

CASE STUDY

The succeeding pages present for your examination and discussion an actual, on-going initiative on green jobs. A facilitator will be provided to your group to direct the discussions and assist you in completing the assigned tasks within the time provided.

Instructions:

1. Read the case study provided your group. (15 min)
2. Discuss among yourselves, using as guide the questions indicated below. The facilitator may also pose some questions to probe further or elaborate certain points. (30 min)
3. Write your responses to these questions on the flip charts provided. (5 min)
4. Choose a member of your group to present your outputs in plenary. Each group is given a maximum of 10 minutes to give a brief description of their case, then present their discussion results.

Total time: 1 hour 45 min

Guide Questions:

1. What is the social/economic (labour) challenge or issue in the case?
2. What environmental factors greatly affect/are affected by this challenge/issue?
3. What are the probable impacts of this challenge/issue on specific stakeholders?
4. How are these impacts responded to?
5. How could these responses be enhanced or strengthened to ultimately lead towards green jobs?

A Case Study on CC-Vulnerable Coastal Community
*Protection and Sustainable Natural Resource Management of Coastal Areas –
A Community-Based Climate Change Adaptation and Mitigation Case*

Introduction

The Philippines is one of the most vulnerable countries to climate change. Foremost of the reasons is its archipelagic nature, consisting of 7,107 islands. About 70% of the country's 1,500 municipalities lie within the 32,400-kilometer coastline. The Philippines also lies along the path of tropical storms. About 20 typhoons pass through the country every year. Since climate change is predicted to cause more intense and more devastating storms, the coastal communities are therefore at great risk.

Most people living in vulnerable areas along or near the coasts simply do not have better choices. They just could not afford the cost of real properties in areas that are not exposed to hazards and therefore have to contend with their conditions being mostly informal settlers along coastal zones. Those who suffer the most are generally the poorest. Ironically, this poorest sector of society contributes least to the problem of climate change. And yet, they suffer much in terms of job availability (unemployment), under-employment and oftentimes suffer abuses in their jobs from some opportunistic employers.

This case study covers the municipality of Batuan in the province of Masbate. It is basically a 5th class municipality with a total land area of 5,341.40 hectares. The land area is subdivided into 14 barangays which are all within the coastal zone – the subject of this case. Coastal fishing communities are, in general, highly depressed due to very low income and lack of employment opportunities. The average household income of fishermen in the region is Php1,529 per month which includes all sources such as fishing, farming, part-time employment, etc. Current municipal population stands at 12,038 persons which is relatively small. The coastal fishermen are basically considered part of the poorest of the poor considering that their level of income is way below the poverty line. As their number increases, more competition for the same resources ensue, thus, stocks decline and more fishermen resort to using unsustainable and illegal fishing methods. The consequence is depletion of resources. Even the mangrove forest which serves not only as protective natural barriers for tsunamis, typhoons and other natural calamities but also as ideal sanctuary of aquatic resources, are not spared of destruction as a result of poverty.

On the brighter side, however, a recent assessment of coastal and marine resources conducted by the Philippine Federation for Environmental Concern (PFEC) indicated high potentials for the community as a variety of fisheries and other aquatic resources abound in the municipal waters of Batuan.

Challenges

Some of the serious impacts of climate change in this subject community include rising sea level, continuous erosion of coastal and river banks leading to incessant recession community areas, excessive flooding that destroy crops and plantations as well as lives and properties especially homes and dwelling places. These are as far as physical impacts are concerned. What is more serious is the CC impact on the livelihood of coastal communities. Excessive siltation and pollution along coastal lines lead to drastic impairment of important and high value coastal marine and aquatic life. The destruction of mangrove forests, for instance, lead to drastic reduction of fish and crustacean catch and limit the spawning grounds for important marine and coastal life. Already, the communities report around 50% reduction of fish catch compared to

about 5-10 years ago. The impact of climate change in terms of reduced productivity in the coastal and marine ecosystems takes great toll on the quality of life of coastal communities. They remain poor and even deprived due to the onslaught of CC and typhoon frequency that batters the community year after year. Added to these, is the seeming neglect of authorities especially the local government unit in protecting and properly managing the marine and coastal resources resulting to open and free access even of illegal fishers and big-time commercial fishing vessels. Consequently, rapid depletion of marine resources, destruction of coral reefs, reduced fish catch for the community and continued unsustainable natural resource use significantly impair efforts towards environmental protection and management.

Responses/Opportunities

There is such a broad spectrum of strategies to Climate Change adaptation considering that CC oftentimes limits or impede development options contributing to lost opportunities for the great majority of poor coastal communities. Strategies may range from simpler methods such as restoration of coastal forests and coral reefs, community-based conservation and aquaculture, protection and reconstruction of wetlands to more technical approaches such as coastal and coral erosion monitoring, sea level and tide monitoring, coastal zone monitoring, impact assessment studies, light detection and other wide-ranging studies. Because of the very wide range of technical expertise needed and the varying absorptive capacity of the community, not all climate change adaptation interventions can be introduced in a community, much less sustained by the target communities. Thus, careful attention was given in designing a combination of adaptation interventions to enhance the communities' resilience. Most important of all, the communities' capacity must be built to be able to sustain these adaptation options.

This case therefore demonstrates an innovative model of community-based adaptation using a combination of biophysical protection through ecosystems approach and enhancing economic capacity to adapt to changing living conditions. As the study is too broad, only two of the several phases of the project will be highlighted. These are the (a) Community-based Climate Change Communication Strategy and the (2) Implementation of Some Adaptation strategies.

There is a lot of Climate Change Adaptation options that a community can consider. Some of these perhaps have been operational at the community level although they are unconscious about them. As a result of the Climate Change Communication strategy used in this case, the coastal community was catalyzed to act together to address the impact of climate change, protect their lives and properties and improve their quality of life. Realizing that working together as a community and contributing each one's efforts for a common good will spell out difference in community development, the constituents have initiated and supported various mitigation and adaptation interventions in their municipality. This, coupled with the serious involvement, commitment and support of the Local government Unit, have generated external support (financial and technical) from various sectors. They are now engaged in the following development work:

- a. Restoration of coastal mangrove forests
- b. Delineation, protection and management of Marine Protected Area
- c. Restoration of coral reefs

- d. Community-based conservation and aquaculture
- e. Resource Inventory for livelihood options
- f. Institutional, Policy and Regulatory involvement
- g. Continued capacity building for community livelihood resiliency to CC

Already, the community have started rehabilitating their extensive but almost depleted mangrove forest through reforestation and intensive protection work employing the “bayanihan” practice (traditional voluntary community service). They are now in the process of developing a comprehensive coastal and marine management plan for the municipality as a result of their successful initiative to declare part of their site as Marine Protected Area. Included in the plan is restoration of coral reefs and other conservation and protection measures. As technical assistance become available from the Bureau of Fisheries and Aquatic Resources (BFAR) and academic institutions, there are now initiatives on engaging in aquaculture and other environment-friendly and sustainable livelihood options for the community. Natural resource inventory in the marine, coastal and inland areas are being undertaken to determine other potential livelihood and enterprise development options that the community can engage to in order to further improve their quality of life. All these interventions are designed to increase resiliency of the community to climate change.

On the part of the government, the LGU have institutionalized CC programs and started allocating regular support funds. The provincial government at the same time is providing technical and financial support to the municipality’s CC program. Line agencies such as DENR, DA, BFAR DAR are now providing technical support. The academic sector is now mobilized, and some international support facility such as UNDP & WB are now coming in. The once small, remote, and obscure community is slowly becoming a model in CC mitigation and adaptation interventions.

Therefore, the challenge of creation of green jobs in coastal communities is great. With all the attendant development potentials and prospects coming in, it is hoped that all efforts will lead ultimately to sustainable development, sustainable livelihood for the local communities, and climate change resilient municipality of Batuan, Masbate.