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DREF Operation Update

Belize: Hurricane Earl

 International Federation
of Red Cross and Red Crescent Societies

DREF Operation Update no. 1	MDRBZ005; Glide no. TC-2016-00078-BLZ
Date of issue: 15 August 2016	Date of disaster: 4 August 2016
Operation manager (responsible for this EPOA): Mariela Moronta, Regional Disaster Management Coordinator; email: mariela.moronta@ifrc.org	Point of contact in the National Society: Lili Bowman, Director-General, Belize Red Cross Society
Operation start date: 7 August 2016	Expected timeframe: 3 months
Overall operation budget: 143,828 Swiss francs	
Number of people affected: To be determined	Number of people to be assisted: 2,200 people (440 families)
Belize Red Cross Society: 300 volunteers, 15 staff, 8 branches and a headquarters office	
Red Cross Red Crescent Movement partners actively involved in the operation: American Red Cross International Federation of Red Cross and Red Crescent Societies (IFRC)	
Other organizations actively involved in the operation: The Caribbean Disaster Emergency Management Agency (CDEMA), the Pan American Health Organization (PAHO), the Belize National Emergency Management Office (NEMO).	
This DREF update reflects an increase from 250 households to 335 to be reached through a cash transfer programming based on initial assessments. Some activities will be covered by the Belize Red Cross Society though local donations. The overall budget figure, timeframe and total target population of the operation remain as initially stated.	

A. Situation analysis

Description of the disaster

Tropical Cyclone Earl made landfall on 4 August, with wind gusts of up to 110 km/h, as estimated by National Hurricane Center of the United States. As of 9am (GMT -6) on 4 August Tropical Cyclone Earl's centre (Category 1) was located at approximately 189 miles east-southeast of Half Moon Caye, 231 miles east-southeast of San Pedro Ambergris Caye, 230 miles east-southeast of Dangriga, 236 miles east-southeast of Belize City, 271 miles east-southeast of Corozal Town, and 267 miles east of Punta Gorda Town. The cyclone was moving west at about 14 miles per hour. At its centre the hurricane was estimated to have wind speeds of 70 miles per hour. The Belize National Emergency Management Office (NEMO) urged people to secure their homes, properties, businesses or livestock as Tropical Cyclone Earl approached the country.

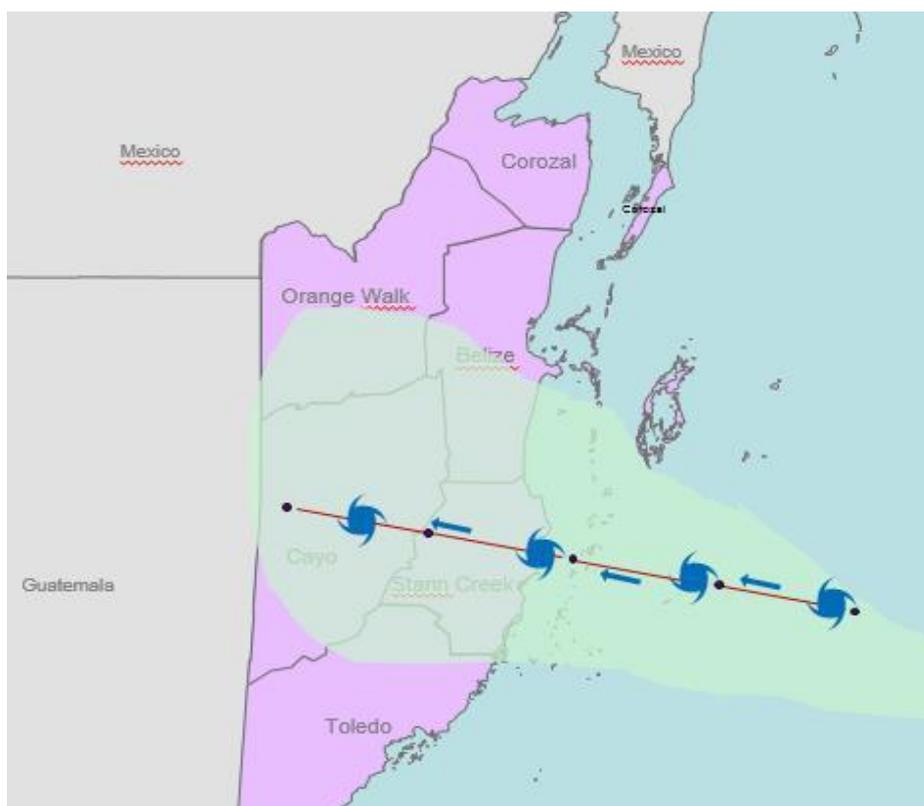


Photo 1: Map of Hurricane Earl's path through Belize. Source: REDHUM.



Photo 2: PSP Activity during CTP distribution in Ladyville. Source: BRCS

Major infrastructure and building damage are reported by NEMO. Roads and streets are blocked in San Pedro, Caye Caulker, Belize City, and Ladyville, Belize River Valley, Orange Walk, Belmopan and other affected areas. Schools, markets, civil and international flights and ports have been closed during the passage of the storm, while government hospitals were on standby. Electricity and water supply were also affected in several parts of the country. The Philip Goldson International Airport (PGIA) resumed operations on 4 August.

After the passage of the hurricane, NEMO prioritized search and rescue, medical care, sheltering and looking after people affected, clearing of debris along the highways, restoration of utilities, inspection of airports and seaports.

The Ministry of Works is clearing the main highways. NEMO responded to flash flooding in the Cayo District. Communities along the Macal and Mopan River were instructed to seek higher ground after the passage of the storm. In addition, NEMO issued alerts to the population to not stay in buildings near floodwaters and to activate flood plans. Heavy rains and wind hampered the initial damage assessments in the days following the storm. The government undertook an aerial survey in the afternoon of 4 August.

This DREF has been partially replenished by DG ECHO. The major donors and partners of the DREF include the Red Cross Societies and governments of Australia, Austria, Belgium, Canada, Denmark, Ireland, Italy, Japan, Luxembourg, Monaco, the Netherlands, Norway, Spain, Sweden and the USA, as well as DG ECHO, the UK Department for International Development (DFID) the Medtronic and Zurich Foundations and other corporate and private donors. The IFRC, on behalf of the Belize Red Cross Society would like to extend many thanks to all partners for their generous contributions.

Please refer to the original [Emergency Plan of Action](#) for further information on the DREF operation – the “Operational Strategy” and “Operational support services” remains unchanged.

Summary of the current response

Overview of Host National Society:

In preparation for the hurricane making landfall in Belize, the BRCS headquarters has been in close contact with all eight branches, providing them with situation updates. In the northern division, volunteers supported the local authorities in the collective centres.

On 4 August, as Hurricane Earl made landfall, BRCS volunteers assisted people to evacuate their houses and move to collective shelters, where first aid was administered by BRCS as required.

An Emergency Operations Centre (EOC) is active in the BRCS headquarters with teams on standby. The National Society's contingency and disaster management plans have been activated. National Intervention Team (NIT) members, equipment and vehicles are on stand-by and disaster preparedness stocks are ready to be dispatched as soon as needed.

The BRCS has experience responding to disasters. In 2015, it carried out a DREF operation to support the population affected by heavy rains and floods in October.

Movement Coordination

The IFRC's Disaster & Crisis, Prevention, Response and Recovery Department (DCPRR) has been in constant contact with the BRCS prior to Hurricane Earl's arrival. The Emergency Shelter officer was deployed to Belize on 3 August to support the National Society. Coordination meetings have been held to inform Movement members. The American Red Cross deployed two delegates specialized in risk reduction and assessments.

Coordination with non-RCRC actors in the region

The IFRC has been sharing information and coordinating with CDEMA. NEMO is coordinating the National Emergency Operations Centre where government agencies have deployed representatives while sector specific assessments are conducted in the affected areas. The Regional Response Mechanism has been placed on alert to inform on the situation and to coordinate possible regional support.

The IFRC is coordinating as well with PAHO's Caribbean regional office in Barbados, the Spanish Agency for International Cooperation (AECID), the European Commission's Humanitarian Aid Office, the United Nations' Office for the Coordination of Humanitarian Affairs (OCHA), and the World Food Program (WFP). Close coordination will continue with PAHO and national authorities as initial relief activities take place.

Needs analysis, beneficiary selection, risk assessment and scenario planning

Detailed sector assessments were conducted throughout the affected areas in emergency and relief intervention. These activities were conducted by ministries to determine the impact at the sectorial level. With a high probability of more rainfall, it was important to conduct detailed assessments as a way of building community resilience as well as informing the National Society contingency planning processes.

The overall population of Belize per district is as follows:

District	Capital	Area	Population (2015 estimate)	Population density (2015)
Belize	Belize City	4,310 km ²	110,644	25.7/km ²
Cayo	San Ignacio	5,200 km ²	87,876	16.9/km ²
Corozal	Corozal Town	1,860 km ²	45,530	24.5/km ²
Orange Walk	Orange Walk Town	4,600 km ²	49,466	10.7/km ²
Stann Creek	Dangriga	2,550 km ²	39,865	15.6/km ²
Toledo	Punta Gorda	4,410 km ²	34,928	7.9/km ²
Total			368,309	

National authorities are advancing relief efforts, which have been constrained by logistical, communication and transportation challenges. The needs identified by the Belize Red Cross Society to enhance the relief efforts are:

- **Water** - There will be a need to ensure that affected people have access to safe water, pending restoration of supply. The National Integrated Water Resources Authority (NIWRA) reports indicate that some communities will be without potable water for some weeks. In the medium term, rehabilitation of water systems will need to be undertaken.
- **Sanitation** - Clearing of rubble needs to be done in a manner that will not lead to accumulation of debris, which combined with stagnant water as a result of potential rains during the season, may pose public health risks.
- **Relief and cash transfer programme** – The assessments considered the market analysis and examined the impact on livelihoods and the feasibility of a cash transfer programme (CTP) to respond to the most immediate needs of the vulnerable families.
- **Health:** The Pan American Health Organization (PAHO) deployed experts to carry out assessments. The Belize Red Cross Society coordinated with local health authorities and PAHO in relation to health interventions based on prioritized needs, hygiene promotion, community-based health and first aid (CBHFA) - With many areas cut off, lack of potable water and the likelihood of more rains going forward, there is the need for some public awareness on the importance of proper water, health and hygiene practices to avoid water and vector-borne diseases. Disease prevention and health promotion activities at collective centres and at the community level were undertaken immediately in order to protect health and prevent the occurrence of outbreaks of diseases, including water and vector-borne diseases. There also continues to be a need to promote safe water and food handling and to provide hygienic items to reinforce good practices. The Belize Red Cross

Society has suitable awareness materials, but it will need support for their adaptation, printing and dissemination.

- **Vector-borne diseases in Belize:** Malaria cases decreased significantly between 2006 and 2010, dropping from 844 to 150. This dramatic decrease came about due to the Ministry of Health's concerted efforts, such as increased surveillance, foci elimination, and case identification, in the main endemic areas. Belize was on track to halt the spread of malaria by 2015. Data for 2009 revealed that there were 87 clinically-confirmed cases of dengue hemorrhagic fever, and in 2010 that figure increased to 293 cases. The number of detected cases of Chagas' disease through screening at the National Blood Bank was 45 in 2010. Between 2006 and 2009, there were 35 cases of hepatitis B and 52 clinical cases of mumps. To EW 25 there were 56 suspected cases and 1 confirmed case of Dengue mainly from Serotype DEN3. (PAHO/WHO epi update July 29). In Epidemiological Week (EW) 20 of 2016, the Belize International Health Regulations (IHR) National Focal Point (NFP) reported two autochthonous cases of Zika virus from Belize City and Cayo District¹. There were no cases of yellow fever, measles, tetanus, rubella, diphtheria, or pertussis in the reporting period.
- **Shelter:** Assessments were conducted to determine the specific shelter needs of the affected population.
- **Vulnerable groups:** Belize in proportion to its local population is one of the Central American countries that receives the highest percentage of migrants. In addition, the BRCS intervention will work based on the minimum standards in emergency contexts in relation to children and persons with disabilities.

Risk Assessment

- Damaged roads will cause difficulty in accessing cut-off communities.
- The Belize Red Cross Society will work closely with the Ministry of Health to implement activities geared towards public education on appropriate water, health and hygiene methods including the prevention of mosquito and other vector-borne diseases.

B. OPERATIONAL STRATEGY AND PLAN

Objective: To respond to the immediate needs of 440 families (2,200 persons) affected by Hurricane Earl.

Initial actions aimed to provide hygiene promotion and unconditional cash transfers to most affected families in the districts of Cayo, Belize and Stan Creek in the communities of Ladyville, Vista del Mar and Lords Bank.

Community selection criteria:

1. Low-lying communities with restricted road access
2. Communities at high risk of landslides/rockfall as a result of topography
3. Communities with minimal access to adequate food, water and sanitation
4. Communities with high infrastructure damage

Family selection criteria:

1. Displaced persons
2. Families with damage to their dwellings
3. Persons with minimal access to food, potable water, and adequate sanitation
4. Single mothers with children
5. Elderly
6. Families with children under 5 years of age
7. Families who do not have a source of income due to loss of livelihoods (e.g. fishing and agriculture)
8. Persons with disabilities
9. Low income households

Cash Transfer Programme

Given the damage caused by the hurricane, the expenditures of the affected households rose to approximately BZ\$1,196.84 (US\$599.95) in August 2016, and the gap between their August earnings and the expenses of a low income family affected by the hurricane was calculated to be BZ\$566.84 (USD\$284.15). Consequently, taking into account the Economic Security Threshold Gap and the fees charged by the use of the VISA Card within Belize, it was determined that the final balance for each VISA card must be USD\$295.

¹ Source: [Regional Zika Epidemiological Update \(Americas\) July 29, 2016. PAHO](#)

It should be noted that the BRCS generated extra funds from local donors due to positive media coverage of its response efforts. In order to reach more beneficiaries through CTP, the National Society elected to assume the following costs:

Emergency assessments (USD\$1,200), Transportation-general (USD\$1,500), Per diem for the volunteers (USD\$15,000), Monitoring visits to project areas by headquarters (USD\$300), Lessons learned workshop (USD\$5,000), Beneficiary satisfaction surveys

(USD\$1,200), Communications: telephone, internet and courier costs (USD\$500), Banking charges (USD\$100) and Office supplies (USD\$200) for a total of USD\$25,000.

A total of 220 VISA cards were delivered to Ladyville's Japan neighbourhood on 9 August 2016, and 214 exit surveys were conducted with beneficiaries with the following results: Regarding the level of organization, 99.4 per cent of the beneficiaries perceived the distribution as well organized, 76 per cent

of the beneficiaries waited less than 20 minutes to receive their card, 16 per cent of them waited between 20 to 40 minutes, 6 per cent of them waited more than 40 minutes and 2 per cent waited more than 1 hour.

The number of households to be reached through CTP was increased from 250 to 335 households with the following distribution:



Photo 3: Belama Phase 4 assessment. Source: IFRC

	Belize District			TOTAL Households
	Ladyville (Japan)	Vista del Mar	Lords Bank	
Outcome 3 CTP	220	40	75	335

Operational support services

Human resources

This remains unchanged since the [DREF Emergency Plan of Action \(EPoA\)](#) was issued

Logistics and supply chain

This remains unchanged since the DREF EPoA was issued.

Communications

This remains unchanged since the DREF EPoA was issued.

Security

This remains unchanged since the DREF EPoA was issued.

Planning, monitoring, evaluation and reporting (PMER)

This remains unchanged since the DREF EPoA was issued.

Administration and Finance

This remains unchanged since the DREF EPoA was issued.

C. DETAILED OPERATIONAL PLAN

Water, sanitation and hygiene promotion

Needs analysis: Detailed assessments were conducted to determine the needs related to water, sanitation and hygiene promotion of the affected communities and information is being analysed.

Population to be assisted: The BRCS volunteers will conduct hygiene promotion campaigns and activities to reduce the risk of water-borne and vector borne diseases in the districts of Cayo, Belize and Stan Creek targeting at least 440 households.

Objectives	Indicators
Outcome 1: Immediate reduction in risk of waterborne and water related diseases in targeted communities (440 families).	440 households reached with information to improve hygiene habits and practices
Output 1.1 Hygiene promotion activities which meet Sphere standards in terms of the identification and use of hygiene items provided to target population (2,200 people).	2,200 people reached by hygiene promotion activities (Field reports) Number of volunteers involved in hygiene promotion activities (Field reports)
Activities planned	Weeks
	1 2 3 4 5 6 7 8 9 10 11 12
Conduct detailed assessment to define intervention strategy	
Carry out hygiene promotion activities in affected communities	
Monitor hygiene promotion actions at community level	

Quality programming/ Areas common to all sectors / Cash transfer programme

In order to support the National Society, the IFRC and the American Red Cross deployed additional personnel to carry out detailed assessment in the most affected areas. Assessments included sectorial assessments (health, water, sanitation and hygiene promotion, shelter, livelihoods, CTP). Visa cards were sent jointly with the assessment team and

The BRCS deployed teams to assess Stann Creek, Corozal and Cayo at the request of NEMO. The National Society also carried out further assessments in Belize district and San Pedro.

Based on preliminary needs assessments, the National Society will increase the assistance to affected households with cash transfer from 250 families to 335 families.

Objectives	Indicators
Outcome 2: Continuous and detailed assessment and analysis is used to inform the design and implementation of the operation	Number of assessments conducted (<i>general and/or sectoral</i>) (Target = at least 4 communities)

Output 2.1 Initial needs assessment are updated following consultation with beneficiaries	Assessment reports which show that beneficiaries are consulted (assessment reports, plan of action).												
Output 2.2 Cash / voucher solutions (food, NFIs and livelihood asset replacement) are considered where appropriate and incorporated into the plan where feasible	Market assessments and feasibility studies completed which inform programme design (<i>assessment report, plan of action</i>) Sectoral plans which show that use of cash / voucher solutions have been considered and incorporated where appropriate based on consultation with beneficiaries (<i>plan of action</i>)												
Output 2.3 The management of operation is informed by a comprehensive monitoring and evaluation	Planned evaluations identify recommendations and lessons learned with management feedback												
Outcome 3: Affected families have unconditional funds to cover their immediate needs	% of target population which reports being satisfied with cash transfer programme (means of verification = beneficiary satisfaction survey)												
Output 3.1. Distribution of unconditional cash transfer to 335 households through a cash transfer programme.	335 households who receive unconditional cash transfers												
Activities planned	Weeks	1	2	3	4	5	6	7	8	9	10	11	12
Deploy BRCS and IFRC team to affected areas to conduct rapid assessments		■											
Procure ODK and Mega V kit		■											
Detailed assessment of impacts at community level (consultation with beneficiaries) – Covered by BRCS		■	■										
Conduct livelihoods assessment and market analysis, determination the type and amount assistance		■	■										
Develop a multi-sectoral action plan and review the EPoA		■	■										
Train volunteers on cash transfer programming (CTP)		■	■										
Notification to beneficiaries of CTP		■	■										
Coordination with the bank to issue the cards		■	■	■									
Distribution of cards to beneficiaries		■	■	■									
Monitoring card use		■	■	■	■	■							
Monitoring visits by IFRC disaster manager		■	■				■					■	
Carry out beneficiary satisfaction survey - Covered by BRCS		■	■				■					■	
Conduct a lessons learned workshop - Covered by BRCS												■	■
Elaboration of intermediate and final report							■	■				■	■

Budget

See [Annex 1](#) for the detailed DREF operation budget.

Contact information

For further information specifically related to this operation please contact:

- **In the Belize Red Cross Society:** Lili Bowman, Director General of the Belize Red Cross Society; email: bzercshq@btl.net
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For Resource Mobilization and Pledges:

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1. DREF budget [below](#)
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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 Disaster Response (Sphere) in delivering assistance to the most vulnerable.

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

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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

MDRBZ005- Belize Hurricane Earl

12/08/2016

Budget Group	DREF Grant Budget CHF
Shelter - Relief	0
Shelter - Transitional	0
Construction - Housing	0
Construction - Facilities	0
Construction - Materials	0
Clothing & Textiles	0
Food	0
Seeds & Plants	0
Water, Sanitation & Hygiene	0
Medical & First Aid	0
Teaching Materials	7,924
Ustensils & Tools	0
Other Supplies & Services	0
Cash Disbursements	95,495
Total RELIEF ITEMS, CONSTRUCTION AND SUPPLIES	103,418
Land & Buildings	0
Vehicles	0
Computer & Telecom Equipment	0
Office/Household Furniture & Equipment	0
Medical Equipment	0
Other Machinery & Equipment	0
Total LAND, VEHICLES AND EQUIPMENT	0
Storage, Warehousing	0
Distribution & Monitoring	0
Transport & Vehicle Costs	2,899
Logistics Services	0
Total LOGISTICS, TRANSPORT AND STORAGE	2,899
International Staff	6,281
National Staff	0
National Society Staff	0
Volunteers	203
Other Staff Benefits	0
Total PERSONNEL	6,484
Consultants	0
Professional Fees	0
Total CONSULTANTS & PROFESSIONAL FEES	0
Workshops & Training	0
Total WORKSHOP & TRAINING	0
Travel	13,287
Information & Public Relations	0
Office Costs	7,561
Communications	483
Financial Charges	918
Other General Expenses	0
Shared Office and Services Costs	0
Total GENERAL EXPENDITURES	22,249
Partner National Societies	0
Other Partners (NGOs, UN, other)	0
Total TRANSFER TO PARTNERS	0
Programme and Services Support Recovery	8,778
Total INDIRECT COSTS	8,778
TOTAL BUDGET	143,828