

Community Profiling and Mapping for CREST

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Through the years, disaster occurrences have been frequent throughout the world especially on developing countries like the Philippines thus resulting into many cases of fatalities. Being a developing country, a high percentage of people in the Philippines are considered poor making them more vulnerable to the impact of disasters. With this said, the proponents discovered the need to establish a systematic method of community profiling of the urban poor to enhance disaster risk reduction.

1. Introduction

1.1. Nature of Disasters

1.1.1. Disaster is defined as a serious disruption of the functioning of the society, causing widespread human, material or environmental losses, which exceed the ability of the affected communities to cope using their own resource. Disaster occurs when the negative effects of the hazard are not well managed. (Abarquez and Murshed, 18)

1.2. Trends in Disasters

1.2.1. Since 1995, according to Centre for Research on the Epidemiology of Disasters (CRED), there is a huge increase in both frequency and impact of disasters especially typhoons and cyclones. It is notable that developing countries like the Philippines have the highest cases of disaster fatalities. This is because of the fact that most people from developing countries are poor thus making them more vulnerable to the impact of disasters. Vulnerability is an unsafe condition that can be physical, economic, social, behavioral and environmental (Anderson and Woodrow, 1989). With this said, different disaster organizations found in developing

countries are practicing Community-Based Disaster Risk Management (CBDRM).

2. Disaster Management

2.1. What is Disaster Management?

2.1.1. Disaster management aims to reduce or avoid potential losses from the hazards of disasters. There are four phases of disaster management: preparedness, mitigation, response, and recovery. Locally speaking, preparedness, mitigation and response are the focus of relevant organizations in disaster management today. The proponents can relate the cliché "Prevention is better than cure" on why these people focus on the first three phases of disaster management rather than recovery. In disaster management, the utilization of information is very important. These information will be coming from the past victims of disasters and potential victims of upcoming disasters. This is where Community-Based Disaster Risk Management will come into the picture

2.2. Community-Based Disaster Risk Management (CBDRM)

2.2.1. CBDRM is a process that communities at risk actively engage in to for identification, analysis, treatment, monitoring and evaluation of disaster risks for them to be

able to reduce their risk in disaster and improve their capacities. This only means that the people in the community are the ones actively involved in decision making and in the implementation of disaster risk management activities. The involvement of those involved is primary and the support of those who are least vulnerable to disaster is necessary. In CBDRM, local and national governments are involved and supportive. (Abarquez and Murshed 12) The goal of CBDRM is to reduce the chance of vulnerability and to reinforce the communities' capacity to cope with disaster risk they face. In risk reduction, there is a dire need for involvement with the people in the community. With this approach, the real needs and resources of the community will be considered. There is a high chance that problems will be addressed with appropriate involvement, with this approach.

3. CREST

3.1. Who, what are they?

3.1.1. The Community Response for Enlightenment, Service and Transformation (CREST, Inc.) is a non-government disaster response center based in Metro Manila, promoting community-based disaster management and a pro-people climate change adaptation initiatives where participation and protection of people's interest is the core concern. CREST operates through a network of people's organization based in Metro Manila, specifically Manila, Pasig, Quezon City, Pasay, Muntinlupa and the CAMANAVA growth-area, and in other disaster-prone areas. Formally established in June 20, 2005 by leaders

of community and church-based organization who have long been in the forefront of upholding the rights and welfare of the least served urban poor communities. It started from a movement of people's organization rendering relief assistance and community program. CREST was registered to SEC on October 17, 2005

3.1.2. CREST has 3 main functions as a Disaster Management Organization (DMO). It is as follows: Community Profiling, Hazard, Vulnerability and Capacity Assessment and Disaster Needs Capacity Assessment. With careful analysis, the proponents found the problems with the said functions and solved it using Information Technology.

4. The solution

4.1. Community Profiling and Mapping System for CREST

4.1.1. CREST Community Profiling and Mapping System was developed with the thorough understanding of the processes of Community Response for Enlightenment, Service and Transformation organization. The processes of CREST revolve around the pre- and post-disaster stages of Disaster Management. The proponents made sure that the system was tailor-fit to these processes and functions of CREST that promotes Community-Based Disaster Management (CBDM). The said processes of CREST are the following: Community Profiling and Mapping, Vulnerability Assessment, Inventory/Request for Relief goods and Hazard Assessment.

4.1.2. The system aids in processing and visualizing the data gathered from the processes of CREST by showing it through

graphs and maps thus making it more understandable and usable (Refer to Fig.1).

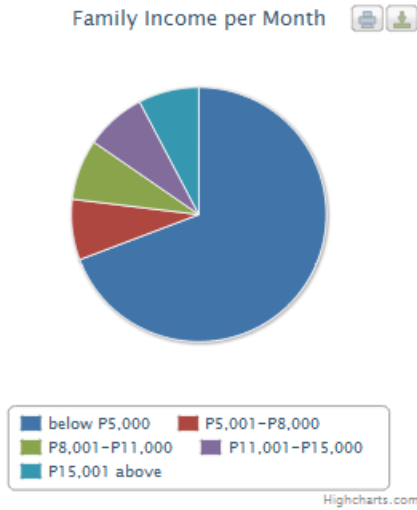


Fig. 1: Sample graph showing the income of families in a community per month

The users would easily know the current state of different communities. With this, the system would be able to provide significant data that may help the users in preparing for disasters. Some of these pertinent data are infrastructures that can be used as evacuation centers, locations where they can deploy early warning systems,

locations where they can get resources in times of disasters and locations where they can deploy their resources. These are some examples of how they use the maps (Refer to Fig.2).



Fig. 2: Community assets plotted in Google Maps