

# Final Report

## Ecuador: Volcanic Eruption

<b>DREF Operation</b>	<b>Operation n° MDREC016</b>
<b>Date of issue:</b> 18 May 2021	<b>GLIDE n°</b> <a href="#">VO-2020-000205-ECU</a>
<b>Date of disaster:</b> 20 September 2020	
<b>Operation start date:</b> 5 October 2020	<b>Operation end date:</b> 31 January 2021
<b>Host National Society:</b> Ecuadorian Red Cross (ERC)	<b>Operation budget (CHF):</b> 176,363 Swiss francs
<b>N° of people affected:</b> 18,685	<b>N° of people assisted:</b> 4,176
<b>N° of National Societies involved in the operation:</b> The German Red Cross (GRC) and International Federation of Red Cross and Red Crescent Societies (IFRC) supported the Ecuadorian Red Cross with initial preparedness readiness and early actions through the activation of the Early Action Protocol (EAP), which the National Society implemented with funding from the IFRC's Forecast-based Action Fund by the DREF (FbA) for Volcanic Ashfall (MDREC015) in areas of Chimborazo province. This operation was implemented in an area not reached by the activation of the Early Action Protocol (EAP) in Chimborazo province, but rather focused on Chillanes canton in Bolívar province.	
<b>Other partner organizations actively involved in the operation:</b> The Geophysical Institute; the Guamoto Cantonal Decentralized Autonomous Government (GAD); the Water Unit (Chillanes); Political Offices of the Chimborazo and Bolívar provinces; leaders of targeted communities in Chimborazo and Bolívar provinces; the National Risk and Emergency Management Service; the Ministry of the Environment, the Ministry of Agriculture and Livestock and the Ministry of Water; and Acción Mundial.	
The Ecuadorian Red Cross and IFRC had expenditures for a total of CHF 108,901 Swiss francs of the CHF 176,363 budgeted. The remaining balance of CHF 67,462 will be reimbursed to the Disaster Relief Emergency Fund.	
Due to the efficient and effective use of funds, all of the planned objectives were reached. The National Society placed two of its regular staff on loan to support for this operation, which also contributed to reducing the planned expenditures. The National Society effectively reached the planned number of families with WASH kits, reducing the expected costs (N.B. The financial report indicates these costs as "other supplies and services".) While the number of people reached appears as slightly less than the related WASH indicator, this is due to fewer individuals in each target household. As a standard component of its emergency response operations, the National Society hosted a two-part online lessons learned workshop with participation from the Bolívar branch of the ERC. The secretariat team internally identified areas for future improvement.	

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## A. SITUATION ANALYSIS

### Description of the disaster

On 20 September 2020, an internal explosion of the Sangay volcano generated a large ash cloud that rose some 6 to 10 kilometres above the volcano's crater, according to the National Polytechnic School's Geophysical Institute (IGEPN). The volcano, located in the Sangay National Park bordering the provinces of Tungurahua and Chimborazo, is considered the most active in the country, and the ashes emitted affected five provinces (Chimborazo, Bolívar, Guayas, Los Ríos



The Ecuadorian Red Cross (ERC) conducted a Water, Sanitation and Hygiene (WASH) training session with the distribution in Chillanes, Bolívar. Source: ERC.

and Santa Elena). According to data from national and local authorities, the greatest impact was to agriculture and livestock in the cantons of Alausí, Chunchi, Guamote, Cumandá and Pallatanga in Chimborazo province, as well as in Chillanes in Bolívar where the community water sources were contaminated. It was reported that at least 18,685 people were affected.

Provincial-level Emergency Operations Committees (EOCs) were immediately established in Chimborazo and Bolívar provinces, receiving support from the National Risk and Emergency Management Service (SNGRE), the Ministry of the Environment and Water, as well as from key local actors that compose the Technical Working Groups (MTT) per the EOC manual. The MTT engage in protection and response measures in their localities such as restrictions to vehicles and recommendations on suspending in-person activities in the areas with significant ashfall.

At the national level, preventive measures were taken to safeguard the key public services that were affected. The ashfall affected water supply in the Chillanes canton in Bolívar province, as the area does not have a protected water treatment system. Water is directly collected and distributed via pipelines to homes for use by people and livestock and for irrigation.

## Summary of the response

### Overview of Host National Society

Following the ash emission by the Sangay Volcano, the Ecuadorian Red Cross triggered its Early Action Protocol (EAP) for forecast-based action by the DREF. That operation (MDREC015) supported immediate actions by the ERC with support from IFRC country cluster for the Andean countries, the Climate Centre and German Red Cross. While the objective of that operation was to provide personal protection equipment (PPE), tools for cleaning crop areas and financial aid to protect the livelihoods to 1,000 families identified in Chimborazo province, the ERC also identified other areas that required support.

Based on this, the ERC solicited a DREF operation to respond to humanitarian needs in Chillanes canton in Bolívar province. This was not an area reached by the activation of the EAP in the neighbouring Chimborazo province.

The Ecuadorian Red Cross activated its preparedness and response system through the following priority activities:

### Planning activities:

- Initial impact assessment performed by the ERC provincial board damage assessment and needs analysis (DANA)<sup>1</sup> specialists, the specialist collected samples from the ash metres installed in various points across the provinces and prepare and submit rapid and situation reports to national headquarters. Based on the initial assessment the ERC decided to focus the intervention on health and WASH and despite the recognized importance of a Mental Health and Psychosocial Support (MHPSS) intervention in an emergency setting, the ERC did not conduct any MHPSS because this is a service that is currently being provided nationally and was strengthened during the COVID-19 pandemic.
- Assessment of the condition of water sources in communities in Chillanes, Bolívar. This was performed by a water, sanitation and hygiene (WASH) assessment team, composed of staff from ERC and the IFRC office in Ecuador.
- Activation of 35 volunteers and hired staff (35 volunteers conducting the census and then 33 distributed kits) from the provinces of Bolívar, Chimborazo, Tungurahua, Cotopaxi and Pichincha (ERC national headquarters).
- Inter-institutional coordination between authorities, technical teams, the EOC, technical working groups, and local actors such as community leaders, police and Political Office (*Tenencia Política*)<sup>2</sup>.
- Coordination between ERC national headquarters and national entities from the national EOC that was already active addressing COVID-19- related measures.
- Coordination with the Bolívar province through its ERC provincial board's technical team.
- Assessment and monitoring of water and hygiene conditions in target communities, identification of water sources (surface water and storage tanks), and analysis and monitoring of water quality and hygiene conditions in target communities.
- Purchase of personal protection health kits (2 N95 / KN 95 masks, 1 pair of goggles and 1 neck buff)

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<sup>1</sup> The DANA is an emergency assessment tool, generally used by all national and international response actors.

<sup>2</sup> *Tenencia Política* is a local entity that provides security and support to citizens.

- Purchase of household cleaning kits (1 broom, 1 mop, 1 plastic bucket, 1 packet of garbage bags, detergent, 1 packet of sponges, 1 hand brush, 2 pairs of rubber gloves)

#### **Implementation activities:**

- Training on the use of colorimeters to community leaders.
- Cleaning of water sources.
- Distribution of tarpaulins to protect natural water sources.
- Distribution of water disinfection kits (PUR water disinfection sachets and 10- and 20-litre dispenser buckets) to households (60-day supply)
- Distribution of personal protection health kits (2 N95 / KN 95 masks, 1 pair of goggles and 1 neck buff)
- Distribution of household cleaning kits (1 broom, 1 mop, 1 plastic bucket, 1 packet of garbage bags, detergent, 1 packet of sponges, 1 hand brush, 2 pairs of rubber gloves)
- Development of WASH-related key messages and CEA methods (mass media and interpersonal communication).
- Awareness talks (with a CEA approach) to people in target communities on safe water treatment, water culture and water disinfection methods and on how to use the distributed kits.

#### **Overview of Red Cross Red Crescent Movement Actions in country**

Through its team in Ecuador, IFRC assisted with the activation of the Early Action Protocol<sup>3</sup> for the Forecast-based Action and this DREF operation for the affected area in the Bolívar province. The IFRC Country Coordinator in Ecuador was deployed to help the ERC with its assessment activities, especially WASH assessments in Bolívar. The need for this assessment was determined through an initial rapid assessment that identified a greater impact on WASH than in any other sector in affected communities. The IFRC office in Ecuador, the cluster office for the Andean countries in Peru and the IFRC Americas Regional Office provided support through technical guidance on disaster management; finance; planning, monitoring, evaluation and reports (PMER), among others, for the implementation of the Emergency Plan of Action.

#### **Overview of non-RCRC actors' actions in country**

The institutions that were activated at the beginning of the emergency include SNGRE, for coordination and assessment of the event in conjunction with the Decentralized Autonomous Canton Government of Chillanes; provincial office (*Jefatura Política*<sup>4</sup>), National Police, Political Office and *Acción Mundial*; and the Ministry of the Environment and Water, which focused their actions on assessing the impact on water sources and natural resources throughout the area.

The government ordered a two-hour suspension of activities at the José Joaquín de Olmedo international airport to clear the runway. The Ministry of Agriculture and Livestock deployed 15 assessment and response teams to the affected areas to conduct a survey of the damages and to instruct farmers on how to protect their livestock, especially on how to clean eyes, mucous membranes and noses with water and brush out their fur to prevent irritation and damage to the skin. In addition, eight banana trucks and 600 45-kilogram bags of silage and hay were delivered to communities to feed livestock, and 40 air blowers were distributed to clean affected blackberry and tomato plantations.

The Geophysical Institute and the ECU 911 Integrated Security System were active and monitored potential new volcanic activity.

#### **Assessment of Needs and scenario planning**

Considering the data collected by field assessment teams, the needs assessment focused on access to safe water, hygiene promotion and health protection measures. The actions carried out by the Ministry of Agriculture and Livestock, Ministry of the Environment and of Water were relevant and prevented crop loss and livestock deaths. Regarding MHPSS needs, these were not detected specifically in relationship to the ash emergency. Probably because people did not lose their crops/animals and a more severe situation (the pandemic) overshadowed the impact of the stress caused by this emergency.

The following information was gathered during the needs' assessment:

<sup>3</sup> Forecast-based early action triggered in Ecuador: Volcanic Ash Dispersion- Sangay volcano (MDREC015).

<sup>4</sup> This office purpose is to control administrative actions and promote processes of social and political participation, maintaining governance.

- **Community Engagement and Accountability and Communications:**

Communication media in affected communities is limited, as most residents lack phone connections and satellite antennas are scarce. The only way to communicate is using a megaphone, and communities use fireworks to convene meetings in established locations. A few people were not fluent in Spanish and a few people have hearing impairments due to age or other conditions.

To address these issues and ensure that everyone in the affected areas was able to participate, the intervention used tools and methodologies that included home visits, talks using a hands-on approach (For example, during the distribution of WASH kits groups of 15 to 20 people were shown the correct use of the PUR pouches, as it was the first time these communities used this item) and distribution of manuals ( the manual were in Spanish, which is the dominant language in these communities, as 95% of the target communities spoke Spanish as mother tongue).

The communication system using loudspeakers, a mobile phone connection service, sirens and megaphones could not be implemented as planned due to delays in acquiring the items required for the communication system to function properly, as suppliers stopped services in December because of the holidays. Also, because of the pandemic it was decided to visit homes decreasing that way the amount of people that will gather in one place.

- **Water and Hygiene:**

Under the assumption that each community had its own water source, the initial assessment included a visit to 19 communities in Bolívar province. It was identified that none of the water sources had a purification mechanism. Two communities shared the same water source, so work was conducted with 18 water systems. The assessment also found that the need for training of the water operators and community leaders. The water source assessment identified the presence of ash in the water through pH tests and the water distributed to the population tested negative for chlorine.

The physical protection of water systems and training to people responsible for the water points was needed, also contributing to significantly reducing impact in similar situations in the future. Ash was no longer found in the water when the pH levels were measured again at the end of the intervention. The population's awareness regarding the home water treatment kits increased as a result of this intervention. In the health component, hygiene awareness was addressed during the home visits and included topics such as personal hygiene, community hygiene and hygiene specific to the ash falls. These topics were reinforced during the delivery of the kits.

- **Livelihoods**

The population began harvesting the crops (mostly grains)<sup>5</sup> that could be harvested within the first 15 days following the emergency to limit their losses. They also continuously cleaned pastures and lands that were not ready for harvest, with technical support from the Ministry of Agriculture and Livestock. Since this was a one-day event, no dead or sick animals were reported, and communities used the ashes to fertilize their lands.

- **Health**

Based on experiences in other areas in the country, it was known that volcanic ashfall mainly affects the respiratory tract, eyes and skin. The operation distributed a health protection kit accompanied by awareness-raising in communities regarding the actions that should be taken during a volcanic event with ashfall and how to recognize these symptoms and distinguish them from those caused by COVID-19.

At the end of the operation, it was found that the health protection kits were used in communities not only to protect against ashes, but also to prevent the spread of COVID-19. This had already been considered given that the same types of materials (masks and goggles) are used for both issues.

- **Shelter**

People cleaned their productive infrastructure and homes to avoid long-term damage from the ashes. The ash collected during cleaning was used as fertilizer. By the end of the intervention, communities had resumed their normal activities without any major shelter- and livelihoods-related issues, as these areas did not suffer much impact. PGI evaluation and activities were considered due to their importance. However, the pandemic restrictions did not allow them to happen. During the distribution of kits, priority groups were prioritized, such as elderly and pregnant women.

### **Targeting:**

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<sup>5</sup> In affected communities, harvest is usually in September; although the harvest was started a couple of weeks earlier to prevent further losses.

For the initial assessment, community leaders provided the total number of families reached and the ERC used this number to estimate the total number of individuals reached by assuming an average family size of four persons. These estimated results were subsequently validated via a population census. The results of the census indicated that 518 fewer people were reached than in the initial estimated values. As a result, the ERC technical team identified five additional communities in order to reach the target number of people for the health component. In contrast, only one additional community was needed to reach the targeted number for the WASH component because the number of WASH kits was based on the number of families and not the number of individuals.

The people reached were 49,8% male and 50.2% female, 6.1% of the people reached had some disability, 22.2% were elderly and 18.6% were children younger than 12 years old.

The following criteria was used to target households with:

- Elderly members
- A member with a disability
- Monoparental families with children and adolescents
- Pregnant women
- Livelihoods based on agricultural or livestock activities.

## **Risk Analysis**

One of the main risks during the operation was the winter weather. Secondary access roads leading to communities were damaged by rains, causing delays of up to two hours for vehicles. Three strategies were implemented to conduct activities normally: 1) The teams were split into two groups. The trucks transporting the humanitarian assistance travelled to communities at a slower pace, while the technical staff and volunteers travelled to communities in smaller vehicles to validate the target population's data and begin awareness-raising activities with those to receive the kits; 2) The activities were carried out over short periods in the field and at times when no rains had been forecast by the National Meteorology and Hydrology Institute (INAMHI); and 3) Trucks were not loaded to capacity to avoid overburdening the engine.

Despite conditions, and with support from the staff responsible for operational security (the ERC did not have a specific security plan, but it did consider mobilization measures, biosecurity measures and restrictions for staff due to the pandemic), the immediate assessments were carried out and decisions were made in a way that did not affect either assets or activated personnel. Considering the technical team's exposure each time it was deployed to the field, ERC volunteers and staff were provided with personal protection and biosecurity equipment as well as safety guidelines and regulations related to COVID-19 and other risk situations.

Considering that 2020 was a pre-electoral year in Ecuador, the ERC took immediate and timely actions through meetings with communities to make clear the institution's objectives and work protocols in order to avoid any perception of political interference.

## **B. OPERATIONAL STRATEGY**

### **Proposed strategy**

#### **Overall Operational objective:**

**Immediate reduction of the risk of waterborne and water-related diseases for 1,044 families in the 19 selected communities of Chillanes canton, Bolívar province.**

This operation was implemented in 24 communities in the canton in different lines of action. For which, the National Society worked with a community-based, comprehensive and environmental approach through:

- The implementation of activities (such as cleaning of tanks, covering the water sources, work with the community and training in the use of colorimeters, etc.) to protect and care for water sources, with the active participation of local actors, authorities, and community members.
- Delivery of items for treatment, storage, and good use of water at the household level, for consumption, food preparation and hygiene to 1,044 families.

- Sensitization talks for the prevention of diseases caused by the consumption of ash-contaminated water, methods of water treatment at the household level, the importance of a good water culture.
- Analysis of water quality in the affected communities on a permanent basis.
- Delivery of health personal protection kits to 4,176 people in the communities; composed of (2 N95 / KN 95 masks, 1 pair of goggles and 1 neck buff).
- Delivery of home cleaning kits to 1,044 families.
- The kits were distributed in communal houses.
- Support was provided by community leaders and the political lieutenant, who were in charge of informing the communities of the agenda and ensuring people's attendance on the indicated day and time.
- The work was carried out by two teams of 10 to 16 volunteers each. Each team had the task to conduct distributions in three communities per day, for a total of ten days allocated for kit distribution.

## Operational Support

For the intervention in the 19 prioritized communities and the additional communities added in Bolivar province, the ERC had a team of trained volunteers and specialists in water and hygiene issues, who were activated for the execution of the activities of this plan and had the technical support of the ERC's national headquarters staff. The following support areas were also available for this operation:

### Human resources

- 1 WASH field technician.
- 35 volunteers and staff (Bolivar, Tungurahua, Cotopaxi and Chimborazo), 10 of whom were from the local provincial branch (Bolivar province), for the activities planned.
- IFRC personnel: the operations officer and the country coordinator provided direct technical assistance during the operation, in addition to the support provided by the PMER and finance officers in dealing with technical issues in their corresponding areas.
- 1 finance assistant designated by the National Society.

The field technical team continuously analysed the context and issues arising during the operation, identifying changes in communities and initially selected the target population and complemented sectors in a single activity. Examples worth mentioning as a reference include conducting family censuses together with awareness and health promotion processes, protection of water points together with training of those responsible for community water systems, and delivery of humanitarian assistance together with training in the use of distributed items and kits.

### Logistics and supply chain

- 70,080 sachets of PUR or Watermaker were purchased for the chemical treatment of household water. This quantity covers 2 months of uninterrupted drinking water consumption for 1,044 families of 4 members. This process, which entailed shipping and processing costs, was carried out from the Americas Regional Logistics Unit (RLU) in Panama and sent to Ecuador for distribution and use.
- The replacement of 57 units of tarpaulins for water protection of the 18 water systems, from the RLU.
- 2,088 buckets (1,044 of 10-litres and 1,044 of 20-litres sizes) with tap and lid for safe water storage were purchased locally. Trucks were hired to transport the kits to the distribution points. Vehicles for distribution were leased as well as one truck, and ERC provided another truck, one bus to transport staff and the provincial board's van, and two vehicles from headquarters for communication and distribution activities.
- The necessary personal protection equipment (PPE) was purchased for the implementation of the activities by the ERC volunteers and staff who participated in the operation.

### Community Engagement and Accountability (CEA)

To strengthen this operation, as well as to ensure and promote effective participation and feedback from the participating communities, the ERC incorporated the Community Engagement and Accountability approach. This was structured based on an analysis and diagnosis of the needs and information channels of the communities, in order to support the strengthening and improvement of their capacity to respond to ash fall.

Development of specific messages that respond to the most frequent concerns, questions and doubts identified through the online and offline information channels implemented and also through the identification of rumours, participatory identification of harmful behaviours and rapid diagnoses of information needs.

- Printing of information, education, communication (IEC) material in the dominant language of the area.

- A community communication campaign was carried out through the use of audio-visual resources, printed material, among others that fit the context of the community.
- The communication messages were disseminated in the 24 communities through the communication channels preferred by the community.
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- ERC developed communication actions with the community to raise awareness about the health effects that can be caused by ash fall and the consumption of contaminated water.
- Collection of testimonies from the population reached.

With support from the ERC's national headquarters teams for CEA and communications, a communications strategy was established with the target population to collect needs, suggestions and feedback on the activities implemented by ERC, which served to inform the response provided to priority groups such as people with disabilities, older adults, children and adolescents, pregnant women and people with chronic diseases. Exit activities were also planned and implemented, such as feedback of results to community leaders and lessons learned processes with National Society staff.

### **Information technology**

Open Data Kit (ODK) was used to collect information and evaluation related to water monitoring and hygiene surveys. As well as for the registration of people reached with humanitarian assistance.

### **Security**

The ERC Principles and Values program provided ongoing technical guidance for action, supporting and guiding volunteers who mobilized to the different communities to meet the operational security parameters required in an electoral and pandemic context. In addition, all personnel and volunteers participating in the operation must have the appropriate PPE.

Regarding Operational Security, the IFRC office in Ecuador team supported the National Society with training on operational security coordination, security briefings and analysis of current risks, among other aspects; at the same time, participants were asked to complete the Stay Safe online course for volunteers and the consolidation of the internal security network to participate.

For an integral institutional strengthening, it was imperative to guarantee the Duty of Care by reinforcing the safety of the Ecuadorian Red Cross volunteers through a pragmatic training in operational safety and Civil-Military Relations (CMR) in the context of situations such as the volcano ash. The objective was to promote the importance of training in operational safety and CMR for the participation of headquarters and branches working in the current response.

### **Planning, Monitoring, Evaluation and Reporting**

The ERC used a monitoring methodology based on Inter-American Development Bank's best practices for social projects, which is applied to operational programs at headquarters and operational teams in the field, ensuring the effective achievement of expected results. The review of technical and budgetary progress was conducted on a regular basis at the different levels of responsibility. The findings were consolidated and communicated by the Planning Directorate for timely decision making and communication. Additionally, the ERC conducted a lessons learned workshop (online). The CCST in Lima, the IFRC's Disaster and Crisis Department and the office in Ecuador provided support during the implementation and monitoring of the operation. The PMER and finance officers assisted with technical issues related to their corresponding areas.

### **Administration and finance**

The ERC, through its Financial and Administrative Management, assigned an accountant to support the preparation of the budget, the allocation of funds and the monitoring of expenses incurred during the execution of the plan, as well as the preparation of the financial report. In addition, the IFRC finance officer supported the operation.

## C. Detailed Operational Plan



### Health

People reached: 4,176

Male: 2,137 (51.18%)

Female: 2,039 (48.81%)

Indicators:	Target	Reached
People who received health protection kits	4,176	4,176
Personal health protection kits delivered	4,176	4,176

#### Narrative description of achievements

#### **Purchase and distribution of 4,176 health personal protection kits (2 N95 / KN 95 masks, 1 pair of goggles and 1 neck buff)**

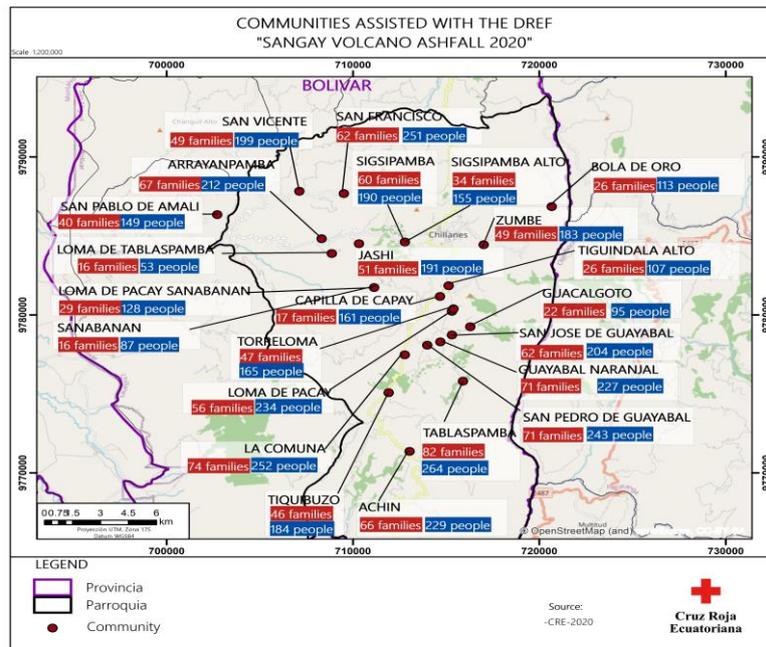
According to the initial assessment, 4,176 health protection kits (1 pair of goggles, 2 N95 masks and 1 neck buff) were to be delivered to the same number of people in 19 communities. Community leaders provided the total number of families reached and the ERC used this number to estimate the total number of individuals reached by assuming an average family size of four persons (4,176 people). These estimated results were subsequently validated via a population census. The results of the census indicated that 518 fewer people were reached than in the initial estimated values. As a result, the ERC technical team identified five additional communities, shaded in blue in the below table, (24 communities in total) in order to reach the target number of people for the health component (Table 1).

Table 1: Number of people reached per target community – Health component			
N°	Community	N° of families	N° of individuals
1	Achin	66	229
2	Arrayampamba	67	212
3	Bola de Oro	26	113
4	Capilla de Capay	17	61
5	Guayabal Naranjal	71	227
6	Jashi	51	191
7	La Comuna	74	252
8	Loma de Pacay	56	234
9	San Francisco	62	251
10	San José de Guayabal	62	204
11	San Pablo Amalí	40	149
12	San Pedro de Guayabal	71	243
13	San Vicente	49	199
14	Sigsipamba	60	190
15	Tablaspamba	82	264
16	Tiguindala Alto	26	107
17	Tiquibuzo	46	184
18	Torreloma	47	165
19	Zumbe	49	183
20	Guacalgoto	22	95
21	Loma de Tablaspamba	16	53
22	Loma de Pacay Sanabanan	29	128
23	Sigsipamba Alto	34	155
24	Sanabanan	16	87
<b>Total</b>		<b>1,139</b>	<b>4,176</b>

Note: Communities highlighted in blue were added after the family census in order to reach the target.

The ERC team, composed of 35 volunteers and hired staff, conducted the census. These were equipped with PPE, as well as buffs, in addition to their uniforms. Community leaders were tasked with providing information to the families who were not home on the day the censuses were conducted and therefore not registered by ERC.

The kits were delivered to the 24 communities over a ten-day period by 33 ERC volunteers and staff from the provinces of Bolívar, Chimborazo, Tungurahua and Cotopaxi as well as technicians from the ERC zone coordination and national headquarters. The distribution process was implemented smoothly and in line with COVID-19-related operational security and biosafety protocols established by IFRC and the World Health Organization. This is the reason that during the distribution process ERC explained that the PPE was both for ashfall and the pandemic.



**Awareness (with CEA approach) talks to the population of the target communities on the use of the distributed kits.**

This activity was carried out by the WASH specialist and the 33 ERC volunteers and hired staff who participated in the information collection and humanitarian assistance distribution activities. During such activities, the 1,139 families served were instructed on the proper use of materials provided and the benefits of protecting against ashfall, especially during activities in the field activities and in crowded places. These messages were tailored to a COVID-19 context. People’s awareness was raised during the census taking (1,044 people reached) and reinforced during distribution activities (1,139 people reached).

**Challenges**

- Limited communication channels between leaders, the population, and the response teams due to the geographical location of homes and communities. Movement from one community to another for censuses and distributions took between one and two hours.
- Limited means of telecommunications (minimal mobile or fixed telephone coverage in communities). This made it necessary for people to move to be able to send a message to the population, which caused a cascading effect that resulted, for example, in having to delay actions or in that sometimes not all the targeted population showed up at the specified times. Sending messages via radio stations was not considered an option because, given the COVID-19 context and the fact that it was an electoral period, the information could have been misconstrued as a general intervention, as these radio stations reach communities in other provinces.
- The population was not accustomed to wearing face masks, as they traditionally use shawls and scarves to protect their faces. During kit deliveries, it was therefore suggested that they use the masks when travelling or when in crowded places such as markets, because community members reported that they do not come in contact with other people when working their fields and after the harvest they usually wait a while before preparing the soil for the next planting period.
- Because of the pandemic, gatherings of more than ten people were not allowed, which resulted in that distributions to 100 or 150 people that formerly took an hour in the current context required between 4 and 5 hours.

**Lessons learned**

Among the main lessons learned:

When using similar PPE for both ashfall and COVID-19, communications and awareness materials should include information on both situations to meet communities' needs.

Health protection items should be delivered as assembled kits. Receiving items in bulk requires staff to invest time in assembling the kits and physical space during transport, and receiving assembled kits reduces the risk of surplus or missing items.

Initially identifying that communities did not have mobile phone coverage or internet on a permanent or widespread basis was useful for coordinating the work strategy with community leaders, using flow of information and "word of mouth" messages.



## Water, sanitation and hygiene

People reached: 3,753 (1,044 families)

Male: 1,922 (51.18%)

Female: 1,831 (48.81%)

Indicators:	Target	Reached
People in priority communities use adequate water and hygiene services in a humanitarian recovery context	4,176	3,753
<b>WASH Output 1.1: Continuous assessment of water, sanitation, and hygiene situation is carried out in targeted communities</b>		
Water assessments carried out in communities during the intervention	19	19
Coordination meetings held with local agents (1 per community)	19	19
ERC volunteers trained in WASH issues	20	28
<b>WASH Output 1.2: Daily access to safe water which meets Sphere and WHO standards in terms of quantity and quality is provided to target population.</b>		
Families have drinking water services thanks to the delivery of water disinfection kits	1,044	1,044
Families sensitized regarding water and sanitation issues	1,044	1,044
Communities receive tarps to cover and protect community water reservoirs	19	19
Communities receive tools to measure chlorine and pH	19	19
Community leaders receive training and advice on water source monitoring and treatment	19	19
<b>WASH Output 1.3. Hygiene-related goods (NFIs) which meet Sphere standards and training on how to use those goods is provided to the target population.</b>		
Family cleaning kits delivered to target communities	1,044	1,044
Awareness talks held in target communities	19	20
Communication channels implemented for community engagement	2	2
CEA-related spaces to share findings with communities	1	1

### Narrative description of achievements

#### **Assessment and monitoring of the water and hygiene situation in the selected communities and identify water sources (surface water and storage tanks) and analysis and monitoring of the water quality and hygiene situation in the selected communities**

For the initial assessment, community leaders provided the total number of families reached and the ERC used this number to estimate the total number of individuals reached by assuming an average family size of four persons. These estimated results were subsequently validated via a population census. The results of the census indicated that 518 fewer people were reached than in the initial estimated values. However, only one additional community was

needed to reach the number of families targeted for the WASH component because the number of WASH kits was based on the number of families and not the number of individuals. As a result, a smaller number of people were reached (Table 2).

<b>Table 2: Number of people reached per target community – WASH component</b>			
<b>N°</b>	<b>Community</b>	<b>N° of families</b>	<b>N° of individuals</b>
1	Achin	66	229
2	Arrayampamba	67	212
3	Bola de Oro	26	113
4	Capilla de Capay	17	61
5	Guayabal Naranjal	71	227
6	Jashi	51	191
7	La Comuna	74	252
8	Loma de Pacay	56	234
9	San Francisco	62	251
10	San José de Guayabal	62	204
11	San Pablo Amalí	40	149
12	San Pedro de Guayabal	71	243
13	San Vicente	49	199
14	Sigsipamba	60	190
15	Tablaspamba	82	264
16	Tiguindala Alto	26	107
17	Tiquibuzo	46	184
18	Torreloma	47	165
19	Zumbe	49	183
20	Guacalgoto	22	95
<b>Total</b>		<b>1,044</b>	<b>3,753</b>

Note: Communities highlighted in blue were added after the family census in order to reach the target.

An ERC/IFRC team was deployed to the field during the initial phase of the emergency to assess the impact to WASH and the WASH needs of the population affected by volcanic ash. The following was determined in conjunction with leaders and water system managers:

- Two communities - Ashi and Arrayampamba - shared one water system.
- Fifteen water sources warranted the installation of a protection shed.
- Three had a suitable system, with a lid on their respective tanks.
- One consisted of a canal that supplied a covered tank; however, the open-air section was approximately 15 km long, so the intervention required a more detailed study and a larger budget allocation.

In communities, residual chlorine and pH tests were done for the treatment tank and in different points in the communities, finding that only the “La Comuna” community system had an adequate water chlorination process.

Given this scenario, the ERC technical team carried out the following activities:

- Cleaned 18 storage and water treatment tanks.
- Installed 21 tarps in 15 water systems.
- Delivered additional colorimeter and tarps to 20 communities.
- Conducted two pH and residual chlorine measurements in water points targeted in the field.

This information was shared with community leaders and those responsible for the water points so that they could keep records of their systems' status.

Regarding hygiene-related activities and to ensure the proper use of materials and sensitize the population, some 25 ERC volunteers and hired staff visited 642 households in December to provide information on hygiene and good health practices and on home treatments that would allow them to have safe water. This knowledge was reinforced during humanitarian assistance distribution sessions, reaching 100 per cent of identified families.

During home visits, households received manuals on washing hands and eyes, safe water use, water boiling, how to use water to cook food, personal hygiene, community hygiene, and waste and ash collection. Families also received PUR sachets and instructions on their use.

### **Hiring a WASH project technician**

A WASH technician was hired for three months to implement actions to protect 19 water sources and systems, monitor and provide technical support for community system water treatment, provide technical support regarding WASH issues to water board focal points and communities, coordinate awareness talks in communities (group or family) with the Bolivar provincial board, deliver 1,044 cleaning kits and 1,044 home water disinfection kits and conduct home visits to at least 50 per cent of households.

### **Distribution of 1,044 home water disinfection kits (PUR water disinfection sachets and 10- and 20-litre dispenser buckets) - 60-day supply for 4,176 people.**

A total 33 ERC volunteers and hired staff participated in the process to distribute the water disinfection kits, which consisted of three stages: 1) verification and validation of residents of registered communities; 2) awareness-raising and induction on correct use of PUR sachets to groups of between 15 and 25 people; and 3) reception of kits. The following table provides information the home water treatment items distributed:

AMT	ITEM
1	20-litre plastic bucket with lid and dispenser
1	10-litre plastic bucket
66	PUR water treatment sachets per family

A total of 1,044 home water disinfection kits (PUR water disinfection pouches and 10- and 20-litre dispenser buckets) were distributed to 1,044 families that reached 3,753 people. It was not possible to reach more people because the kits were distributed to families and the average family size of those that received these kits was lower than initially estimated.

N°	Community	N° kit	
		Cleaning	PUR
1	Achin	66	66
2	Arrayampamba	67	67
3	Bola de Oro	26	26
4	Capilla de Capay	17	17
5	Guayabal Naranjal	71	71
6	Jashi	51	51
7	La Comuna	74	74
8	Loma de Pacay	56	56
9	San Francisco	62	62
10	San José de Guayabal	62	62
11	San Pablo Amalí	40	40
12	San Pedro de Guayabal	71	71
13	San Vicente	49	49
14	Sigsipamba	60	60
15	Tablaspamba	82	82
16	Tiguindala Alto	26	26
17	Tiquibuzo	46	46
18	Torreloma	47	47
19	Zumbe	49	49
20	Guacalgoto	22	22
<b>Total</b>		<b>1044</b>	<b>1044</b>

### **Awareness talks (with a CEA approach) on safe water treatment, water culture and water disinfection methods to people in target communities**

A total of 1,044 families were sensitized about the proper way to use the materials provided and the benefits of consuming and using safe water at home. First aid and water use manuals were delivered during the census taking, reaching 70 per cent of families. In addition, awareness talks on the proper use of PUR sachets were held during distributions.

**Technical support to members of community water committees or boards through workshops or training on water supply management, water treatment and analysis and storage tank operation and maintenance**

The WASH specialist and four volunteers from the ERC Bolívar provincial board oversaw training and advising the 19 community managers responsible for water source surveillance and treatment. The meeting and coordination spaces from the first component were used to raise awareness on water management. In addition, each was provided training in the field on how to use the colorimeter and measure pH.

The first workshop was held in the field, with community leaders helping with the tanks' maintenance and cleaning. The second training was on using the colorimeter and measuring pH - a colorimeter was provided to each community leader.

**Distribution of tarps to protect natural water sources**

This activity was complemented with the delivery of a dual colorimeter test kit and an additional tarp to the 19 community leaders as new stock or to replenish those used in water sources. One was also provided to the Provincial Board for training or emergency response processes.

Community	Number of tarps
San Jose de Guayabal	2
Jashi	1
Sigsipampa	3
Tablaspampa	4
San Pedro de Guayabal	2
Guayabal Naranjal	1
San Pablo de Amali	1
San Francisco de Surubamba	1
Arrayan Pamba	1
Torreloma	1
San Vicente de Porotopamba	1
Bola de Oro	2
Capilla de Pacay	1
El zumbe	1
<b>Total</b>	<b>22</b>

**Purchase and distribution of 1,044 family cleaning kits (1 broom, 1 mop, 1 plastic bucket, 1 packet of garbage bags, detergent, 1 packet of sponges, 1 hand brush, 2 pairs of rubber gloves)**

As it was explained before, these kits were planned based on the number of families, and 1,044 cleaning kits were distributed to families that reached 3,753 people. It was not possible to reach more people because the kits were distributed to families and the average family size of those that received these kits was lower than initially estimated.

Family cleaning and home water treatment kits were delivered during humanitarian aid distributions to groups of 15 to 25 people (in open communal spaces in each community) over a ten-day period by 33 ERC volunteers and hired staff from the provinces of Bolívar, Chimborazo, Tungurahua, and Cotopaxi as well as technicians from the provincial board and national headquarters. Family cleaning kits contained:

AMT	ITEM
1	Broom
1	Mop
1	Plastic bucket with lid
1	Dustpan
1	Detergent
3	Sponge
1	Surface disinfectant
1	Packet of trash bags
1	Brush
1	Rubber gloves

### **Develop WASH-related key messages and CEA methods (mass media and interpersonal communication)**

WASH-related key messages and the message demonstrating the use of PUR sachets were delivered during kit distributions to groups of 15 to 25 people by 33 ERC volunteers and staff.

### **Monitor progress, buy-in, and assess intervention results through beneficiary feedback**

To develop this activity, the WASH team, Institutional Communications and CEA tailored the messages to the context in Chillanes as these had been previously used and validated in other places affected by ashfall in that same general area. Not only were these messages adapted for this ashfall event but also complemented with information on COVID-19, thereby promoting comprehensive protection of populations facing two situations. Throughout the operation, field teams verified or answered questions from the population if so required. This action was complemented with the final satisfaction survey conducted and mentioned below.

### **An exit strategy has been developed that includes community consultations and the sharing of final evaluation results with the community**

As part of the CEA component, spaces were promoted that enabled community members to play an active role in building short- and medium-term resilience as well as acquire the knowledge, skills, and connectivity to achieve the necessary social and behavioural changes for their benefit.

An intervention and an exit strategy were developed based on a diagnostic of conditions in the territory, on the ERC's institutional capacity and on a mapping of actors that provided an overview of the context in communities in order to design the tools to be used accordingly, including:

- Basic CEA training for 12 ERC volunteers and staff participating in plan activities.
- Kick-off meeting and presentation of visibility and initiative, with participation by key local actors such as the Chillanes Mayor's Office, Police Department, Political office, and other canton officials in order to strengthen coordination mechanisms.
- Participatory analysis with community leaders to identify gaps and information channels and to adapt key messages to the local context, considering that activities could not be implemented directly with community residents because of the COVID-19 emergency.
- The non-probability sampling survey<sup>6</sup> focused on monitoring and satisfaction of the target population through a representative, which was carried out in the second week of January 2021, revealing that:
  - 70 per cent of respondents indicated that the provided assistance partially covered their needs and 25 per cent indicated that it fully covered their needs.
  - 55 per cent of respondents were very satisfied with the quality of the items in the volcano kit and 35 per cent were satisfied.
  - 66 per cent of respondents indicated that they were very satisfied with the quality of the items in the home water treatment kit and 22 per cent indicated that they are satisfied.
  - 81 per cent of respondents indicated that they were very satisfied with the training received.

By the end of the plan, it was possible to work together with the 19 leaders representing their communities to promote spaces for articulation and feedback with the Provincial Board.

As part of the integrated efforts for this plan, two *communication channels were implemented for community engagement*, 1) through the community and 2) through the local authorities. Continuous support was provided by the Institutional Communications team, both in the field and online, by socializing the activities carried out by the National Society and sensitizing the community and local authorities regarding care, self-care and cleaning measures in the event of ashfall. In addition, the flow of daily internal information has been kept active in order to update project and volunteer staff at the national level. The following was done during the project's implementation:

# of posts	Medium	People reached
9	Facebook	50,897
8	Twitter	13,299
7	Instagram	15,917
<b>24</b>	<b>Social networks and media</b>	<b>80,113</b>

The main posts relate to Red Cross in Action, ERC communiqués, Institutional Newsletter and Press Releases. People reached refer to those linked to any type of interaction: likes, shares, comments, among others.

<sup>6</sup> Referential data with general information on the communities to learn about the referential satisfaction with the ERC's work.

## Challenges

### WASH

- Logistical and administrative issues delayed the intervention, e.g., the acquisition of materials and kits for the intervention was delayed, mainly due to the pandemic.
- Due to administrative issues, there were not enough vehicles available at the beginning of the operation to deploy large teams to the field.
- Initially, ERC received little support from the communities' water system representatives for work in water points. When joint work was attempted, the representatives replied that they were engaged in other urgent actions at that time, which led to having to postpone some activities in order to fully achieve the objective. As the weeks passed, however, representatives were formally appointed by community leaders, assuming their responsibilities and facilitating the implementation process.
- A WASH 'suitcase' and a field laboratory were available for assessing water sources; however, these did not contain essential materials for its implementation. Certain chemicals could not be procured quickly from suppliers, making it impossible to test for parasite colonies (faeces and E. coli); however, it was possible to verify water residual chlorine and pH levels and use it for training with community leaders.
- One problem with the PUR sachets was that they came in strips of 24 sachets, which had to be cut one by one for distribution which in turn required time to prepare and deliver. The excess sachets will be stored in the ERC's strategic warehouse 3 for future interventions.
- No map existed of the identified communities because of the area's geographical location, which made it difficult to plan and implement activities in the short term.
- While censuses were conducted using technological tools that the IFRC uses to facilitate the work, actual physical signatures were required upon receiving the humanitarian assistance in order to meet donor demands. This meant twice the effort and twice the time required for distribution.

### CEA

- While a survey to collect socio-demographic information focusing on health determinants exists, it could not be implemented at the community level because of the restrictions imposed by the pandemic. Therefore, some aspects were included in a general manner through the family census.
- The information obtained in the field revealed the need for communities to improve their communication channels or communication of key messages. The acquisition and implementation of a community communication kit was therefore proposed, consisting of a speaker, a microphone, a siren, and a flash memory with key awareness messages. This was not possible to implement, mainly due to delays in the acquisition of the kits because of pandemic-related restrictions and delays clearing customs. This has been left as a potential activity for another intervention.
- Despite that the activities to be implemented were socialized with the ERC provincial board, the turnover in volunteers who actually helped with the activities made it necessary to hold rapid and periodic induction processes before each deployment, using up time planned for implementation of activities in the field.

## Lessons learned

By the end of the intervention, it was found that it is necessary to:

- Have appropriately sized packaging (boxes) for the kits to optimize space during storage and transport.
- Strengthen two-way communication as a cross-cutting element for engagement, not only with participating communities but also with internal audiences: volunteers and hired staff.
- Strengthen the capacity to manage expectations and conflicts at the level of staff hired in the territory and volunteers, based on a principle of operational independence.
- It is important to strengthen working knowledge and guidelines regarding the management of IFRC Emergency Funds for ERC provincial boards' new volunteers and staff to ensure an efficient strategy for planning, implementation, accountability, and feedback to communities.
- Considering that the cleaning, health protection and home water treatment kits arrived almost in mid-December, which coincides with Christmas and end-of-the-year holidays, ERC had the foresight to move up the taking of the family censuses and plan and organize distributions in communities within the scheduled time.

## National Society Strengthening

### Narrative description of achievements

### **Hiring of the Financial technician**

The National Society did not hire anyone to cover this position, but rather assigned the specific work to a member of the institution's staff. This person performed these duties for three months. There were no associated costs to this activity as this was a cost that was assumed by the National Society.

### **Hiring an accounting technician**

The position of accountant was filled by a technician from the National Society who had prior experience managing IFRC funds, which is why this was not reported as a hire and no reimbursement was requested.

As part of implementation, 40 uniforms (t-shirt, bib and cap) were acquired and delivered to the ERC provincial board as motivation, a token of appreciation and updating of this material for personnel who have supported various operations and activities.

### **ERC technical and monitoring support**

Throughout the project, the National Society deployed various technicians to the field to support field actions, actually supporting processes on site during nine deployments. The main support lines include:

<b>N° of visits</b>	<b>Line</b>	<b>Objective</b>
1	CEA	Deployed mainly to carry out assessment and information gathering actions that help to identify tools and strategies for working with beneficiaries, as detailed in component 2 in this report.
2	Institutional Communication	Mobilized to support CEA actions and cover humanitarian assistance distribution actions in the field.
4	Zone Coordination	Initially supported project presentation processes; however, permanent support was maintained in December and January for the project's planning, implementation and final justification. The coordinator worked together with the WASH technician and the local technical team.
2	GREED National Coordination	As part of the system for monitoring the activities' implementation, the GREED National Coordinator travelled to the field to assist with the mid-term evaluation and preparation of the partial report, as well as accompanied humanitarian assistance distribution activities to verify and help with fulfilment of delivery, operational security and biosafety protocols and procedures in a COVID context.

### **IFRC technical and monitoring support**

The IFRC team from the Ecuador and Peru offices supported the ERC from the moment of activation. The IFRC country coordinator, an expert in WASH, provided technical assistance in the field, while the operations officer also provided monitoring and technical support to staff at national headquarters and in the field. Support was also provided by the PMER and Finance officers.

### **Training**

Three WASH-related training / refresher processes were carried out for the operation as part of the National Society's capacity-building strategy. The first training was delivered by the technician to local volunteers; the second training was for the volunteers involved in the censuses; and the third training was for volunteers involved in distributions. A total of 28 volunteers - 24 volunteers from different provinces supporting the activity and 4 volunteers from the Bolívar Provincial Board - were trained, who continuously participated in safe water actions together with the WASH technician.

<b>Date of training / refresher</b>	<b>Province of participants</b>	<b>M</b>	<b>F</b>	<b>Total</b>
28 November 2020	Bolívar	4	0	4
	Bolívar	1	2	3
9 December 2020	Tungurahua	7	0	7
	Cotopaxi	0	2	2
	Chimborazo	2	3	5
26 December 2020	Bolívar	1	0	1
	Tungurahua	0	1	1
	Cotopaxi	2	2	4

	Chimborazo	0	1	1
TOTAL		17	11	28

### Personal Protection Equipment

The necessary personal protection equipment (PPE) was purchased for the implementation of the activities by the ERC volunteers (35) and staff who participated in the operation (refer to the personnel mentioned above).

### Lessons Learned workshop

The evaluation and lessons learned processes were carried out online on 11 and 12 January. A total of 28 people participated, including volunteers, and hired staff from the ERC Bolívar provincial board, including its president; volunteers from zone 3 (Cotopaxi, Tungurahua and Chimborazo,) who provided support in the field; and technicians from Headquarters. The process lasted four hours and was conducted over two sessions held during night-time hours.

Among the main lessons learned, the National Society mentioned:

- Consider the importance of counting on the local Board staff's participation in the event of activation of the EOC, in order to socialize, for example, the community selection technical processes used in response based on the ERC's humanitarian mandate.
- Identify CEA's role and function within operations; strengthen CEA's future work through point persons and people responsible in each provincial board; and consider an induction for the team to be deployed to the field to manage expectations with leaders and the community in general.
- Improve logistics processes, such as verifying the proper functioning of the KODIAK truck, providing tools to the truck's driver, and analysing shipping the kits in closed boxes with clear waybills, documents or route sheets in order to avoid confusion and delays when transporting cargo between communities up until it is delivered to beneficiaries (maintaining the chain with logistics information).
- Given the turnover in volunteers, consider conducting more continuous training at the micro (canton, province) level and not only at the macro level (national).
- Have location maps, and/or even a local point person because of the local language (Quechua), when travelling to communities, either to gather information or for subsequent processes, in order to save time and avoid duplication by teams in the field.
- Strengthen the ERC's positioning and role during the community intervention since ERC continues to be mistaken for a government entity.
- Take advantage of the community work experience gained during the DREF operation, to prepare proposals for community work involving prevention, preparedness and response actions that allow the Bolívar provincial board to continue working in these communities.

### Challenges

According to a cross-cutting analysis of this operation's effectiveness, challenges include:

- Not having pre-assembled health protection kits, either for family or individual components, as it required time and space for storage prior to distribution.
- Not having a vehicle assigned on a permanent basis from the beginning for coordination deployments and preparations in the field.
- The COVID-19 context in the country during plan's timeframe, and especially in December when a state of exception was declared due to an increase in cases; complicated logistics because of the inability to carry out face-to-face activities with a large number of people which in turn increased the work times of field personnel.
- Given the short period of time between the final activities and project closeout, no emotional release or containment sessions (psychosocial support- PSS) were held with the personnel deployed or in charge of implementation, either by the provincial board or central headquarters. However, after the lessons learned workshop the National PSS Coordination provided support to the operation's 33 responders before the end of January.

### Lessons learned

As part of the strengthening and utilization of an operation's resources, it is considered important to continue implementing the following:

- The National Society had an emergency fund helped with the activities' implementation until the replenishment funds arrived.
- Kits should be pre-assembled and delivered to the field in order to avoid staff fatigue and transport processes.
- The cleaning kits should be delivered already assembled inside the plastic buckets in order to avoid issues with improperly stacked items.
- The integration of the CEA component should be reinforced from the beginning of actions in the field to take advantage of the analysis of local characteristics and plan operational strategies.
- Capacity-building talks should be incorporated with more personnel from participating Boards because of the high turnover.
- Evaluation or lessons learned meetings through virtual means, such as the one implemented in this operation, should be promoted because they can be adjusted to staff's time availability and help avoid crowded physical spaces when working in a pandemic context.

## D. Budget

The final financial report is in the Annex [here](#).

## Contact information

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## 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 Humanitarian 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.

# DREF Operation

## FINAL FINANCIAL REPORT

Selected Parameters			
Reporting Timeframe	2020/10-2021/04	Operation	MDREC016
Budget Timeframe	2020/10-2021/01	Budget	APPROVED

Prepared on 18/May/2021

All figures are in Swiss Francs (CHF)

## MDREC016 - Ecuador - Volcanic Eruption

Operating Timeframe: 05 Oct 2020 to 31 Jan 2021

### I. Summary

<b>Opening Balance</b>	<b>0</b>
<b>Funds &amp; Other Income</b>	<b>176,363</b>
DREF Allocations	176,363
<b>Expenditure</b>	<b>-108,901</b>
<b>Closing Balance</b>	<b>67,462</b>

### II. Expenditure by area of focus / strategies for implementation

Description	Budget	Expenditure	Variance
AOF1 - Disaster risk reduction			0
AOF2 - Shelter			0
AOF3 - Livelihoods and basic needs			0
AOF4 - Health	54,481	41,747	12,735
AOF5 - Water, sanitation and hygiene	94,584	56,323	38,261
AOF6 - Protection, Gender & Inclusion			0
AOF7 - Migration			0
<b>Area of focus Total</b>	<b>149,065</b>	<b>98,069</b>	<b>50,996</b>
SFI1 - Strengthen National Societies	22,399	8,877	13,521
SFI2 - Effective international disaster management	4,899	1,954	2,945
SFI3 - Influence others as leading strategic partners			0
SFI4 - Ensure a strong IFRC			0
<b>Strategy for implementation Total</b>	<b>27,298</b>	<b>10,832</b>	<b>16,466</b>
<b>Grand Total</b>	<b>176,363</b>	<b>108,901</b>	<b>67,462</b>

# DREF Operation

## FINAL FINANCIAL REPORT

Selected Parameters			
Reporting Timeframe	2020/10-2021/04	Operation	MDREC016
Budget Timeframe	2020/10-2021/01	Budget	APPROVED

Prepared on 18/May/2021

All figures are in Swiss Francs (CHF)

### MDREC016 - Ecuador - Volcanic Eruption

Operating Timeframe: 05 Oct 2020 to 31 Jan 2021

### III. Expenditure by budget category & group

Description	Budget	Expenditure	Variance
<b>Relief items, Construction, Supplies</b>	<b>128,667</b>	<b>84,668</b>	<b>43,999</b>
Shelter - Relief	2,120	651	1,469
Water, Sanitation & Hygiene	64,206	7,013	57,193
Medical & First Aid	50,112	38,580	11,532
Teaching Materials	12,230	143	12,087
Other Supplies & Services		38,282	-38,282
<b>Logistics, Transport &amp; Storage</b>	<b>7,532</b>	<b>6,763</b>	<b>768</b>
Distribution & Monitoring		1,752	-1,752
Transport & Vehicles Costs	7,532	3,956	3,576
Logistics Services		1,056	-1,056
<b>Personnel</b>	<b>22,900</b>	<b>7,911</b>	<b>14,989</b>
National Society Staff	13,050	3,388	9,662
Volunteers	9,850	4,522	5,328
<b>Workshops &amp; Training</b>	<b>1,000</b>		<b>1,000</b>
Workshops & Training	1,000		1,000
<b>General Expenditure</b>	<b>5,500</b>	<b>2,912</b>	<b>2,588</b>
Travel	2,600		2,600
Information & Public Relations	500	1,111	-611
Office Costs	1,400	127	1,273
Communications	500	118	382
Financial Charges	500	1,557	-1,057
<b>Indirect Costs</b>	<b>10,764</b>	<b>6,647</b>	<b>4,117</b>
Programme & Services Support Recover	10,764	6,647	4,117
<b>Grand Total</b>	<b>176,363</b>	<b>108,901</b>	<b>67,462</b>