After – Action – Review Report

OBSERVATIONS

A community Tsunami coordination and evacuation drill was conducted in the community of Carenage, Trinidad. The objectives of this mission were met. CDEMA was able to support the exercising of the National Tsunami Protocols and SOPs; the exercising of the Carenage Community Tsunami Hazard Protocols and SOPs and the enhancement of Tsunami Hazard Awareness in Trinidad & Tobago. CDEMA was instrumental in the planning, coordination, execution and evaluation of the drill and ensured that the drill was conducted within the context of the regional realities.

The project objectives for the national drill were as follows:

i. To exercise the National Tsunami Protocols and SOPs;

ii. To exercise the Carenage Tsunami Hazard Protocols and SOPs;

iii. To raise awareness on the Tsunami Hazard in Trinidad.

Following are some strengths, weaknesses, opportunities and challenges experienced:

Strengths

a) The emergency first responders mobilized rapidly upon initial receipt of the Tsunami threat form the National Tsunami Warning Centre (NTWC)

b) Crowd and vehicle control were well executed by the Trinidad and Tobago Police Services (TTPS)

c) There was efficient coordination and activation of the Early Warning Systems (Sirens, town criers, etc) by the TTPS, the Trinidad and Tobago Fire services (TTFS) and the Community Emergency Response Teams (CERTs).

d) Roadblocks were quickly established by the police to cordon off the inundation zone, emergency first responders demonstrated a sound knowledge of the evacuation routes and safe zones and supported the evacuation of personnel to safety.

e) Key players demonstrated a level of coordination and knowledge of the plan.
Weaknesses

a) The tsunami evacuation routes for residence were also used to redirect traffic which resulted in congestion along the route. Evacuating persons had to navigate around traffic.
b) Some persons (traffic) tried to traverse through the Police roadblocks.
c) The sirens wail (EWS) used to notify persons of the pending tsunami threat was the normal siren wail of the police, fire and ambulance services thus persons were unable to discern whether this was a tsunami event or a routine police, fire or ambulance event.
d) The “All Clear” message did not reach all emergency first responders thus they were not stood down.
e) The EWS sirens have not yet been installed in the community thus the exercise was unable to test the effectiveness of this system.
f) The persons caught in vehicular traffic were not advised of the tsunami threat thus they did not evacuate their vehicles to safety. Additionally, those who were aware that this as a simulation opted not to react.
g) Residents knowing that this was a simulation did not take the drill seriously and did not evacuate.

Opportunities

a) Enhanced public outreach and education campaigns to build awareness on the tsunami hazard and to encourage greater community participation in future drills;
b) Need for redundancies in the emergency communication systems;
c) Intercommunication among the TTPS, TTFS, and TTDF needs to be addressed and routinely exercised;
d) There is need for more tsunami hazard signage at strategic locations within the community;
e) Greater awareness of the evacuation maps; evacuation routes, tsunami hazard zones, tsunami safety zones within the community;
f) Selection of a unique siren wail for natural disasters, and public awareness on the recognition of the wail;
g) Identification of separate evacuation routes for personnel and traffic;
h) Enhancement of incident management among the first responders.
Challenges

a) A number of residents within the community refused to participate in the exercise for various reasons, primarily because they knew it was a simulation;
b) Motor vehicle drivers complained about the traffic disruptions within the Carenage community;
c) The Carenage Community has one major road in and out of the community, which posed some challenges with motorists;
d) TTFS internal communication system was down during the drill;
e) Incident management was lacking; it was not clear where the incident command was and who was the incident commander;
f) There were some concerns raised with the IHC Hazard maps. The proposed safe zones were not that far inland nor elevated. The IHC advised that their tsunami inundation models took into consideration the possibly tsunamigenic locations, the geomorphology of the bay, and other factors and the result was that tsunami waves above a certain height were not probable and that tsunami wave propagation would not be that far inland. Nonetheless, psychologically persons were not confident that the identified tsunami safe zones were safe. This may pose a challenge with adherence to the plan and confidence in the modelling process. This is a matter that needs further discussion.

RESULTS AND ACHIEVEMENTS

Following are the key results and achievements of this mission:

i. The aims and objectives of the exercise were successfully met. The ODPM and emergency first responders demonstrated a sound understanding of the National and community SOPs.

ii. The exercise suggests that all emergency first responder personnel are knowledgeable of their roles and responsibilities in accordance with the Tsunami Plan.

iii. Emergency responders demonstrated that they are capable of managing a tsunami hazard incident utilizing the resources available to them.

iv. The exercise revealed a number of areas for strengthening:

   a) There is need for Incident Management Training among the first responders,
b) Enhancement of emergency communications, this needs to be clearly articulated in the national and community SOPs and Protocols,

c) Development of an inter-agency emergency communication system among the key responders,

d) Strategic placement of the tsunami hazard signs within the community,

e) Strengthening of the Community EWS – installment of the community sirens and enhancement of the coordination of the community EWS,

f) Identification of a unique siren wail for natural hazards and sensitization of the public to this wail,

g) Capacity development in hazard mapping and modelling at the national level. There was an opportunity lost in the transfer of knowledge from the IHC to the local authorities,

h) Continued national and community awareness campaigns on the Tsunami Hazard.

**FOLLOW UP ACTIONS**

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<tr>
<th>Follow up Actions</th>
<th>Person Responsible</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>1. Finalize the draft National tsunami SOPs</td>
<td>CDEMA and NDO</td>
<td>March 31, 2020</td>
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<tr>
<td>2. Finalize the Community Tsunami SOPs</td>
<td>CDEMA and NDO</td>
<td>March 31, 2020</td>
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<tr>
<td>3. Draft the exercise report</td>
<td>NDO</td>
<td>February 21, 2020</td>
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<td>4. Draft Plan of Action for recommended implementation of the exercise findings</td>
<td>NDO</td>
<td>February 21, 2020</td>
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