Drills

- Ensure that siren tests are approved and scheduled with the proper officials.
- Coordinate with village units for response/drill during test tsunami evacuation.
- Conduct simultaneous tsunami evacuation drills in various villages.
- Engage medical and rescue personnel in the drill with coordination at the district level.
- \bullet Debrief after the exercise. District officials meet to assess village preparedness and next steps.

Local and national warning signals were activated to test the system's ability to alert communities of impending disasters. Following the signal test, three communities evacuated to safe areas, and practiced procedures such as first aid.



CONTACT US! JOIN US!

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COMMUNITY-BASED DISASTER MANAGEMENT

The goal of the United States Agency for International Development's Sustainable Coastal Livelihoods Program is to make the communities more resilient to the impacts of natural hazards. This has involved strengthening the economy, infrastructure and disaster preparedness capabilities in the Program area. Specifically, the Program conducted a series of six activities over 16 months in community-based disaster management (CBDM) with the goal of establishing a CBDM system for villages in the Program area. The program provided local community members with the skills needed to implement this system, including developing



Community engagement in the CBDM process is essential to achieve buy-in and reduce impacts of future disaster events.

solutions for the CBDM needs in their areas. These communities were able to assess and rank the risks, develop mitigation strategies, and access governmental resources to enhance disaster preparedness.

RISK ASSESSMENT, RANKING AND MAPPING

Participatory Risk Assessment combines common methods used in Participatory Rural Appraisal (PRA) known as social mapping and calendar development to assess risk from natural disasters in local surroundings. Official Village Disaster Volunteers, together with resource people from government agencies (local, provincial and national disaster management officials), are led through a series of exercises designed to increase the understanding of risks from natural and man-made disasters. Key actions that have to take place are for communities to produce a hazard map and to determine vulnerabilities.

BACK COVER - 8 FRONT COVER - 1

MAP AREAS TO INCLUDE

Hazard-related

- Evacuation route
- Past inundation
- Warning tower
- Safe zones/shelters

Kev Places

- Houses (including disabled/elderly homes)
- Hospital/health center
- School
- Buildings (religious, municipal, community)
- Piers, landmarks

Natural Resources

- Mangroves
- Rivers
- Mountains

Produce a hazard map. The facilitator works with the targeted group of stakeholders to:

- Conduct a visual survey of the area.
- Draw maps of the area and highlight potential natural hazards and risks.
- Use existing maps and relevant information from governmental agencies, non-governmental organizations, or universities to assist in mapping the resources and risks, such as flood-prone areas, inundation, or earthquake zones.

Determine vulnerabilities. In a workshop, villagers identify potential risks that they might experience throughout the year and depict these on both a map and a calendar.

• On a spreadsheet, list potential hazards and livelihoods by month of the year.

- Rank each risk/hazard using a scoring system of 1-10 (1 indicates highest ranking, 10 the lowest ranking) based on the participants' view of: overall importance, level of risk, severity, level of damage, damage to assets, loss of life, and difficulty of recovery.
- \bullet Participants provide input from their experience with tsunamis and other natural disasters to complete this exercise. In one community, villagers prioritized road accidents as the highest ranking risk, followed by typhoons, drought, brushfire, flood and landslide. Tsunamis were listed as the 9^{th} priority because they occur so infrequently.

	Months										_	_	Risk Ranking							Area in Village									
DISASTER RISKS	Jan	Peb	Mar	Apr	May	Jun	M	Aug	Sep	Oct	Nov	Dec	Overall Importance	Level of Risk	Severity	Level of Damage	Diamage of Assets	Loss of life	Difficulty of recovery	. 1	2	3	4	5	6	7 1			0 1
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DOCUPATION													Household	Income													_		_
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Risk Calendar depicting risks and vulnerabilities. Villagers identify the area of the village and the type of livelihood that could be impacted by potential hazards.

Establish village committees

Typical Committee Set-up for a Rural Village

- 1. Disaster Warning Committee
- 2. Evacuation Committee
- 3. Rescue Committee
- 4. Safety Committee
- 5. Medical Committee
- 6. Recovery Committee
- 7. Public Relations Committee

Coordinated by Suksamran District officials, local and national warning signals were activated to test the system's ability to alert communities of an impending natural disaster. Following the signal test, over 900 members of the three communities evacuated to safe areas in less than 20 minutes.

Committees have a direct line between community members and government disaster officials:

- Groups are preassigned with tasks that reduce risk, prepare the community in the event of a disaster and help to mitigate the effects if a disaster occurs.
- Subcommittees are established in each village.



The Buddy System includes a window placard, posted at those houses where people have need for assistance during

evacuation

Create a Buddy System

- Establishing a Buddy System in the community helps to ensure that special needs individuals are linked with others in case of evacuation.
- The community and village volunteers identify the houses of the elderly, disabled, and other high-needs groups.
- Post a placard on these houses.
- Complete and submit a form to the evacuation committee outlining the type of help needed by those households.

INSIDE BACK COVER - 7

EVACUATION PLANNING: KEY TO SUCCESSFUL RESPONSE

Develop disaster management plans

- Partner with Ranong Provincial Division of Disaster Management (DDPM).
- Plans include:
 - 1. Evacuation maps
 - 2. Household safety kits
 - 3. Plans for seven village subcommittees for various stages of disaster from preparation to recovery

Identify evacuation routes

- Work with government officials from NDWC, DDPM and local agencies to ground-truth government-designated/produced evacuation routes.
- Consider the constraints of the community—use of vehicles versus travel by foot.
- Walk evacuation routes to assess time constraints for village evacuation.
- Share tsunami experience from other places—mapping, evacuation.
- Identify overlooked or special needs groups such as fishers, students, elderly, health center patients, tourists, etc. and integrate their needs into the overall tsunami evacuation plan.

Develop a linkage of communitybased activities with other government initiatives

- Village-level plans incorporate tsunami warning, evacuation, mitigation, and education strategies.
- Discuss plans for monthly disaster readiness tests and an annual tsunami memorial and awareness event.

TYPICAL COMMITTEE SET-UP FOR A RURAL VILLAGE

- 1. Disaster Warning Committee
- 2. Evacuation Committee
- 3. Rescue Committee
- 4. Safety Committee
- **5. Medical Committee**
- 6. Recovery Committee
- 7. Public Relations Committee

Things to remember about risk assessment:

- Classroom work should be supplemented with an on-site risk assessment walk- about.
- Always consult with leaders to validate/verify the risks and proposed mitigation measures.
- The community needs to determine if they are addressing all hazards, both natural and manmade, or just natural.

Identify strategies to reduce or prevent impacts

- Strategies include training, policy/law/rule-making, enforcement, and/or physical modifications to infrastructure.
- These strategies should be discussed with the Tambon council, NGOs, district and provincial program officers. They may be able to allocate resources (financial and technical) through annual budgeting to implement key actions.

Socialize the risk assessment in the community

By this point, a small committee has been trained and has developed the risk assessment. The committee now sets up a meeting to:

- Introduce the CBDM Training team. (Who are we?)
- Explain the process of CBDM and the activities to date. (Why are we doing this and how did we arrive at this point?)
- Present the Risk Assessment Map and Evacuation Plan to village groups. (What problems has the committee identified? What are the recommendations to mitigate the identified problems?)
- Verify the outputs—lead discussion with village groups to verify outputs of the Risk Assessment Map and Evacuation Plan. (*Do the people in the village agree with what the committee has found?*)
- Make amendments and adjustments to Risk Map and Evacuation Plan as needed.
- Confirm next steps. (What are the next steps that must be taken to prepare the village in the case of a disaster?)

OUTREACH

Continual community outreach and engagement in the planning and implementation of disaster management actions builds a spirit of buy-in, and provides feedback and ground-truthing for all efforts. Greater detail can be provided to village maps and community disaster plans can be more participatory with the assignment of roles and responsibilities.

Create an education program

- Identify educational/training products that have been developed elsewhere which may be relevant and adapted to the local villages.
- Work with teachers and schools to present established curriculum.
- Select booklets with the appropriate level of detail and language to hand out to families.
- Utilize videotaped meetings for education materials in communities outside the focus area.

Produce a video of survivors' stories

- This "oral history" provides powerful messages to the community.
- Identify villagers willing to share their experience to record the event and prevent future loss of life.
- These experiences can be used for training and/or exhibition in the local memorial museum.

EXAMPLES OF PREPAREDNESS MEASURES TO REDUCE A TSUNAMI'S IMPACTS ON A VILLAGE IN SOUTHERN THAILAND (To be prepared by the village committee)

- Plant more mangrove forest every year
- Identify and improve alternative evacuate routes
- Build more shelters
- Before the crisis, develop multi-agency teams for response and recovery
- Install fixed ladders at all trees
- Set up an Emergency Committee
- Get volunteers for actions
- Develop and improve the community warning tower
- Designate on-duty officer and test the warning tower
- Set up a donation center for community

VILLAGE VOLUNTEERS: A CONDUIT TO THE COMMUNITY

Working at the Tambon level, identify 2-3 people from each village to be trained in disaster preparedness. Official Village Disaster Volunteers assist with local coordination and outreach and have proven to be a successful strategy to engage local villages in Community-Based Disaster Management.

Training Village Disaster Volunteers (VDVs)

- Provide basic instruction on various disasters invite local Department of Disaster Prevention and Mitigation to assist with training and provide content.
- Develop Disaster Risk Maps and use the Participatory Risk Appraisal tool to understand local risks.
- Have VDVs present their finding to other volunteers from the Tambon.
- Conduct CBDM training-of-trainers to enable volunteers to conduct village workshops.
- Have VDVs present their findings at village meetings/workshops for feedback form the local community.

The Role of VDVs

- Facilitate creation of Community-Based Risk Map, Disaster Plans and Evacuation Plans.
- Present findings at village meetings and facilitate feedback from villagers.
- Interact with villagers to collect survivor video footage.
- Conduct workshops/presentations at regularly held village meetings on Disaster Risk Management.
- Communicate with the Tambon Authority and the Department of Disaster Preparedness and Management about disaster planning, training and drills.



Community volunteers facilitate a meeting with villagers to identify risks and evacuation procedures

INSERT SECOND - 4