## Establishing a socioeconomic monitoring program for Corales de San Bernardo National Natural Park, Colombian Caribbean coastline Award No. NA04NOS4630291 Final Report

The establishment of a socioeconomic monitoring program for CRSBNNP, sector San Bernardo, had the main objective of enhancing its adaptive management. The justification for that came from identifying the lack of socioeconomic data as an important gap in the attempt to conduct holistics analysis of CRSBNNP, sector San Bernardo's status (MPA's goal vs. treats and weaknesses). Since 2001, biophysical monitoring is being implemented without the complementary support from socioeconomic analysis.

In order to reach that objective, the socioeconomic monitoring was implemented under the framework proposed by Bunce, et al. (2003) and contributions from other authors. In that sense, further specific objectives were proposed in consistence with a common methodology process consisting on preparatory activities, training phase, data collection, analysis, communication strategies and adaptive management. Consistently with that, specific objectives were:

1. To develop skills for the socioeconomic monitoring team through a training process in data collection and data analysis

2. To identify threats, problems, solutions and opportunities for a sustainable use of resource's park

3. To establish a baseline household and community profile

4. To determine the importance, value and cultural significance of resources and their uses

5. To assess positive and negative impacts of management measures in order to improve them and develop an adaptive management

6. To enhance stakeholders participation and public awareness programs

7. To verify and document assumptions on socioeconomic conditions in the area, community dynamics and stakeholders perceptions

8. To provide a basis for a regional system by means of which site-level data can be fed into national, regional and international databases for comparison

9. To establish a socioeconomic monitoring program over a long term period of time

Whose results were essentially reached thanks to the joint effort made by INVEMAR, as marine and coastal research institution; UAESPNN, as environmental authority and MPA's manager; and local communities as direct users of MPA's goods and services. Other stakeholders were also involved through workshops and interviews.

Project's results indicates that SocMon contributions were beyond the establishment of a baseline, it lead to perform in depth analysis on study area's status in terms of use patterns, actors, perception and management.

As the establishment of SocMon was identified as a key tool to deal with decisions making on management, the implementation of the project arose a high level of interest since preparatory activities. That fact significally contributed to the training process on SocMon to develop skills in data collection and analysis. As a result, there is today a trained staff in UAESPNN – PNNCRSB regional office as well as trained community members.

Consequently, both, the environmental authority and local communities were able to verify by themselves the validity of results (initial assumptions for this research) from previous assessments in terms of the existence of treats and weaknesses for a sustainable management (overexploitation and institutional limitations, among others).

On the other hand, results also pointed out the importance and values of MPA's goods and services. Being particularly important the high level of local community's dependence on the natural environment to satisfy basic need (income, food security, etc), specially relying on fisheries and tourism employment opportunities. Other no tangible values such as cultural and historical values were identified, most of them related to fisheries as a traditional way of living.

A comprehensible analysis of results indicates current limitations in management with conservation purposes due to conflict between the established conservation goal and the intensive use applied by communities, fisheries sectors and tourism.

Regardless the problem on use conflicts, local communities as other stakeholders were not considered obstacles for the adaptive management process, but active participants into the process. They played a dual goal, participating as an extension of the research team (during workshops, field work, etc) as well as

objective population who will further receive the benefits from an improved management at PNNCRSB, San Bernardo site. Results also pointed out the existence of awareness of environmental issues such as overexploitation and habitats destruction among local communities and other stakeholders, but also the existence of higher value placed on present consumption than future.

That suggest a need for stronger environmental education processes as well for establishing alternative subsistence activities or harvest techniques to improve food security and/or income generation and reduce population's discount rate.

Taking into account the relevance of results over the application of a common methodology for SocMon, this study represents a baseline for further establishment/feeding of larger regional, national or international database on coral reefs. Such relevant results from data analysis of systematically collected data, make significant contributions to management, pointing an adaptive character and a long term vision. A monitoring develop like that will additionally contribute to interinstitutional cooperation as well as to keep participative approaches

The main limitations faced during the research process was indeed the lack of statistics information to complement primary data as well as some institutional weakness which made it difficult to maintain an stable level of community receptivity in new proposals.