

BIBLIOGRAPHY

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ABSTRACT

This study is a short qualitative study to look into the level of Women's Participation in the Processes of Community-Based Disaster Preparedness (CBDP) activities. This was done to discern and identify what action needs to be taken in order to involve women in the different CBDP activities. The study comes out with the finding that highlights the needs of women. From the identified needs, strategies and activities can be developed which can encourage women to actively participate in Community-Based Disaster Preparedness (CBDP) activities.

The identified need and strategies will be a basis and a stepping stone in implementing CBDP programs which can bring women into the public spaces, give them opportunities to be partners in all CBDP decision-making, development planning and community mobilization.

Included in awareness programs are education and trainings which will be women learning nontraditional skills such as rescuing, managing relief camps and doing damage assessments. Accessing information and situations will all be part of their learning. Knowledge is one of the main aspects that can empower the women.

While Barangay Padang is a disaster prone area mostly affected by eruptions of Mayon Volcano, typhoon, lahar and flood calamities. Recent analysis of field information reveals that women do not have appropriate knowledge in CBDP. Community Resources to fund IEC Programs is indeed needed to implement CBDP programs.

The study highlighting women's participation is indeed an important aspect in community decision making, Community Planning and Community Mobilization thereby provided them a space in giving them a voice to actively participate in Community Development.

INTRODUCTION

Background of the Study

Climate change has been considered an important concern nowadays. It is a phenomenon that causes humanity to act and behave by instinct due to subsequent occurrence of natural calamities and disasters. Among these are strong typhoons, drought, flooding, earthquakes and even volcanic eruption. These occur without warning and become furious as these reach maximum strength. Because of these natural occurrences, people are affected which eventually cause destruction, loss of lives and properties and affect greatly agriculture and fisheries especially food availability leaving people in chaos and distress.

In a recent report published by Oxfam (2009) climate-related disasters, like floods, earthquakes or droughts are set to increase and the number of people affected is predicted to increase by 54 percent or equivalent to 375 million people by 2015 (<http://www.oxfam.org/en/policy>). The Centre for Research on the Epidemiology of Disasters (CRED) estimates that 65 per cent of disasters from (1991-2005) occurred and over 95 per cent of people killed by natural disasters are mostly from the developing countries (<http://www.cred.be/centre/intro.html>).



While Climate Change already poses significant challenges for developing countries; factors such as the Global Economic Crisis; increasing pressure on rural productive lands and an increasingly urbanized population may also make the poor more vulnerable to disasters.

The reason for their vulnerability is abject poverty. The poor are more likely to live in areas exposed to disasters in which they lack financial capacities or capabilities, health facilities and preparedness planning systems to cope with disasters. The economic factor is most apparent as many poor people are forced to live on marginal lands, such as floodplains, coastal towns and unstable hillsides. A study made by CRED in 2001 concluded that in the past decade, in an average; every disaster in low Human development countries claimed about 1,062 lives. Each disaster in the middle Human Development Countries claimed 145 lives. These figures stand in stark contrast to the average of 22.5 people killed per disaster in high Human Development Countries (2001).

Meanwhile, in the Philippine Archipelago an average of twenty (20) typhoons and dangerous storms arrive from the Pacific Ocean over the eastern seaboard yearly. The Philippines has been an unfortunate recipient of increased flooding from more powerful and dangerous type of



typhoons. Most of this frequent storms affect the Bicol Region which causes floods, lahar, and mud flows (IFRC, 2009).

More specifically, Barangay, Padang in Legazpi City is always at stake and hampered by natural calamities. Agricultural produce and economic activities is terribly affected. These activities are common scenes in the area and other parts of the country. These are regularly occurring in communities that are hard-pressed by pressures of disasters where no definite program of disaster preparedness and management are observed. On the other hand, there are areas which have a local disaster preparedness plan and program due to past experiences from natural calamities like typhoons, flooding and earthquakes.

Aside from the threat of typhoons, volcanic eruptions are common occurrences in the Philippines. Most of the 7,100 islands in the country are from volcanic eruption. There are thirty-seven (37) volcanoes in the country of which eighteen (18) are considered active including the famous Mayon Volcano in the Bicol Region.

Because of these given disaster-prone conditions, the Philippine government encourages its local units to have a responsive and functional community-based disaster preparedness (CBDP) and management program. This is becoming a pressing issue several lives need to be



protected including children and youths. More so, the participation of women in CBDP activities geared towards Community Development.

Disaster preparedness is indeed everyone's concern and a pressing need in most local communities where disaster and calamities becomes a part of their lives. It is also a means of helping individual groups or a community prepare in the event of a natural calamity. It is a broad concept that describes a set of measures that includes loss of lives, properties and disruption of livelihoods.

In addition, disaster preparedness is an important precondition event to everyone especially to people living in disaster-prone areas like Barangay Padang which is directly located at the foot of Mayon Volcano. Women and men roles are different in the event of disasters. However, women have a better understanding on how to deal with circumstances because they are usually left in the house together with elderly, children and youths. As a result, they are the once involved in preparing the family members cope with the natural calamities or disasters because men are encourage to help extra hand for other disaster related activities.

In view of this, it is necessary to understand and assess the processes and strategies women do in the event of a natural calamity that strike them. The regular occurrence of the Mayon Volcano in Bicol region has caused a lot of experiences and interventions for community action



and development. It is in this premise that the research study is conducted for more responsive and effective women participation in community-based disaster preparedness activities.

Statement of the Problem

Natural calamities causing disasters are considered part of unpredictable phenomenon known to men. They do not know set boundaries when it happen and they affect young or old, and men, women and children alike. Its impact an effects trigger a socio-psychological and economic destruction know to men. The inevitable eruption of Mayon Volcano put Barangay Padang in a very dangerous and non-permanent condition. People and community continue to experience the effects of the eruptions. especially when these are induced further by strong rains, typhoons and flooding.

In 2006, mudflows from Mount Mayon was flushed by heavy rains brought by Typhoon Reming where 430 families were buried or washed away to the sea by these rampaging flush floods causing a catastrophic effect on the normal lives of the people. Lately in 2009, people in the barangay have to be evacuated again due to the eminent eruption of the Volcano. Everyone experienced the effects of eruption disaster that



compelled to bear the loss of lives as well as properties in Barangay Padang.

The research study will attempt to answer the following questions in relation to community-based disaster preparedness (CBDP) activities:

1. What is the level of participation of women in the different localized CBDP activities ?
2. What are the strategies to enhance the participation of women in the community-based disaster preparedness activities?
3. What are the needs of women to encourage and strengthen their participation in Community- Based-Disaster Preparedness activities?
4. What are the different aspects of women's participation in community-based disaster preparedness activities?

Objectives of the Study

The main objective of the study is to determine the active participation of women in community-based disaster preparedness activities at Barangay Padang, Legazpi City

Specifically, this study aims:

1. To determine the level of participation of women in the different activities of CBDP program;



2. To identify the different strategies influencing the participation of women in community-based disaster preparedness activities;
3. To identify the local needs of women in encouraging and strengthening local participation in CBDP activities; and
4. To analyze the different aspects of women's participation in community-based disaster preparedness activities.

Significance of the Study

Women's participation in development activities is considered a significant contribution in program management. Specifically, this could be seen in local community activities such as the community-based disaster preparedness activities in the calamity-stricken or affected areas. Given the fact that most areas are vulnerable to calamities in the country, the findings of this research undertaking will support a number of interventions towards social development and welfare including community development.

Results of the study will serve as basis for more responsive and effective disaster prevention activities while reducing the impact of such disasters through appropriate decision-making, participatory planning, community action and program implementation including monitoring and evaluation..



Furthermore, it provides new perspective on women's experiences, needs and interests contributory to disaster preparedness strategies necessary in ensuring meaningful participation through proper information and responsive activities toward gender equality and women's empowerment.

In addition, the study will enable development workers especially planners to draw concrete ideas and insights in planning function and practical plans and program related to disaster preparedness and related activities especially on local governance and management.

Experiences and testimonies of local people will be carefully integrated and analyzed to serve as a case scenario for information and knowledge exchange on disaster preparedness vital to responsive community action and community education. Also, it will encourage appropriate measures towards community mobilization and organization towards a well planned program that incorporates women's point of view including their needs and roles for the welfare of the whole community.

Finally, the study it will provide valuable recommendations in developing a comprehensive and gender-sensitive community-based disaster preparedness program that adhere to local people objective in reducing the effects and impacts of any form of disaster in the future.



Scope and Limitation of the Study

The study focused on the participation of women in community-based-disaster preparedness activities. Compared to the men, women have less access to resources, opportunities and decision-making. These were identified constraints that hinder the development of their full capabilities in carrying out community responsibilities and decision-making. Participation of women empowers communities to identify their needs, action plans, manage projects and evaluate the results of their activities.

It also focuses on the significant involvement of women in the process of carrying out their knowledge in disaster preparedness. Individual and collective reliance for a proactive and immediate response to a disaster or to make appropriate recommendations for relevant activities in the strategic areas as proposed in disaster management projects is deemed necessary for local governance and management implementation.

Specifically, the study was done in Barangay Padang because this is the community which experienced the combination of the strong typhoon, mud flows and flooding. These people and community experiences resulted to develop a local disaster preparedness program. Given the vast testimonies of the locals, it is an opportune time that such study will be conducted as basis for further inquiries. The women as part



of the overall disaster preparedness activities will be analyzed vis-à-vis the needs and strategies used for better management.

Conceptual Framework

The essence of this study is anchored on the concept of participation as an effective tool in Disaster Preparedness among women in Barangay Padang. Participatory approach in this endeavor is done basically to recognize their capacity and capability as active women in the attainment of their own development. In order to build disaster-resilient communities, they first need to be empowered so that women in the community can cope with these adverse effects caused by these natural hazards.

Participation of women in Barangay Padang will be described as to their socio-demographic profile like age, civil status, educational attainment and religious affiliations.

Women's participation will also be analyzed in their involvement and decision-making in the following Community-Based Disaster Preparedness Activities such as:

1. Disaster Education and Awareness;
2. Coordination and linkages on Disaster Preparedness;
3. Drill on Disaster Evacuation, Search and Rescue;
4. Tree Planting; and



5. Lahar, Mud Flow and Flood Buffering.

It is believed that there are factors that intervenes the CBDP such as scarce community resources and lacking in (IEC) Information, Education and Communication Programs and other activities implemented by the LGU's and NGO's are not well implemented and sustained.

The interplay of all variables interrelates to each other demonstrate collective decision among the women. Participation also mean building and strengthening the capabilities of women in Barangay Padang who are able to determine the development that leads to empowerment of the whole community (Figure 1).



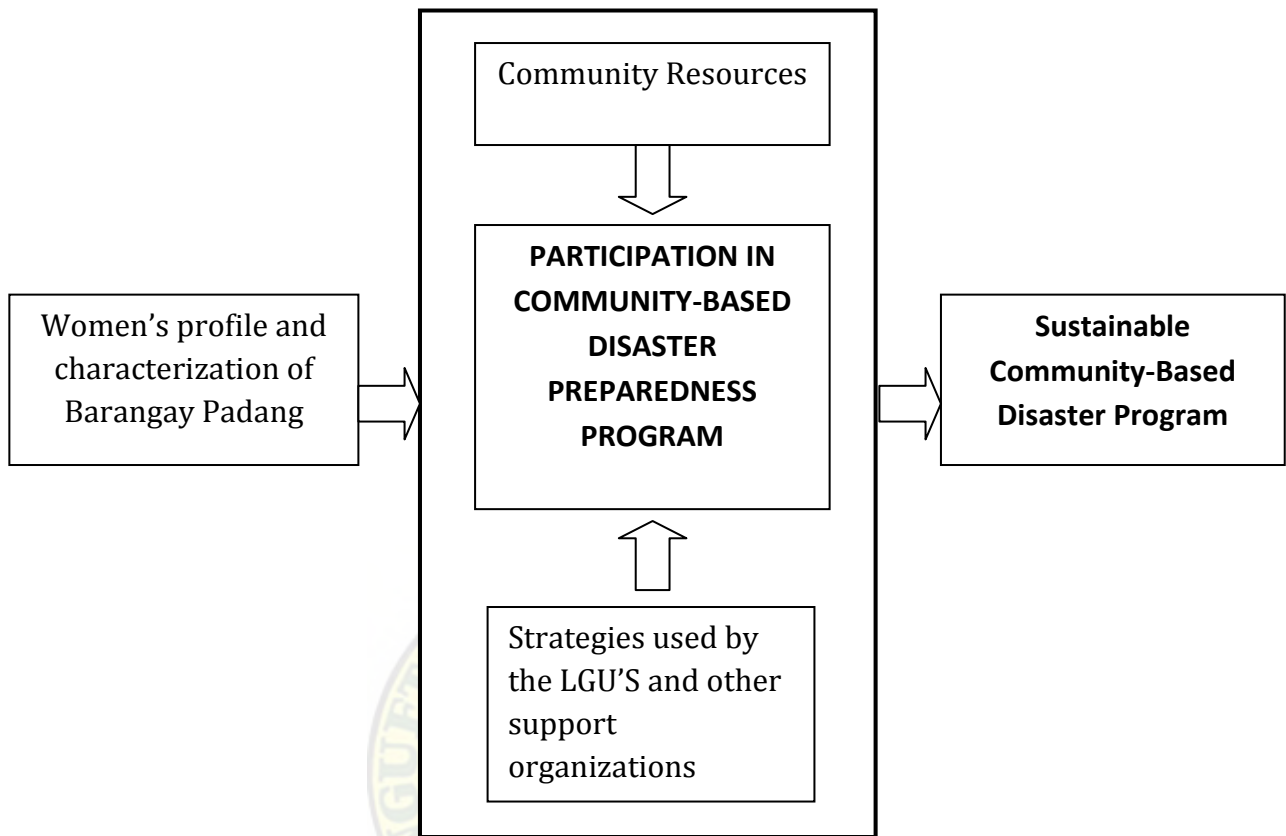


Figure 1. The interrelationship of factors identified in the development of Community-Based Disaster Preparedness Program



Operational Definition of Terms

Awareness. Locally termed as “pagmalay”, it refers to the development of the women through learning programs or training activities that enable them to develop knowledge and skills which they can use specially in situation of disasters.

Climate change. It is basically understood as the heating up of the environment that involves the green house gasses filling up the earth’s atmosphere & environment with the slow depletion of the earth’s ozone layer.

Contingency planning. It is basically anticipatory an advance planning process by the community in a situation of uncertainty where objectives, actions and possible response are put in place in order to prevent a hazardous or catastrophic situations.

Disaster. “sakuna”, a serious disruption of socio-economic activities caused by natural or man- made calamities. It includes loss of lives and properties which causes environmental degradation.

Disaster preparedness. “paghahanda”. It means anticipating calamities that will affect the community and it is a measure taken to reduce its effects. It involves predicting the possibility of emergency to



prevent them, mitigate their effects on vulnerable populations, and respond to and effectively cope with their impact as its consequences.

Disaster preparedness activities. Refers to selected activities needed to be given priorities in terms of responding to any natural or man-made disasters for the women to be ready and equipped in order to prevent damages and loss of lives and properties.

Disaster impact. It is the actual consequence of a hazardous situation caused by natural or man-made calamity.

Disaster management. It is a process strategy that is implemented when any catastrophe arises to help the event return to normal function as quickly as possible with a proper Disaster Management Planning.

Participation. Refers to the active involvement of women in Disaster Preparedness Activities.

Poverty. It is a situation where the women in Padang are deprived to a better access of information, progress and development. The poor are most likely to live in areas exposed to disasters which lack the basic financial capacity, health facilities and planning to cope with disasters.

Women. Refers to the women in Barangay, Padang, Legazpi City.



Vulnerability. Factors in the community that allows a hazard to cause a disaster or a catastrophe. It increases the chances of a community being unable to cope with an emergency.



REVIEW OF LITERATURE

Description of Natural Disasters

Disasters cause changes to our environment. It changes the face of the earth. Natural disasters result from four major causes which are the earthquakes, storms, floods and droughts. According to UNESCO, three quarters of the world's population live in areas that were affected by these phenomena.

To understand the nature and entirety of disasters and its unprecedented effects such as the case of the recent flood and other Typhoons like typhoon Reming in 2006 devastated had Legazpi City. It is important to know first the definition of disaster. On the article, Disasters: The Environment and Public Health, Improving our Response written by Logue (1996) at the American Journal of Public Health, he defined disaster as “ a catastrophic event that often leads to great destruction and loss, an event that causes excessive morbidity and mortality.”

On the other hand, Shishani, et al., (2009) on the Disaster Nursing Golden Lecture, defined disaster “ as a result of vast ecological breakdown in the relation between humans and their environment, as serious or sudden event on such scale that the stricken community needs extraordinary efforts to cope outside help or international aid.”



The above-mentioned definition of Shishani, et al., (2009) is closely similar to the definition of the Center for Research on the Epidemiology of Disasters (CRED) (2009) in Brussels, Belgium wherein it defined disaster “as a situation or event which overwhelms local capacity, necessitating a request to a national or international level for external assistance”.

There are also two types of disasters namely: natural and man-made. Adelman, et al., (2009) on her study of the nature of disasters on her book, *Disaster Nursing: A Handbook for Practice*. She defined natural disaster “as a type of disaster that often strike without a warning such as earthquakes, tsunamis, pandemic flu, outbreaks and tornados,” while a man-made disaster is “a type of disaster that occur or can occur with some warnings which include anything that a human being has done to cause a disaster such as acts of bioterrorism, hijackings or war”. From that definition, Typhoons, Volcanic Eruptions are considered natural disasters because it occurred naturally and brought major damages to the people in the communities.

Earthquake is caused by a sudden released of accumulated strain energy in the form of low frequency sound and waves called seismic waves. Earthquake beneath the ocean can caused tsunamis. A tsunami



according to UNESCO travels at the speed of a commercial jet plane but slows down when it hits shallow waters and rears up onto the land.

According to UNESCO some 50,000 earthquakes occur on an average every year as the Earth's tectonic plates shift and adjust, including some of potentially devastating magnitude releasing awesome amounts of energy. But scientists have no way of knowing beyond the broadest indications when and where tremors will occur next. UNESCO has supported the establishment of international, regional and national centers for the recording, exchange and analysis of seismological data. It helped train engineers and scientists and has been behind the creation of specialized centers for earthquake engineering and seismology in the former Yugoslav Republic of Macedonia, Britain, Japan, Peru and Iran.

Flood is among the most common natural disasters. It affects specially the low lying areas. In the Philippines a series of floods had affected many areas which was caused by continuous heavy rains. In the case of Tropical Storm Ketsana, locally known as Ondoy, hit the country dumping more than one month's worth of rain in only 12 hours and reportedly killing 240 people in what has been referred to as the worst flooding the country has seen in more than 40 years according to the Philippine Daily Inquirer (2009).



Floods are caused by heavy rain that pours down to the rivers. These natural waterways are unable to carry all the water down which caused the rising and overflows of water causing the surrounding land to be flooded. Heavy rain is not the only cause for flood; it can also come from masses of snow melting and tidal waves. Floods occur anywhere and it is deadly. Meanwhile, in Legazpi City, some of the barangays including the road going to barangay Padang was flooded due to heavy rains that have caused residents to evacuate their homes due to floods in December of 2010. Albay Governor Joey Salceda has declared a state of calamity in the province as flood levels continue to rise as rains continue to shower. According to weather bureau PAGASA, the severe weather is caused by the tail end of a cold front.

Tropical cyclones also known as typhoons or hurricanes are among the deadliest and most costly natural disasters because they bring massive surges of water.

A future rise in sea levels according to UNESCO is associated with global warming which may cause bigger storms and causes tsunamis.

Another concern is the rising of the sea surface temperatures that may cause the increased intensity of violent tropical storms according to the Intergovernmental Panel on Climate Change (2008) where many coastal areas will experience increased levels of flooding,



accelerated erosion, loss of wetland and sea water intrusion in freshwater sources.

The changing climate patterns increased the prevalence of drought which is one among the deadliest natural disasters. It had already threatens one third of the earth surface. It directly affects the lives of 250 million people and threatens another 1.2 billion in 110 countries tens of millions are those in the sub-Saharan Africa are expected to swell migratory pressures towards Northern Africa and Europe according to UNESCO.

Volcanic eruption is also one of the most dangerous natural disasters. It discharges fumes, ashes and lava, lahar and causes avalanches, landslides and tsunamis.

On the local scale the province of Albay has been experiencing series of volcanic eruption from Mayon volcano. Thus in 1999 Mayon explodes again. According to a local paper "Albayano Examiner" communities around the said volcano had evacuated to a safer ground. In 2 hours some two thousand residents had fled their homes and more residents followed through. According to Eduardo Laguerta the resident volcanologist of PHILVOCS said the seismograph had registered 25 minutes earthquake before the volcano had erupted and the ashes had reached up to 7 kilometers. Until the following year in 2000 the condition



of Mayon volcano was still critical according to Narito (2000) of the Dyaryo Bikol.

Aside from the volcanic eruption the Province of Albay has been experiencing series of floods, volcanic mudflow, earthquake and typhoons. Damaging properties and causing harm to the people. In an article written by Arguilles (2009) said, that the Provincial Disaster Coordinating Council (PDCC) readied preventive measures in case Mayon Volcano acts up or makes a full blown eruption. Albay Gov. Joey S. Salceda said, "Albay is ready and improving its Disaster Management Strategy to attain its Zero Casualty Goal." He further said that the PDCC is in the process of updating population at risk and hazard assessment, conducting capacity building evaluation at the Barangay and Municipal levels, and holding awareness briefing in villages near the volcano to prepare for a possible increase in Mayon volcano's alert status.

The Province of Albay have been especially exposed to various climate risks such as tropical cyclones. These could worsen as a result of climate change. The coastal areas must be protected also from sea level rise and storm surges. Communities living along the coastline and in the uplands must be prepared to meet these challenges to the environment, their livelihood and their homes. There is therefore a need to start



discussions on how Philippines can best adapt to the changing climate (National Conference on Climate Change, 2007).

Result of climate change in the Bicol areas, St. Bernard in the Visayas, Palawan and Davao are now experiencing tremendous floods. President Aquino said he is considering imposing a total log ban throughout the country as a long-term measure to prevent floods. (Philippine Daily Inquirer, 2011). The National Disaster Risk Reduction and Management Council (NDRRMC) reported to the President the damages to property, infrastructure and agriculture has been estimated at P1.2 Billion and the number of displaced families has already reached to 262,107, or more than 1.3 million persons. “There must be a long-term intervention to all this flooding disasters.”

Moreover, The United Nations Development Program (UNDP) (PNA, 2010) hailed Albay's Provincial Disaster Coordinating Council (PDCC) for its recent Mayon Volcano eruption Disaster Preparedness and Zero casualty response strategy. Inter-agency like the Department of Public Works and Highways (DPWH) in Bicol has put in place a disaster contingency plan in the event Mayon volcano erupts (PNA, 2009). Danilo Manalang, DPWH, Regional Director, said his agency has prepared the Mayon Volcano Disaster Preparedness Program designed to make available the much needed manpower, machine and resources



once this volcano erupts. He directed his three District Engineering Offices in Albay to organize a DPWH Disaster Team to coordinate closely with the Provincial Disaster Coordinating Council (PDCC) and the Philippine Institute of Volcanology and Seismology (Phivolcs). For Disaster Management direction. He said “they have to make an effort to contribute to a zero casualty in any eventualities that maybe brought by the eruption of Mt. Mayon.” Furthermore, Governor Joey S. Salceda of Albay said “the country’s first successful institutional Disaster Management Office, APSEMO is Albay’s contribution to Disaster Risk Reduction strategies was consistent with the United Nation’s Hyogo Framework for Action (HFA).” With its contribution, “ theGalingPook” award came at the heels of a special citation given to Albay for its Local Capacity, Interventive Mechanism (LCIM) for Good Governance conferred by the United Nations Development Program (UNDP) and the Dutch Development Agency (DDA).

Meanwhile in the Daily Inquirer, article written by Salazar(2010) on key measures to prepare for floods stressed that Filipinos should start getting familiar with terminologies like earthquake, tidal wave proof embankments, riverbanks reconstruction and rainwater harvesting. It might save their lives and property when the waters come rushing in. Earthquakes can, and do, strike the country at any time. And can cause



massive floods, as proven by the massive earthquake in Japan that resulted in a monstrous tsunami and liquefaction in some areas. She highlighted the comprehensive flood control measures suggested by Urban planner and architect Felino A. Palafox Jr. that should be followed:

1. Step up improvement work of rivers, which enable them to take in rainfall of high volume, and further devise measures to cope with excessive rainfall.

2. Consolidate river water-control facilities such as a reservoir set in a park as a scenic pond in order to check sudden and large flow of rainwater into rivers, promote measures to store and filter water into the ground.

3. To reduce flood damages in the lowlands: a) encourage proper use of land through such measures as making past flood records known; and, b) promote redevelopment by making use of high-floor buildings and artificial foundations.

4. Build flood-control lakes when developing large tracts of land

5. Enable sewerage systems to store rainwater

6. Use pavements, which can filter water through.

7. Improve sewerage systems into those which have filtration boxes to filter water into the ground.

To prevent flooding in lowlands, his recommendations include:



1. Consolidate anti flood facilities such as quake- and tidal wave-proof embankments.

2. For added protection against floods during severe earthquake, reconstruct the riverbanks and other major rivers into ones with less slope and approachable for the citizens to walk down to the water.

3. Consolidate drainage systems in low-lying urban areas.

While all these preventive measures are considered and well pondered upon, and in the event or occurrence of natural disasters every individual or group has to do its part to minimize the threat of these catastrophes. The best way to realize an ideal preventive measure is to be pro-active and anticipatory. The strength of all preventive efforts lies in the participation of the community specially the women who are at the forefront of such environmental threat.

People Responsiveness on the Occurrence of Natural Calamities and Disasters

Awareness is not only taught in formal seminars, conferences or the classroom but is passed on informally from generation to generation and this knowledge, essentially local and traditional needs to be tapped as well. The case of the indigenous people of the Andaman Sea who call themselves the *Moken* provides a striking example. By reading the signs of the sea, the *Moken* headed for high ground or to the deeper ocean



before the 2004 tsunami struck, and reportedly survived the disaster without suffering a single casualty (UNESCO, 2005). In Cuba, disaster preparedness begins in the classroom and is an integral part of the country's civil defense system. Local involvement is a vital part not only of being ready to confront natural hazards but also to recover if disaster strikes. Small island countries are at particular risk from a wide range of natural hazards, including tropical storms, earthquakes and volcanic eruptions. Island communities in the Pacific and the Caribbean have adapted to these hazards and have built locally specific knowledge and practices to minimize loss of life and livelihoods when disasters strike. A number of collaborative activities have been undertaken on educational and communication aspects of disaster mitigation, such as the preparation of an information kit for the media, as well as disaster preparedness teaching materials through a joint initiative between UNESCO and the Caribbean Disaster Emergency Response Agency.

There are many ways in implementing awareness building. It can be through a dialogue, lectures, seminar workshops, conferences and creative methods. In Nepal, most of the disaster awareness raising education/training programs has been able to attract only educated and leading people of the community. The implementation of Folk-Songs like programs with disaster awareness theme were is useful in attracting the



children, women, minorities and other marginalized groups who generally don't take part in other such activities. Folk-Song program for disaster awareness raising is simple to implement in practice. In addition, It is inexpensive. Such method can be useful to various types of natural disasters. Since the method is based on local language and culture, it can effectively attract and make the rural uneducated, women, children, minors etc., who generally do not participate in other community awareness programs, understand the nature of disasters, their tangible/intangible impacts and the importance of existing protective measures.

While many know that human tragedies and losses, as a result of a disaster, impede the economy, few know that the devastation of disasters can be prevented by risk reduction and crisis management initiatives. Raising awareness of risks and an understanding of the factors which underlie them are critical to reducing vulnerability. Only by understanding fully the risks can people plan their response. Different kinds of programs/training are found to be conducted for the disaster awareness raising in the rural community. However, rural women, children and minors, who are the most affected group by any natural disaster, are unable to get attracted by the usual disaster awareness



trainings/programs because of illiteracy, poverty, religious/cultural obligations etc.

Building awareness from the bottom up is as valuable as transmitting information from the top down, the IFRC report says. Putting it bluntly, timely information may be the only form of disaster preparedness that the most vulnerable can afford. Cuba is often mentioned as a leader in prevention strategy, because its methods demonstrably work. Six major hurricanes that struck Cuba between 1996 and 2002 killed a reported 16 people compared with thousands elsewhere in the Caribbean. In September 2004, Hurricane Ivan battered the western part of Cuba with 260-kilometer-an-hour winds. More than 1.5 million people were evacuated to higher ground ahead of the storm, which destroyed thousands of houses. Of the 64 deaths caused by the storm throughout the Caribbean, none was reported in Cuba. Compare that with what happened in the Asian tsunami, where scientists with information about the killer waves had no way to communicate a warning to people in the path of the disaster even with hours at their disposal (UNESCO, 2005).

Quite often the people who are affected by a disaster, and who are sometimes themselves the cause of them, such as the inhabitants of slums built on flood plains or on hillsides prone to mud slides, live on the



fringes of society and are uninvolved in risk-reduction measures, which they may actually regard as a threat.

The best science and technology in the world are of little value unless they can be turned into effective disaster warnings that ordinary people can understand. The International Federation of Red Cross and Red Crescent Societies (IFRC) said that it is “striking” how many disasters “could have been avoided with better information and communication.” But for many, it says in its 2005 World Disasters Report, disaster arrives “suddenly, unannounced.”

Raising awareness in disaster preparedness among the authorities and among the target communities that you want to mobilize and strengthen is important. Raising awareness means; explaining your goals, strategy and convincing them that they can benefit from your success. Remember that you may find resistance to change and often those with most vested interests may be among this group. Awareness raising means presenting opportunities to learn new skills-such as planning, defining clear demands, public speaking, Boost morale and give constituents a sense of their collective possibilities (Milinga, et al., 2005).

Right after the Great Indian Ocean Tsunami disaster in 2004, officials met in Kobe, Japan for the Second World Conference on Disaster Reduction. They agreed upon a framework for action which can be



adopted from 2005 to 2015. They called this the HYOGO DECLARATION.

The framework includes five commitments which follows:

1. Make Disaster Reduction a Priority- government should integrate Disaster Risk Reduction into their Laws, Programs and Plans and ensure the participation of the local communities in planning.

2. Know the Risk and Take Action- countries should define and understand potential risks so that they can prepare and develop early warning devices to the needs of each communities.

3. Build Understanding and Awareness - government should include information which include Disaster Risk Reduction in formal and informal education and to ensure local indigenous knowledge and homegrown technology which should be preserved and transmitted.

4. Reduce Risks - safety Codes are needed to ensure school, hospitals, and homes does not collapse in case of earthquakes. Avoid communities sitting in Disaster Prone Areas.

5. Be Prepared and Ready to Act - governments, regional/local/national should conduct risk assessment, adopt contingency plans, test preparedness by measures such as evacuation drills, and ensure emergency services, response agencies policy makers and development organizations are properly coordinated. With this framework, Albay APSEMO have claimed to have implemented various awareness building



programs and projects under the disaster management framework for disaster preparedness, mitigation, response, recovery and rehabilitation. This was best exemplified by the preemptive evacuation being undertaken by the province and disaster risk reduction in the provincial comprehensive land use plan. APSEMO had also taken a leading role in coordinating with Provincial Disaster Coordinating Council warning agencies, non-governmental organizations, the private sectors and other communities. It also conducted trainings, information campaigns, drills and capacity-building exercises.

Furthermore, in a primer of the Philippine Institute of Volcanology and Seismology (2007) identified one solution to lessen the possible tsunami impacts, especially loss of lives is to pre-determine high grounds where people could go. It may also help if earthquake and tsunami drills are regularly conducted in threatened communities. Vigilance and sustained community level public education on tsunami awareness, preparedness and mitigation is very important. Since Barangay Padang is within the coastal area. Coastal communities must be aware of Tsunami facts and must react appropriately during an earthquake at any time. It is very important that the people and the local leaders in the coastal areas are aware on the basic things that they should know and do if they experience a very strong earthquake.



Women are made more vulnerable to disasters through their socially constructed roles. As Enarson (2009) stated “gender shapes the social worlds within which natural events occur”. She further said, that advocates have stressed that what is necessary to bring a gender perspective to the study of natural disasters is research and analysis of data disaggregated by sex, pilot projects during the reconstruction phase, an open dialogue within communities and between communities and the national government and capacity-building for women before, during and after disasters have occurred. She stressed that an effective development process must include both the needs and the potential contributions of women as well as men. A Community-Based Disaster Preparedness and Response Plan that takes women’s physical, psychological, social and economic vulnerabilities into account will help to reduce women’s vulnerability to overall disaster. A plan that goes even further to recognize women’s abilities and include them in disaster relief efforts will help to change gendered beliefs about women. A gender-based approach to the study and analysis of natural disasters is essential in accomplishing this goal.

In order for individuals to be properly informed about disaster preparedness they need to be aware and conscious of what the problem is all about in order to solve that problem properly. In the context of



community based disaster preparedness awareness information, education campaign is an important feature that lead women to be equipped with CBDP knowledge and empowered.

Women Participation in Development Activities

Women play an important role in disaster preparedness. The emerging issues related to women empowerment which made it compulsory to put gender equality are the top priority towards National Development and International Peace (Latha, 2007). Recognizing the intensity of women empowerment and national development issues on gender equality has taken the right dimensions in emphasizing more on the security and development that stresses the reduction of poverty, protecting human rights and investing in sustainable development. She further stressed that there are many community development activities that may interest the women of today. One such important area that needs for immediate attention is the role of women in disaster preparedness activities. Women had encountered many problems during disasters and during the aftermath recovery measures. Few facts and cases have been cited, so that we may be able to focus on the necessary action to be taken to break the barriers and build bridges for a secured nation and sustained economic growth of our country.



By equipping communities with the knowledge and skills, they need, in order, to prepare for an emergency rather than reacting once a disaster strikes. Communities are able to exercise some control over the scale of their impact. Good preparation can prevent loss of lives and livelihoods, reduce malnutrition and diseases, as well as providing communities with independence and autonomy (www.unicef.org.uk/).

According to Disaster Preparedness Plan for women when disaster strikes, a person may not have much time to act (www.examiner.com, 2010). There are three (3) basic steps in disaster or emergency preparedness. Always be Prepared for a sudden emergency in any eventualities caused natural or man-made disasters. These will help protect families, communities to cope better if a disaster does occur:

1. KNOW- Every individual must know the different natural or man-made disasters that could occur in local areas and how to prepare for them. Know what the local evacuation routes in order to act or evacuate quickly in a specified area.

2. PLAN- Always make an emergency plan and provide each family members a copy of the said plan. Talk with family members to know the potential disasters or emergencies that could happen in the area and explain how to respond to each of them. Select a meeting place, other than your home, for loved ones to meet in case it is unsafe to return home.



Make sure to designate an "emergency check-in" contact and teach children of contact phone number. This is important in case family members get separated during a disaster.

3. PACK- It is advisable to pack emergency supplies to meet individual needs for (3) three days. Always keep all important documents together in one place, in case the individual have to "grab and go" during an evacuation.

The three basic steps are now disaster guide which must be shared to every individual especially that today requires everyone to be conscious on disaster preparedness. These are now translated in local dialects and languages which radio and television networks use as constant reminders to local people (www.igma.tv/iam. ad).

In 2003, during the First India Disaster Management Congress participants scaled up women's participation as the key to sustainable disaster prevention and preparedness. Mainstream intervention for disaster reduction should essentially build on existing resilience demonstrated amply by women and poor communities. Besides addressing practical aspects, strategically involving women in relief phase could reduce corruption, ensure information flow to affected citizens and hold agencies practical needs of women and girls which so often do not get counted.



Institution-making decisions on climate change adaptation and mitigation at all levels (international, national, community levels), and disaster risk management policy, framework, and legislation are invariably male-dominated according to the third global congress of women's politics and governance (Preuss, 2009). For example, during the 13th Annual Conference of the Parties in Bali 2007, under the United Nations Framework Convention on Climate Change, women comprised only 28% of delegation of parties and 12% of heads of delegation. This is very slow progress from the 17% and 14%, respectively in 2001 when the declaration was adopted for parties to increase the number of women participants. Not only lawmakers and bureaucrats but also researchers and experts are predominantly male. Gender diversity brings in more diverse perspectives in decision-making, and yield better results.

Women's vulnerability to disasters depends on the social, cultural, economic and political environment (Bildan, 2003). The economic factor is most apparent as many poor people are forced to live on marginal lands, such as floodplains, coastal towns and unstable hillsides.

Disaster preparedness activities are measures taken to prepare for and reduce the effects of disasters. It also predicts and wherever or whenever possible to caution people and communities, mitigate impact on vulnerable populations, and respond to and effectively cope with



disaster consequences. It is best viewed from a broad perspective and is more appropriately conceived of as a goal rather than as a specialized program or stage that immediately precedes disaster response. It is a continuous and integrated process resulting from a wide range of activities and resources rather than from a distinct sector activity by itself. It requires the contributions of many different areas ranging from trainings, logistics, to health care, and institutional development while increasing the efficiency, effectiveness and impact of disaster emergency response mechanisms at the community level. Disaster preparedness seeks to prepare for and reduce these adverse effects (Red Cross, 2008).

More so, disaster preparedness is achieved partially through readiness measures that expedite emergency response, rehabilitation and recovery and result in rapid, timely and targeted assistance. It is also achieved through community-based approaches and activities that build the capacities of people and communities to cope with and minimize the effects of disasters on their lives. This way, disaster risk is reduced because it limits the negative impacts.

Therefore, in communities where there is a transfer of knowledge and coping mechanism, disaster risk reduction is eminent where a systematic approach in identifying, assessing and reducing the risks of disaster is a goal. Problems are properly addressed. Disaster risk



reduction aims to reduce socio-economic vulnerabilities to disasters as well as dealing with the environmental and other hazards that trigger them. In many instances, women's vulnerability in disaster situations is often emphasized, but their contributions to the safety of their homes and communities generally are unrecognized because it is seen only as an innate responsibility. Women have distinct needs especially in emergencies and disaster situations which have to be addressed. They also have unique talents and capacities to be leaders in their own communities. Participating in community-based disaster preparedness is an activity where women in communities can be strengthened and trained to undertake any program towards disaster management and mitigation.

Being prepared in disasters provides opportunities and result for the women to evaluate their own situation based on their own experiences. By knowing their needs and problems they will know what actions will be taken, they will become part of creating plans and decisions. They will be the major players in the implementation of these plans with an end goal of achieving capacities and transferring of resources to the community.

Awareness Raising in Disaster Preparedness

Awareness is not only taught in formal seminars, conferences or the classroom but is passed on informally from generation to generation and this knowledge, essentially local and traditional needs to be tapped as



well. The case of the indigenous people of the Andaman Sea who call themselves the Moken provides a striking example. By reading the signs of the sea, the Moken headed for high ground or to the deeper ocean before the 2004 tsunami struck, and reportedly survived the disaster without suffering a single casualty (UNESCO, 2005). In Cuba, disaster preparedness begins in the classroom and is an integral part of the country's civil defense system. Local involvement is a vital part not only of being ready to confront natural hazards but also to recover if disaster strikes. Small island countries are at particular risk from a wide range of natural hazards, including tropical storms, earthquakes and volcanic eruptions. Island communities in the Pacific and the Caribbean have adapted to these hazards and have built locally specific knowledge and practices to minimize loss of life and livelihoods when disasters strike. A number of collaborative activities have been undertaken on educational and communication aspects of disaster mitigation, such as the preparation of an information kit for the media, as well as disaster preparedness teaching materials through a joint initiative between UNESCO and the Caribbean Disaster Emergency Response Agency.

There are many ways in implementing awareness building. It can be through a dialogue, lectures, seminar workshops, conferences and



creative methods. In Nepal, most of the disaster awareness raising education/training programs has been able to attract only educated and leading people of the community. The implementation of Folk-Songs like programs with disaster awareness theme were be useful in attracting the children, women, minorities and other marginalized groups who generally don't take part in other such activities. Folk-song program for disaster awareness raising is simple to implement in practice. In addition, It is inexpensive. Such method can be useful to various types of natural disasters. Since the method is based on local language and culture, it can effectively attract and make the rural uneducated, women, children, minors etc., who generally do not participate in other community awareness programs, understand the nature of disasters, their tangible/intangible impacts and the importance of existing protective measures.

While many know that human tragedies and losses, as a result of a disaster, impede the economy, few know that the devastation of disasters can be prevented by risk reduction and crisis management initiatives. Raising awareness of risks and an understanding of the factors which underlie them are critical to reducing vulnerability. Only by understanding fully the risks can people plan their response. Different kinds of programs/training are found to be conducted for the disaster



awareness raising in the rural community. However, rural women, children and minors, who are the most affected group by any natural disaster, are unable to get attracted by the usual disaster awareness trainings/programs because of illiteracy, poverty, religious/cultural obligations etc.

Building awareness from the bottom up is as valuable as transmitting information from the top down, the IFRC report says. Putting it bluntly, timely information may be the only form of disaster preparedness that the most vulnerable can afford. Cuba is often mentioned as a leader in prevention strategy, because its methods demonstrably work. Six major hurricanes that struck Cuba between 1996 and 2002 killed a reported 16 people compared with thousands elsewhere in the Caribbean. In September 2004, Hurricane Ivan battered the western part of Cuba with 260-kilometer-an-hour winds. More than 1.5 million people were evacuated to higher ground ahead of the storm, which destroyed thousands of houses. Of the 64 deaths caused by the storm throughout the Caribbean, none was reported in Cuba. Compare that with what happened in the Asian tsunami, where scientists with information about the killer waves had no way to communicate a warning to people in the path of the disaster even with hours at their disposal (UNESCO, 2005).



Quite often the people who are affected by a disaster, and who are sometimes themselves the cause of them, such as the inhabitants of slums built on flood plains or on hillsides prone to mud slides, live on the fringes of society and are uninvolved in risk-reduction measures, which they may actually regard as a threat.

The best science and technology in the world are of little value unless they can be turned into effective disaster warnings that ordinary people can understand. The International Federation of Red Cross and Red Crescent Societies (IFRC) said that it is “striking” how many disasters “could have been avoided with better information and communication.” But for many, it says in its 2005 World Disasters Report, disaster arrives “suddenly, unannounced.”

Raising awareness in disaster preparedness among the authorities and among the target communities that you want to mobilize and strengthen is important. Raising awareness means; explaining your goals, strategy and convincing them that they can benefit from your success. Remember that you may find resistance to change and often those with most vested interests may be among this group. Awareness raising means presenting opportunities to learn new skills-such as planning, defining clear demands, public speaking, Boost morale and give constituents a sense of their collective possibilities (Milinga, et al., 2005).



Right after the Great Indian Ocean Tsunami disaster in 2004, officials met in Kobe, Japan for the Second World Conference on Disaster Reduction. They agreed upon a framework for action which can be adopted from 2005 to 2015. They called this the HYOGO DECLARATION. The framework includes five commitments which follows:

1. Make Disaster Reduction a Priority- government should integrate Disaster Risk Reduction into their Laws, Programs and Plans and ensure the participation of the local communities in planning.

2. Know the Risk and Take Action- countries should define and understand potential risks so that they can prepare and develop early warning devises to the needs of each communities.

3. Build Understanding and Awareness - government should include information which include Disaster Risk Reduction in formal and informal education and to ensure local indigenous knowledge and homegrown technology which should be preserved and transmitted.

4. Reduce Risks - safety Codes are needed to ensure school, hospitals, and homes does not collapse in case of earthquakes. Avoid communities sitting in disaster prone areas.

5. Prepared and be Ready to Act -governments, regional/local/ national should conduct risk assessment, adopt contingency plans, test preparedness by measures such as evacuation drills, and ensure



emergency services, response agencies policy makers and development organizations are properly coordinated. With this framework, Albay APSEMO have claimed to have implemented various Awareness Building Programs and Projects under the Disaster Management Framework for Disaster Preparedness, Mitigation, Response, Recovery and Rehabilitation. This was best exemplified by the Preemptive Evacuation being undertaken by the Province and Disaster Risk Reduction in the Provincial Comprehensive land use plan. APSEMO had also taken a leading role in coordinating with Provincial Disaster Coordinating Council warning agencies, non-governmental organizations, the private sectors and other communities. It also conducted trainings, information campaigns, drills and capacity-building exercises.

Furthermore, in a primer of The Philippine Institute of Volcanology and Seismology (2007) identified one solution to lessen the possible tsunami impacts, especially loss of lives is to pre-determine high grounds where people could go. It may also help if earthquake and tsunami drills are regularly conducted in threatened communities. Vigilance and sustained community level public education on tsunami awareness, preparedness and mitigation is very important. Since Barangay Padang is within the coastal area. Coastal communities must be aware of Tsunami facts and must react appropriately during an earthquake at any time. It is very



important that the people and the local leaders in the coastal areas are aware on the basic things that they should know and do if they experience a very strong earthquake.

Women are made more vulnerable to disasters through their socially constructed roles. As Enarson,(2009) states “.gender shapes the social worlds within which natural events occur .” She further said, that advocates have stressed that what is necessary to bring a gender perspective to the study of natural disasters is research and analysis of data disaggregated by sex, pilot projects during the reconstruction phase, an open dialogue within communities and between communities and the national government and capacity-building for women before, during and after disasters have occurred. She stressed that an effective development process must include both the needs and the potential contributions of women as well as men. A Community-Based Disaster Preparedness and Response Plan that takes women’s physical, psychological, social and economic vulnerabilities into account will help to reduce women’s vulnerability to overall disaster. A plan that goes even further to recognize women’s abilities and include them in disaster relief efforts will help to change gendered beliefs about women. A gender-based approach to the study and analysis of natural disasters is essential in accomplishing this goal.



The importance of community based disaster preparedness is of vital significance specially to women in the communities. If women are informed they will be educated, they will have knowledge on what appropriate actions will they take. By giving them the knowhow, they will be empowered.

Participation a Key Factor inCommunity-Based Disaster Preparedness Program

At the heart of Community-Based Disaster Preparedness and Management is the principle of participation. Without participation there can be no agreements in decision making and planning. Individualism prevails which may cause conflicts according to Yodmani (www.adb.org/documents/books/social_protection/chapter_13.pdf).

A better understanding of disasters and losses reveals that the increase in disaster occurrence and disaster related loss is due to the exponential increase in the occurrence of small and medium scale disasters. As a result many feel it is important to adopt a new strategy, which directly involves vulnerable people themselves in planning and implementation of mitigation measures. This bottom's -up approach has received wide acceptance because communities are considered the best judge to their own vulnerability or weaknesses and can make the best decisions regarding their own well-being.



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. According to Lorna P. Victoria the Director, Center for Disaster Preparedness, Philippines said that Community participation has been recognized as 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 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 and preparedness measures, decision making, implementation; the community directly benefits from the risk reduction and development process people's participation, It is community members who are the main actors and propellers; while sustaining the CBDM process, they also directly share in the benefits of disaster preparedness, mitigation and development.



Therefore, Participation of women in disaster preparedness is an essential element in community development. It is the core strategy in making communities aware of disasters and its effects and it is a strategy in building community capacities, actively responding to emergencies and providing them with more access and control over resources and basic social services. Using a Community-Based approach to managing disasters certainly has its advantages (Coupal, www.mosaic-net-intl.ca).

Participation is the most common element in any community involvement like disaster preparedness planning, risk assessment, mitigation, capacity building, implementation of plans and projects and development of systems for monitoring may help a community grow and be empowered. Participation in CBDP increased women's awareness towards gender perspectives that will raise the profile of women to sustainable development, sharing concrete solutions, and inspiring more actions. Women should not be seen only as victims of natural disasters and climate change; they can also be communicators of good practices and active agents of change (<https://www.gdnonline.org>).

Participation is a development approach which recognizes the need to involve disadvantaged segments of the population in the design and implementation of policies concerning their wellbeing. The strengthening of women's participation in all spheres of life has become a



major issue in the development discourse. Socio-economic development cannot be fully achieved without the active participation of women at the decision-making level in our society. Various scholars define “Participation” in various ways. Norman Uphoff, (cited in Khan 1993) identified (4) four main kinds of participation, which are distinct but interrelated. They are as follows:

- a. Participation in decision making in identifying problems, formulating alternative planning activities, allocating resources.
- b. Participation in implementation in carrying out activities, managing and operating programs.
- c. Participation in economic, social, political or other individual or collectively benefits and
- d. Participation in evaluation of activities and its outcome for feedback and monitoring purposes.

According to Mishra (1984), “participation means collective and continuous efforts by the people themselves in setting goals, pooling resources together and taking actions which aims at improving their living conditions”.

Rahman (1991) has stated that all forms of actions through which citizens take part in the operation of administration may be termed as “participation”. Here, “taking part” refers to any level from macro to micro



region or it may be of any type, e.g. advisory or in decision-making or implementation.

Millennium declaration (UNDP, 2000) had sets forth a road map for human development supported by 191 nations. One among the millennium development goalsis facilitating the participation of women and girls in the development process, including efforts to reduce Disaster Risk, is a key priority. Women across the world play critical roles in the shaping of risks in development. In some contexts, women may be more exposed to and vulnerable to hazards. For example, those with responsibilities in the household may be more exposed to risk due to unsafe building and from local hazards stemming from inadequate basic services or exposure to smoke from cooking fuel. At the same time, women are often more likely than men to participate in communal actions to reduce risk and enhance development. Orienting disaster risk policy so that it builds on the social capital represented by women can enable a more informed development policy. As criticisms of participatory development indicate, achieving such model will not be easy, but best practices does exist to point the way.

When women face barriers in participating at higher levels of decision-making, these factors severely limit the skills and knowledge available for Sustainable Development and Risk



Reduction. Overcoming disparities like access to education is a fundamental component of the Disaster Risk Reduction Agenda.

Disaster Rehabilitation

There are many ways by which Disaster Rehabilitation can be provided or extended to disaster victims. One that can be done to early rehabilitate these victims is the provision of temporary shelter for them after they have been accommodated from evacuation centers or if there have been no available evacuation centers or rehabilitation areas being provided by government agencies.

In the case of Typhoon Reming in 2006, temporary shelter units were provided by the Provincial Disaster Coordinating Center in coordination with international organizations like UNESCO, PLAN, the Philippine-Canadian Centre of Manitoba, (PCCM) Inc. and the Bicol Association of Manitoba, Inc. (BAMI) have succeeded in developing a model of cooperation for carrying out fundraising projects for disaster victims in the Philippines. The model can be easily applied to other organizations in the community in the near future.

Disaster rehabilitation is indeed the most significant and it is the last phase of disaster management because victims need early recovery of these traumatic events or circumstances that they experienced. Part of disaster rehabilitation is contingency planning for emergencies. As the



saying goes, “Many heads are better than one,” this proverb underlines the importance of collective and coordinated efforts within the community. It must include the local people responsible for the ultimate response to any kind of emergencies. This process may include government, non- government agencies and other concern groups to facilitate a common understanding (NDCC,2003).

METHODOLOGY

Time and Locale of the Study

Barangay Padang is one of the barangays of Legazpi City in the province of Albay, Bicol Region. It is located in the northern part of Legazpi City directly at the foot of Mount Mayon Volcano, on the western side is the Albay Gulf.

It has a total land area of 511.7 hectares with a total population of 3,071 from 550 households. Ninety-eight (98%) percent of the population are Roman Catholic. Barangay Padang has a distance of 7.5 km from the city proper and can be reached in 20 minutes by jeepney or by bus.

It is also one of the rural communities of the City located at the permanent danger zone at the foot of the Majestic Mayon Volcano. It is located in a



coastal area where marine resources abound. Fishing is the main source of livelihood of the local residents.

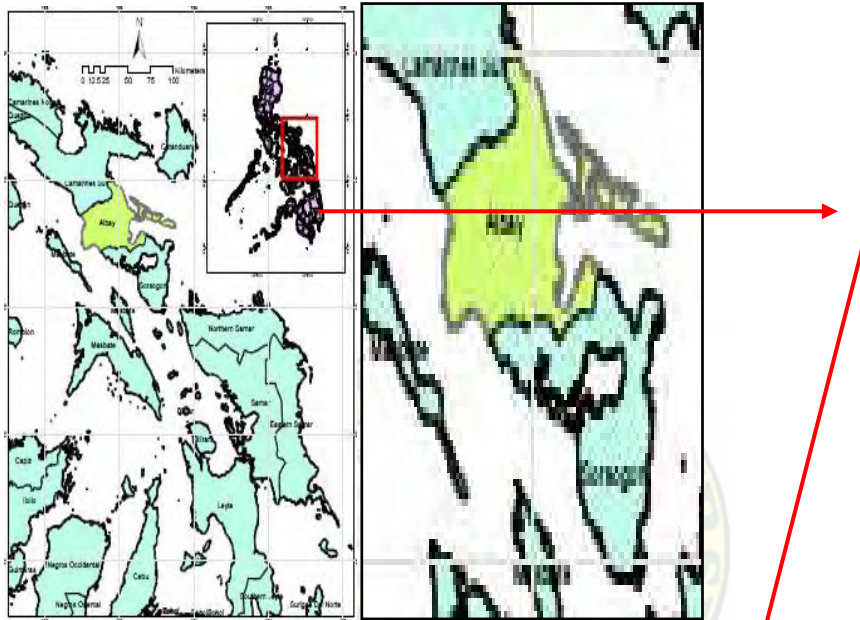
Despite its location in a permanent danger zone, beautiful beaches are found in the area. At sunrise, the majestic Mayon with white clouds that serves as its veil changes its aura depending on the cloud formation. Because of the beauty of this village and friendly people, the area transform into a concern of disaster reality. This prompted the research to consider the area for women's involvement in disaster-stricken research undertaking.

In 2006, Barangay Padang was terribly devastated by typhoon Reming aggravated by flush flood of lahar. Half of the barangay was covered with mud coming from the lahar deposits during volcanic eruptions. Rice fields and other farms were totally damaged brought about by continuous landslides, mud flows and flooding. Also, there are lots of illegal slash and burn practices "kaingins" including cutting of trees at the designated protected areas of Mt. Mayon. The source of potable water is a problem observed by the local residents. This is brought about by damages caused during volcanic destructions and strong rains.

Figure 2 map of showing the location of the study.



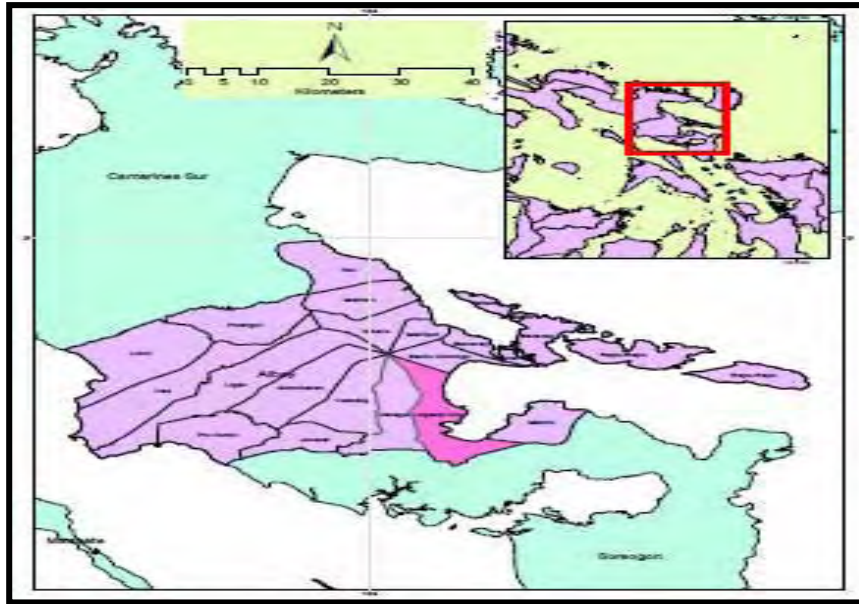
The study was conducted on September 6, 2010 to February 15, 2011 covering the second semester of School Year 2010 – 2011.



A- Bicol Region

B- Province of Albay





C - Padang, Legazpi City

Figure 2. Map of the study area

Respondents of the Study

Basically, the research participants are local women in Barangay Padang. They were selected in a random manner based on degree of involvement of community activities and knowledge about the conditions and events related to natural calamities especially the eruption and disaster caused by Mayon Volcano.

The identified respondents provide testimonies and experiences through narrations on individual or collective involvement on community-based disaster preparedness activities. Also, these women represent the sentiments of women in the barangay.

Age. The largest number of respondents ranges from ages 41 to 60 yrs old. Majority of the respondents are married which implies that most of them either stay home or they do not have jobs and or they are self employed. On the other hand, women younger seem not to stay at home during day time unless they are nursing mothers.

Occupation. In the evening most of the women prepare food for their husband who normally go out fishing to sea. At daybreak, the fishermen comes home where their wives wait for them at the seashore to Help them pull the fish nets and sort out the fishes that they catch for them to sell. After the fish are sold, they do their house hold chores.

Table 1. Profile of the respondents

PROFILE	FREQUENCY	PERCENT
<u>Age</u>		
below 30 yrs old	5	12.50
31-35 yrs old	4	10.00
36-40 yrs old	3	7.50
41-45 yrs old	6	15.00
46-50 yrs old	11	27.50
above 50 yrs old	9	22.50
<u>Civil Status</u>		
Single	3	7.50
Married	32	80
Widowed	4	18
Separated	1	2.50



<u>Occupation</u>		
Employed	6	15
Self-employed	18	45
Not employed	16	40
<u>Level in Education</u>		
Elementary	15	37.50
High School	19	47.50
College	6	15
<u>Religion</u>		
Roman Catholic	38	95
Others	2	5

Like Aling Rosa (2010), one of the elders in the community, as early as 3:00 in the morning she goes to the sea shore with her lamp to wait for her husband from his fish hunt. She waits until the net are pulled to the sea shore and help sort out the catch and sell them according to the kind and sizes. In the afternoon she sells banana cues. Other woman sells vegetables, and fruits, root crops and bananas, and rice cakes to augment household income.

The younger respondents with ages 21 to 35 have work outside the community during day time. In the evening, they are around to share household activities but during weekends, they help their parents on household chores. As observed during the interview, most of the respondents were home based. Most of them were not salary-based or



have stable income. They are not employed neither in the offices or in factories. Instead, they have their own business activities to attend which are considered self-employment.

Education. It is also observed that most of the respondents reached only elementary grades (15 or 37.50%) and high school level (19 or 47.50%). Based on observation, this condition is translated into poor economic condition because of the realities of poor conditions and community situations, thus limiting them from pursuing higher education. Only six respondents attained college levels.

Religion. History shows that Bicol region is one of the Spanish dominated areas in the country. Old Roman Catholic churches and religious practices are found. One of the famous ruins that defines and identifies the area is the Church of Cagsawa ruined by rock boulders during the eruption of Mayon in 1814. The strong influence of the Roman Catholic tradition exist as seen during holy week procession and observance of the feast of saints. Based on this, majority of the respondents belong to the Roman Catholic faith and practice its teachings and practices.

On the other hand, only three respondents or 7.5 percent are affiliated to other religion. It is noted that these individuals are not



influenced or affected by religious affiliations with regards to community activities. Furthermore, people cooperate in community activities and religion is not a hindrance to community action.

Research Methods Used

The study used three research methods in obtaining pertinent research data, namely: key informant interview, focus group discussions, case analysis complemented with observations and document analysis from primary and secondary sources.

The study was facilitated through a request letter addressed to the City Mayor seeking permission to conduct interviews and focused group discussions with the women in Barangay Padang. The Barangay Captain was also furnished with an introductory research letter for the conduct of the research. The letter served as basis to encourage local women to be involved in the research process and provide honest and direct responses.

The guide questions were formulated and prepared by the researcher based on the problems and objectives of the study. Guide questions were written in English and were asked in Tagalog.

The researcher introduced herself and gave them orientation about the study before the interview session. Specifically, the individual interviews were conducted at the respondent's home. A checklist of interview guide



questions was used to guide the flow of ideas. Responses and narratives were recorded and further integrated to answer the research problem.

In order to validate and seek further data and information on the experiences of the local women in the area, two focus group discussions were conducted in separate occasions. The first FGD was conducted on September 15, 2010 together with the barangay captain of which five women were present. The second group discussion was conducted in November 2010 with the women teachers of Padang Elementary School. The researcher introduced herself after which she oriented the group about the purpose of the study. The discussion was guided by the interview schedule. Their responses were recorded by the researcher. The researcher facilitated the discussion where everyone had shared.

Analysis of Data

Pertinent data were gathered based on testimonies and narrative experiences. These were analyzed and interpreted according to the research problem and objective of the study with emphasis on women's participation.

Data obtained during key informant interviews were consolidated and further validated through focus group discussion with the local residents supplemented by document analysis of historical events and



observations through cross data verification of results from other sources. Data gathered were classified, tallied, grouped, summarized and analyzed according to interview guide questions supplemented by follow up questions based on the data provided by the respondents. This led to further analysis on the research credibility and validity.

Further, the needs of women which reflect the level of participation in the different activities in disaster preparedness were determined and interpreted to address the factors presented in the conceptual framework of the research.

In view of the process and result, the data gathered was translated into information which can be transformed into a concept that can support a model community-based disaster preparedness project on a village-level.



RESULTS AND DISCUSSION

At this point, disaster preparedness is no longer just an option that can be shelved. It is now a matter of vital importance. The Province of Albay has been exposed to various climate risks such as tropical cyclones, volcanic eruption and flood. These could worsen as a result of Climate Change. The coastal areas must be protected also from sea level rise and storm surges. Communities living along the coastline and in the uplands must be prepared to meet these challenges to the environment, their livelihood and their homes.

The disaster coordinating center of both provincial and the City must look on how Albay can best adapt to the changing climate in the village level. Despite the many experiences of past calamities, disaster preparedness, risk reduction, mitigation is still a limited concern especially among the women in Padang.



While Padang is one among the rural communities located on a permanent danger zone at the foot of the Majestic Mayon Volcano, it is also located in a coastal area where tsunami could also occur during earthquake caused by the eruption of Mayon Volcano that lies in one of the geological faults of the rings of fire. Despite of the danger Padang is still a home to all its residents.

Level of Women's Participation in Community-Based Disaster Preparedness

Table 2 present the level of Women's Participation in Community-Based Disaster Preparedness Activities in Barangay Padang.

Decision making and community mobilization are moderately participated in community based disaster Preparedness. Likewise their participation in development planning was not participated by women. They claimed they were not informed of such activity and that there were no such activity implemented in their community.

Table 2. Level of women's participation in CBDP activities

ACTIVITIES	MEAN	DESCRIPTION
Decision making	1.78	Moderately participated
Development planning	1.48	Not participated



Community mobilization	1.70	Moderately participated
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Legend:

2.51 _ 3.00	Highly participated
1.51 – 2.50	Moderately participated
1.00 – 1.50	Not participated

Many factors can be considered. According to Marcelina (2010), she was not aware of the existence of a community based disaster preparedness program. This is due to lack of information and education on community based disaster preparedness among women in the community level.

“Mas magandasana kung ang CBDP program nayan aymagbibigaykaalamantungkolsapagumpisangmaliliitnanegosyo kaya pangkabuhayanparamakaahonsakahirapan”.It would be better if the CBDP program would include information about putting up small scale business or livelihood program to alleviate us from poverty.”

Motivating factors may include addressing women’s extreme poverty. It may need to delve into sustain women’s sustaining development by improving their environmental understanding and management which is integral to eradicate poverty and ensuring environmental sustainability. It may also need to suggest local governance to create and implement CBDP programs addressing poverty and environmental concerns with particular attention to the needs of women and children. From the



teachers of Padang Elementary school, they look at non participation of women in CBDP as a result of their poor condition. Inasmuch as the women wanted to join community activities they have to attend to the needs of their families. This factors suggest the creation of sustainable livelihood opportunities that will lead to reducing vulnerability of women to environmental hazards. All these factors make the level of participation in CBDP decision making, planning and mobilization very low inrating.

Despite of this situation, information and education regarding disaster preparedness, It is scarcely disseminated. It is because it lacks the resources appropriation.

Needs of Women to Encourage and Strengthen Participation in CDBP

The series of calamities that hit Barangay Padang had aggravated the poor economic condition of the women. Poverty is worsened by the fact that women in the area are not productive because they are primarily responsible for domestic duties, childcare and care for the elderly or the disabled. Women's visibility in the community remains low, and attention to their needs is badly inadequate.



Food on the table. When the respondents were asked about their needs that can be addressed for them to participate in CBDP activities, their responses were simple and practical. As Edna explicitly answered

“Di akomakadalosamgaaktibidadessa barangay. Kailangan magbentsaaking maliit na tindahan maskipapa ano may pagkainsa la mesa. At mgabata din kailangan alagaan.”
I cannot attend to barangay activities I need to sell in my little store in order to have food on the table. The children need to be taken care of”.

Her husband is a fisherman and not all the time he has a catch from his fishing activities. Her time is devoted to her income generating activity which supplements her husband's income to sustain the family needs. According to Maria, she needs to prepare, cook her banana ques and sell it from house to house. She said, she cannot afford to attend a meeting of CBDP activities.

Jobs. From the observation of the researcher, most of the women in Barangay Padang stay at home. They do not have jobs. Most of them rely on their husbands' income which is not enough for their daily needs.

Education of the children. According to Adelina, her three children are still in the elementary grades at a public school. At the present situation they cannot afford to send their children to school. She worries that her



children cannot reach high school or college. Her husband's income is not sufficient for their living.

Health care. Is one among the needs of women in barangay Padang. As the economic recession continues to impact throughout the country, health care costs are also rising. Its access are falling out from the reach of many women in Barangay Padang. They are highly vulnerable to basic health care costs. The lack of proper food intake aggravate the general health situation in the community most especially the women.

Housing. The need for a decent shelter to house their family is also an important facet to live comfortably and decently.

According to Enarson (2009),it is the economic conditions that pervade women to bear a disproportionate burden of the world's poverty. Statistics indicate that women are more likely to be poor and at risk of hunger because of the systematic discrimination they face in education, health care, employment and control of assets. Poverty implications are widespread for women, leaving many without the basic rights such as access to clean drinking water, sanitation, medical care and decent employment. Being poor can also mean they have little protection from violence and have no role in decision making.

Activities Needed to Develop Community- Based



Disaster Preparedness Program of Women
in Barangay Padang

Table 3 Present activities needed in CBDP of women in Barangay Padang. As shown in the table, all activities were rated highly needed by women.

Table 3. Activities needed to develop community- based disaster Preparedness program of women in Barangay Padang

ACTIVITIES	MEAN	DESCRIPTION
Education in disaster preparedness	2.60	Highly Needed
Coordination and linkages	2.68	Highly Needed
Drill on disaster evacuation search and rescue	2.65	Highly Needed
Tree planting	2.73	Highly Needed
Lahar and flood buffering	3.00	Highly Needed

Legend:

- 2.51 - 3.00 highly needed
- 1.51 – 2.50 moderately needed
- 1.00 – 1.50 not needed

Maria said, “ Lahatngmanganabanggitnaactibidadesng CBDP gayangEdukasyonparasapagpapa-angatngkamalayan at kaalaman, pagtanimngkahoy ay mahalagaparasapaghahandasamgadaratingnasakuna. Noon, makapalanggubatsabundokngMayon, ngayonpawalanayongmgamalalakingkahoy. Dapatmagtanimpara may sasalosamgabato at putiknagalingsabulkan”. “All mentioned CBDP activities like the education and awareness building and



planting trees are important in disaster preparedness. Before, the forest was thick on the mountains of Mayon, it is getting scarce. There should be tree planting so that it can serve as buffer to stone and mud coming from the volcano.”

Within the locality it is a sad thing to find the trees are being replaced by coconuts at the foot of Mayon volcano. The few remaining trees are also endangered for fuel consumption and commercial logging purposes. Though the existence of the no logging policy in the area is applied, but there are always these illegal loggers that cuts these trees. A tree is a very significant part of our ecosystem. It produces oxygen, sequesters carbon, fixes nitrogen, distills water, provides habitat for hundreds of species. Trees can control erosions. It can intercept rainfall and lessens the impact of precipitation on the ground by stabilizing the soil with their roots. Programs and activities should include detailed requirements on the maintenance and restoration of vegetation in areas prone to landslides.

One of the striking weaknesses identified in most local communities is the non-implementation of disaster preparedness program. Awareness, education and management capacity is needed to respond to the threat of disasters. Because of these weaknesses, The respondents cannot assess the damages in their own localities because they have inadequacy of knowledge and information. An Environmental Scan in the community will help women understand their community’s internal needs and assets.



It also provide them a better concept of disaster management which includes analysis of eco hazards. It will provide them the right approach and proper solution to these disaster problems.

The importance of coordination and linkages will help local organizations in developing contingency plans like conducting capacity and vulnerability analyses in their local areas involving all stakeholders. Properly coordinated development of a contingency plan and involvement and active participation of the women will make disaster response efficient and effective, greater involvement of women in disaster reduction, prevention and preparedness and improved risk management.

“It is important to have an organization says Maria, it will become the focal point of advocacy to mobilize local resources and facilitate better coordination among the women in our community and other communities”.

Addressing the lack of knowledge in terms of drills on evacuation, search and rescue trainings is one of these activities that is needed by women in the communities.

“Mgabatas eskwelahan lang namanang may drill exercises. Dapat mayroon din sa komunidad para matuto din ang lahat, .says Maria” it is only the children in school who have drill exercises. There should also be drills in the community so everyone can learn says Maria.



They need to be equipped with actual training exercises. Activities should really be an enticing one so as to encourage the participation of women in the locality. Activities may include procedures of search and rescue providing each role of the stakeholders. Location identification or ocular inspection for evacuation within the locality or other alternative sites for shelter areas as well as location of highly disaster prone areas could be conducted in an artistic/ creative fun workshop which women can really enjoy. Search and rescue operations need assistance in terms of medical services. Does the local community have medical services available? Coordination of relief activities among local organizations, government and NGO's should be well considered so as to avoid duplication of efforts. There must be logical framework in making designs and management programs done in a consistent manner always involving the women in all these processes.

Respondents recalled that in 2006, the occurrences of successive super typhoons *Milenyo* and *Reming* killed about 2,000 people and destroyed billions of pesos worth of agricultural crops, properties and government infrastructures. They would not want those tragic disasters to be repeated. While the province of Albay will be implementing construction of a multi-million flood control structure along critical flood paths down the slope of Mayon Volcano as an ease to the destruction caused by lahar during rainy



seasons, it will be constructing dam structures as spur dikes and embankment along gullies on the slopes of Mayon that serves as a route of avalanches of huge volume of volcanic debris to the rivers.

The proposed projects were based on the necessity of putting in place the structures that would mitigate the danger of more avalanches of lahar and flashfloods threatening residential areas, farms and properties below Mayon volcano. In terms of women's participation in such big projects, the local level would at least do the information dissemination to its local residents including women sector so that they will not be left behind. They will not just be the recipients only. There must be an integrated approach linking action at the grass root level. This can help enhance participation of women in Padang.

Strategies to Increased Women's Participation in Community Based Disaster Preparedness

Table 4 shows that education campaign, skills building, exposures and linkages are strategies highly rated by respondents joining and women's organization was rated moderately suggested.

Education and campaign. The effects of disasters is intensified by the fact that the women do not often have appropriate knowledge in disaster preparedness. The significant role of education in improving the



capacity of women and communities to reduce the risk of disasters is by anticipating, educating and informing the stakeholders who are one of the main keys to reduce the deadly effect of such natural disaster.

Table 4. Strategies to increased women’s participation in CBDP

STRATEGIES	MEAN	DESCRIPTION
Education and campaign	2.76	Highly Suggested
Skills building	2.76	Highly Suggested
Women’s organization	1.75	Moderately Suggested
Linkages	2.50	Highly Suggested
Exposures	2.56	Highly Suggested

Legend:

- 2.51 – 3.00 Highly suggested
- 1.51 – 2.50 Moderatelysuggested
- 1.00 – 1.50 Notsuggested

A project approach can be developed to inform, educate communities which highlights the women’s participation on disaster prevention/preparedness education as an environmental initiative. The project may develop and adapt educational materials that will be published and disseminated. This will be understood by women who are of low



education. The final materials will be translated and adapted to ensure that they are culturally appropriate and locally relevant. Theater developmental education can also be organized. This creative activity will include women in projecting or animating disaster preparedness and mitigation which is one of the core environmental issues in the locality. This framework emphasizes the importance of education and learning in its priorities for action. The use the knowledge, innovation and education to build a culture of safety and resilience in the community for all levels.

Strengthening of human resources, capabilities and capacities of research and development institutions for disaster reduction and mitigation in the area is also of great importance. This will minimize traditional approach to disasters adopted by the government as well as NGOs that have created a dole-out mentality among the poor. As a result, the vulnerabilities of the women have increased because they always expect outside assistance instead of developing their individual capacities and creativities. It is for the sake of their own survival strategies which can eventually minimize the effects of such disasters. Such strategies need to expand to protect life and properties during major disasters. Education and training programs plus the improvement of facilities for women professionally involved with CBDP should be sufficiently enhanced. It must focus on ways and means to reduce disasters. The advantages of training local practitioners



specially the women is that they can re-echo knowledge learned by their own families and from other women in the locality.

Skills building. Community development strategies do not only stress leadership training and providing residents with access to skills, knowledge, and resources, but also strategies that emphasize teaching on how to apply skills and knowledge to the resolution of problems during a crisis situation. Skill in Emergency Management is another important aspect wherein strategic process should be implemented, not a tactical process that usually resides at the executive level in an organization. The expected outcome of these efforts is to build more awareness, support responsible, connected, and trusted women communities which will work in tandem with, not in opposition to the authorities or private institutions during an extreme event. These will also enhance their ability to respond effectively during a crisis, minimize recovery problems, and reduce the time needed to normalize and rebuild communities.

Women's organization. Establishing or joining women's organization that can create venue for sharing ideas, easy mobilization and action to solve problems is an essential concept which can increase participation. Creating and strengthening of linkages and networking for partnership, exchanges of information, skills and knowledge and strengthening



support for action so as to enhance disaster prevention, reduction and mitigation is indeed an essential need. The potential of the information media, and the private sector at large must be sufficiently mobilized. People's Organizations often times viewed only as end beneficiaries of projects. People's Organizations have evolved into a major stakeholder, not just as recipient but as implementers fully involved in the project cycle.

Aspects in Community-Based Disaster Preparedness of Women in Barangay Padang

Disasters that Affect the Respondents

As shown in Table 5 all disasters like volcanic eruptions, flood, storms and earthquakes tremendously affected the women and their particular communities.

The erratic eruptions of Mayon volcano put the residents of Barangay Padang in an unstable and insecure situation which prevents the respondents to improve their economic condition.

Lilia recalled her recent experience in December 2009 where they were forced to evacuate.

*“The explosion was loud especially at dawn in December 18, 2009, when it explodes the ground shakes”.
The smoke was very thick. If the ashes continue to fall all our*



plants will die. There will be food shortage especially our rice and vegetables”.

We had to evacuate. Some of the residents did not like to evacuate for fear that their houses will be looted and their animals has to be fed but a military dam truck came to fetch us, an order from the Provincial Government had ordered all residents living within the radius of 4 kms.has to move out as soon as possible. Danger zone was extended up to eight kilometers radius later.

Table 5. Disasters that affects the respondent

KIND OF DISASTER	NUMBER	PERCENT
Volcano eruption	40	100
Lahar/mud flow	40	100
Typhoon	40	100
Flood	40	100

When they returned home some of their pigs, chickens and dogs were dead. Their plants were covered with ashes.

Back in 2006 mud from Mayon volcano was flushed by heavy rain brought by typhoon Reming where 430 individuals were buried and washed away to the sea by the rampaging flushflood. It resulted in a catastrophe that had totally disrupted their normal life in its established social, traditional and economic life systems. There was no exception in experiencing the effects of eruption disasters that compelled the residents to bear the loss of lives as well as properties in Padang.



“It was 3:00 in the afternoon when we heard the sound of a roaring water. I was curious to see why the neighbors were shouting”, says Myrna. I saw my neighbors drowned from the dark body of water rampaging down to the sea. I took my two (2) kids and run to the comfort room at the back of our house. I embraced my kids as we prayed and prayed. We were all crying. The situation was very fearful. The water was already passing near our house. It was getting dark and there was silence in the neighborhood. our neighbors’ houses were all buried. Some were flushed to the sea.

They were all gone.”

“ I saw a private dam truck full of people trying to get away from the flush flood but they were all flushed to the sea. Says another respondent. I knew my house was taken by the water. I was in the farm. Isaw the big boulders of water from Mayon. It was fast and strong. I could not move my feet then. It was the day of armagedon Our village became very clear., no more roads, no more trees, no more houses. It became a muddy village. I could not find my neighbors and my family. Because of the strong typhoon, heavy rain poured and lahar flowed its way to Padang.”

Responses to Disasters

Table 6 presents the responses of the respondents to disasters. It was noted that an innate role of a mother has to always see to it that the family is safe, ready for her families food, clothing and other things that the family needed.

“ At the evacuation center food has to be readied for the family because ration is not always prepared if there are ration it is alwaysnoodles and sardines. no vegetables or meat. Everyone has to bringenough clothes and beddings and also kitchen utensils to avoid sickness. Sickness is inevitable at the evacuation centers because of many people.



Medicine is therefore needed usually is very important to every one”

Table 6. Response to disasters

RESPONSE TO DISASTERS	IMPORTANT	NOT IMPORTANT
Prepare food, money, medicine, clothing flashlight, water, beddings and etc.	40	0
Evacuate as needed by situation	40	0
Prayer	40	0
Wait for order of LGU officials to evacuate	25	15

In many instances residents along the creek side were always alert. When rain continuously fall, river becomes bigger and higher, residents has to evacuate to save their lives even without any local orders to tell them to evacuate. They claimed they have also practical senses. They can also read the weather. They don't only save their lives but also their animals like cows, carabaos and pigs in a safer place before they evacuate.

Praying is also an important aspect that the respondents do when calamities come. They believe in the intercession of the Divine God to save them from being harmed during calamities. One among the stories that proved prayer as the saver of life is through an old woman



experience, she lives alone in a hut. When lahar was flushed by typhoon Durian in 2006 half of Barangay Padang was flushed to the sea. The small hut where the old woman lived was not hit by the rampaging flood by the volcano. As if the flood had made its way not to flush the old woman's hut.. When asked how come she was alive; she merely answered them , "I prayed". On the other hand being so fanatic to a religion is also a factor that hinders the respondents to act or to move out of their home to a safer place or to actively participate in CBDP activities because they tend to rely on God's grace to save them and if they become victims because of their negligence or lack of knowledge they will say "It is God' s will" or it is their fate.

It is also noted that it is important to wait for the order of the local government to evacuate. It is for their safety because they can use government facilities like trucks that haul them and the evacuation centers that the government provides them. Rations are also provided. With the Zero- Casualty policy of the Government of Albay, no one is spared to be left when order is disseminated. Everyone has to be lifted out of their homes.

"It is not easy just to evacuate," says Maria. "It is tiring, timeconsuming and expensive. It disrupts our activities in the farm".



Participation from the residents especially the women is automatically responded when an order is from the Provincial level.

In the recent eruption of Mayon Volcano, the government issued an order for all residents living within 4 kilometers radius to evacuate. Because it was an order of the government, every resident has to cooperate and leave their homes to the evacuation center.

“The importance of being cooperative to orders of the local government is that everyone is being saved”, said one respondent. “No casualty was counted”.

The effects of disasters are tremendous by the fact that the poor do not often have appropriate knowledge of these preparedness activities. On the other hand, the traditional approach to disasters adopted government and NGO's where people are evacuated, fed in the evacuation centers, sent home when normal situation returns. It has created a relief mentality among the poor rather than building their capacity to cope with disasters. As a result, the vulnerabilities of the communities have increased, as individuals were left to develop their own survival strategies for minimizing the effects of disasters. Such strategies are far from adequate to protect their property or possessions during major disasters. For example, the PRA study revealed, that many of the poor do not know the meaning of warning signals, preservation of dry foods, where to get credible forecast



informations, or where to take shelter. Thus education and trainings in disaster preparedness is a must.

CBDP Activities Attended by Respondents

As gleaned in Table 7 the level of participation of the women in Barangay Padang during disaster activities shows that activities is moderately participated in coordination and linkages, tree planting and education in disaster preparedness. Activities like drill on disaster evacuation search and rescue, lahar and flood buffering are not participated. It means that heavy activities are part of the male counterpart.

Table 7. CBDP activities attended by respondents

ACTIVITIES	MEAN	DESCRIPTION
Education in disaster preparedness	1.53	Moderately Participated
Coordination and linkages	1.75	Moderately Participated
Drill on disaster evacuation search and rescue	1.10	Not Participated
Tree planting	1.65	Moderately Participated
Lahar and flood buffering	1.0	Not Participated

Legend:



2.51 – 3.00	Highly Participated
1.51 – 2.50	Moderately Participated
1.00 – 1.50	Not Participated

It is noted that education in disaster preparedness activities is not well attended by the respondents. As mentioned in the respondents' occupation, most of the women are self employed and house wives who are pre-occupied with their income generating activities and household activities. Most of the respondents claimed that they did not know of such disaster preparedness trainings or activities. They were not informed or invited. The level of consciousness in CBDP does not show their activeness and participation. Unlike in the church cooperative program, women are actively participating in discussion and planning of their activities. Their activities and programs are successful because the women themselves made it happen. When women work they worked with enthusiasm.

In terms of coordination and linkages less participation of respondents can be attributed to their non participation in the different activities of CBDP. What do they need to coordinate and link with when they do not have activities or program to implement? It was not much of a felt need. Sometime in rainy November of 2010, there was a guy riding a motor cycle. Nobody knows who he was and where he came from. He went around the City declaring of a strong tsunami that was coming. He told



people that part of the city was already eaten by big waves and that they have to move as soon as possible.

He alarmed the whole City of Legazpi. News spread like fire and a lot of people near the sea side evacuated to a safer ground. Fortunately there was no tsunami happened during that day. The authorities in Legazpi tried to find who that guy was for giving false alarm but never found who he was. On the other hand it served a real drill for people in the communities because they never had drills for earthquake or tsunami disaster. The women in the community has no experience on drills. It is only the school children who had experiences on earthquake drill.

Drill therefore includes implementing mitigation techniques to carry out basic intensity, zoning mapping and risk assessment. This allows any selected area to be delineated into high, medium and low seismic hazard zones, and to assess its vulnerability.

Another significant activity that has a great factor in disaster preparedness is planting trees which can help soil erosion also serves as a natural buffer to calamities. Trees and forests are closely linked with weather patterns and also the maintenance of a crucial balance in nature. It is noted that it is extremely important for the women in Padang not only take a keen interest in the cause of environmental protection, but also to implement this ideals in action by planting new trees. In this way, they



will be making an important gesture to the community in demonstrating their concern and at the same time making their own little but significant, contribution. Some of the respondents said they saw the local Government officials did a tree planting. Most of the seedlings were not cared for and it eventually dried up. There is a need of close monitoring and scientific approach to such meaningful activities.

Another significant activity in disaster preparedness is the lahar and flood buffering. It is time for the women to participate in flood control planning to save their children and their homes. They can help propose for a project focused on the creation of a simple lahar pathway identification model for Mayonvolcano that can be readily reproduced using publicly available data. This project can be done through a workshop facilitated by an expert.. A survey of volcanic hazard zones within the vicinity to determine potential lahar pathways that include low-lying areas near the seashore is muchneeded. Simplistic lahar models could provide useful information for the community for further data collection efforts enabling the development of more precise lahar models.



Significance of Women's Participation in Community-Based Disaster Preparedness

In terms of significance women's participation in community-based disaster preparedness, a very low degree of respondents seeing themselves not important in CBDP because they are not of practical use (Table 8). They have nothing to do with community decision because it is the local government who decides anyway. They are ordered to follow. They are not tapped as partners in community based disaster preparedness development efforts of LGU's and NGO's to improve the environmental problems that can contribute to sustainable growth and poverty reduction. This does not reflect the needs and priorities that enhance the realization of women's significance.

To enhance the realization of women's significance in participating in CDBP program is supporting their practical coping strategies which facilitates their understanding and feeling of their capacities and capabilities.

Harnessing the capacities of women's perspective in CBDP should integrate decision making, disaster risk management and risk assessment, information and education to help address vulnerable conditions that will help protect themselves and their families including their communities against disasters. In such manner, it seeks to contribute to gender equality and women's empowerment.



Table 8. Significance of women's participation in CBDP

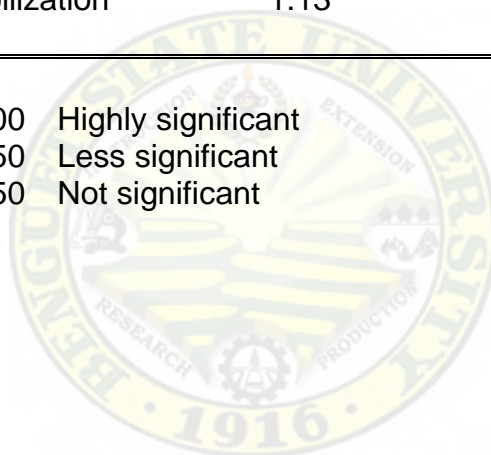
ACTIVITIES	MEAN	DESCRIPTION
Decision making	1.18	Not Significant
Development planning	1.20	Not Significant
Community mobilization	1.13	Not Significant

Legend:

2.51 – 3.00 Highly significant

1.51 – 2.50 Less significant

1.00 – 1.50 Not significant



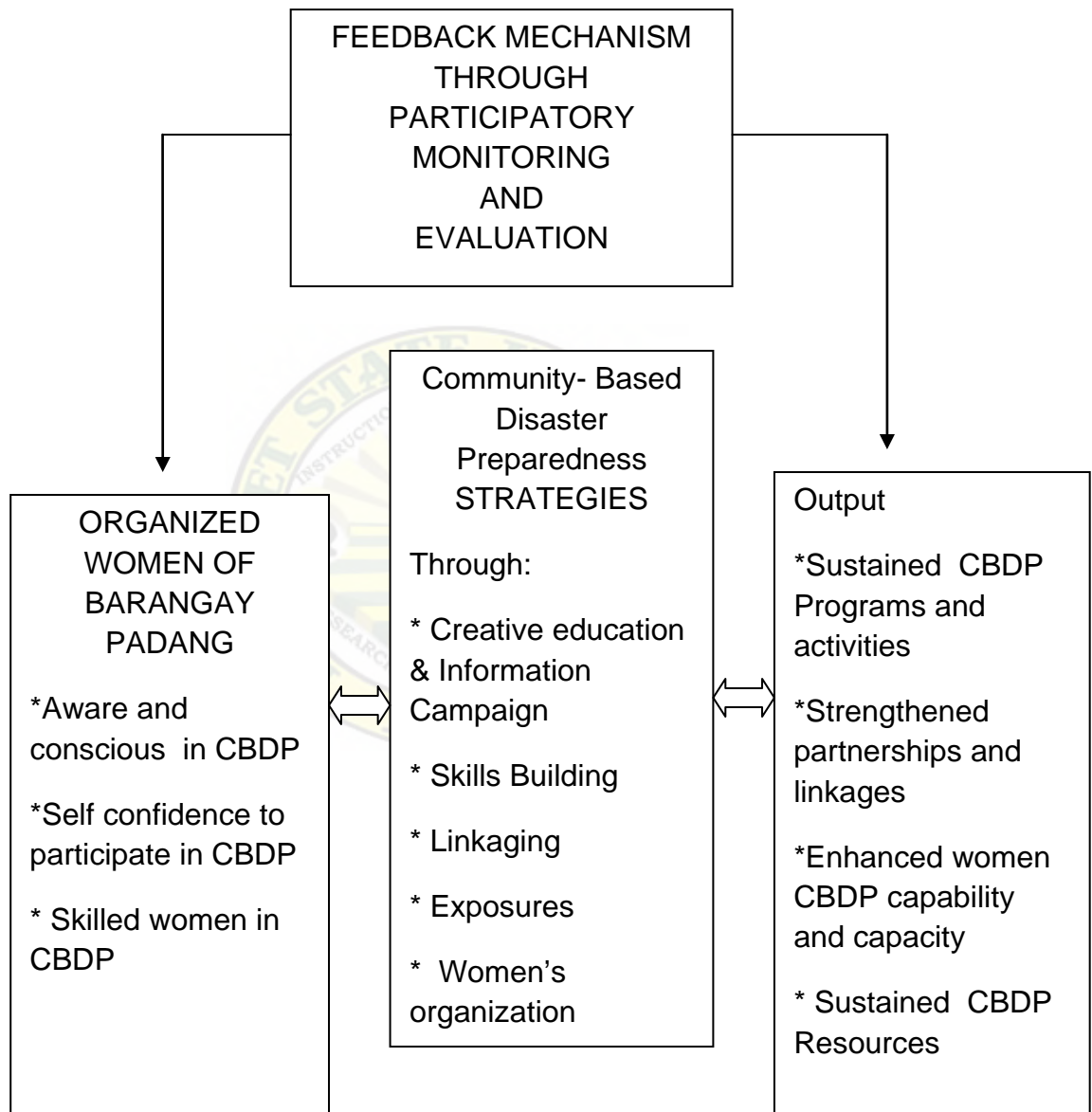


Figure 3. Improved Framework in Community-Based Disaster Preparedness Program

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study was conducted to determine the level of women's participation in the different activities of community based disaster preparedness program in Barangay Padang.

A better understanding of the study looks into the realm of Participatory approach which is basically to recognize women's capacity and capability in Community -Based Disaster Preparedness.

Involving women in community-based disaster preparedness decision making, Planning and Mobilization develop a sense of responsibility needed to maintain a good balance between women and their community. Providing women a space and a voice to actively participate in community based disaster preparedness is essential.

Women's non participation in any community development is not a development. It creates divisiveness. Participation depends on the awareness, encouragement, strategies and programs that are within their community. Being aware of their needs and problems in CBDP will direct appropriate actions with an end goal of achieving capabilities and able to transfer knowledge and resources to the community.



Findings

The findings of the study are as follows:

1. There is no existing local government or Non government programs and activities in the village that can facilitate women's education, information and awareness in community -based disaster preparedness.

2. Women see themselves as less important in CBDP decisionmaking, community planning and community mobilization in disaster preparedness.

3. There are no income generating activities/projects that can help alleviate women's poor economic condition to encourage participation in Community- based disaster preparedness.

Conclusions

1. Community- based disaster preparedness programs are not yet in place in barangay Padang.

2. Women see themselves as less important in CBDP decision making, community planning and community mobilization.

3. There are no programs/ activities that can help alleviate women's poor economic condition to encourage CBDP participation.



Recommendations

In view of the findings and conclusions the following recommendations are presented for adoption:

1. Establish a project approach that will develop and implement disaster prevention/preparedness education and information programmes aimed at generating general public awareness on community-based disaster preparedness and strengthening women's capacity to assist in the reduction of losses from natural disasters.

2. Involved the women throughout the process of decision making, planning and mobilizing to recognize their capacities and capabilities.

3. Encourage continued mobilization of local resources for disaster reduction activities and develop economic programs focusing on disaster preparedness, response and mitigation for women in a community level.

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APPENDICES

Appendix A. Interview Guide Questions



In the process of analysis the following factors will be looked into from the inquiries or questions listed below:

1. What is the profile of the women who participated in Padang Community- Based Disaster Preparedness activities in terms of :

1.1 . Age

1.2 . Civil Status

1.3 . Educational Attainment

1.4 . Religious Affiliation

1.5 . Occupation

2. What disaster had affected you most?

3. What do you do when Disaster arises?

4. Have you attended any Barangay Disaster Preparedness Activities like:

4.1. Education in Disaster Preparedness

4.2. Coordination and linkages on Disaster Preparedness

4.3. Drill on Disaster Evacuation and Search and Rescue

4.4. Tree Planting

4.5. Lahar and Flood Buffering



5. What is the significance of women's participation in Padang CBDP in terms of:

5.1. Decision Making

5.2. Development Planning

5.3 Community Mobilization

6. What is the level of participation of women in terms of CBDP

6.1 Decision making

6.2 Development planning

6.3 Community mobilization

7. What are the needs of women that can be addressed to encourage and strengthen their participation in Community-Base Disaster Preparedness ?

8. What strategies can be used to increase participation of women in CBDP?



9. What activities are needed to develop women CBDP programs in Barangay Padang?



B. Request Letter to Conduct Study

Republic of the Philippines
BENGUET State University
La Trinidad Benguet



September 06,2010

Hon. Geraldine B. Rosal
City Mayor
Legazpi city

Dear Madam:

Greetings!

The undersign is conducting a research entitled "WOMEN'S PARTICIPATION IN COMMUNITY-BASED DISASTER PREPAREDNESS IN BARANGAY PADANG, LEGAZPI CITY" in partial fulfillment of the requirements of her studies in masters degree in Community Development at the Benguet State University, La Trinidad Benguet. The study offers concrete ideas and issues that practitioners and planners may incorporate in their work. It will offer new perspective on women's experiences, needs and interests in disaster preparedness that will contribute to program planning, decision making and program implementation which can ensure meaningful participation of women equipped with information in disaster preparedness.

In this regard, may I request your good office to allow me conduct interviews and group discussions to the residents and officials of Barangay Padang especially the women which is the focus of the study.

Thank you very much and Mabuhay!

Respectfully yours,

(sgd) Jocelyn B. Kapuno

Photos in Barangay Padang





Plate 1. Padang memorial cross was put up in memory of those who passed away during the 2006 flash flood.
Photo by J. Kapuno (2009)



Plate 2. Improved Barangay hall of Padang destroyed by typhoon Reming in 2006.
Photo by J. Kapuno, 2009



Plate 3. First meeting with the Barangay Captain in Barangay Padang. Nov. 06, 2009
Photo by J. Kapuno, 2009



Plate 4. Group discussion with the teachers of Padang Elementary School. Nov, 2009
Photo by J. Kapuno

INTERVIEW SCENES



Plate 5. Pictures of some respondents during the interviews in Barangay Padang. Photo by J. Kapuno 2009





Plate 6. Children's theater workshop at the Evacuation Center
at Rizal Elementary School, Legazpi City
Photo by J. Kapuno, 2009



BIOGRAPHICAL SKETCH



The author traced her roots from the tribe of the Kalingas. Jocelyn Banasan Kapuno finished her social work studies at the Asian Social Institute in Malate, Manila.

She worked with different non-government organizations since 1986. One of the early NGO's where she worked with was the Social Action church-based organization concerned with displaced communities in the Cordillera. One of the communities is Taloy Sur, Tuba, Benguet. The community was displaced by the development of the Marcos Park with during the President Marcos administration. As a result, the residents were relocated to Nueva Vizcaya and Palawan.

Through social action, the displaced residents regained their land and were returned to its rightful owners. During those times, Ms. Kapuno was the social worker who supported the cause of the local residents. Further, she initiated and started the Cordillera Green Network, an environmental non-government organization (NGO) in the Cordillera dealing with the protection, conservation and proper management of natural resources and its inhabitants.



The researcher was not only interested in community work. She got interested in making video films. Her first film won the grand prize in the 1988 International Film Festival in Tokyo, Japan. She thought her winning was only accidental so she joined another festival also in Japan. She won a special award for the second time in 1992. Her continued passion on films led to another until she has the eye for documentaries of local people, culture, events and practices. .

The researcher is now based in Legazpi City where she is starting to orchestrate another NGO that can help protect and conserve the environment for the future generation.

