcano eruption.

However some challenges should be raised here. The Red Cross of DRC still needs to strengthen the capacities of their executives in the area of disaster management, the evaluation of damages and the analysis of needs, financial, emergency logistics and camp management. The Goma population is estimated at about 700,000 inhabitants, and several neighbourhoods have sprung up everywhere around the old city.

Consequently, there is the need to systematically install alert sign boards in all of these neighbourhoods. The emergency material needed is still incomplete, and there is the urgent need to request for funding to purchase and preposition such material in the North Kivu province.

How we work

All International Federation assistance seeks to adhere to the [Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations \(NGO's\) in Disaster Relief](#) and is committed to the [Humanitarian Charter and Minimum Standards in Disaster Response \(Sphere\)](#) in delivering assistance to the most vulnerable.

The International Federation's activities are aligned with its Global Agenda, which sets out four broad goals to meet the Federation's mission to "improve the lives of vulnerable people by mobilizing the power of humanity".

- Global Agenda Goals:**
- Reduce the numbers of deaths, injuries and impact from disasters.
 - Reduce the number of deaths, illnesses and impact from diseases and public health emergencies.
 - Increase local community, civil society and Red Cross Red Crescent capacity to address the most urgent situations of vulnerability.
 - Reduce intolerance, discrimination and social exclusion and promote respect for diversity and human dignity.

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International Federation of Red Cross and Red Crescent Societies

MDRCD007 - Dem Rep Congo - Volcano Eruption

FINAL Financial Report

Selected Parameters	
Reporting Timeframe	2009/4-2009/9
Budget Timeframe	2009/4-2009/6
Appeal	MDRCD007
Budget	APPEAL

All figures are in Swiss Francs (CHF)

I. Consolidated Response to Appeal

	Goal 1: Disaster Management	Goal 2: Health and Care	Goal 3: Capacity Building	Goal 4: Principles and Values	Coordination	TOTAL
A. Budget	63,777					63,777
B. Opening Balance	0					0
Income						
<u>Other Income</u>						
<i>Voluntary Income</i>	63,679					63,679
C5. Other Income	63,679					63,679
C. Total Income = SUM(C1..C5)	63,679					63,679
D. Total Funding = B + C	63,679					63,679
Appeal Coverage	100%					100%

II. Balance of Funds

	Goal 1: Disaster Management	Goal 2: Health and Care	Goal 3: Capacity Building	Goal 4: Principles and Values	Coordination	TOTAL
B. Opening Balance	0					0
C. Income	63,679					63,679
E. Expenditure	-63,679					-63,679
F. Closing Balance = (B + C + E)	0					0

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III. Budget Analysis / Breakdown of Expenditure

Account Groups	Budget	Expenditure					TOTAL	Variance
		Goal 1: Disaster Management	Goal 2: Health and Care	Goal 3: Capacity Building	Goal 4: Principles and Values	Coordination		
A							B	A - B
BUDGET (C)		63,777					63,777	
Supplies								
Water & Sanitation	1,155	1,086				1,086	69	
Teaching Materials	4,078	9,403				9,403	-5,325	
Other Supplies & Services	2,732	2,173				2,173	560	
Total Supplies	7,965	12,661				12,661	-4,697	
Transport & Storage								
Storage		217				217	-217	
Distribution & Monitoring		99				99	-99	
Transport & Vehicle Costs	1,502	3,252				3,252	-1,751	
Total Transport & Storage	1,502	3,569				3,569	-2,067	
Personnel								
International Staff		5,085				5,085	-5,085	
National Society Staff	15,888	8,509				8,509	7,379	
Total Personnel	15,888	13,594				13,594	2,294	
Workshops & Training								
Workshops & Training	18,801	12,269				12,269	6,532	
Total Workshops & Training	18,801	12,269				12,269	6,532	
General Expenditure								
Travel	11,492	2,039				2,039	9,453	
Information & Public Relation	1,155	1,246				1,246	-91	
Office Costs	751	584				584	167	
Communications	693	1,340				1,340	-647	
Financial Charges	1,386	12,238				12,238	-10,852	
Total General Expenditure	15,477	17,447				17,447	-1,970	
Programme Support								
Program Support	4,146	4,139				4,139	6	
Total Programme Support	4,146	4,139				4,139	6	
TOTAL EXPENDITURE (D)	63,777	63,679				63,679	98	
VARIANCE (C - D)		98				98		