

COMMUNITY BASED DISASTER MANAGEMENT IN THE PHILIPPINES: MAKING A DIFERENCE IN PEOPLE'S LIVES

Lorna P. Victoria
Director, Center for Disaster Preparedness

ABSTRACT

Community participation has been recognized as the additional element in disaster management necessary to reverse the worldwide trend of increasing frequency and loss from disasters, build a culture of safety and disaster resilient communities, and ensure sustainable development for all. This paper highlights the features, processes, components, and gains of community based disaster management (CBDM) as showcased by good practices in community based preparedness and mitigation of key organizations involved in the Philippine Disaster Management Forum.

1. Introduction

Within the last decade, parallel efforts in various regions of the world called for a shift in paradigm from the prevailing emergency management framework to disaster risk management to reverse the increasing trend in disaster occurrence and loss, especially from small- and medium-scale disasters. These highlighted the need for proactive disaster management activities and the significant role of local communities. The community based approach also corrected the defects of the top-down approach in development planning and disaster management which failed to address local needs, ignored the potential of local resources and capacities, and may have even increased people's vulnerabilities.

The Philippines Among Most Disaster-Prone Countries

The Philippines shares with several Asian countries the unwelcome distinction of being one of the world's most disaster-prone countries. The Center for Research and Epidemiology of Disasters in Belgium recorded a total of 701 disaster incidents from 1900 – 1991, or almost 8 disasters a year. For the period 1987 to 2000, the National Disaster Coordinating Council recorded 523 disasters with total cost of damage of Php 150.071 Billion (about US\$ 30 Billion at present exchange rate of US\$ 1:Php 1), or some 37 disasters on the average annually.

Documentation by non-government organizations (NGOs) also covers local disasters which do not land in the newspapers but which are considered disasters at the community level. Aside from natural disasters, the figure includes human-induced disasters such as development aggression (development projects which are undertaken against the will of local communities), fire, labor repression, other industry- related events, armed conflict, and toxic waste contamination. The cumulative documented population affected by disasters from 1991 to 2000 is 96,907,837 individuals, which indicates that many Filipinos are repeatedly hit by disasters.

Taking On An Alternative Approach in Disaster Management

The government's inadequacy and the limitations of the prevailing view of disaster management at that time compelled NGOs and people's organizations to promote and develop an alternative approach with the organization of the Citizens' Disaster Response Center/Network (CDRC/N) in 1984.

After the experience of successive "mega-disasters" within the last decade and the positive case stories of community mobilization in disaster preparedness and mitigation, there have been more communities, people's organizations and NGOs, government agencies and local government units which have taken on community based disaster management. The Philippine National Red Cross has implemented its Integrated Community Disaster Planning Program since 1994. Other agencies such as World Vision, Caritas-Manila and the Philippine Relief and Development Services have integrated CBDM into their existing emergency services. In the government sector, the Department of Social Welfare and Development through its Bureau Emergency Assistance has promoted Family and Community Disaster Preparedness to local government units. The municipality of Guagua and the province of Albay in the environs of Mt. Pinatubo in Central Luzon and Mayon Volcano in Southern Luzon respectively, are among local government units which are recognized to excel in the local and community level disaster management.

In 2002 the Philippine Disaster Management Forum (PDMF), a network involving key disaster management agencies and advocates of CBDM, has emerged. The First Philippine Conference on Community Based Disaster Management will be held in November, 2002 with community partners of the PDMF, national government agencies and local government units interacting with one another. The Center for Disaster Preparedness (CDP), a spin-off organization from the Training and Education Desk of CDRC, assumes anchor organization role for the PDMF.

2. Elements and features of community based disaster management

Whether a disaster is major or minor, of national or local proportion, it is the people at the community or village level who suffer most its adverse effects. They use coping and survival strategies to face and respond to the situation long before outside help from NGOs or the government arrives. They are interested to protect themselves from the damage and harm through community based disaster preparedness and mitigation. .

The following key elements of CBDM can be derived from practice in CBDM in the Philippines (which generally parallels experiences in other countries)

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- ?? *people's participation* - community members are the main actors and propellers; while sustaining the CBDM process, they also directly share in the benefits of disaster preparedness, mitigation and development.
- ?? *priority for the most vulnerable groups, families, and people in the community* - in the urban areas the most vulnerable sectors are generally the urban poor and informal sector while in the rural areas, these are the subsistence farmers, fisherfolk and indigenous people; also more vulnerable are the elderly, the differently abled, children and women (because of their care giving and social function roles)

- ?? *risk reduction measures are community-specific* and are identified after an analysis of the community's disaster risk (hazards, vulnerabilities and capacities and consideration of varying perceptions of disaster risk)
- ?? *existing coping mechanisms and capacities are recognized* - CBDM builds upon and strengthens existing coping strategies and capacities; most common social/organizational values and mechanism are cooperation, community/people's organizations, and local knowledge and resources
- ?? *the aim is to reduce vulnerabilities by strengthening capacities; the goal is building disaster resilient communities*
- ?? *links disaster risk reduction with development* - addresses vulnerable conditions and causes of vulnerabilities
- ?? *outsiders have supporting and facilitating role* - NGOs have supporting, facilitating and catalytic role, but while NGOs should plan for phase-out, government's role is integral to enable and institutionalize the CBDM process; partnerships with less vulnerable groups and other communities

Closely related to the elements and features cited above are the principles of CBDM activities and programs. These also serve as overall targets to work for and parameters/indicators of performance to keep track of.

- ?? *participatory process and content*: involvement of community members, particularly the most vulnerable sectors and groups in the whole process of risk assessment, identification of mitigation & preparedness measures, decision making, implementation; the community directly benefits from the risk reduction and development process
- ?? *responsive*: based on the community's felt and urgent needs; considers the community's perception and prioritization of disaster risks and risk reduction measures so the community can claim ownership
- ?? *integrated*: pre-, during and post-disaster measures are planned and implemented as necessary by the community; there is linkage of the community with other communities, organizations and government units/agencies at various levels especially for vulnerabilities which the local community can not address by itself
- ?? *proactive*: stress on pre-disaster measures of prevention, mitigation and preparedness
- ?? *comprehensive*: structural (hard, physical) and non-structural (soft, health, literacy, public awareness, education and training, livelihood, community organizing, advocacy, reforestation and environmental protection, etc) preparedness and mitigation measures are undertaken; short-, medium- term and long-term measures to address vulnerabilities
- ?? *multi-sectoral and multi-disciplinary*: considers roles and participation of all stakeholders in the community; combines indigenous/local knowledge and resources with science and technology and support from outsiders; addresses concerns of various stakeholders while upholding the basic interest of the most vulnerable sectors and groups
- ?? *empowering*: people's options and capacities are increased; more access to and control of resources and basic social services through concerted action; more meaningful participation in decision making which affects their lives; more control over the natural and physical environment; participation in CBDM develops the confidence of community members to participate in other development endeavors.

?? *developmental*: contributes to addressing and reducing the complex relation of conditions, factors and processes of vulnerabilities present in society, including poverty, social inequity and environmental resources depletion and degradation

Box 1. Capacity Building Essential in Vulnerability Reduction (Morillo, 2001 and MRRS, 2001)

The Citizens' Disaster Response Center/Network is generally recognized among the organizations in the Philippine Disaster Management Forum as having pioneered in community based disaster management since 1984. The features of its citizenry-based development-oriented disaster response (CBDO-DR) has found applications in many CBDM programs:

- ??The goal is to reduce people's vulnerability by increasing their capacities to prepare for, to cope with and to mitigate the adverse effects of disasters. Aware and organized communities can pressure government to implement policies and programs recognizing people's needs and interests and promoting a safer environment.
- ??People affected by disasters are active actors in rebuilding their life and livelihood. People's existing capacities are recognized and further strengthened.
- ??It addresses roots of people's vulnerabilities and contributes to transforming or removing structures generating inequity and underdevelopment.
- ??People's participation is essential in all phases (pre-,during, post) and process (risk assessment to counter disaster planning and contributes to building their capacities.
- ??Premium on building organizational capacity of most-vulnerable communities through formation of through formation of grassroots disaster response organizations,
- ??The less vulnerable sectors are mobilized into a partnership with the vulnerable sectors in disaster management and development work

CDRC/N's mitigation measures are mostly non-structural in nature and directed to capability building in disaster preparedness and mitigation such as community organizing, food security, nutrition improvement, disaster management training, public awareness, and advocacy. CDRN's Food Security and Improvement Program (FSNIP) enhanced the capacity of vulnerable communities to withstand the effects of disasters through food and income sources diversification, increasing access to food supply, and improvement in nutritional status of beneficiaries, especially children..

The village of Ag-agama, an indigenous community in the Cordillera, Northern Luzon regularly experiences typhoons, drought, pest infestation, and earthquakes. Disaster events have become windows of opportunity for preparing and strengthening community capacities for the next disaster that is most likely to happen.

After the Ag-Agama community profiling workshop using Participatory Rapid Appraisal tools, a community development plan for two years was formulated. Diversification of food and income sources included dispersal of vegetable seeds, fruit seedlings and farm implements, sustainable agriculture training, construction of waterworks, rehabilitation of the community irrigation system, livestock and fish production, and dispersal of draft animals and veterinary medicines. Aside from increasing access to food supply, health and nutrition related activities focused on de-worming of children, sanitation campaigns, construction of latrines, establishment of village pharmacy and herbal gardens, and medical missions. Training and education covered disaster management, functional literacy campaigns, and organizational development support.

An evaluation of the effectiveness of CDRC/N's CBDM work by its Core Donors in 1999 concluded: *'The key (to effectiveness) is increased self-confidence (of vulnerable communities) through meaningful participation, one of the central elements of the CBDO-DR approach. As a rule, not only the organized members of the community benefit from counter disaster planning, but also the unorganized.'*

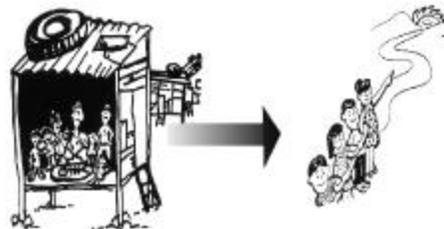
3. Process To Transform At-risk communities to Disaster Resilient Communities

In general, the goal of CBDM is to transform vulnerable or at-risk communities to disaster resilient communities. While resilience is a new term in CBDM in the Philippines, community members easily grasp the concept when illustrated with the bamboo which sways when battered by strong winds but stays firmly rooted and weathers the storm.

Although steps may vary from community contexts and organizational mandates, the process and requisites for disaster risk reduction can be generalized as follows:

1. Initiating the process - linkage and building rapport with community; community or outsiders may initiate
2. Community Profiling - initial understanding of disaster situation and orientation on CBDM
3. Community Risk Assessment - participatory assessment of hazards, vulnerabilities, capacities and people's perception of risks
3. Formulation of Initial Disaster Risk Reduction Plan - community counter disaster, disaster management, development plan or action plan; identification of appropriate mitigation and preparedness measures including public awareness, training and education; action plan
4. Formation of Community Disaster Response Organization - community organizing and mobilization, capability building in preparedness and mitigation, organizational development and strengthening
5. Implementation of short-, medium-, and long-term risk reduction measures, activities, projects and programs - implementation strategies and mechanisms; organizational/institutional strengthening
6. Monitoring and Evaluation - continuous improvement of disaster risk reduction plan/community counter disaster plan, identification of success factors and improvement of weak areas; documentation and dissemination of good practices for replication

Within this process, the formation and strengthening of community disaster response organization or community disaster management volunteers team is the key to mobilizing communities for sustainable disaster risk reduction. The community volunteers, disaster management committee, and disaster response organization are the necessary interface or the channel for outsiders such as NGOs or government agencies to assist/support the community at-large. The community groups and organizations are essential in sustaining the risk reduction process for the community to meet intended aims and targets in CBDM.



HV_c
At- risk Community

HC_v
Resilient Community

Box 2. Replicating Ideally Prepared Communities (Abinales, 2002 and Heijmans & Victoria, 2001)

Although Buklod Tao (People Bonded Together) is the only people's organization in the newly formed Philippine Disaster Management Forum, it ensures that the presence, voice and interests of communities in CBDM are always upheld. After successfully engaging in disaster preparedness and emergency response activities such as organized evacuation, search & rescue and evacuation center management in their community since 1997, Buklod Tao has taken on the task of assisting other vulnerable communities build capacities in CBDM.

Buklod Tao is an environmental people's organization formed by residents of Dona Pepeng Subdivision and informal settlers of North and South Libis, Bgy. Banaba, San Mateo in February 1997 after community mobilization against a construction company's plan to put up a cement batching plant in an adjacent agricultural land. They protested that the project would aggravate regular flooding in the community considering its location at the delta of the Nangka and Marikina Rivers.

After a one-day Disaster Management and Preparedness Seminar in June 1997, Buklod Tao formed a Disaster Response Committee (DRC) composed of 33 members and formulated a Counter Disaster Plan. Three disaster management teams were organized and emergency rescue and evacuation plans were detailed (including fabrication of 3 fiberglass boats using local expertise and labor and practice rescue maneuvers in the river). From the Barangay Council, Buklod Tao was able to secure one life jacket. From other sources, the organization was able to tap funds (around Php 30,000 or US600) to purchase flashlights, batteries, ropes, megaphones, first aid kits and materials to build three rescue boats.

Two months after the disaster preparedness seminar, a typhoon hit the community again. Although several houses were swept away by the waters, no one was killed and many people were able to save their belongings. Since then, when typhoons hit the area everybody can be brought to safety because of flood-level monitoring, early warning, evacuation, rescue operations, and relief assistance activities of the DRC and Buklod Tao.

Word of Buklod's activities have circulated and neighboring vulnerable communities request assistance in training and formation of their own DRC. Aside from engaging in its 4 major community programs – disaster preparedness, advocacy & environmental paralegal, information education & reading center, and waste redemption – in North and South Libis, they have helped in capability building in disaster preparedness and mitigation in Banaba Extension. A one-day Disaster Management Orientation (DMO) was followed by a 2-day Disaster Preparedness Training (DPT) in January 2002 with the formation of a DRC as an output. Buklod has also helped this DRC by passing on its old but still serviceable preparedness logistics.

Following the parish-sponsored DMO held in Bgy. Ampid, San Mateo with Buklod leaders as resource persons, Hazard Capacity Vulnerability Assessment Workshops were conducted with villagers in 4 nearby communities -- Riverside Libis, R Dulo, R. Bungad and Pulang Lupa, all part of Bgy. Sto. Nino. In June 2001, a 2-day DPT was held in Sitio Gipit. Almost a year after, a Counter Disaster Planning Session was held and a DRC was formed. Upon referral by the Social Action Center of Antipolo City, Buklod Tao has also assisted in the formation of a Disaster Management Committee in the far-flung rural community in Bgy. Calawis, Antipolo City, some 40 kilometers from Manila. After the 2-day DPT, the Calawis Community Based Disaster Group was formed. Its initial activities include mobilizing resources to finance and equip disaster preparedness requirements.

Although Buklod Tao has honed skills in community disaster preparedness, disaster mitigation is a more complex undertaking. Recent riprapping by the government of a portion of the bank of the Nangka River has changed the course of the water, causing soil erosion and landslide of parts of North and South Libis. Within October 2002, community sandbagging was undertaken as an erosion control measure. Various groups, including the Corporate Network for Disaster Response, were tapped for the logistics for the activity. Soil erosion and landslide are new hazards which Buklod Tao and the communities have difficulty in coping with.

Experience in CBDM point to the following essential components/requisites of CBDM. :

- ?? Capability building in disaster management - sustained education and training activities; sustained public awareness using local language and culture
- ?? Community Disaster Response Organization - disaster management teams, disaster response committee, disaster management committee, disaster management network; etc.
- ?? Counter Disaster Plan – Emergency/Contingency Plan; Counter Disaster Plan; Preparedness and Mitigation Plan; Community Development Plan
- ?? Disasters Risk Reduction – Development Continuum - linking vulnerability reduction and capacity building to achieving sustainable people-centered development
- ?? Partnerships in Disaster Risk Reduction - partnerships of the vulnerable sectors with less vulnerable groups in CBDM; partnerships of the community with local government, NGOs and other communities

Box 3. Mobilizing in the Integrated Community Disaster Planning Program (PNRC, 2002)

Better known for its blood banking and emergency response programs, the Philippine National Red Cross (PNRC) undertook the proactive and community based approach in disaster management starting 1994 with its Integrated Community Disaster Planning Program (ICDPP).

Its approach involves the formation of the Barangay (village) Disaster Action Team (BDAT) whose members are elected by the community assembly from among sectoral organizations. Usually, the Barangay Captain (village head) is also the Chair of the BDAT. The ICDPP provides intensive training for the BDAT who later on conduct the risk assessment and local disaster action planning with the community members. In its preparation of hazard and resource maps, the ICDPP uses GPS together with other participatory tools. The BDAT leads the community in preparing the hazard and resource maps and 3-dimensional models, but the digitized maps are finalized in the PNRC central office. The digitized maps are the technical outputs of the ICDPP for turn-over to the municipal government to influence and improve land use planning. The BDAT members also use a lot of popular public awareness materials such as posters and comics on disaster preparedness for the process of problem identification and ranking solutions.

The ICDPP was piloted in Bgy. Bacun, Benguet, Mountain Province in Northern Luzon. Bacun is 2-kms. away from the road or about 2 hrs. hike without carrying anything. Especially during rainy season, the foot trails are slippery and there are many accidents in bringing the farm produce out of the community. For materials required for their flood control project to divert the flow of water and to concretize the foot trails, villagers persevered in the daunting task of carrying 2,000 sacks of cement bags along the mountain trails, 2 kms. above sea level.

In Bgy. Maasin of the town of Quezon in the island province of Palawan, the BDAT and community members have constructed a hanging bridge and health center and protected the mangroves areas from being converted into commercial fishponds. The community has provided the labor while Red Cross has provided the materials for the construction projects. Technical help in engineering design was provided by the municipal government. Since the project has been identified by the community as being urgent, and they have worked so hard to see the construction projects to completion, they continue to manage and sustain the project. The hanging bridge took 5 months to construct and is now used during flood to have access to the village center and for children to continue schooling. The village health center has been nominated in provincial and regional competitions for excellence in service.

5. Benefits of Community Participation in Disaster Preparedness and Mitigation

Experiences in the Philippines point to the following major benefits of involving communities in CBDM:

- ?? A wide range of innovative and do-able structural and non-structural preparedness and mitigation measures are identified and implemented to reduce vulnerabilities by building on and strengthening local coping strategies and capacities
- ?? Involving the community members throughout the process of risk assessment (hazard vulnerability capacity assessment) to disaster action planning (counter disaster planning) leads to ownership, commitment, individual and collective actions in disaster preparedness and mitigation
- ?? Community members mobilize resources from within (mostly labor) and outside the community so community disaster preparedness and mitigation is cost effective
- ?? Case stories that show and tell that CBDM works leads to replication and increased demand for CBDM
- ?? CBDM strengthens social cohesion and cooperation within the community and society
- ?? Community disaster preparedness and mitigation provides opportunities for the integration of disaster management into the local development planning processes and systems.
- ?? CBDM builds confidence among individuals, households, communities in undertaking disaster preparedness and mitigation as well other development-related endeavors. This leads to self- and community empowerment

6. Conclusion

Experiences in the Philippines affirm the effectiveness of involving communities in disaster preparedness and mitigation. However, local communities can not reduce all vulnerabilities on their own. While communities have built on local coping strategies and capacities to reduce some vulnerabilities, many necessary structural mitigation measures involve big capital outlay. More important, vulnerability is also a complex web of conditions, factors, and processes, which can only be reduced through complementary and concerted action among multiple-stakeholders from various disciplines and levels of the disaster management and development planning system.

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