

# DREF operation final report



International Federation  
of Red Cross and Red Crescent Societies

## Indonesia: Sinabung Volcano Eruption

DREF operation n°MDRID005  
GLIDE n° VO-2010-000170-IDN  
Final Report  
8 March 2011

The International Federation of Red Cross and Red Crescent (IFRC) 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.

**Period covered: 28 August to 3 October 2010.**

**Summary:** On 3 September 2010, CHF 143,243 (USD 141,096 or EUR 109,883) was allocated from IFRC's Disaster Relief Emergency Fund (DREF) to support Indonesian Red Cross (or Palang Merah Indonesia/PMI) in delivering immediate assistance to about 5,000 internally displaced persons (IDPs) who were forced to flee from the eruption of Sinabung Volcano. After the operation closed, PMI continued conducting procurement for replenishment of disaster preparedness stocks in case of further eruptions.

The National Society as an auxiliary to the Government of Indonesia supported the community to cope with these volcanic eruptions. Together with the local authority, PMI delivered its emergency response activities in 29 IDPs locations which covered 4,372 families or 15,595 individuals.

This operation was expected to be implemented over three months but had been completed by 30 November 2010 as the eruptions subsided and the displaced were assisted to return to their homes.

Key donors and partners of DREF include the Danish Red Cross/Danish government, Irish Red Cross/Irish government, Japanese Red Cross Society, Monaco Red Cross/Monaco government, Netherlands Red Cross/Netherlands government, Norwegian Red Cross/Norwegian government, Swedish Red Cross/Swedish government, Canadian government, Italian government, AusAID, United Kingdom Department for International Development (DFID), DG ECHO, OPEC's OFID, and corporate and private donors, the IFRC, on behalf of PMI, would like to extend thanks to all for their generous contributions.

[<click here for the final financial report, or here to view contact details>](#)



Situation in a camp which is not the same as their normal pre-eruption life can affect the physical and psychological condition of internally displaced persons. Palang Merah Indonesia is focusing on children by conducting creative games such as playing soccer, drawing and snakes and ladders. More than 268 children were involved in these activities.

Photo credit: Palang Merah Indonesia.

## The situation

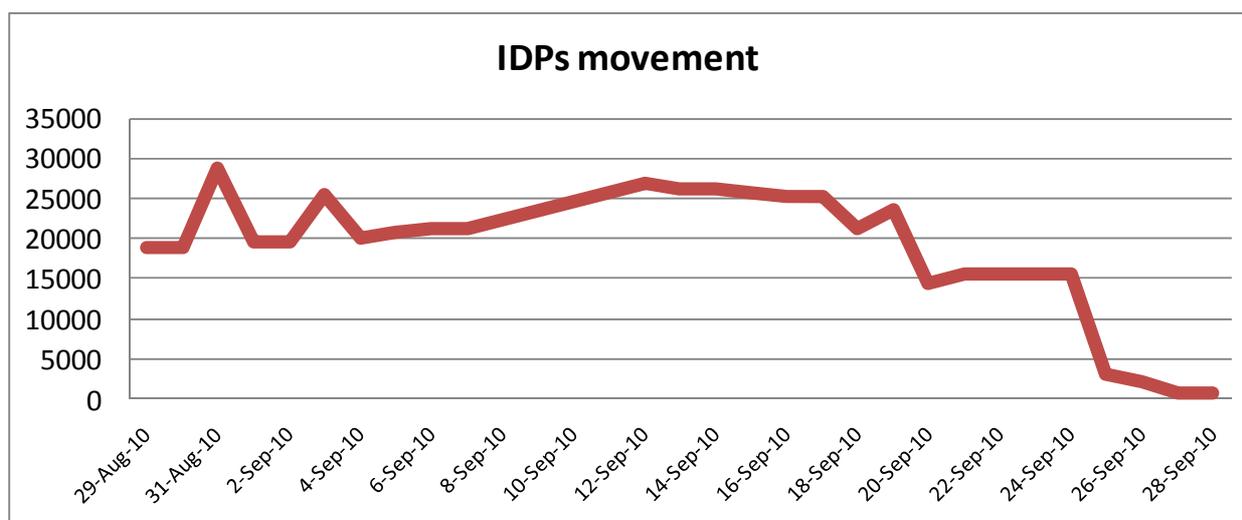
On Sunday, 29 August 2010, Volcano Sinabung, a type B volcano (a non-active volcano type) which is located in Karo district, North Sumatera, Indonesia, unexpectedly exploded and produced a powerful burst of volcanic ash a mile high into the air. Since the last eruption of Sinabung was 410 years ago, people panicked because they were not prepared for the unexpected eruption of this dormant mountain. Fortunately, on this occasion hot lava only travelled short distances around the crater. The volcano exploded again on Monday 30 August 2010 with a bigger explosion which lasted for about 15 minutes with reports of smoke and ash reaching almost one and a half miles high. This major eruption was then followed by other big eruptions on 3 and 7 September. The resulting ash and debris from these eruptions affected 25 villages in three sub-districts within the radius of 6 kilometers. Areas worst affected were the villages in Namanteran Tigaderket and Payung sub-districts. It was reported that these eruptions caused one serious casualty, 35 inpatients and 8,522 outpatients.



A Palang Merah Indonesia volunteer is putting a mask for one of a lady who lives in the affected area of Sinabung volcano eruption. This aims to avoid respiratory diseases and other health issues that threatened the people near Sinabung. Photo credit: Indra Yogasara/Palang Merah

In response to these eruptions, the Karo district government and the *Badan Penanggulangan Bencana Daerah* (BNPB - in English Provincial Disaster Management Agency) declared a local emergency phase until 24 September. To reduce risk of further casualties the local authority decided to evacuate everyone from the 14 villages located around the close danger areas or red zone around the volcano. This action resulted in about 26,137 of the residents to become internally displaced persons (IDPs). They were taken to evacuation centers for the duration of the eruptions and until an alternate shelter solution could be found. The local authorities also urged all individuals to wear face masks to avoid respiratory diseases or other health issues and to protect their drinking water sources to prevent them from contamination from volcanic ash. To reduce the risk of a secondary disaster from the volcanic cold mud flow, people who lived along river banks and in the path of the ash cloud outside the 6 km red zone were regularly updated by the local authorities to remain alert and take precautions to reduce the risk especially during heavy rain.

Since the main eruptions occurred four times, the number of IDPs was continually fluctuating. After the second eruption, some communities attempted to return to their homes but the third eruption forced these communities to leave their homes and return to the IDPs camps which were located in safer areas. The number of IDPs dropped again on 24 September as the government announced that the volcanic activities had returned to normal and were no longer a threat. Figure below shows the IDPs movement.



During the emergency situation, local culture and practice has helped in the evacuation and shelter process. It is Karo's tradition to have their own community halls for functions like wedding, praying, or other special events which involve large numbers of people, well-known as *jambur* in local dialect. These common facilities were scattered in many locations around the towns and villages and were quickly utilized during the emergency period as evacuation halls for the IDPs. However, as the halls were only designed for short term festivals and events, and not constructed for long term shelter, the number of people staying in these buildings soon became overwhelming. There were no rooms and sanitation facilities (like latrines) were limited. As a result, many improvements had to be made and constant support was required to feed, shelter and support these displaced.

After the fourth eruption the activity reduced considerably and the status was changed from a type B (dormant) volcano to type A (active) volcano. The Volcanic Disaster Mitigation Agency of Indonesia is now required to continually monitor its activity levels.

## Red Cross and Red Crescent action

PMI mobilized emergency response teams (SATGANA) not only from the local district, but also from neighbouring PMI chapter and branches such as PMI North Sumatera, Medan, Binjai, Langkat, Labuhan Batu, Sibolga, Nias, Tapanuli Selatan, Tanah Karo, Deli Serdang, and Pematang Siantar with total of 83 volunteers.

Most of the PMI activities were designed to assist the IDPs to live comfortably in the evacuation centres. As mentioned earlier, most of the evacuation centres were community halls, stadiums, and churches which did not have appropriate facilities or suitable sleeping arrangements. It was also the rainy season and improvements were needed to reduce inundation.

Dealing with this situation, PMI worked closely with the local authorities and other stakeholders which included the district health office, the University of Indonesia, the Boy Scout association (*Pramuka*), and private companies like PT Coca Cola Indonesia, Mobile Phone providers and Amateur Radio Association (RAPI) to deliver emergency health services, information, public kitchen services and basic relief items. They also assisted in the provision of water and sanitation services and psychosocial support services.

## Achievements against outcomes

Relief distributions (food and basic non-food items)
<b>Outcome: 5,000 of the most affected and displaced people are supported with essential non-food items to meet their immediate needs.</b>
<b>Expected results:</b> 5,000 most affected and displaced people affected by the volcano eruption receive non-food assistance.
<b>Activities planned</b> <ul style="list-style-type: none"> <li>• Identify and register most affected and displaced families based on agreed criteria;</li> <li>• Distribute non-food items from existing stocks to identified beneficiaries;</li> <li>• Continuously monitor relief activities and provide reporting on relief distributions;</li> <li>• Conduct an ongoing assessment of the impact of the volcano and review support strategies;</li> <li>• Conduct an impact evaluation;</li> <li>• Replenishment of stocks based on approved budgets and IFRC procurement required.</li> </ul>

### Impact:

During the emergency period, PMI supported 1,606 families (6,718 individuals) with 1,606 hygiene kits, 981 sleeping mats, and 229 baby kits. In addition, PMI also helped the IDPs to improve their living condition by distributing 101 tarpaulins and 1,658 blankets. Tarpaulins were used as shade and as partitions in the evacuation centres. Meanwhile, the IDPs used the blankets distributed to cope with cold conditions.

To be better prepared for future disasters, PMI North Sumatera chapter also replenished some of its basic equipment and relief items that were utilized from its warehouse facilities. This replenishment included two set of field kitchens, 2,000 blankets, 2,000 sleeping mats, 860 tarpaulins, 10 water tanks (2,000 liter) and 100 garbage bins. All these replenishment items are in stock at PMI North Sumatera warehouse to avoid unnecessary delays should there be a need to respond to an emergency in the future.

## Emergency Food

**Outcome: 5,000 of the worst affected and displaced people are supported with essential food items to meet their immediate needs.**

**Expected results:**

Emergency food is provided and where necessary cooked to provide 5,000 displaced people with a daily ration of meals while they remain displaced and sheltered in refuge halls.

**Activities planned:**

- A mobile public kitchen will be operated in locations where families have fled the volcano but have not received any assistance from the authorities or other relief service;
- Food support will be provided in coordination with other food providers to individuals who have been neglected or where insufficient assistance has been provided.

**Impact:** The PMI started to provide cooked meals and basic food for the IDPs from 2 September. The field kitchen team was supported by the community volunteers to help cook and deliver this service. The kinship ties are strong in this community and community mobilization and cohesion are strong. Surrounding people and local authorities also supported the IDPs by sharing food supplies. As a result, food was not a critical issue during the evacuation period.

PMI field kitchen volunteers worked with the IDPs in processing and providing meals. Up to 17 September, PMI provided 11,687 meals for lunch and dinner. This service reached 12 evacuation centres in the four districts of Kabanjahe, Munte, Merek and Tiga Panah.



IDPs are involved actively with PMI field kitchen field in preparing and delivering meals for the IDPs need.

Photo credit: Palang Merah Indonesia.

## Emergency Health

**Outcome: The psychological disturbance and health risk has been reduced through psychological support and mobile clinics.**

**Expected results:**

Emergency health services rendered to 5,000 displaced people.

**Activities planned:**

- Operate mobile health clinics for affected families in displacement camps;
- Make psychosocial support (PSS) services available to displaced populations;
- Conduct PSS activities for children;
- Conduct PSS activities targeting women, elderly and other people that may have been traumatized by the volcanic eruption and displacement.

**Impact:**

PMI delivered emergency health service for the IDPs of the Sinabung volcano eruption through the operation of mobile clinics which consisted of four ambulances from the North Sumatra municipal branches. Each ambulance was run by a doctor and three volunteers with first aid and ambulance service skills, and equipped with basic medicines and supplies. In close coordination with local health government office and clinical services, PMI also supported the operation of 19 health posts in IDP camps in the districts of Kabanjahe, Tigabinanga, Munte, Merek and Tigaderket. The health services attended to health needs of the affected population who presented with acute respiratory infection, stomach problems and common cold. This PMI health mobile clinic reached a total of 1,171 individuals. These individuals did not have access to government run health posts. .

In the delivery of psychosocial support (PSS) activities, PMI team targeted children by conducting creative activities such as drawing, colouring and origami, and playing games such as snakes and ladders and football to shift their mind from the uncomfortable conditions in the camps. There were 268 children actively involved in these activities. Adults were also one of PSS targets during the operation. The team screened movies for them as another way to occupy their time in the camps.

Based on the assessment, PSS activities were provided in many camps by PMI. Some church organizations and universities also helped out but some camps remained unserved. As a lesson learnt, PMI has recommended in its report the need for inter-agency emergency coordination in the delivery of PSS in the field to ensure that affected population are served as much as possible,

### **Water, sanitation, and hygiene promotion**

**Outcome: To assist 5,000 people most affected and displaced people affected by the Sinabung volcano eruption to reduce health risks through improvement in the sanitation environment.**

**Expected results:**

Hygiene environment and facilities improved for the displaced persons.

**Activities planned:**

- Building materials to construct temporary latrines and bathing facilities;
- Cleaning and upkeep of drainage;
- Improvement of rain protection measures;
- Provision of garbage collection facilities.



A Palang Merah Indonesia volunteer is preparing the garbage bins before distributing it to the IDPs camps. Photo credit: Palang Merah Indonesia.

**Impact:** Based on the assessment, the IDPs' need for safe drinking water had been met, However the need for water for washing and sanitation was still present. In addition, the condition of the camps prompted the PMI to improve the sanitation and hygiene by providing additional water storage tanks and garbage bins in the *jambur*. The PMI water and sanitation team set up two water tanks of 1,000 liters capacity each, a water pump and ten garbage bins at *jambur* Guru Pulungan for 920 IDPs. Referring to the [SPHERE project](#) standard that one individual needs up to 15 litres of safe water per day, it was estimated that 15 per cent from the total number of IDPs or 138 people received direct benefit from water and sanitation service. Up to 17 September, the PMI water and sanitation team reached 1,932 IDPs in this specific *jambur*. Note: The government provided additional water truck services and installed additional temporary water pipe systems as a temporary solution to increase

the availability of drinking and bathing water. This action meant that the target of PMI to support 5000 individuals was not required.

On 5 September the PMI team also constructed two emergency latrines and provided garbage bins in *jambur* Klasis. There were 842 people in this *jambur*. After setting up the sanitation facilities, PMI was monitoring and maintaining the facilities to ensure the proper usage by the IDPs.

In addition, the PMI water and sanitation team set up four latrines with a 1,000 litre water tank to serve 517 IDPs who still occupied the Dalian camp up to 28 September.

### Challenges

Overall, PMI North Sumatra encountered the following challenges in this operation:

- The need to continually reassess and compare data and information available from sources outside the PMI.
- Reporting was difficult as the communication network was often disrupted by the eruptions and ash.
- It was not clear what the follow up plans were for these returnees.
- PMI needs to build capacity to deal with volcanic eruptions such as this.

### Recommendations

PMI North Sumatra has proposed the following recommendations after the operations closed:

- There is a need for further support for people who have returned to their homes in awareness raising, health monitoring and risk reduction programming.
- There is a need for socialization of information and early warning for the people who live in the red zone of the Sinabung volcano in case of future eruptions.
- There is a need for continued psychosocial support for people to address the fear caused by a rumbling sound coming from the Sinabung volcano.
- There is a need to prepare decent places for people to evacuate to should further eruptions occur.

## How we work

All IFRC 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 the [Humanitarian Charter and Minimum Standards in Disaster Response \(Sphere\)](#) in delivering assistance to the most vulnerable.

The IFRC's vision is to inspire, encourage, facilitate and promote at all times all forms of humanitarian activities by National Societies, with a view to preventing and alleviating human suffering, and thereby contributing to the maintenance and promotion of human dignity and peace in the world.

The IFRC's work is guided by [Strategy 2020](#) which puts forward three strategic aims:

1. Save lives, protect livelihoods, and strengthen recovery from disaster and crises.
2. Enable healthy and safe living.
3. Promote social inclusion and a culture of non-violence and peace.

## Contact information

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# International Federation of Red Cross and Red Crescent Societies

MDRID005 - Indonesia - Sinabung Volcano

Final Report

Selected Parameters	
Reporting Timeframe	2010/9-2010/12
Budget Timeframe	2010/9-2010/12
Appeal	MDRID005
Budget	APPEAL

All figures are in Swiss Francs (CHF)

## I. Consolidated Response to Appeal

	Disaster Management	Health and Social Services	National Society Development	Principles and Values	Coordination	TOTAL
<b>A. Budget</b>	143,243					143,243
<b>B. Opening Balance</b>	0					0
<b>Income</b>						
<u>Other Income</u>						
<i>Voluntary Income</i>	143,243					143,243
<b>C6. Other Income</b>	143,243					143,243
<b>C. Total Income = SUM(C1..C6)</b>	143,243					143,243
<b>D. Total Funding = B + C</b>	143,243					143,243
<b>Appeal Coverage</b>	100%					100%

## II. Balance of Funds

	Disaster Management	Health and Social Services	National Society Development	Principles and Values	Coordination	TOTAL
<b>B. Opening Balance</b>	0					0
<b>C. Income</b>	143,243					143,243
<b>E. Expenditure</b>	-81,295					-81,295
<b>F. Closing Balance = (B + C + E)</b>	61,948					61,948

Selected Parameters	
Reporting Timeframe	2010/9-2010/12
Budget Timeframe	2010/9-2010/12
Appeal	MDRID005
Budget	APPEAL

All figures are in Swiss Francs (CHF)

### III. Budget Analysis / Breakdown of Expenditure

Account Groups	Budget	Expenditure					TOTAL	Variance
		Disaster Management	Health and Social Services	National Society Development	Principles and Values	Coordination		
A							B	A - B
<b>BUDGET (C)</b>		<b>143,243</b>					<b>143,243</b>	
<b>Supplies</b>								
Construction Materials		1,287				1,287	-1,287	
Food	22,000	6,887				6,887	15,113	
Water & Sanitation	19,000						19,000	
Medical & First Aid	13,000	6,809				6,809	6,191	
Teaching Materials	9,500						9,500	
Utensils & Tools	30,000	3,387				3,387	26,613	
Other Supplies & Services	11,000	29,528				29,528	-18,528	
<b>Total Supplies</b>	<b>104,500</b>	<b>47,897</b>				<b>47,897</b>	<b>56,603</b>	
<b>Transport &amp; Storage</b>								
Storage	1,650						1,650	
Distribution & Monitoring		4,726				4,726	-4,726	
Transport & Vehicle Costs	4,000	3,953				3,953	47	
<b>Total Transport &amp; Storage</b>	<b>5,650</b>	<b>8,679</b>				<b>8,679</b>	<b>-3,029</b>	
<b>Personnel</b>								
International Staff		22				22	-22	
National Staff	2,500	556				556	1,944	
National Society Staff	10,850	13,082				13,082	-2,232	
<b>Total Personnel</b>	<b>13,350</b>	<b>13,660</b>				<b>13,660</b>	<b>-310</b>	
<b>General Expenditure</b>								
Travel	4,500	4,730				4,730	-230	
Office Costs		15				15	-15	
Communications	1,500	312				312	1,188	
Financial Charges		1,041				1,041	-1,041	
Other General Expenses	5,000						5,000	
<b>Total General Expenditure</b>	<b>11,000</b>	<b>6,097</b>				<b>6,097</b>	<b>4,903</b>	
<b>Programme &amp; Service Support</b>								
Programme & Service Support	8,743	4,962				4,962	3,781	
<b>Total Programme &amp; Service Support</b>	<b>8,743</b>	<b>4,962</b>				<b>4,962</b>	<b>3,781</b>	
<b>TOTAL EXPENDITURE (D)</b>	<b>143,243</b>	<b>81,295</b>				<b>81,295</b>	<b>61,947</b>	
<b>VARIANCE (C - D)</b>		<b>61,947</b>				<b>61,947</b>		