THE USE OF CBMS IN DISASTER RISK REDUCTION AND CLIMATE CHANGE ADAPTATION PLANNING AND MANAGEMENT

Introduction

Ladies and gentlemen, good morning. Before I begin my presentation on the use of Community-Based Monitoring System in disaster risk reduction and climate change adaptation planning and management, I would like to give a brief perspective of the Province of Surigao del Norte.

Surigao del Norte, being a poor province, is highly vulnerable to disasters. Disasters hit poor people the most, affecting their lives, properties and livelihood. The prevalence of malnutrition, high incidence of maternal deaths, school drop-out rates, and unemployment make it more vulnerable. The increasing mining activities, urban migration and human congestion and developing tourism industry contribute to the complexity of the problem.

Surigao del Norte Profile

Surigao del Norte is located in the Northeastern tip of Mindanao. It is bounded on the east by the vast Pacific Ocean, on the north and west by the Mindanao Sea, and on

the south by the provinces of Surigao del Sur and Agusan del Norte.

It is considered the gateway to Mindanao because of its strategic location. It is the entry point of the Japan-Philippines Friendship Highway connecting Mindanao to the rest of the Visayas and Luzon.

Because of its geographic location, it is proximate to the deepest parts of the world, the Philippine Deep and the Marianas Trench.

Fast facts

The province has a land area of 201, 710 hectares with Surigao City as its capital. It has 20 municipalities, one city and 335 barangays. Surigao del Norte's population in 2007 was 409,468, with 1.24% growth rate and population density off 203 persons per square kilometer. We experience maximum rainfall throughout the year with no pronounced dry season. We are classified as a second-class province in terms of income.

The Surigao del Norte's Advantage

The province is blessed with the bounties of the lands and seas. It is a haven of opportunities for business, leisure and adventure.

We have the following investment areas:

AQUACULTURE – We supply our marine products to the provinces in Mindanao. Our lobsters, prawns and sea cucumber reach to Cebu and Manila.

TOURISM - We are a tourism destination in this part of Mindanao. We have long stretches of fine white beaches, submarine caves, waterfalls and barrel-shaped surfs. We host annually two international events, the International Game Fishing Tournament in Pilar and the International Surfing Competition in General Luna, Siargao Island. We are a destination to eco-tourists and waters ports enthusiasts.

MINING - We are also blessed with large mineral deposits, one of the largest in the Philippines, if not in Asia. Mining is a major industry and an economic growth driver.

Development Challenges:

Yet, in spite of these rich natural blessings and potentials, we remain a poor province. We are confronted with:

1. High poverty Incidence especially in remote areas
2. Low agricultural productivity in both food and commercial crops
3. Low school participation rate in hard-to-reach areas
4. High malnutrition incidence among 0-5 year old and 6-12 year old children
5. Rapid denudation and degradation of natural resources due to deforestation and small-scale mining

6. Insufficient infrastructure support like farm-to-market roads, irrigation and postharvest facilities
7. Frequent occurrence of natural calamities like floods, landslides and storm surges which are becoming more intense because of the impacts of climate change.

Background of the Project

In 2008, the province was chosen by the National Economic and Development Authority, through funds from the United Nations Development Program (UNDP) as pilot of the Disaster Risk Reduction and Climate Change Adaptation (DRR-CCA) Program. The output of the program is a DRR-CCA Enhanced Provincial Development and Physical Framework Plan (PDPFP). In the same year, the Community-Based Monitoring System (CBMS) program also started.

Project Issues and Concerns

- While the formulation of the DRR-CCA Enhanced PDPFP was being funded by NEDA and UNDP, the CBMS implementation requires counterpart funds from the provincial and municipal governments. Some municipalities cannot implement the program in that year due to fund constraints.
- The dearth of technical manpower in the local government units is also another concern.

- In the conduct of household surveys, the geographical configuration of the province made surveys quite difficult.

The Project on DRR-CCA Mainstreaming has taught us risk analysis and assessment. We were able to identify the province's natural hazard vulnerabilities like flood, rain-induced landslide, storm surge, tropical cyclone, earthquake-induced landslide, liquefaction, ground rupture and tsunami.

The said project facilitated the preparation of risk maps and identification of areas prone to flooding *(map),* rain-induced landslide *(map),* storm surge *(map),* earthquake-induced landslide *(map)* and liquefaction *(map).*

Considering these vulnerabilities, we were able to identify which of the areas are most vulnerable to all hazards.

In the CBMS, the municipalities, at present, are in various levels of data analysis and integration. Based on the CBMS indicators, here is the partial report:

Indicator	**Average**
Malnourished Children (0-5 years old)	18.43 percent
Households with Access to Safe Water	89.50 percent
Households with Access to Sanitary Toilets	76.53 percent
Households who are Squatters	9.16 percent
Households with Makeshift Housing	2.06 percent
Households victimized by crime	0.48 percent

Here are the municipalities which scored low in the CBMS indicators:

1. Pilar
2. Malimono
3. Gigaquit
4. Burgos
5. Gen. Luna
6. Sison
7. San Francisco
8. Tubod
9. Alegria
10. Mainit
11. San Benito
12. Bacuag

CBMS Application in DRR-CCA Planning and Management

- DRR-CCA Planning and Management has been successful in promoting convergence of planning processes at the provincial, municipal and community levels- through the use of CBMS data.
- CBMS was used in the identification and prioritization of areas most vulnerable to disaster risk and climate change.
- CBMS was used in the formulation of some DRR and CCA policies.

    1. Priority assistance should be given to municipalities which scored low in the CBMS indicator survey in order to strengthen their coping mechanism to disasters.

2. Disaster Risk Reduction and climate change adaptation should be inculcated to all stakeholders especially to those identified as poor and vulnerable.
3. More investments should be given to areas and sectors identified as poor and vulnerable.
4. Government should provide resettlement areas for informal settlers located in identified environmentally dangerous zones.
5. Public information and education should be intensified in vulnerable areas to help people avoid risk, protect their communities and respond correctly when disaster strikes.

- CBMS was used in the formulation of some DRR and CCA strategies.

1. Strengthening of disaster coping mechanisms through the HEALS program of the Provincial Government.

   H - Health
   E - Education & Environment
   A - Agriculture & Aquaculture
   L - Livelihood
   S - Spiritual Renewal, Senior Citizen and Social Welfare Security

2. Reactivation of Local Disaster Risk Reduction and Management Councils and Emergency Response Groups especially in hard-to-reach and vulnerable areas.

3. Mainstreaming of disaster risk reduction and climate change adaptation concerns in the local planning systems and processes of municipalities identified as highly vulnerable:

1. Malimono
2. Gigaquit
3. Bacuag
4. Mainit
5. Alegria
6. Claver
7. Tubod
8. Sison
9. Placer
10. Gen. Luna
11. Socorro
12. Surigao City

4. Prioritization of projects in the Annual Investment Plan that would address disaster risk reduction and climate change adaptation issues in vulnerable communities:

- Construction of potable water system
- Establishment of supplemental feeding program
- Livelihood and employment program
- Waste management program
- Socialized housing program

Best Practices

1. Counterparting scheme of CBMS implementation. The Provincial Government's counterpart included the venue and accommodation and supplies of the trainings and the printing of the survey questionnaires.
2. Provision of computers from United Nations Development Programme through the National Anti-Poverty Commission, Inc. to the LGUs.
3. Outsourcing of funds from other donor agencies like AUSAID, UNDP, USAID and World Bank strengthens project complementation and pooling of resources.

Conclusion

Disaster, environment and development are closely linked to each other. The Provincial Government places importance on building its capacity to mitigate the risks.

Improving service delivery on health, food and nutrition, water and sanitation, shelter, peace and order, education, income and employment will reduce the vulnerabilities of our communities.

Strengthening the coping mechanisms of the communities will not only save lives but also protect assets, livelihoods and prevent people from becoming poorer than they already are.