

Some Points on the Integration of Disaster Management (DM) in Community Based Coastal Resources Management (CBCRM)

Cluster Issues and Action Points All Fellows' Meeting, 14 June 2000

Significant Issues for the DM Cluster in CBCRM

1. Vulnerabilities of coastal communities to natural hazards
2. Human-made disasters such as oil spills, effect of sinking ships on the marketing/consumption of fishers' catch
3. Depletion of coastal resources
4. Conflict over resources and other social conflict

Identified Action Points for the DM Cluster in CBCRM

1. Decrease vulnerabilities of coastal communities to natural & man-made hazards
2. Develop capacities of people in disaster management
3. For emergencies in coastal communities, facilitate with DM organizations
4. Develop program in DM in coastal communities to be integrated in CBCRM; at the community level, to be a component of its development plan
5. Define DM framework in CBCRM
6. DM training customized for CBCRM
7. Monitor and document experiences and processes for theorizing

Disaster Management (DM) in CBCRM

Relevance

- The Philippines tops the list of the world's most disaster prone country from 1900 to 1991 with a total of 701 incidents or almost 8 disasters a year. India comes as a far second with 369 incidents. (study by CRED cited in PDI, 2/07/93)
- The Philippines' exposure to natural hazards is defined by the geographical and physical characteristics of the country. The long-running armed conflict, unrestricted environmental destruction and government policies that tend to overlook its inimical effects on the majority of the Filipino people and the environment cause displacement and more lasting damage.
- Philippines is an archipelago and consists of some 7,000 islands. Its coastline measures to more or less 28,692 kilometers. There are some 10,000 coastal barangays while 80% of all provinces have coastlines. (CDRC, 1994)
- "More than 80 % percent of the country's population reside within 50 km of the coast of the main islands.... The fisheries sector employs over one million people, or about 5% of the national labor force. Locally captured fish accounts for about

60% of the national protein consumption, making it second only to rice as a staple". (Ferrer et al (eds), 1996)

- "Fishers sector is one of the most neglected sectors in our society.... Fishers are the most marginalized among the rural poor." (Oxfam, 1999)
- Vulnerable conditions in coastal communities - "1) highly unequal distribution of power and power relations; and 2) poverty" (Ferrer et al (eds), 1996 p.201)

Particularities of CBCRM

- Hazards faced by coastal communities – natural (tsunami, typhoon, storm surge, etc) man-made (environmental degradation, fish kill, etc.) combination; Vulnerability factors - physical/material; social/organizational; attitudinal/motivational
 - "CBCRM is holistic and integrated.... Various program components including: research, organizing, training, advocacy, socio-economic or enterprise development"
- "Local communities work in partnership with government.... Unlike land-based ecosystems, marine ecosystems are open and have no demarcation to separate one area from another. Consequently, resource use people flows from one place to another and efforts to control resource utilization entail difficulties of conflict and political negotiation of rights. An idealistic view of a community being able to effectively manage marine resources without the legitimization of local and regional governments is ill placed in most places." (Ferrer et al, p. 196 - 197)

Locating DM in CBCRM

- refer to section on Developments in CBDM Relevant to CBCRM (pp. 3-8)
- making CBCRM holistic and integrated. Considering the community's disaster risks. CBDM contributing to people-centered and sustainable development in coastal communities.
- strengthening POs involved in CBCRM: pre-disaster activities, emergency responses as necessary, post-disaster activities incorporated in CBCRM components
- as an entry point to set up CBCRM: pre-disaster activities such as Disaster Preparedness Training focusing on Hazard Vulnerability Capacity Assessment and Community Counter Disaster Plan focusing on preparedness and mitigation measures to contain CBCRM components
- solidarity of fisher communities and NGOs with those who experience crises through emergency relief or other forms of solidarity; between coastal and upland communities

- addressing common vulnerability issues (related to disasters and development) across ecosystems and sectors
- learning experiences as part of CBCRM as a living framework. CBDM is also an evolving and dynamic framework. For disaster management organizations, opportunity to particularize CBDM for coastal communities.

Developments in Community-Based Disaster Management Relevant to CBCRM

Framework

- Growing appreciation of CBDM Approach in DM
- Paradigm shifts in disaster management

From emergency management to disaster risk management

Emergency Management Approach:

Focuses on the emergency itself and in actions carried out before and after the emergency, including emergency preparedness and recovery. It's objective is to mitigate the losses, damage and disruption when disasters occur and to facilitate a quick recovery. Assumes that disasters are recurring and inevitable.

Disaster Risk Management Approach:

Focuses on the underlying conditions of risk, generated by unsustainable development and which lead to disaster occurrence, and on actions intended to manage and reduce those risks. It's objective is to increase capacity to manage and reduce risks and hence the occurrence and magnitude of disasters

Source: Maskrey, 1998

- Disaster Risk =
$$\frac{\text{Hazard} \times \text{Vulnerability}}{\text{Capacity}}$$
 (ADPC, 2000)

A disaster occurs when a hazard strikes a vulnerable community or group while inherent capacity is not enough to withstand or cope with its adverse effects and impacts. The result is a general disruption of community functions, damage and loss to life, property, livelihood and the environment.

A hazard is an event or occurrence that has the potential for causing injury or damage

Vulnerabilities refer to long-term factors and weaknesses adversely affecting the ability of the community to respond to, cope with or recover quickly.

Capacities refer to resources and strengths that exist within people and their community which can be used to mitigate, prepare for, cope with effects or

quickly recover.

Note: Community people and outsiders need to understand each other's perception of disaster risks, before they think of implementing disaster risk reduction measures. Even among members of the community, perception of risks may differ and the community risk assessment and risk reduction planning are important processes for gaining unity and support.

- Aim of CBDM is reduce vulnerability and increase capacity to prepare for, cope with and mitigate damaging effects of disasters.
- Essential features of CBDM

Experiences in the implementation of CBDM point to the following essential features.

- *Centrality of the role of the community in disaster management.* The focus of attention in disaster management is the local community.
- *Disaster risk reduction as the foundation.* The primary content of disaster management activities revolves around addressing vulnerable conditions and roots of vulnerabilities. The main strategy is through increasing the community's capacities, their resources and coping strategies.
- *Linkage to the development process.* Disasters are viewed as unmanaged development risks and unresolved problems of the development process. CBDM should lead to a general improvement of quality of life of the vast majority of poor people and of the natural environment. CBDM contributes to people's empowerment -- to possess physical safety; to have more access and control of resources; to participate in decision making which affects their lives; to enjoy the benefits of a healthy environment.
- *Community as the key resource in disaster risk reduction.* The community is the key actor as well as the primary beneficiary of disaster risk reduction. Within the community, priority attention is given to the conditions of the most vulnerable as well as to their mobilization in the disaster risk reduction. The community participates in the whole process of disaster risk management from situational analysis to planning to implementation.
- *Application of multi-sectoral and multi-disciplinary approaches.* CBDM brings together the multitude of community stakeholders for disaster risk reduction to expand its resource base. The local community level links up with intermediate and national and even up to the international level to address the complexity of vulnerability issues. A wide range of approaches to disaster risk reduction are employed.
- *CBDM as an evolving and dynamic framework.* Lessons learned from practice continue to build into the theory of CBDM. The sharing of experiences, methodologies and tools by communities and CBDM practitioners continues to enrich practice.

Source: ADPC, 2000

Disaster Management Models

- CBDM Activities

CBDM covers a broad range of interventions undertaken before, during and after a disaster to prevent or minimize loss of life and property,

minimize human suffering and hasten recovery

Disaster Prevention covers measures to provide permanent protection from disasters or reduce the intensity/frequency of a hazardous event so that it does not become a disaster.

Disaster Mitigation includes measures taken in advance of a disaster aimed at reducing its adverse impact on the community, society and the environment.

Disaster Preparedness covers activities to enhance the ability to predict, respond to and cope with the effect of a disaster. It includes actions that assume an event will be disastrous and prepare people to react appropriately during and following the event.

Emergency Response covers measures required in search and rescue of survivors and in meeting basic survival needs for shelter, water, food and health care.

Recovery covers interventions in rehabilitation and reconstruction. It is the process undertaken after a disaster.

Note: Prevention, mitigation and preparedness interventions are directly linked to development activities.

- Predominant Model - Disaster Management Continuum (refer to illustration p. 6)
- Other Models Which are More Relevant to CBDM (refer to illustrations pp. 6-7)
 - Expand Contract Model (Kotze & Holloway, 1996)

Assumes that the disaster interventions of prevention, mitigation, emergency response and recovery can be carried out at all times in a disaster-prone community. However, the relative weighing of each component "contracts" or "expands" depending on the relationship between the hazard and the vulnerability of the community.

- Model used by the Citizens Disaster Response Center/Network
- Disaster Crunch Model (Blaikie et al, 1994)

Is a pressure and release model which shows that vulnerability (pressure) which is rooted in socio-economic and political processes has to be addressed (released) for disaster risk reduction.

The Disaster Crunch Model shows the relationship of hazards and a complex condition of vulnerabilities (in a situation of low capacities) in causing a disaster. The Disaster Release Model that the strategies for the reduction vulnerabilities. The outcome will be "safe" as opposed to "unsafe conditions", "sustainable" versus "unstable or fragile" livelihoods, "resilient or capable" versus "vulnerable" communities.

CBDM Process

1. Initiating the Process
2. Community Profiling
3. Community Risk Assessment : Hazard Vulnerability Capacity Assessment
: Community Measurement (Perception) of Risks
4. Disaster Risk Reduction Planning
5. Implementation and Monitoring
6. Evaluation and Feedback

Examples Practiced by the Citizen Disaster Response Center/Network to Reduce Disaster Risk at the Community Level by Building on People's Coping Strategies

- a. *Reinforcing people's existing livelihoods* to increase or maintain the current level of production and income: farm implements dispersal, draft animal dispersal, irrigation (expansion, rehabilitation, improvement of water-management), soil fertility improvement, seed dispersal (different nutritional value crops and vegetables), livestock dispersal, fishing implements dispersal.
- b. *Reinforcing people's coping strategies to reduce risks* like diversifying crops: cereals, legumes, vegetables, fruits, root crops and cash crops (mixed cropping, inter-cropping, backyard vegetable gardening, non-staple food); promotion and production of disaster resistant and other indigenous crops; propagation and production of planting materials (nursery); improve water supply; establish herbal gardens, alternative sources of income (like weaving, bamboo products, etc.); reliable social and organizational support structures (especially in times of out-migrating adults); post-harvest facilities (preserving and processing methods); improved storage methods, day care facilities.
- c. *Conducting seasonally based preparedness action*: drought, floods, pests, red tide, epidemics, and even militarization are seasonally in nature and are likely to happen in some areas. The key to effective action to combat disasters is a regular seasonal cycle of preparedness, like planting of disaster resistant crops, storage and post-harvest facilities, seed banks and nurseries, mobile resources (livestock, mills), temporary shift in sources of income and counter disaster planning.
- d. *Encouraging long-term investments* which increase the presence of fall-back resources in the community. These are resources which people rely on heavily in times of crisis, for instance, trees and forest products are fall-back resources. Cultivation of utility trees around homes and lands, maintaining forest reserves for food, fodder and cash, improving water catchments, protection of water sources, some SALT practices, etc. But also establishment of village pharmacy, training of community health workers, functional literacy are long term investments.
- e. *Strengthening social and organizational support structures* to establish a community spirit of cooperation, through organizational development and management, disaster response committee formation, counter disaster planning, leadership training, campaigning, functional literacy, day-care facilities, horse dispersal to facilitate communications, etc.
- f. *Making health and sanitation services available at the community level*, through capacity building of community health workers, establishment of medical/herbal gardens and village pharmacy, preparation of herbal medicines, first aid, mother and child care, supplementary feeding to third degree malnourished children, develop KSA on preventive health and nutrition (adults and children), promotion of breastfeeding, promotion of low-cost nutritious food, rehabilitation or provision of potable and accessible water, spring development, provision of latrines/toilets, education on personal hygiene and sanitation.
- g. *Conducting advocacy and campaigns* to press government, from local to national continually regarding policies and issues that affect the local food security and nutrition situation and/or that form a barrier to solve the problems. Community organizations should identify other groups and individuals to get support and cooperation. They might even build connections with local and national press. Campaigns will mainly focus on the government's policies generating vulnerability at the community level.