# SOCMON WORKSHOP REPORT

JUNE 18-21, 2007 LA PARGUERA, PUERTO RICO



MANUEL VALDES PIZZINI, PH.D.
PROFESSOR OF ANTHROPOLOGY
DIRECTOR, INTERDISCIPLINARY CENTER FOR COASTAL STUDIES
UNIVERSITY OF PUERTO RICO, MAYAGÜEZ

#### Introduction

SocMon, the Socioeconomic Monitoring Initiative for Coastal Management is an international effort to understand the human dimension of coastal and marine resource utilization for incorporating information into management plans and conservation programs. SocMon contributes to the conservation of coral reefs through the understanding of the different ways in which coastal communities use those resources, either for protection or use as part of their cultural and social life. Members of the CIEL contributed to the development of guidelines of SocMon for the Caribbean, and tested the protocol in La Parguera Natural Reserve.

This is a brief report on the design and implementation of a SocMon Workshop, in Spanish, for MPA managers of the Commonwealth of Puerto Rico. This workshop was one of the first domestic applications of the Global Socioeconomic Monitoring Initiative (SocMon). Approximately 20 marine and terrestrial reserve managers were trained in the SocMon methodology for collecting socioeconomic data. The workshop followed the methodology and guidelines developed by Bunce et al (2000) and by Bunce and Pomeroy (2003) for the Caribbean. Eileen Alicea was in charge of the logistics of the workshop, and coordinated with Robert Matos, head of the Division of Refuges and Reserves of the Commonwealth of Puerto Rico Department of Natural and Environmental Resources (DNER) the details for the participation of the managers. Alicea also coordinated with Manuel Valdés Pizzini all the details related to the workshop. Staff from the CIEL (Interdisciplinary Center for Coastal Studies, UPR-Mayagüez participated in the workshop, aiding Valdés Pizzini.

## **SocMon Participants**

DNER and NOAA officials made a great effort to have the MPA managers of the Commonwealth of Puerto Rico participate in this capacity building effort. Nineteen MPA managers from various divisions of the DNER participated in the workshop. Also, all the CIEL staff but one were not formally trained in SocMon, and thus they seized the opportunity to capacitate themselves on the methodology.

Name	Reserve / Refuge
Angel Dieppa	NOAA Jobos Estuarine Research Reserve-MPA
Carmen Delia Guzmán	Parguera-MPA
Darien López	Luchetti & Cerrillos Reserves
Edgardo Belardo	Vieques-MPA
Edwin Ávila	Boqueron Wildlife Refuge
Eileen Ortiz	RN Laguna Tortuguero-Vega Baja
Farel Velazquez	Guajataca Wildlife Refuge
Francisco Guzmán	RN Rio Espiritu Santo-MPA
Gaspar Pons	RN Isla de Mona-MPA
Héctor Horta	RN Cordillera y Culebra- 2 MPAs
Iris Alameda	RN Boquerón
Luis Encarnación	NOAA Jobos Estuarine Research Reserve-MPA
Manuel Corbet	RN Humacao-MPA
Marinelly Valentín	Embalse La Plata Wildlife Refuge-Toa Alta
Miguel Canals	Reserva Biosfera Guanica-Bosque & MPA
Myrna Aponte	Reservas Y Refugios San Juan
Raúl Colón	RN Caño Tiburones y Cueva del Indio-MPA
Robert Matos	Director Reservas Y Refugios
Miguel Nieves	RN Isla de Mona-MPA
Eileen Alicea	MAR Management Solutions for NOAA

#### **SocMon Activities**

The core of the SocMon Workshop consisted of the following activities, spanning various months:

- 1. An introduction to the SocMon methodology for assessing the human dimension of MPA management: This activity was held as part of a training program on collaboration in management provided by the United Nations Environmental Programme for the staff of the Division of Refuges and Reserves of the DNER. This capacity building activity for MPA managers served as a preamble to SocMon (May 12, 2006).
- 2. An introduction to SocMon: A mini-workshop for DNER MPA managers. This introduction covered the material of the guidelines document *Lineamientos de monitoreo socioeconómico para administradores costeros en el Caribe* (Bunce and Pomeroy 2003) of which Valdés Pizzini is one of the contributors. Each participant received a poster (11 x 14 inches) summarizing the document and providing a plan for the workshop, which included the selection of the site (La Parguera). The discussion also included: the research techniques, the expected SocMon products and the value added by Socmon to the managers' work (Adaptive Management, Management Plans and Potential Collaborative Efforts). All participants received a copy of the guidelines document and the SocMon Manual in Spanish (*Manual socioeconómico para el manejo de arrecifes coralinos*, Bunce et al 2000). Each participant was asked to read the guidelines document thoroughly, and be prepared for the workshop on that material. MPA managers were also requested to use the *Manual* as a reference book to expand on the guidelines. The introduction was held at the Playita Rosada DNER facility at La Parguera, Lajas (southwest Puerto Rico), on March 2, 2007.
- 3. The SocMon Workshop: From Thursday evening, April 18 (arrival) to Saturday afternoon, April 21, 2007. This workshop included the following activities:
  - Structured lectures on the history, goals and objectives of SocMon, the data collection strategies and methodologies and analyses;
  - Group dynamics based on resource allocation;
  - Writing exercises on their perceptions of key issues at La Parguera;
  - Examination of primary sources (historical documents);
  - Examination of secondary sources (reports) and published materials on La Parguera and surrounding areas (which included other MPAs);
  - Analysis and interpretation of aerial photographs; Use and application of GPS and GIS technologies to socioeconomic processes;
  - Analysis of photographic material depicting the community;

- A practicum (group dynamic) on focus groups; incorporation of the U.S. Census data files (and geo-referenced data) to maps and management;
- A module on the use of the Statistical Package for the Social Sciences (SPSS);
- Field observation of night activities in the town, and in the trips to the bioluminescent bay;
- Field observations of resource use;
- A data collection exercise on the human profile of the coast (an inventory of stilt houses); Interviews with residents;
- A Focus Group with key stakeholders in La Parguera; and
- Presentation on findings, reflections on the methodology and its applications to management.
- 4. A follow up workshop on Socmon: On June 28, 2007 Valdés Pizzini met with the MPA managers at the coastal Natural Reserve Tortuguero Lagoon in the north coast to discuss the experience of the workshop. Each manager gave a short presentation on the actual and potential applications of SocMon to their area, and also gave insights to the problems of their respective areas, from a socioeconomic perspective. In that meeting the DNER staff also participated in an exercise to select potential areas for the application of the SocMon methodology. They selected the following areas: Laguna Tortuguero, Jobos Bay Natural Estuarine Research Reserve; Mona Island Natural Reserve, Vieques and Boquerón in the southwest coast.

### Resources for the workshop

The following is a general list of materials, human resources, equipment, and reading materials provided or made available to participants during the workshop:

- 1. Prior to the workshop each participant received copies of the Guidelines and Manual for SocMon in the Caribbean.
- 2. Each participant received a binder with the hourly schedule of the workshop, names and phone numbers of the facilitator and his assistants, a summary (in Spanish) of the SocMon strategy prepared by Tatina Cortéz; and color paper copies of the Power Point and Mindjet® presentations on all the topics covered in the workshop.
- 3. Workshop organizers distributed the following materials: field notebooks, plastic paper, markers and waterproof cases for note taking in boats, markers, post-on notes, and easel pads.
- 4. The team brought the following equipment: three laptop computers with all the needed software (including SPSS and Arcview® GIS), two Garmin GPS receivers), an in-focus projector, a digital camera, and a printer / copier.
- 5. For the field trips in the water the team contracted two boats from the UPR Department of Marine Sciences and one private boat, all piloted by our staff.
- 6. At the end of the workshop each participant received a certificate of their participation.
- 7. Dr. Valdés Pizzini staff consisted of the following persons: Carlos Carrero (Sociologist and planner, experience with stakeholders interviews, focus groups and management plans); Idelfonso Ruíz Valentín (Environmental Sciences, GIS specialist); Diana Beltrán (Oceanographer, experience with stakeholders interviews, focus groups and management plans), Milton Muñoz (Oceanographer, experience with Traditional Ecological Knowledge and management plans), Marielba Rivera (Lawyer, sociologist, experience with stakeholders interviews, focus groups, Traditional Ecological Knowledge and the SocMon methodology), and Lillian Ramírez Durand (Sea Grant Coastal Community Development Specialist).
- 8. Guest speakers: Walter Díaz Ph.D., political scientists with experience in resource use and the use of census data and GIS applications to coastal management (flood maps, vulnerability analysis); and Rima Brusi Ph.D., socio-cultural anthropologist with field experience in La Parguera.
- 9. A table with books, articles, documents, reports, nautical charts, quadrangle maps from the USGS, copies of primary sources (historical documents), aerial photographs, maps, and photos of La Parguera and the Guánica Dry Forest.

#### Lectures and field activities:

The following is a list, in chronological order, of the lectures, talks, exercises, group dynamics, and field activities of the workshop. A binder with all the materials was provided to Eileen Alicea, the NOAA representative and contractor for this activity:

- 1. Registration and distribution of binders with the schedule and all the materials [First Day]
- 2. Group Dinner
- 3. Welcome and a written exercise (test) on the perceived problems of La Parguera [Second Day]
- 4. Introduction to the SocMon Process and the Strategy for the Workshop
- 5. Survey and Questionnaires: One option for data gathering but not the foremost
- 6. Historiography and MPAs
- 7. Historiography and Content Analysis
- 8. Interviews: A typology and Strategies for Data Collection (Part I and Part II)
- 9. Field Observations and SocMon (Parts I, II and III)
- 10. Design of a protocol for systematic field observations
- 11. A quick presentation of the application of a rapid assessment: St. Croix, U.S. Virgin Islands
- 12. Field visit: as tourists and visitors in the nightly trips to the bioluminescent bay in the boat of private concessionaires
- 13. An impromptu meeting to discuss the findings of the observations
- 14. Discussion on the findings of the field observations and mapping of the navigation route of the boats comparing information provided by the boaters with the geographical position of the boats [Third day]
- 15. Importance and identification of stakeholders
- 16. A group dynamic on resource allocation and management (tragedy of the commons or of open access)
- 17. Focus groups: techniques and the process of interpretation
- 18. A mock-up of a focus group designed and implemented by the MPA managers (a group dynamic)
- 19. Census data and GIS maps
- 20. A sense of place: reading the landscape as a text

- 21. GIS applications to SocMon
- 22. Interviewing people on changes in landscape and resource use
- 23. Field exercise: interviews with local residents (with Rima Brusi)
- 24. Field exercise: interview with a senior MPA manager on the changes in La Parguera
- 25. Field exercise: Focus group with key stakeholders of La Parguera
- 26. Field exercise: Interviews with key informants (scientists and people with high TEK)
- 27. Evening meeting to design the field activities for the following day
- 28. Field activities to gather information using a protocol designed by participants the day before [Fourth day]. Field activities were the following:
  - Inventory of stilt houses
  - Observations of activities in two ramps
  - Observations of water-based activities in La Parguera Natural Reserve
  - Observations of activities in town

#### 29. Plenary session:

- What we learned from SocMon?
- What we learned from La Parguera? In what way are those lessons different from our initial perceptions?
- Next steps
- Certificates to the participants
- Final words from the hosts: Robert Matos, Eileen Alice and Manuel Valdés Pizzini

#### **Results:**

In general terms the SocMon workshop achieved the following results:

- a. Exposed the MPA managers to socioeconomic monitoring applications to the management of MPA and coral reefs.
- b. Made the link between socioeconomic monitoring and Adaptive Management and Collaborative Management.
- c. Trained 19 Protected Area managers in the SocMon methodology.
- d. Engaged the managers in a discussion of the benefits of SocMon to their protected areas.
- e. Encouraged managers to incorporate SocMon in the operation of their MPAs. Five MPAs were selected for the application of the methodology. The decision requires time and effort commitment on behalf of the managers.
- f. Prompted the consultant to write and present a proposal to NOAA, through the University of Puerto Rico Sea Grant Program, for the application of the SocMon methodology to five MPAs over a period of two years.

#### References:

Bunce, L., and R. 2003. <u>Socioeconomic Monitoring Guidelines for Coastal Managers in the Caribbean</u>: <u>Caribbean</u>. World Commission on Protected Areas and Australian Institute of Marine Science.

Bunce, L., P. Townsley, R. Pomeroy and R. Pollnac. 2000. <u>Socioeconomic Manual for Coral Reef Management</u>. Australian Institute of Marine Science.

#### **CIEL Staff**

Carlos J. Carrero-Morales Milton Muñoz-Hincapié Diana M. Beltrán Idelfonso Ruíz-Valentín Marielba Rivera-Velázquez Lillian Ramírez Durand

#### **Guest Speakers**

Rima Brusi Ph.D. Walter Díaz Ph.D.