Culture of Disaster Preparedness

CUBA & India
KEY TERMS

- **Disaster Mitigation**: Physical and Structural Measures to reduce the Impact of Potential Natural Hazards

- **Disaster Preparedness**: Physical, Structural, Political, Human Resource Development & Socio-Economic Processes for reducing disaster Risk & Vulnerability

- **Culture of Preparedness**: A Conscious and consistent Practice, integral to mainstream policies and practices
Living with Natural Hazards

- People generally believe that Government should help us and we know that if government fail, defense forces chip in—but they can’t always help as we have seen in A&N Islands and in the US.

- Risk perception and disaster preparedness need become a culture and a conscious practice. Policy decisions need to take risk perceptions more seriously and disaster preparedness should be recognized as an issue of governance and performance.
KEY TO DISASTER PREPAREDNESS

- Multi stakeholder participation - Government, NGOs, community/civil society/media/academicians ......
- Culture of Preparedness
- DP & Development interface
Disaster Scenario in India

- More than 500,000 lives lost between 1994 & 2005
- An average of 70 million people affected every year
- Average annual loss of USD 2 Billions
- Losses expected to double in the next decade
- More of a Reactive Approach
- Separating Disaster Management & Development Processes
- Lack of Public awareness and appreciation on the need for Disaster Preparedness
- Media & Civil Society treats disasters victims with curiosity & sympathy & ad hoc activism but not with a sense of duty & responsibility
- Academic & Scientific Knowledge seldom transfers into practice, due to lack of access to communities
Government Efforts!

- Emphasis on warning and evacuation
- Control rooms at district and state levels
- Post disaster compensation, rehabilitation
- Shelters
- Disaster mitigation
- Research & Training
NGO Response.....

- Cash, Cloths, Medicines, Tents,
- Water Purification
- Repairs
- Reconstruction
- Technical support, etc.
- Relax until next disaster
- Disaster Preparedness with a Project Approach
Media Approach to Disasters

- Plight of suffering assumes more priority in media followed by issues in relief and rehabilitation, but never on preparedness.
- During disasters government and media at logger heads; Government for not sharing accurate information and media for always blaming and seldom highlighting achievements.
- On preparedness - Most of the coverage in the form of events like press conferences, workshops, but not really on the discussions within these events.
Expectations from the Media

- Shouldn’t conclude in haste, check figures, don’t rush to project claims, restrain from exaggeration, don’t get carried away with VIP visits
- Review existing policies and practices, highlight grey areas and suggest improvements
- Highlight main causes of vulnerability
- Question if the government and civil society is adequately prepared to deal with a sudden disaster—be it cyclone, floods, earthquake or a terrorist attack?
- Disseminate Preparedness guidelines and Tips
Need for a Paradigm Shift

- Disaster Preparedness Should become a culture and conscious practices
- Response to a Natural Hazard must come from where it strikes so as to reduce the time gap between a natural hazard and the Response
- NGOs must implement development programs with Disaster Preparedness perspective, especially in vulnerable areas
- Civil society (indirect victims) must debate the issue of preparedness, so as to ensure appropriate policies and practices
- International Development Agencies must reach out to local social, secular and spiritual organizations for mutual learning of skills and expand their reach
Integration of Disaster Preparedness

- Integration of disaster management strategy into Environment, Poverty Eradication, Agriculture, Irrigation, Infrastructure development etc.
- Integrate key players in the Governance system and key government departments.
- Ensure sufficient provisions for key agencies for continuous risk assessment, contingency planning, promote risk transfer strategies like insurance, regular training for individuals and institutions.
- Identify specific poverty reduction schemes and implementation processes for integrating disaster risk reduction activities.
Some Community based Development linked preparedness examples from Tear fund Report (yet to be published)

FINANCIAL

- Diversification of Livelihood/Income: Preparing for alternative & buffer farm/non farm/sea/non sea livelihood options (India, Zimbabwe)
- Hazard Resistant Agriculture: Drought resistant varieties, salt resistant crops, situation based alternative crops, creation of grain banks (India, Bangladesh, Srilanka, Malwai, etc).
- Community Saving: Community contingency funds, Insurance (India)
- House Hold Asset Management: Timely disposal of assets when prices are high, safe guarding assets with proper measures (India, Bangladesh)
- Cost Sharing: Pooling resources to procure essential assets such as irrigation pumps, bund construction, shelter repairs, etc (Srilanka & India)
Some Community based Development linked preparedness examples from Tear fund Report

**PHYSICAL**

- Development of large-scale mangrove reforestation to protect coastal dikes for communities and their rice fields (Vietnam).
- Continuous (annual) afforestation within households to create living assets which compensate for rehabilitation costs (Bangladesh).
- Sand bagging and tree planting to prevent the erosion of river banks (Buko, Tao, Philippines) (Flood).
- Promotion of plants / trees which absorb and withstand flood waters (India).
- Conserving catchment areas and river banks with trees and strong rooted grass to reduce risk of flooding (Malawi).
- Planting of mangroves and other local varieties along the coastline to serve as a natural barrier from sea surges and coastal erosion (Sri Lanka).
- Cash for work planting of mangrove for coastal protection, with planters taking care of their own demarcated area and upholding their rights to harvest marine products thriving in the forests (clams, mussels, crabs for sale to fish pond owners etc.) (Vietnam).
Some Community based Development linked preparedness examples from Tear fund Report

Early Warning Communication

- Accurate predictions and forecasts [via the] radio service so that people build trust in them (Zimbabwe)
- [The use of a] local communication system (using hand-held microphones by volunteers) for early warning (Bangladesh)
- [The use of] local [radio] stations and other “live” communication systems (Nepal)
- [The use of the] radio.... to communicate information before floods (Malawi)
- [Government officials] sending messages to village heads to warn communities of flood danger (Malawi)
- Utilising weather forecast information to monitor [a] disaster situation during the harvesting periods to [prevent loss of] farmers’ income (Thailand)
Some Community based Development linked preparedness examples from Tear fund Report

Health Care

- Hands on training [regarding the] use of water purifying tablets / chemicals to kill pathogens (Bangladesh)
- Provision of community health programmes to improve morbidity rates (General)
- [Raising of] health awareness on water borne diseases (India and Afghanistan)
- Public health promotion work to reduce people’s vulnerability to diseases (General)
- [Improving] health care knowledge (Dominican Republic)
CUBA

Cuba’s Development model reduces Disaster Risk
CUBA’s Life with Hurricanes

- 240 Hurricanes between 1983-2003
- Out of this seven are catastrophic hurricanes (winds greater than 245 km/h)
- About 08 were extreme hurricanes (wind speed between 210-249 km/h)
- About 20 extensive hurricanes (wind speed 178-209 km/h)
- Rest moderate (154-177 km/h) & Minimal (119-153 km/h) hurricanes
- 60,000 houses damaged (3000 fully damaged)
- Only 36 people were killed
- Same Hurricanes killed more than thousand people in Caribbean, Central America & the US

Cat 5: Catastrophic Hurricane, Cat 4: Extreme hurricane, Cat 3: Extensive Hurricane, Cat 2: Moderate Hurricane, Cat 1: Minimal Hurricane
## Different Impacts

<table>
<thead>
<tr>
<th>Hurricane &amp; Year</th>
<th>Category</th>
<th>Fatalities in Cuba</th>
<th>Fatalities in other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michelle 2000</td>
<td>4 in Cuba, 1 in other countries</td>
<td>5</td>
<td>Honduras-6, Nicargua-4, Jamaica-2</td>
</tr>
<tr>
<td>Irene 1999</td>
<td>4 in Cuba, 2 in US</td>
<td>4</td>
<td>US-12</td>
</tr>
<tr>
<td>Georges 1998</td>
<td>4 in Cuba, 3 in other countries</td>
<td>6</td>
<td>Dom Rep-380, Haiti-209, US-10</td>
</tr>
<tr>
<td>Lili 1996</td>
<td>4 in Cuba, 2 in other countries</td>
<td>0</td>
<td>Honduras-5, Costarica-7, US-6</td>
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</tbody>
</table>
Key Features

- Self Help, social cohesion, citizen based social protection
- Trust between government authorities and civil society
- Political commitment to risk reduction
- Concrete plans to save lives, evacuation plans, etc.
- Investment in human & economic development
- An effective risk communication system
- Institutionalized memory of disasters
- INVESTMENT IN SOCIAL CAPITAL
- Investment in institutional capital (transparent, accountable and capable institutions for disaster mitigation)
LEGAL FRAMEWORK

- Cuban National Civil Defence 1976 Act mandates every adult citizen to undergo civil defence training.
- Legal decree 1997 details the role of ministries, social organizations, and all public entities in case of emergency.
- Law defines centralized decision making with the President, head of civil defence & Minister of the Armed Forces.
- Law also lays out decision-making by local authorities when circumstances so require.
Disaster Mitigation at the Community Level

Developing a Culture of Safety:

- Awareness of procedures & measures to follow in case of Hurricanes (key disaster threat)
- Knowledge of stages of emergency warning, where to get information, how to secure houses, where to go for shelter,
- Basic Trust in government capacity and intention to protect them.
- Political commitment to the protection of human lives.
Disaster Mitigation at the Community Level

EDUCATION

- Disaster Preparedness & Prevention are part of all school and University curricula.
- Every Cuban attends school & school plays a major role in mass education & risk reduction. Wide varieties of teaching material is prepared.
- Media broadcasts risk reduction; doctors teach health risk reduction in disasters.
- Annual updation of contingency plans at various levels is mandatory.
Community Level Disaster Mitigation

Community Organization & Social Capital:
- Cuban people are active in several types of social organizations, women organizations, youth organizations, particularly local mitigation committees.
- All the social organizations discuss disaster risk issues apart from other development issues.
- Disaster mitigation committees develop systematic human resource use and management plans, regular orientation to doctors, teachers, engineers and other professionals.
- Early warning & communication, Community risk mapping, local & national simulation exercises, etc.
Community Disaster Mitigation

Family Level Preparedness:
- Learning about public shelter
- Familiarity with evacuation routes.
- Keep a checklist of fire, police, ambulance, etc.
- Awareness among all responsible members of the household how and when to turn off the water, gas, and electricity at the main switches or valves.
- Adequate Insurance Coverage
- Complete inventory of home, garage, and surrounding property
- Keeping the originals of important documents in a safe deposit box
- EW Messages from Local radio or television stations are taken seriously.
CUBA Disaster Mitigation

- Any Child in Schools can give an explanation how they prepare and what they do in emergencies.
- They know what to do in phases.
- How to gather things from houses and put them away to safety, shut off taps, electricity etc.
- Voluntary Evacuation by 700,000 people during hurricane Michelle recently.
Development Model for Vulnerability Reduction

- Universal Access to Services: Health, Education, Physical Infrastructure
- Policies to reduce social and economic disparities
- Considerable Investment in Human Development: 45 years of investment in human capital provided the country with well-trained professionals.
- Investment in Infrastructure: Both in rural and urban areas reduced urban density and range of resources available in the rural areas that are used for disaster mitigation.
- Social and Economic Organization: Promoting solidarity, cohesion, cooperation, and creates social capital that can be applied for risk reduction.
Unicef Efforts in West Bengal

Working with the Government
Aims of CBDP in WB

**Reduction in**
- Number of deaths
- Number of diarrhoea cases and deaths
- Loss/death of cattle
- Loss/death of poultry,
- Loss of key documents and valuables
- Damage to children`s books, certificates
- Damage to crops and trade tools
- Damage to house, furniture, etc

- Availability of food in affected households during first 5-7 days of flood
Self Reliance
CBDP in Phases

- **Year 1:**
  - Knowing the community and creating a supportive environment for CBDP.
  - Participatory Learning and Action (PLA).
  - CBDP Plan of Action Preparation.
  - CBDP Plan approval and
  - Task force creation and training.
- **Year 2:**
  - Community Preparedness (temporary shelters, life jackets, raising handpumps, etc).
  - Family Preparedness (Family survival kits, child survival kits, protection of family valuables and documents).
  - Mock drill.
- **Year 3:**
  - Child and family support systems (protection of children, support to pregnant women, etc).
  - Behaviour Change Communication in Emergency (Under 3 child care covering exclusive breast feeding, keeping the baby warm, hand washing and diarrhoea management).
  - Sustainability and integration with Panchayats and ownership by panchayats.
CBDP Plan of Action
POA process in CBDP

Rapport Building
- Transect Walk
- Participatory Mappings
  - Data Analysis
  - Presentation
    - Plan Preparation
      - Monitoring and revisiting the Plan
  - Plan Presentation at Gram Sansad
  - Plan Implementation

Community involvement at all level
Community Ownership

- Vulnerable community jointly undertake a vulnerability analysis and risk assessment through a participatory process.
- Electors prepare, present and approve a CBDP plan in the gram sansad meeting.
- Communities take action on their plan to increase their capacity and reduce their vulnerability and consequently are better prepared to limit the damages of a flood on their lives and livelihood.
In that Gram Sava about Rs.1,10,000/- (Rupees One lakh Ten Thousand only) was allotted for the disaster preparedness for the year 2007-08.

The Gram Panchayat is planning to prepare a five year CBDP plan with an annual increase of 10% per year.
CBDP in Bengal

Strategic thinking
Strategic Planning
Strategic Action

Unicef/IAG

Facilitation/organisation
Providing linkage with...

NGOs

Planning and Action
Empowerment

Communities
## Impact of CBDP on Flood

### Comparative Assessment Data

<table>
<thead>
<tr>
<th></th>
<th>Year 2000</th>
<th>Year 2006</th>
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<tbody>
<tr>
<td><strong>Flood</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days of water submergence</td>
<td>40</td>
<td>25</td>
</tr>
<tr>
<td>Maximum height of water (feet)</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>No. of houses fully damaged</td>
<td>272</td>
<td>84</td>
</tr>
<tr>
<td>No. of houses partially damaged</td>
<td>480</td>
<td>124</td>
</tr>
<tr>
<td>No. of lives lost</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>No. of diarrhoea deaths</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>No. of diarrhoea cases</td>
<td>85</td>
<td>3</td>
</tr>
</tbody>
</table>
Implementation

- Establishing and training of Task forces:
  - early warning
  - health
  - water & sanitation
  - rescue
  - shelter
  - protection
  - vulnerability
  - children
Oxfam Efforts in Andhra Pradesh

Community Level Preparedness
Vulnerability Reduction
Disaster Risk Transfer
Reaching Out...
Community Level Preparedness Culture

- **Safe Habitation**: How physically secure is our environment?
- **Clear Planning**: Do we have written procedures & plans to manage a crisis?
- **Community Preparedness**: Are our habitation concerns and risk perception integrated into community development and resource management planning?
- **Recovery Plan**: After all the preparedness, there can still be damage. What is our recovery plan in such a situation (contingency funds, alternative accommodation, etc.)?
Community Level Preparedness

- A Process that involves the people of a particular region (representing all identical groups) physically, financially and socially in developing disaster management plan and carrying it out.

- Community Identifies threats, needs and plans and implements disaster management plan according to the local situation.
The Need (Why)?

- To reduce dependency on External Aid
- To tackle disaster at its source
- Communities Know Better about the Threats & Suitable Prevention Possibilities
- To ensure proper and timely supply of support to the affected
- To Ensure that relief is not wasted
The Common Process (How?)

- Prepare area Map
- Identify vulnerable areas and families (In Mizoram in some areas where the soil is lose considered as physically vulnerable to Landslides)
- Discuss the past history of disasters

- Form Action Groups
- Participation of Government official necessary because they have broader perspective
- Document traditional knowledge
Contingency Planning

Who is at Risk
- Elderly & Disabled
- Children & Pregnant Women
- Sick & Ailing People
- Widows & Single Women
- Families living in the most vulnerable location

What is at Risk
- Cattle & Livestock
- Valuable documents
- Weak Structures
- Livelihood assets such as boats, looms etc.
- Pumps & other installments
- Standing crops
- Water resources
VILLAGE RISK MAPPING
TASK FORCE GROUPS FORMATION

- Early Warning & Communication Group
- Shelter Management Group
- Evacuation & Rescue Group
- First Aid & Health Group
- Water & Sanitation Groups
- Damage Assessment Group
- Counseling Group
- Carcass disposal
- Relief distribution
Rescue Equipment

- With Locally Available Material
D.P Training for School Children
Community to Community

- Horizontal Approach
Community Contingency Funds

- Community Contribution to Contingency Fund in Cash or Food grains.
Reaching Out.....

- Training for NCC Cadets, ex-servicemen, etc.
- Seminars and training with media schools and media persons.
- Engagement with Academic institutions for teaching and curriculum development.
- Knowledge & Capacity sharing with various Government and non-government agencies.
THANK YOU

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