A Preliminary Assessment of Coastal Development Planning in the Municipal Waters of Bolinao, Pangasinan, Philippines

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Introduction
The University of the Philippines through the Marine Science Institute (MSI), the College of Social Work and Community Development (CSWCD) and the Haribon Foundation for the Conservation of Natural Resources (HARIBON) are implementing a Community-based Coastal Resources Management (CBCRM) Project in Bolinao and developing a model for CBCRM that is interdisciplinary and participatory in nature, and applicable nationwide. The CBCRM Project, as developmental action research, strives for more active participation in the planning and implementation of coastal resources management.

The fisheries in Bolinao are diverse but management arrangements rotate around the siganid and milkfish fry concessions and the leasing of municipal waters for fishpen and fishcage operations. The rationale of the municipal government is clearly for taxation purposes rather than for the sustainable management of the coastal resources and it has not prevented the overuse and overexploitation of the coastal area and its resources. Recent enactment of an ordinance allowing the setting-up of fishpens and cages has caused conflict between and among resource users over access to certain fishing areas from which sustenance fishers derive their livelihood. These pens have detrimental consequences on the coastal environment and people dependent on these resources.
Coastal Development Plan in Bolinao: How did it start?

Conceptualization of the Framework

In order to resolve use conflict, overuse and misuse of the Bolinao's coastal environment and fisheries, one of the most logical and appropriate strategies is to formulate, legislate and implement a coastal development plan (CDP) using methods such as economic planning, sectoral planning, land-use planning, shoreline restriction, area protection and exclusion and site acquisition. The broad mandate of the local government units (LGUs) allows for such flexibility in the management of the municipal waters of Bolinao, which are defined in the 1991 Local Government Code to include all the coastal waters within a fifteen kilometer distance from the lowest tide mark. A CDP had not previously been used in Bolinao and no ordinance and resolution qualifies as a possible forerunner of this type of measure. In the Philippines, no municipality has gone into this type of detail and participatory nature of planning.

In the CBCRM Project, the idea of formulating a zoning plan for Bolinao started as early as 1994. With the rejection of the proposed Bolinao Cement Plant Project in August 1996 resulting from the denial of the Environmental Compliance Certificate (ECC), the challenge to the municipal government to formulate a land-use and coastal plan was acknowledged not only by those who opposed the project but also those who supported it. Recognizing the immediate need, the CBCRM Project offered technical assistance to the municipal government in the preparation of the plan.

Different approaches on how to proceed with the activity were discussed. The project staff debated which approach was appropriate (top-down or bottom up?), who should play the main role (the four peoples' organizations or the local government?) and what to call the activity (Resource-Use Mapping, CRM Agenda Formulation, Coastal Zoning or Coastal Development Planning?). Later the project staff arrived at a consensus to call the activity Coastal Development Planning and that a combination of all possible approaches be considered, providing for active participation of the community and the local government.

CDP is an innovation in development planning especially in the field of local government administration and coastal resources management. The traditional and usual planning in the local government can be characterized as top-down, normally a function of the Municipal Mayor with the support of the Municipal Planning and Development Coordinator and the Municipal Local Government Operations Officer. Although mandated by the LGC, people's participation is being ignored in the planning process particularly by the elected officials contradicting the real essence of people empowerment.

People's Organizations

In May 1996, a coastal zoning orientation was conducted for the officers and members of four peoples' organizations organized by the CBCRM Project in four different barangays (villages): Samahang Pangkalikasan ng Arnedo (SAPA), Samahan ng mga Manggingisda at Mamamayan ng Binabalian (SAMMABI), Samahan ng mga Manggingisda at Mamamayan ng Balingasay (SMMABAL) and Samahan ng mga Manggingisda at Magsasaka para sa Kalikasan (SAMMAKA). The output was a resource-use map indicating their proposed management activities for Bolinao. In the preparation of the map, they were asked to identify fishery and coastal management-related issues, problems and concerns, their basis and what management actions or options should be considered. Specifically, the map was oriented to marine protected areas in the municipal waters bordering the barangays of Arnedo, Balingasay and Binabalian and the mangrove rehabilitation area in Pilar and Victory.

While developing the framework, the project staff started facilitating the education of the members of SAPA, SAMMABI, SAMMABAL and SAMMAKA about the need and importance of planning for resource management. Consultations among the four peoples' organizations (POs) helped validate and refine their resource-use map. The four POs, which were then forming a federation, came up with their draft resource use-map in June 1996. The map was then subjected to refinement until it was called Proposed Coastal Development Plan (CDP) for Bolinao.
From July to September 1996, the Proposed CDP was subjected to community consultations until it was presented to the general assembly of the members of the four POs for adoption in October 1996. It was also during that period when the four POs were federated under the name Kaisahan ng mga Samahan para sa Kalikasan (KAISAKA).

While doing groundwork at the community level, the CBCRM Project also started orienting the key people in the municipal government about coastal development planning and how it could be formulated in a participatory manner. It was stressed to these key people that the municipal government particularly the Office of the Mayor would need to take an active and lead role in the activity. Reading materials needed for their reference were shared with the staff of the Mayor. A series of discussions was started to accommodate questions and insights on how to proceed with the planning.

**Municipal Government**

As early as 1994, the concept and the need for coastal zoning in Bolinao were introduced to some of the key officials of the municipality, but the controversy over the proposed construction of a cement plant in the municipality hampered all initiative on coastal resource management. Subsequently, although polarized by the cement plant issue, the CBCRM Project still offered the municipal officials technical assistance in the formulation of a coastal zone plan. The absence of a land-use plan was one of the reasons the Department of Environment and Natural Resources denied the application for ECC of the cement plant.

After a series of discussions and negotiations, the Mayor finally requested the CBCRM Project to assist the municipality in the formulation of a plan. In November 1996 a meeting was held with the Mayor, the Municipal Planning and Development Coordinator and the Municipal Local Government Operations Officer to discuss how the CBCRM Project can provide assistance in the preparation of the plan and how to proceed with the planning. The municipal officials were also informed about the initiative of the KAISAKA and how that initiative can be a collaborative effort with the municipal government. The Mayor gave his support to the activity and agreed to sponsor a Multi-Sectoral Forum on Coastal Development in Bolinao in December.

Prior to the Multi-Sectoral Forum, a pre-consultation was held in November 1996 wherein the KAISAKA version of CDP was presented, validated and refined. The pre-consultation was attended by representatives of the municipal government, local organizations and other concerned individuals. The result of a study on land evaluation was initially presented and integrated into the proposed CDP. The KAISAKA version contained a zoning scheme which divided the municipal waters into three sectors: Sector 1 or Ecotourism Sector; Sector 2 or Multiple-Use Sector; and Sector 3 or Fishery Management Sector. After the presentation, a workshop was conducted to validate and refine the KAISAKA version. Results of the workshop suggested the delineation of an additional sector which covers the municipal waters bordering the central area and was temporarily called Sector 4 or Special Management Sector. The output of the pre-consultation was then consolidated and became the proposed CDP endorsed by the local government and KAISAKA.

**Multi-Sectoral Forum**

On December 5 and 10, 1996, the municipal government sponsored the Multi-Sectoral Forum on Coastal Development Planning for Bolinao. The CBCRM Project and the Office of the Municipal Planning and Development Coordinator served as secretariat. It was attended by around 120 people, mostly barangay leaders, heads of barangay-based organizations, media, representatives of the provincial government, representatives of other government agencies and other concerned individuals. The Multi-Sectoral Forum was the first big gathering of local officials and community and PO leaders organized after the decision on the highly controversial, proposed cement plant in Bolinao in August 1995.

The objectives of the forum were:

- To consult the stakeholders in Bolinao on the formulation of a coastal development plan for the municipality towards sustainable use and management;
- To present the municipal government’s vision of coastal development and resource management;
about the framework of the CDP. The Multi-Sectoral Forum on CDP was also initiated, facilitated and documented by the CBCRM Project. During committee meetings and community consultations, the CBCRM Project staff were allowed to talk, give comments and suggestions and share insights. The CBCRM Project Networking Staff sits as the Secretary of the Committee and has facilitated the planning process.

The CBCRM Project with the assistance of some faculty of the U.P. Marine Science Institute has also conducted a technical study on fishpens and fishcages in Anda and Bolinao and this was presented to the Committee as one of the guidelines in the formulation of the plan. The Project has also collected materials on CRM and planning and made them available to the members of the committee for their reference.

**Analysis of Strengths and Weaknesses of the CDP Process**

**Strengths**

- Bias towards community-based and participatory planning.
- Legal foundation through an executive order. The committee was institutionalized by an executive order issued by the Mayor and obtained the support of the officials of the coastal barangays of the municipality.
- Technical assistance from the CBCRM Project. The CBCRM Project is committed to assist the Bolinao community in pursuit of sustainable and equitable management of the coastal resources.
- Members of the multi-sectoral committee have developed a sense of ownership of the plan, instead of looking at the CDP as an activity or initiative of the CBCRM Project.

**Weaknesses**

- Passiveness and lack of participation of some committee members which affects the morale of some of the more committed members.
- Lack of technical skills and knowledge by the majority of the committee members and the CBCRM Project staff on coastal planning.

- There is a tendency by some members to focus on details and controversial issues such as fishpens.
- Personal interests still prevail although representatives of different sectors should convey the sentiments and interest of the sector they represent.
- Language barrier impeded some of the members from actively participating in discussions. Some members do not understand and speak English and some can hardly speak Tagalog and although the CBCRM Project Staff understand the local language (Bolinao and Ilocano), they use English and Tagalog. Minutes of the meetings and reference materials were written in English.

**Learnings and Recommendations**

The Coastal Development Planning process in Bolinao is still in its early phase yet already valuable lessons were learned during the conceptualization of the framework and the actual planning.

- Meaningful people's participation can only be realized if communities are organized and empowered.
- Education, awareness and capability building on coastal planning are essential as a means to empowering the people and providing the opportunity and access to participate in resource management.
- Coastal planning should be encouraged as a resource management tool as it attempts to address issues and opportunities in a holistic manner, so that use and protection of coastal resources are rationalized within a broader framework of equity and sustainability.
- Coastal planning should be holistic and integrated in its socio-political, economic, biophysical and environmental elements.
- Coastal planning can be a venue in promoting co-management of the fishery and coastal resources by communities and government.
- Involvement of all the sectors in the planning is important. Since coastal resources management is a conflict management, no single agenda can equally benefit all the sectors that make up the
To crystallize a collective vision of the different stakeholders in Bolinao on coastal development and resource management and solicit their support and commitment in the formulation of the coastal development for the municipality;

To present and subject the initial draft CDP for comments and suggestions for further refinement;

To understand and appreciate the concept, rationale, and importance of coastal development planning as a tool in managing the land and water resources of Bolinao; and

To form a multi-sectoral committee that would lead in the formulation of CDP and be a partner of the municipal government in promoting sustainable use and management of the Bolinao’s land and water resources.

The CBCRM Project facilitated the forum. Other institutions that supported the forum were the Lingayen Gulf Coastal Area Management Commission (LGCAMC), the Regional Office of the National Economic and Development Authority (NEDA), the Regional Office of the Department of Agriculture, the Office of Congressman Hernani Braganza, and the Office of the Pangasinan Provincial Planning and Development Office.

Highlights of the forum included the presentation of the KAISAKA version of the Coastal Development Plan and the formation of the Multi-Sectoral Committee on CDP. The presentation highlighted the establishment of three MPAs, the need for mangrove reforestation in Santiago Island, guidelines for fishpond operation, the concession system and other concerns such as pollution, siltation and erosion, fishpond, navigation, etc.

The Planning Group

Since there was a need to create an ad hoc planning group to assist the municipal government in the formulation of the CDP, a multi-sectoral committee was formed. On December 7, 1996, the Mayor issued an executive order mandating the creation of the Multi-Sectoral Committee of the CDP, its composition and functions. The committee is composed of 21 members representing the municipal government, Liga ng mga Barangay, the religious sector, commercial fishers, small fishers, business and tourism, fishpond operators, fish dealers, fishpen operators, ferry boat operators, and environmental advocates. SAPA, SANNABI, SAMMABAL and SAMMAKA have their own representatives in the committee.

The committee was mandated to:

- Formulate the Coastal Development Plan for the municipality;
- Conduct on-site and off-site consultations with the different stakeholders, individuals, communities, groups, institutions in the process of the formulation of the plan;
- Provide the Mayor and the Municipal Development Council data and information needed as basis for actions and decisions;
- Conduct information, education campaigns about the draft CDP; and
- Perform such other functions as maybe assigned by the Mayor and the Municipal Development Council.

The committee, at its 2nd Regular Monthly Meeting adopted a proposal to divide the municipal waters into four zones. The committee has also conducted community consultations in all coastal barangays: Luciente 2, Lucero, Zaragoza, Tara, Pilar, Luna, Victory, Dewey, Goyoden, Binabalian, Ilogmalino, Balingasay, Arnedo and Poblacion. All the consultations were coordinated with barangay officials.

The Role of the CBCRM Project

The CBCRM Project played an important role in the planning process. The conceptual and operational framework of the plan and the planning process were formulated by the Project and were presented to the local organizations and the key people in the municipal government. Groundwork at the community level was done by the site teams and at the municipal level by the networking staff. The Project staff assisted the KAISAKA, the federation of the four CBCRM-organized people’s organizations, in the preparation of the initial draft of the CDP. The Networking Staff had a series of brainstorming discussions with the Municipal Planning and Development Coordinator and the Municipal Local Government Operations Officer.
coastal community. A collective vision of rationalized use and protection can subsume all interests.

The unfolding of the CDP in Bolinao is a continuing experience. More committee deliberations are yet to be scheduled to finalize the CDP for ratification by the Sangguniang Bayan (Municipal Council). The following questions should be properly addressed in the preparation of the coastal development plan:

- What are the needs? (Issue Identification)
- Which of the needs are we able to meet and when? (Issues Evaluation and Objective-Setting)
- How shall we meet them? (Strategy Formulation)
- Who is to do what? (Implementing Structure)
- How can we cope with environmental impacts? (Evaluation Mechanisms)
- What resources must be developed? (Resource Identification and Mechanisms)
- When will the steps be taken? (Work Planning)
- How do we ensure progress? (Monitoring Schemes)

Conclusion

Coastal development planning, although at a preliminary stage, can already be considered as a success in coastal resource management in Bolinao. No municipality in the country has embarked on a participatory approach in coastal planning in such a manner. The approach used and the content of the CDP can be a model to the nearby municipality of Anda, Pangasinan which is now considering the idea of formulating a coastal development plan for its territorial waters. Coastal development planning should be encouraged and institutionalized in local government and regional administration.

Coastal Resources Research Network (CoRR) Phase 2

Coastal communities are a diverse group of people living in a socially, economically and environmentally dynamic strip between land and sea. The dynamic nature of the livelihoods which support people in coastal communities is often ignored as outsiders assume that the communities rely on fishery resources when in fact most households live on a diversity of food and income sources. Coastal fisheries can not provide enough food or income to maintain the large numbers of people who inhabit these areas.

Resource degradation from multiple sources, including overexploitation by the poor, is a common threat to these communities. Most attempts to deal with these problems approach them from a biophysical coastal zone management or a fisheries resource management perspective – sectoral solutions which often ignore the complexity of peoples’ lives and marginalise the immediate users of the resources. Community based coastal resource management (CBCRM) is an attempt to put more control in the hands of local users of coastal resources. CBCRM is forever evolving as it is applied to coastal areas. Recent innovations consider issues of equity and the diversity of the coastal community, and working with planners and regulators who take a more central approach to issues.

While CBCRM has developed in the Philippines, its potential application in emerging economies (Vietnam and Cambodia) and more remote areas (Eastern Indonesia) has raised considerable interest. However, local agencies and research institutions often lack the capacity to adapt the necessary research tools and methods to the local social, political, economic and environmental situation.

The International Development Research Centre (IDRC) has approved the funding of the Coastal Resources Research Network Phase 2 for 3 years beginning November 1997. During Phase 2, CoRR will continue to work with IDRC-supported projects to provide research advice, assistance in training,