Community Risk Assessment

Linking Community Risk Assessment to Resilience Programming

Meda Gurudutt Prasad – CADME
Andhra Pradesh is a state that has suffered the most from the adverse effects of severe cyclones, floods and drought. It is estimated that about 44% of AP’s total territory are vulnerable to tropical storms, floods and related hazards while the coastal belt is even more vulnerable to natural disasters and state’s population is compounded by the recurrent impact of disasters. The coastline between Nizampatnam and Machilipatnam is prone to storm surges. The fertile delta areas of Godavari and Krishna rivers which contribute substantially to the state’s economic prosperity are prone to frequent floods and cyclones and drainage problems more so in the aftermath of cyclone. Some parts of the Telangana region are also experiencing recurring drought.
<table>
<thead>
<tr>
<th>Date &amp; Year</th>
<th>DISASTER</th>
<th>Affected Districts</th>
<th>Affected people (In Lakhs)</th>
<th>House Collapse/damage</th>
<th>Crop Loss in Hectares</th>
<th>Total loss in Crores</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 28th 1977 – November 1; November 15-20 1977</td>
<td>Storm Surge</td>
<td>8</td>
<td>34</td>
<td>10,14,800</td>
<td>13,51,000</td>
<td>172</td>
</tr>
<tr>
<td>May 13th -15th 1979; November 24th – 25th</td>
<td>Cyclone/Flash Floods</td>
<td>10</td>
<td>37.4</td>
<td>7,48,000</td>
<td>-</td>
<td>242.65</td>
</tr>
<tr>
<td>November 11th – 15th 1984</td>
<td>Cyclone</td>
<td>3</td>
<td>19</td>
<td>8,244</td>
<td>1,92,000</td>
<td>55.53</td>
</tr>
<tr>
<td>December 11th – 13th 1985</td>
<td>Cyclone</td>
<td>11</td>
<td>11.75</td>
<td>3,196</td>
<td>2,14,000</td>
<td>40.5</td>
</tr>
<tr>
<td>November 2nd – 3rd 1987; 12th – 13th</td>
<td>Cyclone</td>
<td>10</td>
<td>32.04</td>
<td>1,10,550</td>
<td>9,61,000</td>
<td>126.48</td>
</tr>
<tr>
<td>May 5th – 10th 1990</td>
<td>Cyclone</td>
<td>14</td>
<td>77.81</td>
<td>14,39,659</td>
<td>5,63,000</td>
<td>2137.27</td>
</tr>
<tr>
<td>May 1995</td>
<td>Cyclone</td>
<td>10</td>
<td>2.56</td>
<td>43,179</td>
<td>3,20,000</td>
<td>471.86</td>
</tr>
<tr>
<td>June 12th – 16th 1996</td>
<td>Cyclone</td>
<td>10</td>
<td>0.22</td>
<td>21,517</td>
<td>15,000</td>
<td>129.1</td>
</tr>
<tr>
<td>November 6th – 7th 1996</td>
<td>Cyclone</td>
<td>4</td>
<td>80.62</td>
<td>6,16,553</td>
<td>5,11,000</td>
<td>6,129.25</td>
</tr>
<tr>
<td>November 28th – December 7th 1996</td>
<td>Cyclone</td>
<td>3</td>
<td>0.37</td>
<td>7,569</td>
<td>21,000</td>
<td>53.59</td>
</tr>
<tr>
<td>Date &amp; Year</td>
<td>DISASTER</td>
<td>Affected Districts</td>
<td>Affected people (In Lakhs)</td>
<td>House Collapse/damage</td>
<td>Crop Loss in Hectares</td>
<td>Total loss in Crores</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------</td>
<td>--------------------</td>
<td>----------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>September 23rd – 26th 1997</td>
<td>Cyclone</td>
<td>6</td>
<td>9.47</td>
<td>7,725</td>
<td>1,35,000</td>
<td>255.87</td>
</tr>
<tr>
<td>November 13th – 15th 1998</td>
<td>Cyclone</td>
<td>5</td>
<td>0.68</td>
<td>13,543</td>
<td>3,39,000</td>
<td>305.99</td>
</tr>
<tr>
<td>December 15th – 16th 2003</td>
<td>Cyclone/Flash Floods</td>
<td>6</td>
<td>42.68</td>
<td>17,147</td>
<td>2,65,741</td>
<td>765.92</td>
</tr>
<tr>
<td>August 2nd – 5th 2006</td>
<td>Cyclone/Flash Floods</td>
<td>10</td>
<td>13.84</td>
<td>2,76,567</td>
<td>2,19,897</td>
<td>3,455.23</td>
</tr>
<tr>
<td>October 28th – November 4th 2006</td>
<td>“Ogni” Cyclone</td>
<td>5</td>
<td>13.85</td>
<td>95,218</td>
<td>3,84,550</td>
<td>7,173.25</td>
</tr>
<tr>
<td>March 22nd – 29th 2008</td>
<td>Unseasonably Rains/Floods</td>
<td>22</td>
<td>0.014</td>
<td>3,556</td>
<td>2,27,507</td>
<td>829.88</td>
</tr>
<tr>
<td>November 25th – 30th 2008</td>
<td>“Nisha” Cyclone</td>
<td>5</td>
<td>1</td>
<td>8,258</td>
<td>2,20,000</td>
<td>80</td>
</tr>
<tr>
<td>May 19th – 21st 2010</td>
<td>“Liela” Cyclone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Objectives

- Assure protection to vulnerable communities and school going children through trained task force actions and preparatory measures in order to mitigate the loss in disaster times which occur at regular intervals.
- Assure safe evacuation of vulnerable communities and school going children through pre-planned contingency plans and school safety nets.
- Ensure timely relief, rehabilitation and reconstruction/to the victims of disasters.
- Collective action brings normalcy in the community and schools aftermath of any disaster.
- Reduce the dependency on outside resources.
MAP showing CADME Network members and their area of operation
Trainings to Task force groups

- Warning & Evacuation
- Emergency Medical Care
- Emergency Rescue
- Relief camp management
- Contingency plan development
- Disaster Drill
MODULE 1

WARNING AND EVACUATION
Task force is responsible to warn the villagers on the impending cyclone and the damages expected. It should clearly instruct where when and how the people should reach a safe shelter.
Do not set out to the sea if the sea is rough
Low-lying areas are inundated easily
Elderly are vulnerable to floods and are the first to succumb.
The women and children are equally vulnerable
Preplanned timely evacuation has to be coordinated by taskforce.
At the earliest, seek shelter in a well maintained cyclone shelter or any safe building. Only carry the most essential things.
CADME – CAPACITY BUILDING TO TASK FORCE GROUPS

MODULE -2

EMERGENCY RESCUE METHODS AND KNOTS AND USES
Rescue techniques greatly aid to save lives
Breast line Throw
To cross a flooded area, secure a rope on trees on either side of the area to be crossed. Use clove hitch. Using this rope, one can cross over.
Floating aid using two pots and bamboo sticks
Two pots and Bamboo sticks with rope
Demonstration of two pots floating aid
One who know swimming can rescue another by holding on to the tuft of his / her hair.
Floating Aids

Improvised floating aids – developed with available material in the villages exclusively in disaster times.
To rescue an unconscious casualty from the smoke filled room, bowline drag could be used.
An unconscious casualty in a smoke filled room is being toe dragged.
An unconscious casualty in a fire / smoke filled room being rescued by crawl method.
The main objective of these demonstrations is to make the village youth skilled with different carries according to the situation to help their co-villagers in Emergency times where medical facilities are jeopardized.
Double human crutch and Chair carry by women
Pick a Back to carry a person having wound on his/her back
Fire Person’s lift by Woman
Head and Chest bandage with locally available cloth.
Single human crutch having wound on leg
Cradle carry useful in carrying a person having wound on his stomach.
Fire person’s lift for carrying an unconscious person
Fire person’s lift demonstration by taskforce women
Pick a back – useful in carrying a person having wound on his back.
Chair lift useful in carrying a snake bite person.
Chair carry
Chair carry also useful in rescuing a person trapped in multistory building.
improvised stretcher - two bamboo sticks and one blanket
Improvised stretcher demonstration by woman trainers.
Bandages

Chin Bandage
Chest bandage demonstration
Long arm sling demonstration
Knee bandage
Leg Bandage
Artificial Respiration

1. Holyger – Nelson method
2. Schaffer’s method
3. Mouth to Mouth method
Artificial Respiration

Holyger – Nelson Method

2012 UR Forum Mapping Global Risk
Artificial Respiration - Schaffer’s method
Artificial Respiration – Mouth to Mouth method
MODULE- 4

RELIEF CAMP MANAGEMENT
Tent Pitching in Emergency times

2012 UR Forum Mapping Global Risk
Village level contingency plan developed by Village community and Task force group members along with VAO and Sarpanch
MODULE -6

DISASTER DRILL
Disaster Drill

2012 UR Forum Mapping Global Risk
Disaster Drill

2012 UR Forum Mapping Global Risk
Disaster Drill
Disaster Drill
Disaster Drill
MODULE- 7

INTEGRATION
The following are some of the linkages between developmental activities and disaster preparedness.

<table>
<thead>
<tr>
<th>SLNO</th>
<th>NAME OF THE DEVELOPMENT ACTIVITY (ON GOING)</th>
<th>TO BE LINKED UP WITH DISASTER PREPAREDNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thrift and savings</td>
<td>Rice procurement, Food security</td>
</tr>
<tr>
<td>2.</td>
<td>Housing</td>
<td>Cyclone Resistant Housing, Retrofitting</td>
</tr>
<tr>
<td>3.</td>
<td>Adult Education / Non formal Education</td>
<td>Awareness on disaster preparedness through school education</td>
</tr>
<tr>
<td>4.</td>
<td>Health education/ community primary health care</td>
<td>Emergency medical care , Relief camp management, Personal Hygiene</td>
</tr>
<tr>
<td>5.</td>
<td>Approach Roads to rural areas</td>
<td>Evacuation to elevated areas</td>
</tr>
<tr>
<td>6.</td>
<td>Communication</td>
<td>Warning systems information dissemination</td>
</tr>
<tr>
<td>7.</td>
<td>Transportation facilities</td>
<td>Rescuing methods</td>
</tr>
<tr>
<td>8.</td>
<td>Participatory rural appraisal P.R.A</td>
<td>Village level contingency plan development</td>
</tr>
<tr>
<td>9.</td>
<td>House visits</td>
<td>Vulnerability assessment</td>
</tr>
<tr>
<td>10.</td>
<td>Income generative programme</td>
<td>Risk reduction activities livelihood</td>
</tr>
</tbody>
</table>
It is known that mangrove forest reduces the wind velocity of cyclones and is helpful to increase the marine living resources which are livelihood to fisher folk community.

Keeping in view of the above mentioned fact ACTION has taken up Mangrove Regeneration programme in two villages with community involvement.
Community at work for Mangrove Regeneration work (channel development).
Channels development
Community involvement in Mangrove Regeneration
Channeling work for Mangrove Regeneration

Mangrove Regeneration programme as Disaster Preparedness

2012 UR Forum Mapping Global Risk
Main channel with Brackish water
Channels with Brackish water
Cyclone Resistant housing

Mode of material Transportation
House Construction involving the community.

2012 UR Forum Mapping Global Risk
House Construction
Cyclone resistant housing programme inauguration
FUTURE INTERVENTIONS OF CADME

- Network of 10000 taskforce members of Coastal Areas of India and their commitment to render their services with their D.P skills and knowledge to the victims of any disaster wherever it strikes in any part of the country.
- Disaster preparedness with children
- Climate Change actions integrating with CBDP and ongoing developmental activities 2011 December
  - Community fire brigades in 500 villages of nine coastal districts.
  - Village level community plans development in 500 villages of nine coastal districts.
- Mangrove forest and Green belt programme along the coast as a windshield to resist the wind velocity of Cyclone/Tsunami cum income generation to local communities 2013 December
Culture of disaster preparedness among 5062 vulnerable families in nine coastal districts (Family level disaster preparedness training).

2013 December

Creating the culture of safe and effective use of pesticides or alternatives to pesticide usage among 5000 farmers in 500 villages of nine coastal districts.

2013 December
Disaster preparedness with old age people and vulnerable communities. 2013

Insurance coverage to 10,000 vulnerable families as a disaster preparedness activity in nine coastal districts. 2012

Orientation on CBRNE to taskforce members. 2012
2003 United Nations Sasakawa Award for Disaster Reduction

Certificate of Distinction

Presented to
Meda Gurudutt Prasad (CADME)
Andhra Pradesh, India

In appreciation for his outstanding contribution to developing a global culture of prevention, thereby furthering the goals of the International Strategy for Disaster Reduction.

Jan Egeland
Under-Secretary-General for Humanitarian Affairs
United Nations

Bonn, 16 October 2003
THANKS FOR THE PATIENCE