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DREF Final Report

Cholera Outbreak: Dominican Republic

 International Federation
of Red Cross and Red Crescent Societies

DREF N° MDRDO011	Glide n°: EP-2018-000145-DOM
Date of issue: 21 August 2019 Operation start date: 21 September 2018	Operation timeframe: 3 months End date: 21 December 2018
DREF amount allocated: 102,102 Swiss francs (CHF)	
Number of people affected: An estimated of 1,500 people per day, which may reach 3,000 at critical times.	Number of people assisted: 8,055 people
Host National Society presence: Dominican Red Cross (DRC) has 187 branches and about 20,000 volunteers. In the Independencia province, the affected province, the DRC has five local branches (Descubierta, Jimani, Vengan a Ver, Duverge and Poster Rio) and more than 50 volunteers.	
Red Cross Red Crescent Movement partners actively involved in the operation: International Federation of Red Cross and Red Crescent (IFRC)	
Other partner organizations actively involved in the operation: Ministry of Health and Town Halls in La Descubierta, Guayabal.	
The major donors and partners of the Disaster Relief Emergency Fund (DREF) include the Red Cross Societies and governments of Belgium, Britain, Canada, Denmark, German, Ireland, Italy, Japan, Luxembourg, New Zealand, Norway, Republic of Korea, Spain, Sweden and Switzerland, as well as DG ECHO and Blizzard Entertainment, Mondelez International Foundation, and Fortive Corporation and other corporate and private donors. The IFRC, on behalf of the national society, would like to extend thanks to all for their generous contributions. ECHO has replenished the DREF in the occasion of this operation.	
The Dominican Red Cross spent a total of 86,625 CHF. The remaining balance of 15,477 CHF will be reimbursed to the Disaster Relief Emergency Fund.	

[<Click here for the final financial report and here for the contact information >](#)

A. Situation analysis

During Epidemiological Week (EW) 28 (8 to 14 July 2018), the Ministry of Public Health reported that the Los Pinos Health Centre in the municipality of La Descubierta (Independencia province) had reported an increase in the number of patients with acute diarrhoeal diseases (ADD).

In EW 32 (5 to 11 August 2018), the Ministry of Health reported that the National Public Health Laboratory had identified the *Vibrio cholerae* bacterium in samples collected from La Descubierta residents.

Between EW 28, when the outbreak began, and EW 34 (19 to 25 August 2018), four cases of cholera were confirmed and 91 suspected cases were identified in residents of the



Photo 1: DRC Volunteers conduct a home visit. Source: DRC 2018.

communities of Los Pinos del Edén, Ángel Feliz, La Descubierta urban areas, and Los Bolos¹.

Given that a major outbreak of this disease had not been seen in Independencia province since 2011, the high incidence of cases caused the collapse of the municipal health system. This scenario led provincial health authorities to request the assistance of the Ministry of National Health and national humanitarian organizations, including the Dominican Red Cross (DRC).

In view of the situation, the Dominican Red Cross conducted two assessment missions (12 and 17 August 2018) with multidisciplinary teams in communities affected by the cholera outbreak.

Given the operational needs and challenges identified in areas assessed during the missions, the National Society requested a Disaster Relief Emergency Fund (DREF) to carry out actions to combat this outbreak in affected, difficult to reach areas. Within the framework of the DREF operation, DRC carried out actions to address the outbreak in coordination with Ministry of Health personnel and community authorities.

The cholera outbreak in Independencia province was contained thanks to this coordinated and timely action, and the EW 44 epidemiological bulletin indicated that no suspected cases have been detected in the country since EW 41 (7 to 13 October 2018).²

Summary of the current response

Overview of Host National Society

Dominican Red Cross has a long track record with programmes and projects that improve quality of life and access to health for the Dominican population. One of its strongest areas is its Community Health department, which has been implementing programmes aimed at reducing the population's vulnerability to communicable and noncommunicable diseases based on community empowerment and behaviour change processes.

Furthermore, Dominican Red Cross has the capacity to deploy Water, Sanitation and Hygiene (WASH) emergency equipment able to provide up to 1,000,000 litres of potable water per day for communities, and 870,000 litres per day of hospital-quality water in 29 different points. This capacity is supported by Emergency Response Unit (ERU) teams (designed for operations of no more than six months), which have been deployed to the country for previous humanitarian operations and donated to Dominican Red Cross between 2005 and 2009. The Society National is currently improving these teams.

The National Society has national presence through its branches across the country's provinces. DRC has a municipal branch in the area affected by the outbreak, which coordinated and facilitated DREF activities. The municipal branch in La Descubierta is composed of volunteers who live in this municipality's urban areas; moreover, 50 per cent of volunteers reside in the communities in which this operation's activities were carried out, which facilitated proposed actions.

Overview of Red Cross Red Crescent Movement in country

Dominican Red Cross maintained constant coordination with the Latin Caribbean Cluster, the Regional Health Unit and the Continental Disaster Coordinator for the Americas at the IFRC Americas Regional Office (ARO), first to monitor the evolution of the cholera outbreak and later to implement the DREF operation to respond to the outbreak. IFRC's Latin Caribbean Cluster provided financial, logistical, administrative and reporting support to the National Society during this emergency.

ARO's Disasters and Crises department deployed an Information Management (IM) Regional Intervention Team (RIT) member from Ecuadorian Red Cross to assist the National Society in establishing a reporting as well as an information management system. Given the operation's operational needs, he also assisted in organizing and implementing DREF activities. ARO also deployed the Community Health and Health in Emergencies Coordinator to monitor and support final DREF activities.

Overview of non-RCRC actors in country

The outbreak was limited to an area of La Descubierta very close to the Haitian border.

The Ministry of Health and INAPA (water and sanitation regulatory agency) deployed a province rapid response

¹ [Epidemiological Week No. 34, 2018. Ministry of Public Health - General Directorate of Epidemiology \(DIGEPI in Spanish\).](#)

² [Epidemiological Weekly Bulletins 2018. Ministry of Public Health - General Directorate of Epidemiology \(DIGEPI in Spanish\).](#)

group, which carried out control actions that included supplying water and chlorine to homes; delivery of medicines and supplies to health centres; updates to the cholera diagnosis and treatment guide; disinfection of cholera treatment units; and community education actions involving prevention and control measures in terms of water treatment, food hygiene, hand washing, and excreta disposal.

Needs analysis, targeting, scenario planning and risk assessment

Needs analysis

In August 2018, Dominican Red Cross conducted two field assessment missions (to the urban area and upper sectors of the municipality). The following have been identified in the latter, which is inaccessible due to poor road conditions:

- Multiple factors contributed to the increased risk of acute diarrhoeal diseases (ADD) and spread of cholera in the affected region: poor hygiene practices and use of unsafe water sources for drinking and preparing food; lack of access to health services due to the remoteness of the affected area, which may take up to eight hours to reach; the community's resistance to treatment of people with diarrhoeal diseases; and families' lack of financial resources to access medical care.
- High presence of irregular Haitian nationals who work in the fields and have no access to the state health system due to the mistaken belief that they are not allowed coverage by Dominican health services.
- Communities in the highest area of Sierra de Bahoruco, adjacent to Haiti, have been affected by recurrent outbreaks of diarrhoeal diseases.

From DRC's perspective, there were five aspects that needed to be considered for the required interventions:

- a) **Difficult access:** ground zero of the outbreak was in a remote area. In this mountainous area (up to 2,000 metres above sea level), access issues are twofold: 1) the population has problems accessing basic health services and drinking water; and 2) public institutions have problems providing prevention and treatment measures to the population.
- b) **Insufficient knowledge and poor practices:** affected communities had insufficient knowledge regarding risks, transmission of and care required for people with acute diarrhoeal diseases, and generally underestimate the risks associated with diarrhoea and the need for treatment.
- c) **Cross-border movement:** the population that chooses to use the Haitian health system instead of the Dominican health system cross the border to seek care.
- d) **Language:** public services and communication materials are in Spanish, which limits access to such services for people whose main language is Creole.
- e) **Hurricane season:** the hurricane season might bring heavy rains that could affect access to affected communities as well as their drinking water supply.
- f) **Access to water:** Access to safe water is limited because the water distribution system at the community level has problems in terms of either the water chlorination process, water storage spaces, or the condition of drinking water distribution pipes.

Scenario planning

Best case scenario	The incidence of cholera decreases in the following months after the adoption of better hygiene practices and better access to drinking water. The mortality rate is reduced and remains below 2 per cent due to management of diarrhoea cases in the community and greater attempts to seek care.
Worst case scenario	Increasingly heavy rains make access to affected areas difficult. There is incidence of cholera, and there is a geographical distribution of cases in surrounding communities. The proportion of fatal cases increases as people are unable to access treatment and do not know how to treat dehydration at home.

Operation Risk Assessment

Based on the potential risks involved in DREF activities, Dominican Red Cross took the following risk prevention/mitigation measures for volunteers who participated in this operation:

- Trained Red Cross staff in measures to mitigate cholera infection risks.
- Prepared a contingency plan based on providing early and adequate medical assistance in the event of cases of cholera among volunteers participating in this DREF.
- Psychosocial support for volunteers.
- Protection and visibility materials for volunteers and staff.

- Ensured safe access for volunteers to locations where DREF activities were conducted.

B. Operational strategy

OVERALL OBJECTIVE

To reduce the risk of transmission of ADDs for 7,500 people through health and care actions, and promoting, above all, safe water consumption in at-risk groups through communication and dissemination campaigns in order to prevent complications and deaths.

Intervention strategy

Dominican Red Cross, in coordination with local and national Ministry of Health authorities and local NGOs, deployed volunteers and resources as follows:

Difficult to access high-lying areas: Pinitos, Barreras, Jato, Victorio, Victorio Arriba, Hierba Buena, Mamuse, El Arroyo, Bonete, Elián Trompete 1 and Elián Trompete 2, La Laguna, and El Mortero. The following actions were carried out in these areas (approximately 500 families):

- **Health:** Home visits were made for prevention, hygiene promotion, and to raise awareness regarding transmission, symptoms, treatment and seeking care for acute diarrhoeal diseases. Each family received **one acute diarrhoeal disease kit 1**, containing one litre of chlorine, one kg of detergent powder, five bars of hand soap, one bucket with dispenser, four rolls of toilet paper, one pitcher, two plastic drinking glasses, two spoons, two collapsible jerrycans, and 20 27.9-gram Oral Rehydration Salts (ORS) sachets.
- **WASH:** During home visits, DRC staff explained how to chlorinate water and manage safe water transport, storage and treatment (chlorinator and chlorine) items. DRC also assessed water access points in order to protect these against potential future contamination.



High-lying areas that are still accessible by road: Los Pinos, Ángel Félix, Los Bolos, El Maniel, Guayabal, and Sabana Real. The approximately 1,000 families that live in this area have running water and limited access to a health centre (less than three hours on foot). Because this area had the potential to spread cholera to other areas through its roads, mobile population and larger population centres, DRC established this area as a "containment zone" to prevent the spread of the outbreak. The intervention here focused on:

- **Health:** Home visits were made for hygiene promotion and to raise awareness regarding transmission, symptoms, treatment and seeking care for acute diarrhoeal diseases. Each family received **one acute diarrhoeal disease kit 2**, containing one litre of chlorine, five bars of hand soap, one pitcher, two cups, two spoons, ten ORS sachets, and one informational brochure. DRC continuously monitored community oral rehydration points (UROCs) set up in coordination with the Ministry of Health and the Ministry of Defence.
- **WASH:** During home visits, DRC staff assessed and built structures that are protecting families water access points areas in order to prevent contamination. Dominican Red Cross also rehabilitated rural aqueducts to improve the water's safety.

Rest of Independencia province:

- **Health:** The National Society delivered the Epidemics Control for Volunteers (ECV) course to its volunteers in branches in southern parts of the country to enable them to use the tools this course provides to carry out health promotion and ADD and cholera prevention activities.

➤ **WASH:** DRC acquired items such as hoses, tarpaulins, turbidimeters and laboratory supplies, among other implements, to ensure access to safe water for populations in areas targeted by the operation. In addition, it installed towing systems (ball mount) on two DRC vehicles in order to be able to transport water treatment plants if the cholera outbreak increased and made water treatment plants available for the operation if necessary.

Human resources

The operation hired two local technicians to be responsible for the Water and Health lines as well as a financial/administrative officer. The National Society made available its technical personnel (from Health and WASH areas) and administrative staff from National Society Headquarters. In addition, 78 volunteers from the La Descubierta and Guayabal branches, including 25 women and 53 men, participated in the various DREF activities.

As part of the assistance and technical support provided by IFRC, a RIT member specializing in information management was deployed to support operation activities for a period of two months and ten days.

In addition, IFRC provided technical guidance as necessary for the duration of this operation through its Latin Caribbean Country Cluster Office (Santo Domingo) and ARO (Panama).

Logistics and supply chain

All acquisitions related to this operation were in accordance with IFRC procurement procedures and in compliance with Sphere standards. The acquisition of goods and services met the necessary conditions based on the needs of the affected population and/or operation areas to ensure appropriate level of supplies and optimal performance. Most purchases were made in country, except for the jerrycans as there is no distributor in the Dominican Republic.

Communications

Materials used during activities were developed by the National Society's Communications Unit and validated by Ministry of Health personnel.

Printed materials were aimed at promoting ADD and cholera prevention measures and contained key messages regarding care, identification of symptoms, actions, and assistance in nearby health centres.

Materials included:

- Flyers with key messages on prevention, care and action.
- Coroplast posters with key messages on prevention, care and action.

Security

IFRC insurance was activated for all volunteer personnel who participated in DREF activities. Regarding leased staff, the National Society includes them within their roster of insured personnel because they have contracts.

Safety rules established in IFRC's Stay Safe document were strictly applied in all activities carried out during the operation.

Planning, monitoring, evaluation and reporting

Monitoring mechanisms established for the entire implementation period were based on tracking proposed activities and indicators, and using tools defined and/or adapted for reporting as well as field visits and interviews to key actors.

The following tools were used for monitoring:

- Monthly assessment of implementation against the Plan of Action
- Visits by the national project coordinator to Independencia province. These visits included meetings and interviews with branch teams, key actors, and community people to be reached.
- Field monitoring mission reports
- Narrative operation reports.

Work and coordination with the community and local authorities took place from the Independencia branch, which allowed direct and efficient communications. The branch coordinated continuously with DRC headquarters in logistical, financial and administrative matters.

Administration and Finance

The Dominican Red Cross has specific procedures for conducting procurement and accountability processes in emergency situations which tend to ensure transparency in management of funds allocated to implementation of operation activities.

National Society project management, finance, procurement and auditing offices provided support to the operation, as well as budget monitoring, purchases, expense reports, audits and financial reporting.

Proper financial resource use was in accordance with provisions established in the agreement letter between the National Society and IFRC, and funds were managed in accordance with National Society regulations and DREF guidelines.

C. DETAILED OPERATIONAL PLAN

The Ministry of Health provided clinical hospital treatment to patients affected by the outbreak. DRC actions focused on reducing the risk of spread of ADDs and cholera by promoting good hygiene practices and facilitated use of safe water sources for drinking and preparing food.

Population assisted

8,055 residents in communities in the municipality of La Descubierta reduced their risk of contracting or dying from an acute diarrhoeal disease. This risk reduction was achieved through communications campaigns that promoted proper use and care of water sources in at-risk communities, early identification of ADD symptoms so patients could begin taking ORSs or seek timely medical assistance, and promotion of healthy behaviours that prevent ADDs.


	Health People reached: 8,055	
Health Output 1.1: The immediate risks to the health of affected populations are reduced.		
Indicators:	Target	Reached
# of people reached through Dominican Red Cross programmes and services	7,500	8,055
# of rapid health assessments performed	3	2
Narrative description of achievements		
<p>Activity 1: Rapid health assessments</p> <p>First assessment</p> <p>From 26 to 30 October 2018, rapid health assessments were performed in 12 communities in the municipality of La Descubierta in order to identify the evolution of the cholera outbreak in the region. This assessment revealed that the number of cases of acute diarrhoeal diseases had decreased in relation to August and September.</p> <p>This assessment included house-to-house visits to gauge community members' knowledge regarding cholera and ADDs. Families were given instruction on how to prevent and treat ADDs in a timely manner. Results from this activity were systematized in ODK forms.</p> <p>On 13 October 2018, a community approach workshop was organized to train National Society volunteers on how to carry out the house-to-house visits. 20 volunteers from the La Descubierta municipal branch were trained during this workshop.</p>		



Photo 2: Community approach workshop. Source: DRC 2018

Community	Families	Members
Ángel Félix	49	271
Barrera	25	87
Bonete	146	510
Cacique	3	18
El Maniel	25	97
Guayabal	408	1,592
La Descubierta	387	1,393
Los Bolos	64	152
Los Pinos del Edén	121	452
Mamuce	32	115
Pinito	29	110
Sabana Real	35	122
Total	1,324	4,919

People reached during the first assessment

Second assessment

A second rapid health assessment was performed from 3 to 12 November 2018, which was similar to the first assessment. This second assessment did not identify any recent ADD cases in the weeks prior to the activity.

This assessment also included home visits to promote behaviours that prevented the emergence of new ADD cases.

Community	Families	Members
Ángel feliz	60	255
Barrera	23	86
Bonete	111	388
Cacique	2	13
El Maniel	38	157
Guayabal	268	383
La Descubierta	287	1283
Los Bolos	30	102
Los Pinos del Edén	121	165
Mamuce	34	111
Pinito	19	75
Sabana Real	35	118
Total	1,028	3,136

People reached during the second assessment

Third assessment

This activity was scheduled for early December but considering that the incidence of ADDs was practically nil, the activity was cancelled, and the National Society focused on delivering household items to people to be reached in communities instead.

Challenges

- The remoteness of communities and the difficulty in accessing communities in higher-lying areas of Sierra del Barahuco was a problem. Given their location, in many cases these can only be accessed using domesticated animals or on foot.
- Most shops in this and nearby municipalities did not have up-to-date tax receipts, so having to travel to municipalities far away to purchase goods in shops that provided invoices delayed the work in the field.

Lessons learned

- The desire to fulfil our humanitarian mandate and the spirit of going where others do not were factors that inspired and motivated institutional volunteers during the performance of activities in the most remote communities.
- Identify exceptional alternatives, to be applied during emergencies only, which allow goods to be purchased in stores that do not have updated tax receipts.

Health Output 1.4: Epidemic prevention and control measures carried out.

Indicators:	Target	Reached
# of people reached through Dominican Red Cross health and hygiene awareness actions	7,500	8,055
# of volunteers trained in ECV	25	23

Narrative description of achievements

Activity 2: Epidemics Control for Volunteers (ECV) training for DRC volunteers

The Epidemics Control for Volunteers (ECV) workshop was held in the municipality of Cabral in Barahona province from 30 November to 2 December 2018. 23 volunteers from the region participating in this DREF were trained. This workshop was supported by the Regional Health Unit's Regional Community Health and Health in Emergencies Coordinator and National Society technicians.

Branch	Men	Women	Total
La Descubierta	3	6	9
Guayabal	2	1	3
Jimaní	1	2	3
Barahona	2	4	6
Headquarters	1	1	2
Total	9	14	23

Representatives of San Juan province were unable to attend this activity due to travel issues.

Activity 3: Awareness regarding waterborne diseases

These activities were carried out simultaneously with the previously mentioned health assessments. Key messages focusing on care, identification, prevention and early care to address ADD symptoms were used as the community mobilization tool, as well as promotion of safe water access measures.



Photo 3: Volunteers conducting the community approach exercise before beginning awareness efforts. Guayabal. Source: DRC 2018

Population reached through activities held carried out in October:

Community	Families	Members
Ángel Félix	49	271
Barrera	25	87
Bonete	146	510
Cacique	3	18
El Maniel	25	97
Guayabal	408	1592
La Descubierta	387	1393
Los Bolos	64	152
Los Pinos del Edén	121	452
Mamuce	32	115
Pinito	29	110
Sabana Real	35	122
Total	1,324	4,919

Population reached through activities held carried out in November:

Community	Families	Members
Ángel feliz	60	255
Barrera	23	86
Bonete	111	388
Cacique	2	13
El Maniel	38	157
Guayabal	268	383
La Descubierta	287	1283
Los Bolos	30	102
Los Pinos del Edén	121	165
Mamuce	34	111
Pinito	19	75
Sabana Real	35	118
Total	1,028	3,136

In both events, the ODK tool was used to keep a record of families sensitized.

Activity 4: Distribution of ADD kits 1 and 2 for 1,000 families and 489 families, respectively, to prevent waterborne diseases

- DRC first developed a field distribution plan, identifying storage/warehousing locations, communities,

distribution points, tentative distribution dates, and DRC staff required for distribution, security, logistics and transport.



Potential kit storage sites. Option 3, Las Madres catechism classrooms, was chosen

Distribution activities took place between 6 and 17 December 2018, as follows:

KIT 1 – 1,000 ADD kits distributed in the following communities:

Community	Kits delivered	Date
Guayabal	401	6-Dec-18
Pinos del Edén	158	8-Dec-18
Los Bolos	123	7-Dec-18
Pinito-Barrera	66	7-Dec-18
El Maniel	87	7-Dec -18
Cacique Enriquillo	129	16-Dec-18
La Descubierta	36	17-Dec-18
TOTAL	1,000	

KIT2 - 489 ADD kits distributed in the following communities:

Community	Kits delivered	Date
Mamuse	14	13-Dec-18
Ángel Félix	86	13-Dec-18
Sabana Real	50	13-Dec-18
Bonete	40	14-Dec-18
El Mortero	31	14-Dec-18
Victorio	10	14-Dec-18
Malón	55	14-Dec-18
El Arrollo	30	14-Dec-18
Granada	62	15-Dec-18
Cacique Enriquillo	111	16-Dec-18
TOTAL	489	

Eleven kits could not be delivered because the boxes that contained them were damaged during transport. However, there were enough kits in good condition to distribute to the families that came to distributions. The materials contained in damaged kits were given to health centres in the municipality.



Photo 4: Distribution of KIT1 – Pinitos. Source: DRC 2018



Photo 5: Distribution of KIT1 – Sabana Real. Source: DRC 2018

Activity 5: Provide support to the Armed Forces' Oral Rehydration Unit in the affected area

In addition to providing supplies and materials to the Armed Forces' "Cacique Enriquillo" Rehydration Unit, DRC also provided materials to Community Oral Rehydration Units (UROCs) set up in affected communities by the Ministry of Health.

The following UROCs were supported:

- UROC Cacique Enriquillo – FFAA
- UROC Sabana real
- UROC Ángel Félix
- UROC Bonete



Photo 5: Provision of supplies to UROC – Cacique Enriquillo. Source: DRC 2018.



Photo 6: Provision of supplies to UROC – Bonete. Source: DRC 2018.

Challenges

- Because of administrative issues, the National Society's procurement and logistics system suffered delays in acquiring the supplies that were to be delivered to UROCs, which in turn delayed the activity to distribute these items
- Difficult access to communities where UROCs is located.
- Poor road conditions due to the weather caused damage to kits during transport, which forced staff to check kits one by one before delivery.

Lessons learned

- The National Society's logistics system should establish shorter processes to acquire materials during emergencies.
- Establish a quality system when kits are packed in order to verify that these are complete and properly packaged
- The distribution plan should provide for natural events that may postpone or suspend a distribution and take the necessary measures.



Water, sanitation and hygiene

People reached: 3,780

WASH Outcome1: Immediate reduction in risk of waterborne and water related diseases in targeted communities.

Indicators:	Target	Reached
# of households provided with drinking water services	750	756
# of rural water distribution systems that are rehabilitated	7	7
# of WASH assessments performed	4	4

Narrative description of achievements

Activity 1: Rehabilitation of rural water distribution systems

The first step was to assess water distribution systems in ten communities, in coordination with the community, the health system and the municipality of La Descubierta. Assessments found that the following seven communities needed to have their water distribution system strengthened:

Community	Families
Ángel Félix	60
El Maniel	38
Guayabal	408
La Descubierta	36
Los Bolos	64
Los Pinos del Edén	121
Pinito	29
Total	756

System: Distribution network

Community: Bartolomé

Improvement: Pipes that supply the Bartolomé distribution system.

Diagnostic: The water that feeds the distribution system came from a water wheel, which did not have proper protection and therefore the water was contaminated. This new pipeline connected to INAPA's distribution, which has a submersible pump at Km 4 via Bartolomé-Boca de Cachón.

The agreement established the responsibilities for the following participants:

Town Hall: Ditch digging

Community: Labour

Red Cross: Monitoring and assessment of water quality; purchase of 140 pipes required to carry out this activity

Conclusion: Pipes acquired and provided to the community and municipality.

System: Distribution network

Community: El Maniel

Improvement: Rehabilitation of water distribution network

Diagnostic: System needed to be rehabilitated.



Photo 7: Cistern in poor condition and unsuitable for water collection - El Maniel. Source: DRC 2018.

The agreement established the responsibilities for the following participants:

Town Hall: Support and monitoring

Community: Labour, ditch digging.

Red Cross: Monitoring and assessment of water quality, installation of 530-gallon tanks.

INAPA: Monitoring and follow-up

Conclusion: The water distribution network was rehabilitated once the tanks had been provided to the community.



*Photo 8: Tanks for the distribution system – El Maniel
Source: DRC 2018.*

System: Water supply system

Community: Los Bolos

Improvement: Improvement of the water supply system

Diagnostic: Infrastructure required for the maintenance to keep it in better condition



Photo 9: Reconditioning of distribution system – Los Bolos. Source: DRC 2018.

The agreement established the responsibilities for the following participants:

Town Hall: Support and monitoring

Community: Labour, ditch digging.

Red Cross: Monitoring and assessment of water quality, provision of materials.

INAPA: Monitoring and follow-up

Conclusion: The water distribution system was reconditioned, and a floating chlorine dispenser was implemented

System: Water supply to the Guayabal Clinic

Community: Guayabal

Improvement: Installation of a water pump

Diagnostic: The water supply to the cistern was not reliable, which meant that water had to be purchased in trucks to maintain the cleanliness of the clinic and other health facilities.

The agreement established the responsibilities for the following participants:

Town Hall: Support and labour, ditch digging

Clinic: System maintenance and control.

Red Cross: Monitoring and assessment of water quality, provision of materials and installation of water pump

INAPA: Monitoring and follow-up.



Photo 10: Ditch digging and pipe installation – Guayabal. Source: DRC 2018.

Conclusion: The water pump was installed and cleaned, so the clinic has no water supply problems. An electric pump of 0.5 kW, 2 meters of 14-wire three-wire hose, 11 meters of ½ covered pipe (urban sector) and the tap with a chlorine dispenser were placed. The floating chlorine dispenser installed improved water quality.



Photo 11: Water tap available at the clinic - Guayabal.
Source: DRC 2018.

System: Distribution network

Community: Ángel Feliz

Improvement: Floating Chlorine dispenser

Diagnostic: The water used was not chlorinated

Conclusion: A floating chlorine dispenser was installed.



System: Distribution network

Community: Los Pinos

Improvement: Floating chlorine dispenser

Diagnostic: The water used was not chlorinated

Conclusion: A floating chlorine dispenser was installed



BEFORE



AFTER



System: Water supply system

Community: Los Pinos

Improvement: Inline chlorine dispenser

Diagnostic: The water used was not chlorinated.

Conclusion: An inline chlorine dispenser was installed to supply chlorinated water to the system



Activity 2: Monitoring water quality in health centres

Routine water quality assessments were performed in health centres in Los Bolos and Los Pinos, which were done on a weekly basis in October and bi-weekly in November and December 2018.



Photo 12: Water analysis – Guayabal. Source: DRC 2018.



Photo 13: Water analysis – Los Pinos. Source: DRC 2018.

The first assessments detected deficiencies in the quality of the water. Once activities outlined in the previous activity (WASH activity 1) were carried out, the water quality improved and was fit for human consumption.

Activity 3: Purchase of small parts for water production units, for preparedness

Purchases, installation and improvements for the National Society's water production units were made to make these ready and available for deployment in the event of an adverse situation or event.

Thanks to adjustments made, units are able to produce 15,00 litres of safe water per hour.

Units before improvements



Units after improvements



Activity 4: Perform initial assessment of rural water distribution systems

This activity took place in October 2019 in ten communities in La Descubierta. All rural systems were assessed, focusing in health centres in each community.

		Community
1 st assessment	11 -14 October	Ángel feliz
		Barrera
		Bonete
2 nd assessment	18 – 22 October	Cacique
		El Maniel
		Guayabal
		La Descubierta
3 rd assessment	25 October	Los Bolos
		Los Pinos del Edén
		Mamuce
4 th assessment	29 - 31 October	Pinito
		Sabana Real

Challenges

- Because of administrative issues, the National Society's procurement and logistics system suffered delays in acquiring WASH supplies, which in turn delayed related activities
- Difficult access to communities where water distribution systems are located.

Lessons learned

The National Society's logistics system should establish shorter processes to acquire materials during emergencies.

Strategies for Implementation

Output S2.1: Effective and coordinated international disaster response is ensured

Outcome S2.1.1.1 An effective emergency response capacity mechanism is maintained and adhered to

Indicators:	Target	Reached
# of monitoring visits by IFRC	1	1
# of DRC volunteers insured	79	79

Narrative description of achievements

Activity 1: Monitoring visits by IFRC.

In November 2018, the Regional Community Health and Health in Emergencies Coordinator was deployed to monitor and provide guidance during the operation's final activities.

Activities conducted include:

- Tour through communities targeted by the operation.
- Meeting with technicians in the field to learn about work-related progress and challenges.
- Meeting with the National Society's operation manager and Water and Health focal points.

Activity 2: Deployment of IM Surge RIT Surge IM.

An IM RIT member was deployed for two months to assist with information management, reporting, and, at a later stage, assist with implementation of operation activities.

Activity outputs include:

- Creation of Dashboard on GO platform
- Preparation of ODK tool forms used in the operation
- Support in information collection in assessments and awareness-raising
- Support in preparation of distribution plan
- Support in kit distribution

Activity 3: 79 DRC volunteers insured.

All DRC volunteers who participated in operation activities were provided with insurance by IFRC. This insurance protected institutional volunteers both during the DREF and during all activities organized by the National Society during the 2018 administration.

Challenges

Overall challenges with activity implementation include:

Access: access to communities was complicated due to poor condition or lack of roads. The time it took to travel to each one made for long workdays.

Weather: rainfall was one of the factors that affected roads and therefore access to higher-lying areas, which required walking long distances and sometimes rescheduling activities.

Supplies: availability of supplies in the field was affected by delays in their procurement and transport to the field. These processes were later streamlined thanks to the National President.

Insurance for volunteers: the absence of a database of active volunteers prevented activating the volunteer

insurance from the beginning. Although a little late and thanks to organization in the field, volunteers that would be covering the various planned activities were convened and assigned.

Basic services: Because of the distance from the capital city, and for reasons beyond the National Society's control, there were places with no electricity from 8 am to 2 pm. This challenge was overcome in most of cases by using electricity generated by vehicles in the field.

Lessons learned

Access: Having support vehicles from Headquarters improved access to communities. Communities with no access for vehicles were reached by mule, horse or on foot.

Supplies: Communicating delays in materials procurement to National Society in a timely manner allowed these processes to be streamlined. In the specific case of this activity, these processes were streamlined thanks to the National President's intervention.

Insurance for volunteers: It is necessary to have a database of volunteers at the national level.

Basic services: Establish contingency plans specific to the context in which the operation is implemented, in order to have applicable procedures in place in the event of gaps in public services.

D. Budget

Please see the attached [final financial report](#).

Contact information

Reference documents

Click here for:

- [Previous updates](#)

For further information, specifically related to this operation please contact:

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For Resource Mobilization and Pledges:

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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.

www.ifrc.org
Saving lives, changing minds.



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

DREF Operation

FINAL FINANCIAL REPORT

Selected Parameters			
Reporting Timeframe	2018/9-2019/6	Operation	MDRDO011
Budget Timeframe	2018/9-12	Budget	APPROVED

Prepared on 18/Jul/2019

All figures are in Swiss Francs (CHF)

MDRDO011 - Dominican Republic - Cholera Outbreak

Operating Timeframe: 21 Sep 2018 to 21 Dec 2018

I. Summary

Opening Balance	0
Funds & Other Income	102,102
DREF Allocations	102,102
Expenditure	-86,625
Closing Balance	15,477

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	62,512	39,660	22,852
AOF5 - Water, sanitation and hygiene	17,430	23,562	-6,132
AOF6 - Protection, Gender & Inclusion			0
AOF7 - Migration			0
Area of focus Total	79,941	63,222	16,720
SFI1 - Strengthen National Societies			0
SFI2 - Effective international disaster management	22,161	23,403	-1,243
SFI3 - Influence others as leading strategic partners			0
SFI4 - Ensure a strong IFRC			0
Strategy for implementation Total	22,161	23,403	-1,243
Grand Total	102,102	86,625	15,477

DREF Operation

FINAL FINANCIAL REPORT

Selected Parameters			
Reporting Timeframe	2018/9-2019/6	Operation	MDRDO011
Budget Timeframe	2018/9-12	Budget	APPROVED

Prepared on 18/Jul/2019

All figures are in Swiss Francs (CHF)

MDRDO011 - Dominican Republic - Cholera Outbreak

Operating Timeframe: 21 Sep 2018 to 21 Dec 2018

III. Expenditure by budget category & group

Description	Budget	Expenditure	Variance
Relief items, Construction, Supplies	42,673	37,442	5,231
Water, Sanitation & Hygiene	37,327	30,137	7,190
Medical & First Aid	722	346	376
Teaching Materials	4,624	5,612	-988
Utensils & Tools		1,348	-1,348
Logistics, Transport & Storage	7,269	9,373	-2,104
Storage		853	-853
Distribution & Monitoring		1,059	-1,059
Transport & Vehicles Costs	7,269	6,394	874
Logistics Services		1,067	-1,067
Personnel	28,753	26,208	2,546
International Staff	10,792	11,275	-483
National Society Staff	13,197	10,400	2,797
Volunteers	2,356	2,727	-371
Other Staff Benefits	2,408	1,806	602
Workshops & Training	9,633	3,006	6,627
Workshops & Training	9,633	3,006	6,627
General Expenditure	7,542	5,309	2,233
Travel	2,601	3,263	-662
Information & Public Relations	2,119	1,784	335
Office Costs	482	252	230
Communications	1,763	1,347	416
Financial Charges	578	-1,337	1,915
Indirect Costs	6,232	5,287	945
Programme & Services Support Recover	6,232	5,287	945
Grand Total	102,102	86,625	15,477