

Case Study: CDRT Mobilisation During Response to Hurricane Eta and Hurricane Iota in Belize.



Table of Content

Table of Content	1
1.0 Introduction	2
2.0 Methodology	3
3.0 Community Disaster Response Teams In Belize	4
3.1 Community Disaster Response Teams Structure	5
3.2 Community Disaster Response Team Receiving And Sharing Disaster Information	6
3.3 Important Stakeholders	8
4.0 CDRT Preparedness Actions Before The Hurricane Season	8
5.0 Hurricanes Eta And Iota Response	10
5.1 Overview Of Damage To Belize Due To Eta And Iota.....	10
5.2 Assistance Provided By CDRTs	11
5.3 COVID-19 Affect CDRT Response.....	12
6.0 CDRT Successes	13
6.1 Having An Established CDRT Structure.....	13
6.2 Development of CDRT Plans.....	13
6.3 Effective Channels of Communication	13
6.4 Redundant Forms Of Communication	14
6.5 Network System.....	14
6.6 Outreach Before The Hurricane Season.....	14
7.0 Ways To Improve	15
7.1 Increased Training and Refresher Training	15
7.2 Participation In Drills	15
7.3 Regular Meetings	16
7.4 Assistance With Transportation	16
7.5 Improved Working Relationships With Disaster Management Organisations	17
7.6 Assistance With Funds.....	17

1.0 Introduction

The 2020 Atlantic Hurricane Season set a record for having the most named storms and it was the second season in history to resort to using Greek letters to name storms, as the 26-name listing was used up. During that particularly active season, there were 30 named storms, of which 14 strengthened into hurricanes with seven (7) of them becoming major hurricanes¹. According to the National Oceanic and Atmospheric Administration (NOAA), an average hurricane season has 12 named storms, six (6) hurricanes and three (3) major hurricanes making the 2020 season 73% more active than normal².

Hurricane Eta, the 28th named storm of the 2020 Atlantic Hurricane Season was one of the deadliest natural disasters of that year, as it resulted in the deaths of at least 150 persons in Central America. These deaths were recorded in Honduras, Guatemala, Mexico, El Salvador, Panama, Nicaragua and Costa Rica³. While Eta did not make landfall on Belize, it's proximity to the country produced over 20 inches of rainfall which caused severe flooding in the Western District of Cayo, the Southern District of Stann Creek and the Belize District. As indicated in the Emergency Plan of Action for the DREF Operation⁴, Belize's National Emergency Management Organisation (NEMO) reported that about 50,000 – 60,000 persons were affected by the floods. According to the DREF report, the 420 active volunteers of the Belize Red Cross were called upon to assist with the response.

In the midst of providing relief to the affected persons, Hurricane Iota exacerbated the flooding situation when it affected the country almost two (2) weeks later. Iota became a category 5 hurricane on 16th November, 2020, making it the second hurricane to reach that intensity in the month of November. The first, in recorded history, was in 1932. The

¹ <https://www.noaa.gov/media-release/record-breaking-atlantic-hurricane-season-draws-to-end>

² <https://www.washingtonpost.com/weather/2020/11/30/record-hurricane-season-2020-ends/>

³ <https://www.usnews.com/news/best-countries/slideshows/here-are-10-of-the-deadliest-natural-disasters-in-2020?slide=10>

⁴ <https://reliefweb.int/report/belize/belize-hurricane-eta-emergency-plan-action-epoa-dref-operation-n-mdrbz006>

same districts that were severely impacted by Eta were affected by additional rainfall from Iota.

It should be noted that Belize was impacted by both hurricanes in the middle of the COVID-19 pandemic and therefore those providing assistance were posed with additional challenges to keep themselves and those impacted protected against the virus.

The situation described above can easily overwhelm first responder agencies as they would not be able to reach everyone who needs assistance right away. This is why the International Federation of the Red Cross and Red Crescent Societies (IFRC), other international disaster humanitarian organisations as well as the Caribbean Disaster and Emergency Management Agency (CDEMA) advocate the importance of building community resilience especially within the most vulnerable communities as this should help to reduce the losses faced or the impacts of a disaster on lives, property and livelihoods. In this regard the National Societies with support from the IFRC and their local disaster organisations conduct based disaster risk reduction (DRR) and disaster risk management (DRM) training with interested members of vulnerable communities.

Community members can benefit from different types of disaster preparedness trainings which include the Enhanced Vulnerability and Capacity Assessment (eVCA) whereby residents learn how to identify their community risks and develop a community plan; and Community Disaster Response Teams (CDRTs) training. CDRTs are trained on various aspects of conducting Damage Analysis and Needs Assessments (DANA), light search and rescue, fire safety and prevention and shelter management and are well positioned to offer much needed assistance to their communities when necessary.

This case study would focus on the mobilisation and the work conducted by the CDRTs during the response efforts in the aftermath of Hurricanes Eta and Iota in Belize.

2.0 Methodology

As mentioned previously, this case study will focus on CDRT Mobilisation and as such secondary data was collected via a literature review of all pertinent reports and

documents developed on Hurricanes Eta and Iota and their responses as well as any related case studies and CDRT training materials.

Additionally, primary information was gathered, through the administering of an online survey to active CDRTs in 14 communities within the Belize District as this was one of the most severely impacted areas in the country. The aim of the survey was to get feedback on if there are established response teams within the various communities in the Belize District and if members of the team were assigned designated roles such as team leader, communications, health etc. Questions were also asked to determine if there are any community early warning systems in place and the methods used by the CDRTs to receive and relay information on any impending hazard impacts or disasters. Information on which organisations activates the response teams and different areas CDRTs were requested to provide support was also gathered through the survey.

3.0 Community Disaster Response Teams In Belize

Following a disaster, situations can arise making it difficult for emergency services and first responder agencies to get to communities to provide the help needed. Roads may become impassable, infrastructure such as bridges may be damaged, and loss of electricity can result in communication issues. Responder agencies may also become overwhelmed based on the severity of the emergency which increases the number of persons requiring assistance.

CDRTs are designed to offer basic assistance during and after a disaster and to help strengthen their community's disaster preparedness levels before a disaster. In the case of Belize, CDRT members undergo three (3) – four (4) days of training conducted by the Belize Red Cross. They are trained on basic disaster risk management, shelter management, light search and rescue as well as crime and violence protection. This is done in collaboration with the local fire department, health professions, the National Emergency Management Organisation (NEMO) and other important partners. Trained CDRTs help to strengthen the capacity of the Belize Red Cross and NEMO as the national

society shares the names and contact information of trained persons with NEMO, who can also call upon CDRTs for assistance with emergencies.

According to Belize Red Cross, the main role and function of CDRTs is to assist with increased community resilience by:

- 1) Working closely with its local NEMO to prepare for and provide assistance during any disaster that is within the scope of the CDRT's capacity.
- 2) Helping the community to prepare for and respond to disasters through public educational initiatives.
- 3) Developing and maintaining a strategic community disaster plan.
- 4) Assisting community members with the development of a Family Emergency Plan.
- 5) Mobilising residents to participate in community-based risk reduction activities.
- 6) Implementing, updating and testing of this plan.

The Belize Red Cross breaks down the overall objectives of CDRTs according to three phases of the disaster management cycle. The following outlines the objective of a CDRT based on the phases of preparedness, response, and relief:

- 1) Preparedness: to assist their local NEMO with community empowerment and resilience in order to better prepare for and respond to emergency situations.
- 2) Response: to save lives and property by providing where possible, first response to self, family and community during times of emergencies and disaster.
- 3) Relief: to assist in relief and assessment after a disaster as directed by NEMO.

3.1 Community Disaster Response Teams Structure

The Community Response Teams Minimum Standards Stability Guidelines (MSSG)⁵ states that response teams are meant to function as a single unit, ideally consisting of 10-15 persons but can have more or less persons depending on the needs of their community. All teams should have a leader and a deputy leader, with other team members having designated roles as it relates to health, search and rescue, shelter, needs assessments, preparedness and emergency communication.

CDRTs within 14 communities in the District of Belize were surveyed and only three (3) of those stated that they did not have an established team (Table 1). Three (3) of the 11 communities with a response team did not have roles assigned to team members.

⁵ <https://www.cadrim.org/cdrt>

	Community	Community Disaster Response Team	Team Has Designated Roles	Community Has Stored Equipment
1.	Bermudian Landing	No	N/A	Yes
2.	Biscayne Village	Yes	No	Yes
3.	Boston Village	No	N/A	No
4.	Burrell Boom	Yes	Yes	Yes
5.	Caye Caulker Village	Yes	Yes	Yes
6.	Collect	Yes	Yes	No
7.	Lake Independence	Yes	Yes	Yes
8.	Lords Bank Village	Yes	No	Yes
9.	Lucky Strike Village	Yes	Yes	Yes
10.	Maskall Village	Yes	Yes	Yes
11.	Rancho Dolores	Yes	Yes	Yes
12.	Sand Hill Village	Yes	Yes	Yes
13.	Scoutland Halfmoon Village	No	N/A	No
14.	Willows Bank Village	Yes	No	No

Table 1: Presence of Community Disaster Response Teams in Communities

The structure of the CDRT in Lake Independence was a bit different as the team has a chair, a vice chair and human resource personnel. This is also distinct from the team in Sand Hill Village as it has a president and works hand-in-hand with the village council. Maskall Village has a person designated as security, members assigned to monitor the river level and a record keeper, as the community has a community-based Early Warning System (EWS). The MSSG also states that CDRTs maintain their own independence and therefore can set up the structures as they see fit. This accounts for the differences in the titles and the roles of the CDRTs as the team is meant to be a “living cell” that changes with the need to the community. It should be noted that equipment is not stored in only three (3) of the 14 communities.

3.2 Community Disaster Response Team Receiving And Sharing Disaster Information

There are different aspects of CDRT mobilisation, and it begins with communication and the methods used to receive and share information. CDRTs from all communities only take action after receiving information from an authorised source, which in most cases (10 of 14 communities) is the National Emergency Management Organisation (NEMO). Community response teams all seem to have a close relationship with NEMO and this stems from the system of the national society sharing the names and contact information of trained CDRTs with the national disaster organisation. In some cases, CDRTs would not activate unless information is received from NEMO or the village council.

The CDRT Leaders also play an integral role in spreading relevant information as they were cited as a source of information in all eight (8) communities with designated team roles. Table 2 below shows a breakdown of the ways in which communities receive and disseminate disaster related messages to other CDRT members, community members and stakeholders.

Community	CEWS	TV/ Radio	Social Media	NEMO	National Society	CDRT Leader	CDRT Members
Bermudian Landing		x	x			x	
Biscayne Village		x	x	x		x	
Boston Village		x	x	x			
Burrell Boom		x	x	x			
Caye Caulker Village	x	x	x	x		x	x
Collect		x				x	x
Lake Independence				x		x	
Lords Bank Village		x	x	x			
Lucky Strike Village		x	x	x			
Maskall Village	x	x	x	x	x	x	x
Rancho Dolores	x	x	x	x		x	
Sand Hill Village	x	x	x	x			x
Scoutland Halfmoon Village		x	x		x		
Willows Bank Village			x			x	x

Table 2: Methods Through Which Community Members Receive Alerts

Technology continues to play a major role in information sharing as all 14 communities have a CDRT WhatsApp group which seems to be the primary method of communicating with each other. A community WhatsApp exists even in the three (3) communities that do not have an established community response team. All but two (2) communities identified social media, tv and radio as the main source of information.

Follow-up phone calls and text messages are also made if persons do not respond to the WhatsApp group messages and, in some cases, CDRTs go door-to-door or to the homes of non-responding members to ensure their safety. This is done in Maskall, Sand Hill Village, Willows Bank, Rancho Dolores, Biscayne Village, Scoutland Halfmoon Village, Bermudian Landing and Lucky Strike. Also in Bermudian Landing, CDRTs will assist persons to evacuate, especially the elderly, and will also help to move animals to safe areas.

Four (4) communities have a Community Early Warning System and these use alternate forms of communicating alerts. In the Maskall Village the CDRT leader receive alerts from NEMO and then instigates the activation of the CDRT. School bells/church bells are rung to warn people and in one part of the community, a person is assigned to blow a horn to alert persons of bad weather. It is also used to signal that persons need to evacuate and seek shelter if needed. Various coloured flags representing different alert levels are posted at the police station.

In the community of Rancho Dolores, the community also uses a system of ringing the church bell in five (5) quick successions to alert the community. The bell is rung by a CDRT only when the team leader receives information from the chairperson of the community, who obtains alerts directly from NEMO. Once the bell is rung, CDRTs will start the process of going house to house to warn persons. The village council will also hold meetings with emergency teams to identify problems and to decide on appropriate actions to be taken.

3.3 Important Stakeholders

In addition to information being received via tv, radio and social media, CDRTs receive and share information with various stakeholders other than community members. As it relates to external stakeholders, in some communities, CDRTs have a close working relationship not only with NEMO, but with the city/village councillors and area representatives and would share and receive information from these organisations.

In Lake Independence, CDRTs forward information to city councillors and other community members via WhatsApp. This is also done in Sand Hill Village, Biscayne Village, Lords Bank Village and Lucky Strike Village. In Caye Caulker, information is shared with the village chair and the Emergency Operations Centre (EOC) volunteers, during and after a disaster. In Lucky Strike, CDRTs monitor the situation and provides information to the District Emergency Council host meetings to warn the community.

4.0 CDRT Preparedness Actions Before The Hurricane Season

CDRTs play an important role in preparing their communities to become more disaster resilient. They can provide support during Enhanced Vulnerability Capacity Assessment (eVCA) Training and help prepare community disaster plans. According to the survey CDRTs in 13 of the 14 communities (Table 3 below) developed a list of resources (persons and equipment) available to the community that can be used in times of emergencies, which is an essential element of any CDRT plan. In Sand Hill Village, CDRT members try to

get other community members to commit to volunteer to transport persons who need to evacuate in times of disasters.

CDRT members in nine (9) communities helped educate their families, friends and community members on how to become better prepared for disasters and members of 10 communities educated others on developing a family emergency plan. Having a family emergency plan is another crucial step in building resilience as it ensures that all members of the family understand their risks, the appropriate actions to take to protect themselves against their risks and know how to safely evacuate their homes. In Maskall Village, CDRTs share disaster reduction information with parents at Parents and Teachers Association (PTA) Meetings. Sharing the knowledge that was gained through the CDRT training is an important role of a CDRT member in helping to reduce their community's vulnerability.

Having any type of disaster plan is the first step to increasing disaster resilience but it is also necessary to test these plans. Plans can be tested through tabletop exercises, drills or simulation exercises. CDRTs in only five (5) communities stated that they conducted or participated in drills. This is one noticeable area for improvement as drills/simulations should be conducted at least once a year to ensure that persons understand their role in times of emergencies and to identify any gaps in the plan.

	Educate family, friends, and community on what to do	Educate family, friends and community on developing a family emergency plan	Conduct tabletop exercises/drills	Make a list of resources (persons and equipment) available in the community
Bermudian Landing	x	x		x
Biscayne Village	x	x		x
Boston Village				x
Burrell Boom Village		x	x	x
Caye Caulker Village	x	x	x	x
Collect	x	x	x	x
Lake Independence				x
Lords Bank Village	x	x		x

Lucky Strike Village	x	x	x	x
Maskall Village	x	x		x
Rancho Dolores		x		x
Sand Hill Village	x	x		x
Scoutland Halfmoon Village			x	
Willows Bank Village	x	x		x

Table 3: CDRT Pre-Hurricane Information

5.0 Hurricanes Eta And Iota Response

5.1 Overview Of Damage To Belize Due To Eta And Iota

Even though Hurricanes Eta and Iota did not make landfall over Belize, the rain associated with these systems resulted in severe flooding. Heavy rainfall due to the Hurricane Eta was experienced in Belize from the 3rd November and increased in intensity until the 5th November, 2022⁶. According to the NOAA, a topographically enhanced maximum of 555.2mm of rainfall was recorded in Belize due to Hurricane Eta⁷, while rainfall amounts of 100-125 mm of rainfall generally occurred over the southern and northern thirds of Belize due to Iota⁸. For the Belize District the possibility of flooding alerts was released by NEMO for numerous rivers in the Belize District (Belize River, Crooked Tree Lagoon, Mexico Creek and the Big Falls Creek).

According to the DREF Operation Final Report, NEMO reported that approximately 60,000 people living along the impacted areas were affected and about 5000 persons were directly affected across the country. In the Belize District, many communities were severely impacted. Lords Banks Village were so badly affected that several households had to be evacuated and persons stayed at shelters or with other family members. Canoes were even used to transport persons, as was the case at Scoutland Halfmoon⁹.

⁶ <https://reliefweb.int/report/belize/belize-hurricane-eta-dref-operation-final-report-n-mdrbz006>

⁷ https://www.nhc.noaa.gov/data/tcr/AL292020_Eta.pdf

⁸ https://www.nhc.noaa.gov/data/tcr/AL312020_Iota.pdf

⁹ <https://www.ifrc.org/article/picking-pieces-belize-one-month-after-eta>

5.2 Assistance Provided By CDRTs

In Belize, the National Society trains interested persons in vulnerable communities to be CDRTs. Trained persons then form a community group and set up their own system to provide help to communities before, during and after emergencies. The national society shares the names of trained CDRTs with NEMO, who as seen in section 3.2, shares warning messages with CDRTs. When asked which organisation initiates help from CDRTs, majority (9 communities) identified NEMO (see Table 4). In some cases, the response team would initiate contact with NEMO or the National Society. Even though it is NEMO who asks CDRTs for help, CDRTs share information with NEMO, the National Society and in some cases their village council.

	Community	NEMO	National Society	CDRT Contacted NEMO	CDRT Contacted National Society
1.	Bermudian Landing	x			
2.	Biscayne Village			x	
3.	Boston Village	x			
4.	Burrell Boom	x		x	
5.	Caye Caulker Village	x			
6.	Collect				
7.	Lake Independence				
8.	Lords Bank Village				
9.	Lucky Strike Village	x			
10.	Maskall Village	x		x	x
11.	Rancho Dolores	x	x		
12.	Sand Hill Village	x			
13.	Scoutland Halfmoon Village			x	
14.	Willows Bank Village	x			

Table 4: Method Of Initiating CDRT Activation

The survey results showed that most of the CDRTs (9 communities) assisted by conducting Damage Analysis and Needs Assessments (DANA), the results of which were shared with NEMO and the Belize Red Cross. CDRTs also helped with relief distribution (8 communities) by helping to distribute items such as groceries, clothing, mattresses and sanitization bags. In Maskall Village, additional financial assistance (cash) was provided through the support of the village council.

Most of the community response teams (8 communities) were quick to execute their CDRT plan which included sharing warning information in the methods described in section 3.2 and helping persons in need. CDRTs helped to monitor the situation and kept in close contact with NEMO and the Belize Red Cross, often providing them with new information, which included supplying an updated listing of households affected. CDRTs in Maskall Village, Biscayne Village and Lords Bank Village also submitted pictures of the damages to NEMO and the National Society. Constant communication with victims were done to keep them informed and comfortable.

CDRTs also helped with shelter management (5 communities), aiding with registration, sanitation and cleaning of shelters. They supported food distribution in shelters and providing food to those who did not have any because they needed to evacuate their homes. CDRTs also played an integral role in helping those who needed to evacuate (4 communities). CDRTs in Lords Bank Village resorted to using a canoe to move persons to safe areas. Response Teams in Biscayne Village, Caye Caulker helped with evacuation of persons affected including the elderly.

5.3 COVID-19 Affect CDRT Response

Hurricanes Eta and Iota affected Central America during the height of the COVID-19 pandemic. CDRTs had the double task of trying to help in the response of the aftermath of both Eta and Iota whilst keeping themselves and those affected safe from the virus. CDRTs from 10 communities stated that the way in which they operated were impacted by the pandemic and unfortunately a member of the team in Bermudian Landing died from the virus.

In all communities, due to the restrictions enforced as a result of the pandemic, CDRTs had to limit the number of home visits made, reduce contact with others and social distance. CDRTs also had to ensure that they wore masks and sanitised often to help reduce the spread of the virus.

In Bermudian Landing, the number of persons accommodated in shelters had to be reduced to allow for proper social distancing. CDRTs in Lake Independence had to discontinue providing aid as the number of persons contracting and dying from COVID-19 were on the rise.

6.0 CDRT Successes

6.1 Having An Established CDRT Structure

Majority of the persons trained as a CDRT established a structured team in their community with assigned roles. It was also clear that CDRT leaders were responsible for sharing alerts with other CDRT members and with important stakeholders. Having that clear line of leadership is also important to CDRT activation and ensuring that CDRTs know to act and the type of response that is needed.

6.2 Development of CDRT Plans

CDRT plans are also essential to the effectiveness of their response. Eight (8) communities had disaster plans which they were able to quickly execute. As part of their CDRT plan and preparedness measures, CDRTs in 13 communities made a list of resources of both persons and equipment that are available in the community to be used in time of emergencies. This would allow for quick response actions to be taken. CDRTs were also responsive in helping to evacuate those in need and in Lords Bank Village, CDRTs even used a canoe to help safely evacuate persons. Having a proper CDRT structure and plan in place is critical in building that overall resilience.

6.3 Effective Channels of Communication

Setting up effective modes of communication goes hand in hand with creating an efficient CDRT plan. In all the communities, whether or not they had a structured team utilised a community CDRT WhatsApp group to share and receive information. WhatsApp was the primary form of communication among members but not the only one. In addition to sending messages over the application, follow-up phone calls were made to those who did not respond to the messages as well as home visits were made to ensure the safety of CDRT members, as was the case in Maskall, Sand Hill Village, Willows Bank, Rancho Dolores, Biscayne Village, Scoutland Halfmoon Village, Bermudian Landing and Lucky Strike.

6.4 Redundant Forms Of Communication

In the vein of using non-technology based communication solutions, communities also has systems in place whereby a school bell or church bell was used to alert the community of impending floods, thus allowing community members to safely evacuate their homes. It should be noted that CDRT members were assigned to fulfil the task of raising the alert. This type of redundant alerting system is an important aspect of any CEWS since it ensures that warnings can be received even when technology fails or by persons who do not own cell phones. This system was present in both Rancho Dolores and Maskall Village and is considered to be best practice. Maskall Village also assigned a person to blow a horn to help alert the community.

6.5 Network System

As previously mentioned in section 3.3 the CDRTs in Belize have good relationship with relevant stakeholders such as the national disaster office, the national society and their village councils. They are able to work in collaboration with these stakeholders, often receiving and sharing disaster related information. CDRTs are often called to assist by their local disaster office and are part of community discussions as seen in Lucky Strike Village where CDRTs are part of the response meetings held by the village council.

Also seen through their response, CDRTs are best placed to monitor the situation and provide updates to the authorities. CDRTs are in a position to quickly identify who needs assistance and the type of assistance that is needed. CDRTs share the location of affected persons with their disaster office as well as the national society and in some cases send pictures of the affected areas to those organisations. Receiving accurate information from persons in the area allows the disaster office and the national society to make better decisions and prioritise their response.

6.6 Outreach Before The Hurricane Season

CDRTs gain a lot of knowledge on simple and effective ways to reduce their own risks and decrease the possibility of loss of life and damage to property due to a disaster. CDRTs can therefore implement simple preparedness and mitigation measures to increase their coping capacity. This knowledge is often shared with family, friends and to communities through their pre-hurricane season activities. As seen in section 4.0, CDRTs share knowledge on life saving actions at PTA meetings and help persons to develop family emergency plans. In times of disasters persons can easily become overwhelmed, but this

is diminished when the greater community understand what actions to take and when, and by setting up a plan for their families.

7.0 Ways To Improve

7.1 Increased Training and Refresher Training

CDRTs identified the need for further training to help them build their capacity and ability to prepare their communities and offer more support in the response efforts. CDRT training sets the foundation for learning about disaster risk reduction, however the information received is very basic. CDRTs are willing to learn more in-depth information in the specialised topics of the initial CDRT training such as search and rescue and psychosocial support as well as in additional topics on report writing and leadership skills.

If CDRTs are not called upon to assist regularly or if they live in a country that is affected by disasters sporadically, then it becomes easy to forget the information learnt during the CDRT training. It is important that refresher trainings are conducted every two (2) years. DRR is not a stagnant and new ways of coping and providing aid is developed and utilised. Refresher trainings are a gateway to keep CDRTs updated on the newest trends in DRR.

7.2 Participation In Drills

One of the best practices seen in Belize is that all the community response teams have a CDRT plan, and they also have an effective way of communicating with each other but practice with implementing the plans can help to better their response system and improving their plans. Simulation exercises whether they are tabletops or drills are useful tools in bringing to light areas needing improvement, helping CDRT members understand their role and keeping CDRTs engaged. Participating in drills would help to build leadership skills and increase the team's ability to work together more cohesively. Only five (5) of the 14 communities conducted/participated in drills. Tabletop exercises or drills should be conducted once a year.

CDRTs may initially need assistance with developing and conducting tabletop exercises. They would need guidance and support from their disaster office as well as the national society. CDRTs should also be involved in any community drills being conducted by NEMO and the national society.

7.3 Regular Meetings

CDRTs play a role in all phases of the disaster management cycle which means that CDRTs don't need to act only during an emergency or disaster. As seen from the survey, they are different pre-hurricane season activities that CDRTs can perform such as educating community members. Therefore, conducting regular team meetings to discuss and update preparedness plans, communications plan and CDRT plans could improve the way the team performs before, during and after a disaster. In Belize CDRTs have a close relationship with NEMO, the National Society and their village councils. CDRTs can also discuss how they can be integrated into community activities being conducted by any of those organisations and other community-based organised to spread the word about actions persons can take on an individual level to become disaster resilient.

CDRTs should also conduct their own post-disaster meetings to discuss ways in which they can improve their efficiency in the response or to identify any type of assistance that is needed. Similar discussions should be had after participating in any type of simulation exercise as well. It is also important to take the opportunity to have conversations about any psychosocial support that CDRTs may need after an emergency or disaster. It is important that those type of issues are not neglected as the mental health of humanitarian aid workers such as CDRTs can be affected by what they see and hear on the field.

7.4 Assistance With Transportation

The communities seem to have a robust alerting system that works for them and when alerts are received CDRTs try to assist with evacuating persons by offering transport. However, there are cases where CDRTs have difficulty getting to areas to do assessments and provide support. They try to work with other organisations who can help with transportation, for example, in Sand Hill Valley CDRTs had to depend on transportation from the village council to get to affected areas.

Some CDRTs need support with developing logistical systems as it relates to transportation. They may need more support in this regard from NEMO and the National Society. There is also the example in Sand Hill Village where one of the pre-hurricane season activities that the CDRTs conduct is asking community members with vehicles to volunteer during disasters and assist with evacuations. This is something that other CDRTs can try to implement.

7.5 Improved Working Relationships With Disaster Management Organisations

CDRTs need to feel more engaged before an emergency happens and they need some additional guidance with their preparedness measures and upgrading their skills which will increase their ability to respond and their community's overall coping capacity. In most communities, CDRTs have a good relationship with NEMO and the Belize Red Cross as it relates to sharing information and receiving alerts, but they need more support especially when it comes to training, conducting and participation in drills and additional resources such as transportation as mentioned previously.

CDRTs also require assistance with establishing simple community-based early warning systems or redundant alerting systems. Whilst WhatsApp and social media were the main forms of communication, some communities also use CDRTs as runners to spread information and others utilise school bells and church bells to further warn persons. In the past CEWS was not part of the CDRT curriculum and the importance of having a CEWS is being recognised by many international and regional humanitarian organisations. This is another way in which external organisations can support CDRTs.

7.6 Assistance With Funds

Emergency equipment is stored in some communities and CDRTs are sometimes given personal equipment as well but CDRTs also have to use their own money to get to affected locations or to conduct any preparedness activities that they conduct. When asked for additional comments, some CDRTs expressed the need for financial assistance such as a stipend or reimbursement of transport costs. Although this may be difficult for disaster organisations to help with, perhaps CDRTs should also be taught how to work with other organisations to support their plans as well as how to raise their own funds to support their preparedness and response efforts.

8.0 Conclusion

CDRTs clearly play an important role in disaster risk reduction and are valuable assets to their communities. The CDRTs in Belize have a clear system of mobilisation, receiving and sharing disaster related information from their disaster office, national society and other pertinent stakeholders. As seen from the case study, the community disaster response teams may not be set up in the same way with the same assigned designated roles, however there are similarities in the ways in which the teams work together in the various communities that are effective in the context of their country. The case study also

highlights in importance of a robust communication plan and integrating CDRTs within the nation's disaster system.