Establishing a Socioeconomic Monitoring (SocMon) Program to Support Coral Reef Conservation and Coastal Resources Management: Ten Lessons Learned from four Coastal Villages in Oriental Mindoro and Palawan Provinces in the Philippines


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1. Introduction

Understanding socioeconomic factors and the relationship of communities to coastal and marine resources is crucial for the success of marine conservation. It is increasingly becoming clear that coral reef and marine conservation is about understanding people as much as it is about understanding ecological processes. Establishment of a socioeconomic monitoring (SocMon) program at conservation sites can serve to involve local communities in resource management, provide adaptive management strategies to reflect the local needs, and facilitate understanding of the importance of marine and coastal resources.

The Global Socioeconomic Monitoring Initiative for Coastal Management (SocMon Global) has been undertaken to pursue this worldwide coastal conservation initiative in the late 1990s. As a regional initiative, the Socioeconomic Monitoring Southeast Asia (SocMon SEA) has been undertaken in countries within Southeast Asia including the Philippines, for nearly a decade. Since 2007, the Palawan State University (PSU) and the Conservation International-Philippines (CIP) have been undertaking SocMon-related activities in Palawan Province, Philippines, in collaboration with the local government units (LGUs), national government agencies (NGAs), non-governmental organizations (NGOs), academe and local communities.

The information presented here are derived from the PSU-led project entitled Socioeconomic Monitoring (SocMon) Program in the Philippines to Support Effective Coral Reef Conservation and Coastal Resources Management: Initiation in Oriental Mindoro Province and Continuation in Puerto Princesa City, Palawan Province. The goal of this project is to propagate the use of SocMon among academics, researchers, policy makers and coastal managers, thereby enhancing coral reef conservation and coastal resources management (CRM). This project also aims to highlight the utility and practical applications that can be derived from using SocMon as a tool for adaptive management.

The purpose of this 'Lessons Learned Paper' is to present the experiences and lessons learned in undertaking this SocMon initiative at these Philippines' project sites. Included here are insights about SocMon methodology, research processes, substantive elements and partnership arrangements.

Wife and children of a fishing household in Inagawan, Palawan
2. Methodology

The overall methodology and/or general procedure for undertaking the project largely followed the SocMon methodology (Bunce and Pomeroy 2003, Bunce et al 2000). The SocMon process follows three major steps: (1) advance preparation, (2) data collection, and (3) data analysis and communication (see Figure 1). Field data were gathered through the following methods: observation, key informant interview (KII), focussed group discussion (FGD) and household interview (HHI). At the core of SocMon is the concept of cross-referencing among different data collection methodologies.

Two coastal villages (barangays) were selected in each of the provinces of Mindoro and Palawan. The villages of Kamuning and Inagawan in Puerto Princesa City were chosen in Palawan, while the villages of Cawayan and Masaguisi in the municipality of Bongabong were selected in Oriental Mindoro (see Figure 2). These coastal communities rely heavily on fishing and terrestrial forms of agriculture. There is a pressing need to generate socioeconomic data/information in these four villages as bases for their villages’ coral reef and coastal conservation program initiatives. Household level socioeconomic data that are most needed for local development planning are lacking. However, coral reefs and other coastal resources are under threat from various socio-economic activities.

The project started its implementation on October 2010 and was completed on September 2012. The chronology of the major events over the two-year period is summarized below (see Table 1). The key results of the study are presented in a separate ‘Policy Brief’ document. Presented below are 10 lessons that have been learned based on its application.

3. Lessons Learned

3.1 SocMon Methodology Has Enhanced Community Awareness

The community members in the four villages actively participated in the project’s data gathering activities and validations. Hence, they became more aware of the status of their surrounding coastal areas. They were able to recall programs or projects successfully implemented and those that need to be improved in implementation. The village stakeholders have also become more purposive as to what programs and policies to implement that would effectively solve the coastal management issues and community problems. The SocMon data gathering process, stakeholder validations and roundtable discussions enabled village leaders and residents to become more reflective and as a consequence rethink their roles and participation in community resource use and management.

Through the SocMon, they become more privy to the details of the coastal conditions of their villages. For instance, the specifics of the rules and regulations in coastal management being enforced by the villages and/or local government units (LGUs) are not generally known to the local populace. The community learned to give more importance on the protection and management of their coastal resources since this would eventually affect the socioeconomic conditions of their villages.

3.2 SocMon Methodology is a Practical Diagnostic Tool

The SocMon methodology used was able to diagnose in a practical manner the various facets of the four coastal communities. Relevant socio-economic and governance elements were conveniently generated; pertinent biophysical data were obtained through household interviews and/or community consultations. The methodology was cost-effective, relying on a selected multidisciplinary team of local academics and professionals from the LGUs and other partner agencies. The data gathering instruments were found to be suitable to the intended tasks - as basis for recommendations on policies and programs. Therefore, the methodology can be applied to other similar data generation activities in the community or locality.
Table 1. Chronology of major events in the conduct of SocMon.

<table>
<thead>
<tr>
<th>DATES</th>
<th>ACTIVITIES</th>
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<tbody>
<tr>
<td>October 2010</td>
<td>Project start-up and visit to project sites/partners</td>
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<tr>
<td>December 2-3, 2010</td>
<td>Project Inception Workshop</td>
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<tr>
<td>December 2010</td>
<td>Formation of the SocMon Training Team</td>
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<tr>
<td>January 10-11, 2011</td>
<td>Stakeholder Consultations on the identification of SocMon variables/indicators and uses of research outputs</td>
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<tr>
<td>February 28 - March 30, 2011</td>
<td>Development of the SocMon Training Design and preparation of research instruments for household interviews, key informant interviews and focus group discussions</td>
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<tr>
<td>May 2011</td>
<td>SocMon Methodology Trainings</td>
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<tr>
<td>June-July 2011</td>
<td>Field Data Gathering</td>
</tr>
<tr>
<td>August and November 2011</td>
<td>SocMon Data Analysis Trainings</td>
</tr>
<tr>
<td>January-August 2012</td>
<td>Data Processing, Analysis and Report Writing</td>
</tr>
<tr>
<td>September 2012</td>
<td>Validation of results; writeshops of technical reports; development of communication plan, policy brief and lessons learned; roundtable discussions with local community leaders and government officials and selected stakeholders</td>
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3.3 SocMon is a flexible field methodology

It allows researchers to modify and/or add related variables and to introduce other data gathering methods. For this study, the variable ‘level of participation’ in resource use decision making was further delineated into a current level (referring to the present) and a desired level (referring to how much they are willing to participate) in order to find out whether people’s participation levels can still be enhanced. Data on current and desired participation levels gave researchers the opportunity to statistically compare the two facets of participation, the results of which is useful in community mobilization. Data gathering can also be made more participatory and communal by conducting group interview through a focus group discussion (FGD) with five to ten key informants. Richer data are usually drawn from key informants in an FGD compared to individual interviews.

3.4 Bio-physical Assessments may Compliment SocMon Methodology

To complement the socio-economic assessments, some simple biophysical measurements could be undertaken. Some issues related to environmental conservation and CRM are best supported with field evidence, although this is more of a snapshot data rather than time series data. These may include measuring soil loss through simple erosion plots, measuring selected mangrove stands at diameter at breast height, and measuring turbidity using a secchi disk to indicate the status of marine water quality. The status of coral reefs can easily be assessed through a manta tow survey. As the need arises, experimental test fishing can be conducted. These field assessments are best undertaken by biologists. Hence, it is ideal to have field researchers who are experts in the natural and social science disciplines.

3.5 SocMon Methodology Useful for ‘Academe-Local Government’ Collaboration

SocMon provided a unique avenue for a more cooperative partnership between academic institutions and LGUs. The academe is particularly good in generating and/or analyzing information. Barangay officials gave their full support to the project by providing invaluable information during the key informants and household interviews. (During the FGD, the fishermen were the ones who made the map and identified fishery resources and their locations.)

Overall, the project team received more than adequate support from the concerned village and municipal/city LGUs. The visited local communities were very receptive of the project team. Such enthusiasms were reflected by the active participation of the village officials during data gathering activities as well as provision of meals during community consultations. In addition, the partnership arrangements served as a catalytic forum for developing future collaborative projects between the academe and LGUs. Partnerships forged because of this program enable true collaboration with one another especially on the sharing of resources, tasks and responsibilities to produce usable results in the implementation of CRM programs and establishment of marine protected areas which can be replicated in other sites.

3.6 Material Style of Life Need to be Put in Context

Because of the methodological difficulties of measuring household income, particularly in rural villages whereby income is not officially declared, SocMon does not attempt to measure it. Instead, the variable “material style of life” is used as a substitute or proxy variable to roughly measure the economic status of the households. To quantify material style of life, an aggregate ordinal value was derived from scoring the type of the household’s residential structure with respect to roof, structural walls, windows and floor, with more expensive materials scoring higher than those which cost less.

Yet material style of life may not exactly reflect the household economic status. Some may be able to build residential dwellings made of sturdier and more expensive materials that are not commensurate to their household incomes. We have found out that most of these expensive household materials were purchased through the remittances of their relatives and/or family members who are overseas foreign workers, particularly in Barangay Masaguisi. This has to be cross-referenced also with other variables such as income from other sources to include domestic remittances as well as sale of properties.
3.7 Community Perceptions of Issues Appear to be Geographic and Livelihood-based

Perceptions of community members, in general, appear to be based on geographical factors or livelihood considerations – or both. Many full-time farmers living in the interior of the villages have indicated to have little idea (or no notion at all!) about coastal marine activities. They are also not privy to marine pollution issues, such as garbage and siltation. Similarly, most full-time coastal fishers have limited inkling about agricultural practices. This may be the reasons why there were few respondents who identified the commonly-recognized problems.

Corollary, more allocation of government resources are desired for enhanced coastal management. The village governments have limited resources to allocate for coral reef conservation and CRM. Hence, more government resources need to be allocated at the municipal/city level, which serves as the main center for coastal management. Some village officials have expressed that they cannot undertake effective coastal law enforcement by themselves. Most often, the least allocation happens at the village level while a few resources are allocated at the provincial level. There is also a reliance on externally-funded projects.

3.8 Project partnership may transcend geographical boundaries

Although unusual, the partnership arrangement was generally successful. The Palawan State University (PSU), classified as a state university or college (SUC), spearheaded the project given its experience in undertaking SocMon-related activities since 2007. Within the Palawan province, the PSU has partnered with three institutions namely: the City Government of Puerto Princesa, which is an LGU; the Palawan Council for Sustainable Development Staff, which is a national government agency (NGA); and the PSU Center for Strategic Policy and Governance, Inc., which served as a conduit for fund management as the ‘private and non-profit’ arm of PSU.

Some 447 km away in the province of Oriental Mindoro were two more partners: the Mindoro State College of Agriculture & Technology (MinSCAT), another SUC and the Municipality of Bongabong, an LGU. Collectively, these six institutions undertook their respective responsibilities based on the agreed work plan. They also provided counterpart contributions (in-kind and cash). Meantime, as an external donor, the US National Oceanic and Atmospheric Administration provided an equivalent of US$24,900.00. Through this unusual institutional set-up, this SocMon project came to a successful conclusion.

3.9 Need to Expand Partnerships in Coastal Management

There is a need to expand partnerships in coral reef conservation and CRM. Given the complex problems/issues that confront the coastal areas, the cost of program/project interventions cannot be borne solely by the LGUs and/or SUCs. For example, the Bureau of Fisheries and Aquatic Resources and the Department of Environment and Natural Resources can be tapped for more mangrove reforestation activities/programs. The Department of Science and Technology - given its various programs of support on capacity building and technology transfer can prove to be a potent partner in CRM – particularly in product value adding for agriculture and fishery commodities. Linking with ‘non-traditional’ partners - such as civic organizations and external donors – is also becoming a necessity. MinSCAT has established linkages with the Korean Development Agency and the Malampaya Foundation, Inc. that they intend to enhance through this SocMon initiative.

3.10 Interventions to address coastal issues need to be streamlined

Many of the coral reef and CRM issues and concerns that were identified are relatively well known. They have been listed in various government reports, national plans and academic reports over the last few decades. The management interventions and/or measures – in the forms of broad programs and specific projects – that are needed to address these issues are also generally well known. Mangrove reforestation is used to address mangrove destruction; gear regulation may be employed to reduce overfishing; and the introduction of livelihood projects to address the issue of rural poverty and deprivation.

At the governance side, the LGUs are being capacitated for coral reef conservation and CRM. Relevant policies are likewise being modified and/or new ones are being developed to enhance the CRM efforts. The emerging need is meant for better structuring of these many management measures to ensure that they address the critical/crucial issues and maximize their effectiveness as well. The prioritized programs and projects would provide the coastal political leaders and policy makers alike as well as coastal managers with more solid basis for making informed decisions on where to allocate their limited administrative and financial resources.

Overall, as a participatory tool, the SocMon methodology was found useful in the characterization of coastal villages. Through the 10 lessons learned from this project, the SocMon methodology may be improved for future use.

4 References
