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Emergency Plan of Action (EPoA) El Salvador: Volcanic eruption

 International Federation
of Red Cross and Red Crescent Societies

DREF Operation	MDRSV006 Glide n° VO-2013-000160-SLV
Date issued: 06 January 2014	Date of disaster: 29 December 2013
Operation manager (responsible for this EPoA): Pabel Angeles	Point of Contact: Dr. José Benjamin Ruíz Rodas – President of the Salvadoran Red Cross
Operation start date: 29 December 2013	Expected timeframe: 06 January to 06 April 2014
Overall operation budget: 149,620 Swiss francs	
Number of people affected: 63,079	Number of people to be assisted: 5,000
Host National Society presence (number of volunteers, staff, and branches): 1 Headquarter, 60 Branches, 2,400 volunteers, 230 staff members.	
Red Cross Red Crescent Movement partners actively involved in the operation (if available and relevant): N/A	
Other partner organizations actively involved in the operation: National Civil Protection and its committees	

A. Situation Analysis

Description of the Disaster

The Chaparrastique volcano started registering increased seismic activity at 6:30 am on December 29, 2013. Later on that same day, at 10:30 am, its eruption started, spewing a column of ash that rose more than 5 km above the volcano. Local communities and leaders immediately began evacuation actions. Authorities of the National Civil Protection System (Dirección Nacional del Protección Civil) declared an Orange Alert for the department of San Miguel and a Yellow Alert across the country. A total of 420,344 people live around the volcano.

After the eruption, falling ash affected the population living on the volcano's western side, especially the municipalities of Chinameca, San Jorge, San Rafael Oriente, and El Tránsito, home to an estimated 63,079 people. Of these, 2,300 people were relocated to 16 collective centers set up by the authorities while an unknown number moved to homes of relatives living in safe areas.



According to reports from the Ministry of Environment and Natural Resources (*Ministerio de Medio Ambiente y Recursos Naturales*), the plume of gases show fluctuations which are mainly attributed to changes in weather conditions. On December 29 emissions averaged 637 tons of sulfur dioxide, and reached 1,244 tons on 30 December, 2,200 tons on 31 December, and 1,740 tons on 1 January 2014. Currently, ash and gas emissions continue, and authorities will consider it a risk situation until sulfur dioxide emissions show a significant and sustained decrease.

In its gaseous form, sulfur dioxide is harmful to people. The health hazards relate to the respiratory system and eye, throat and respiratory tract irritations. It can also precipitate as acid rain, causing damage to people's skin, agriculture, vegetation as well as to land and aquatic animals.

The National Civil Protection System's Scientific Technical Commission states that a magmatic component was involved in the volcano's eruption and considered that should another eruptive episode occur, the most probable scenario would involve an eruption with flying incandescent rocks in the crater's vicinity; however, activity in lateral

fissures has not been ruled out. There is an ongoing risk to the population travelling or living in the volcano's surrounding area.

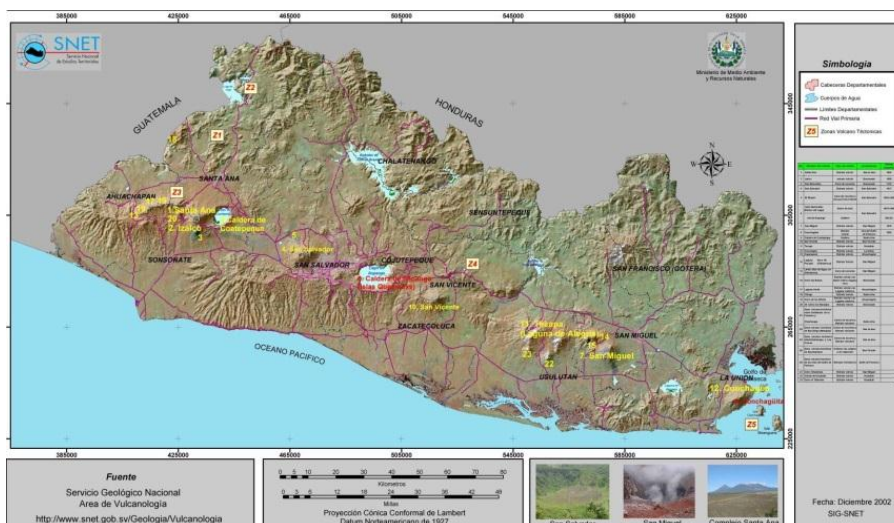
Summary of current response

In view of Chaparrastique's eruption in the Department of San Miguel, the Salvadoran Red Cross responded immediately by deploying 200 volunteers to the affected area to assist with the evacuation to collective centers and provide pre hospital care with support of six ambulances. Additionally, two water trucks were dispatched to distribute drinking water to 16 collective centers housing 2,300 people.

At the moment, the Salvadoran Red Cross continues monitoring the affected communities through its Emergency Operations Center, and coordinating the following actions:

- 1- Distribution of 300 hygiene kits in 5 collective centers in the department of San Miguel.
- 2- Provision of pre hospital care in collective centers in San Jorge municipality, department of San Miguel, with 2 ambulances, 2 pick-up trucks and 1 truck.
- 3- Permanent activation of San Miguel and Usulután Red Cross branches.
- 4- Deployment of medical personnel to the municipality of San Jorge to provide medical care and psychosocial support to people in collective centers and to response teams deployed in the area.
- 5- Response teams were deployed to support the evacuation ordered on 31 December.

Most of the population affected by ash emissions lives in the municipalities of Chinameca, San Jorge, El Transito, and San Rafael Oriente, department of San Miguel.



Volcanic Map of El Salvador - Chaparrastique Volcano; Source: National Geologic Service



Coordination of volunteers prior to the 29/12/13 evacuation Source: Salvadoran Red Cross



Distribution of water Source: Salvadoran Red Cross



First aid care
Source: Salvadoran Red Cross



Delivery of hygiene kits
Source: Salvadoran Red Cross

The Salvadoran Red Cross has extensive experience in disaster management during emergencies such as volcano eruptions, earthquakes, and floods. It has a network of 60 branches distributed across the country and is supported by more than 2,400 volunteers, many of whom are trained in emergency and disaster preparedness and response. It has a large central warehouse as well as a vehicle fleet, which although limited, allows for responding quickly to emergencies and disasters anywhere in the country. Likewise, it has a stock of relief items to provide immediate response during emergencies, which has been used during this event.

For a detailed map of the affected area, please see Annex 2.

Overview of the Red Cross - Red Crescent Movement in the country

In El Salvador there is presence from the International Federation of Red Cross and Red Crescent societies (IFRC), the International Committee of the Red Cross (ICRC), as well as Spanish Red Cross and Swiss Red Cross delegations, which prior to this emergency had been supporting projects in the areas of community health, disaster preparedness, organizational development, social inclusion and youth violence prevention.

Likewise, the Finnish Red Cross and the American Red Cross are funding disaster preparedness, violence prevention and health projects, and there is support from the Italian Red Cross and the Norwegian Red Cross. At the moment, contact has been established with the Swiss Red Cross and the Norwegian Red Cross, who have expressed their interest in cooperating with the National Society in the current emergency, but lines of action and potential budgets have yet to be defined. On the other hand, the Spanish Red Cross has contributed by facilitating transportation during the distribution of humanitarian aid.

Movement Coordination

Any humanitarian action of the Red Cross Movement in El Salvador will be conducted under a single plan of action, in line with the National Response Plan and under the leadership and coordination of the Salvadoran Red Cross. Close communication has been maintained with all Movement representatives with both direct and indirect presence in the country.

The Pan American Disaster Response Unit (PADRU) and the Country Coordinator for the International Federation of the Red Cross Secretariat are in close communication with the Salvadoran Red Cross. The Regional Disaster Management Coordinator was deployed to the disaster area to support on-the-ground assessment and coordination actions along with the Relief Director and the Executive Secretary. In addition, a member of the Regional Intervention Team (RIT) will be deployed for one month to support the National Society in the coordination and implementation of the Mega V system for registration of beneficiaries and distribution of relief items.

Overview of non-RCRC actors in the country

At the national level, the emergency is being coordinated by the National Civil Protection System, of which the Salvadoran Red Cross is part at the national, departmental and municipal levels. For this emergency, they are in coordination with the Ministry of Health, the Ministry of Environment and the National Aqueducts and Sewers Administrator (*Administradora Nacional de Acueductos y Alcantarillado*), among others.

In general, all State sectors, both civil and military, are ready to provide support. Various NGOs have also been participating in coordination meetings and the United Nations sector has maintained constant monitoring of actions at the national level through the Country Humanitarian Team, in which the Salvadoran Red Cross participates and contributes to the exchange of information and humanitarian assistance.



Press conference by the Protection System on the state of affairs regarding the volcanic eruption. Source: Salvadoran National Civil Protection System



Red Cross coordination with the Ministry of Public Health for provision of care in shelters. Source: Salvadoran Red Cross

The Salvadoran Red Cross has been involved in the various committees activated by the National Civil Protection System, such as shelter and emergency services, in order to coordinate and optimize aid on the ground. Although the government is in charge of the management of collective centers, the Red Cross and other organizations are supporting with health care, water delivery, delivery of hygiene kits and evacuation as required.

It is also important to mention that some private companies have contributed with resources for the Salvadoran Red Cross, as they are a respected entity in humanitarian assistance in the country.

Needs analysis, beneficiary selection, risk assessment and scenario planning

According to the National Civil Protection System data and the National Society's own assessment, it is estimated that the most affected municipalities have been Chinameca, San Jorge, San Rafael Oriente and El Tránsito, with a population of 63,079 people, due to their proximity to the volcano and ash falling in their territories. Agricultural and livestock sectors, as well as access to drinking water, are the areas most affected.

Population affected by exposure to ash emissions from the Chaparrastique volcano		
Department	Municipality	People
San Miguel	Chinameca	22,311
	San Jorge	9,115
	El Tránsito	18,363
	San Rafael de Oriente	13,290
Total		63,079

Field assessments show the following affectation and needs:

- 1- Risk of contamination to water sources due to the continuous gas and ash emissions.
- 2- Impact to and loss of livelihoods (mainly livestock and farm animals). The death of 5 heads of cattle has already been reported.
- 3- Safe clean-up of dwellings affected by the accumulation of ash.
- 4- Increased respiratory problems due to inhalation of heavy airborne metals emitted by the volcano.

This plan of action aims to provide humanitarian assistance to families that fulfill the following vulnerability criteria:

- Reside in communities in the area affected by volcanic ash and/or located in a high risk area.
- Owner or tenant of no more than one hectare of land.
- At a low poverty level.
- Families composed of elderly people, children, people with disabilities, pregnant women and single mother heads of household.
- High risk of contracting a respiratory disease.
- Limited access to safe water.
- Families with fewer than 5 head of dual-purpose (milk and meat) cattle.¹

¹ Specific criteria for livelihood activities.

Risk Assessment

The risk of new eruptions is still high given that the volcano continues showing activity through its fumaroles. In a parallel manner, seismic activity in the Pacific and Cocos plates remains constant, with detectable earthquakes throughout the country with magnitudes between 2 and 5 on the Richter scale.

The ongoing volcanic activity can further affect the agriculture, livestock and drinking water sources, with significant long term implications if protective measures are not implemented. It is necessary to conduct additional assessments to gauge the event's impact and carry out mitigation measures.

B. Operational plan and strategy

Overall objective

Provide timely assistance to 1,000 affected families in the municipalities of San Jorge and Chinameca, department of San Miguel, providing immediate assistance and an integral humanitarian response.

Proposed strategy

To achieve the overall objective the following action will be prioritized: pre hospital care, evacuations, provision of non-food items, health care, delivery of and access to safe water, Protection of livelihoods, especially livestock and farm animals, alongside the logistic support these actions entails.

The table below shows the geographical distribution of the 1,000 families that will be reached, all residing in the municipalities of San Jorge and Chinameca, department of San Miguel, which are the nearest to and the most affected by the volcano.

Department	Municipality	Community	People	Families
San Miguel	San Jorge	La Ceiba	949	237
		La Morita	225	56
		San Julián	1,407	280
	Chinameca	Placitas	544	136
		Piedritas	409	101
		La Cruz	789	190
Total			4,323	1,000

One of the first actions carried out by the Salvadoran Red Cross was sending out Damage and Needs Assessment (DANA) teams to identify primary needs, especially in collective centers, which were found to be: drinking water, psychosocial support, restoring family links, hygiene kits and mattresses. Some of the needs identified have been covered in priority areas. In addition, an evaluation is expected to be conducted to examine the status of the population in terms of livelihoods.

Also in coordination with the National Civil Protection System and active non-governmental organizations (NGOs), areas of action and geographical coverage is being established to not duplicate efforts and to be able to achieve localized impact for accountability at the level of beneficiaries, donors and the general public.

Actions to be conducted by the Salvadoran Red Cross will be in accordance with Sphere minimum humanitarian standards.

Operational support services

As stated in its Response Plan, the Salvadoran Red Cross is organized according to the following working sectors:

- Planning and appeal
- Public and institutional information
- Support services to volunteers and branches
- Administrative-logistics support services.
- Operations. Areas targeted by the first-response operations sector:
 - Response to emergency and rescue services
 - Health
 - Monitoring and evaluation

- Security in operations
- Humanitarian Assistance

The Salvadoran Red Cross organizes its disaster response at three levels: political, managerial and operational.

Human Resources

Among the first actions carried out by the Salvadoran Red Cross was the deployment of Damage Assessment & Needs Analysis (DANA) teams to identify primary needs, especially in collective centers, mobilizing 200 volunteers. Meals and travel expenses are covered for these volunteers, as well as the use of National Society's vehicles to ensure their transportation.

For the operations planned, National Intervention Team (NIT) members and staff of the Salvadoran Red Cross Disaster Directorate will be providing support to these volunteers during their visits to communities according to the work plan.

Taking into account the DREF operational needs, a full-time operations coordinator will be needed, who will be responsible for activities and volunteer management, as well for the financial management of the operation, to ensure timely financial reports to the IFRC. In addition, a livelihoods coordinator will be hired, who will be responsible for ensuring the protection of livelihoods of the affected population. A logistics assistant and 80 volunteers will support the operation's implementation, who will be provided with per diems and protection equipment.

Logistics and supply chain

The Salvadoran Red Cross has a specific department for procurement of goods and services, with procedures established and accepted by local authorities and donors in general. The local market allows alternatives in terms of suppliers and most items will be procured locally. However, the IFRC Global Logistics Service, Americas Zone Office will be supporting the replenishment of hygiene kits distributed, and the procurement of jerry cans and mobile phones used for beneficiary registration and surveys.

The National Society also has a large and secure warehouse to protect acquired assets and three trucks to transport goods to communities, as well as 10 branches near the area affected.

Information Technology (IT)

The National Society has a computerized purchasing and warehousing system and regular internet access. For this operation, Mega V and Open Data Kit (ODK) systems will be applied for the identification and selection of beneficiaries and distribution of humanitarian aid. Additionally, two very high frequency (VHF) radios need to be installed in the trucks that will be distributing safe drinking water to the selected communities.

Communications

The Salvadoran Red Cross public relations and Press Department will periodically inform both the institutional authorities and the general public regarding the progress of the operation, using our own means of communication and the media to facilitate the dissemination of actions as well as the Salvadoran Red Cross virtual platforms. So far the following articles have been published:

- <http://www.periodicoequilibrium.com/el-amor-por-el-projimo-desde-el-voluntariado/>
- http://www.elsalvador.com/mwedh/nota/nota_completa.asp?idCat=47673&idArt=8446756

In order to collect feedback from beneficiaries on the quality of our response, a satisfaction survey will be developed and applied half way through the operation.

Security

A Security Plan will be developed to implement the operation that will take into account security measures in terms of the current emergency as well as the possibility of further volcanic activity. The National Society will also coordinate with branches, key actors and authorities responsible for security in the areas to be assisted.

All operational actions will take place during daytime hours, after the security conditions are analyzed with authorities and community leaders. All of our personnel and equipment will be properly identified, highly visible and insured.

Planning, monitoring, evaluation and reporting (PMER)

The Executive Secretary and the Director for Emergency Operations of the Salvadorian Red Cross shall ensure the complete implementation of the Plan of Action by the coordinating team, making sure that a report for the first month and an end-of-operation report are submitted. In addition, they will receive support from the IFRC Regional Disaster Management Coordinator during the process in close cooperation/communication with the IFRC Country Coordinator.

In terms of monitoring and quality assurance, two activities have been designed half way through the implementation: a meeting the two implementing branches (San Miguel and Usulután) and a beneficiary satisfaction survey. The results of these activities will be also discussed during a lessons learned workshop held at the end of the operation. This workshop will include national authorities and representatives of volunteers directly involved in field operations, as well as Movement representatives who participated in the operation.

Administration and Finance

The Salvadoran Red Cross has a permanent administration and finance system which ensures the proper use of financial resources in accordance with conditions laid down in the memorandum of understanding between the National Society and the donor. Financial resource management will be according to National Society regulations and DREF guidelines. In addition, the National Society's own procedures will be applied to the justification of expenses process and will be done on IFRC formats.

The DREF will not be supporting permanent structural costs, only the additional expenses incurred during the three-month operation such a communications costs and some office materials.

Budget

Please see the attached budget in Annex 1.

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6/1/2014

Budget Group	Multilateral Response	Inter-Agency Shelter Coord.	Bilateral Response	Appeal Budget CHF	Expenditure CHF
Shelter - Relief	0			0	0
Shelter - Transitional	0			0	0
Construction - Housing	0			0	0
Construction - Facilities	0			0	0
Construction - Materials	0			0	0
Clothing & Textiles	0			0	0
Food	0			0	0
Seeds & Plants	24,635			24,635	0
Water, Sanitation & Hygiene	47,112			47,112	0
Medical & First Aid	11,771			11,771	0
Teaching Materials	5,599			5,599	0
Ustensils & Tools	0			0	0
Other Supplies & Services	0			0	0
Emergency Response Units	0			0	0
Cash Disbursements	0			0	0
Total RELIEF ITEMS, CONSTRUCTION AND SUPPLIES	89,117	0	0	89,117	0
Land & Buildings	0			0	0
Vehicles Purchase	0			0	0
Computer & Telecom Equipment	0			0	0
Office/Household Furniture & Equipment	0			0	0
Medical Equipment	0			0	0
Other Machinery & Equipment	0			0	0
Total LAND, VEHICLES AND EQUIPMENT	0	0	0	0	0
Storage, Warehousing	0			0	0
Distribution & Monitoring	5,465			5,465	0
Transport & Vehicle Costs	6,271			6,271	0
Logistics Services	1,344			1,344	0
Total LOGISTICS, TRANSPORT AND STORAGE	13,079	0	0	13,079	0
International Staff	4,479			4,479	0
National Staff	0			0	0
National Society Staff	10,750			10,750	0
Volunteers	7,467			7,467	0
Other Staff Benefits	1,720			1,720	0
Total PERSONNEL	24,416	0	0	24,416	0
Consultants	0			0	0
Professional Fees	0			0	0
Total CONSULTANTS & PROFESSIONAL FEES	0	0	0	0	0
Workshops & Training	1,792			1,792	0
Total WORKSHOP & TRAINING	1,792	0	0	1,792	0
Travel	2,687			2,687	0
Information & Public Relations	2,060			2,060	0
Office Costs	3,001			3,001	0
Communications	3,888			3,888	0
Financial Charges	448			448	0
Other General Expenses	0			0	0
Shared Support Services					
Total GENERAL EXPENDITURES	12,085	0	0	12,085	0
Programme and Supplementary Services Recovery	9,132	0	0	9,132	0
Total INDIRECT COSTS	9,132	0	0	9,132	0
TOTAL BUDGET	149,620	0	0	149,620	0
Available Resources					
Multilateral Contributions				0	
Bilateral Contributions				0	
TOTAL AVAILABLE RESOURCES	0	0	0	0	
NET EMERGENCY APPEAL NEEDS	149,620	0	0	149,620	0



El Salvador: Volcano Chaparrastique

