

## Global Socioeconomic Monitoring Initiative for Coastal Management: Its Relevance to MPAs





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# Outline

Introduction
SocMon 101
Why SocMon?
Examples from the regions
Challenges
Future plans

# Introduction

- Reality: A world of increasing threats to ocean and coastal resources
- Marine Protected Areas (MPAs): Natural resource management tool
- Management of natural (coastal) resources begins with managing PEOPLE
- Managing people requires understanding their needs, perceptions and vulnerabilities.
- Collection of human dimension information is critical to natural resource management

# What is SocMon?

## Global initiative for establishing site level socioeconomic and marine monitoring programs

- Guidelines on how to do socio-economic monitoring useful for fisheries and coastal management at the site level
- The guidelines are used with the "Socio-economic Monitoring Manual for Coral Reef Management" that contains field methods
- Globally six regions are successfully conducting SocMon
  - English-speaking Caribbean, Central America, Western Indian Ocean, South Asia, Micronesia/Pacific
- SEM Pasifika





# **Primary Objectives**

- <u>Goal</u>: Increase coastal managers' capacity to understand and incorporate the socioeconomic context into coastal management programs
- Household and community level data are collected to inform: dependence on coral reef resources, perceptions of resource conditions, threats to marine and coastal resources
- Data collected to support marine management strategies such as marine protected areas.
- Facilitate <u>community-based</u> socioeconomic monitoring
- Build regional capacity to sustain socioeconomic monitoring programs through training of coastal managers



# Where is SocMon used?

- Focuses on tropical developing countries in 5 regions, each supported by regional coordinators:
  - Caribbean (University of the West Indies CERMES, TNC)
  - Central America (Univ of Zamorano)
  - Southeast Asia (C.I. Phillipines, WorldFish Center, WWF, TNC)
  - South Asia (IUCN)
  - Pacific/Micronesia (Pacfic Marine Resources Institute)
  - Western Indian Ocean (CORDIO, WWF, IUCN)
- Coordinated by NOAA in partnership with GCRMN
  - World Fish Center, Reef Check, IUCN, CI, WCPA-Marine
- Funded through NOAA Coral Grants, U.S. State Department, and others







# Where in the world is SocMon?



www.socmon.org



# **Objectives for Conducting Socioeconomic Monitoring**



- Identify threats, problems, solutions and opportunities
- Determine the importance of resources and their uses
- Assess costs and benefits of management measures to community (e.g. alternative livelihoods)
- Assess/monitor management effectiveness
- Facilitate stakeholder participation
- Verify assumptions of socioeconomic conditions



## **Socioeconomic Indicators**

- Coastal and marine activities (types of use, locations...) What are the threats? How dependent are people on the resources?
- Demographics (population, ethnic groups, education) levels...)

Who will be impacted?

- Attitudes and perceptions (perceptions of resource) conditions, threats, management, ...) Are people supportive?
- Community infrastructure (roads, type of houses...) How has the standard of living changed?
- Governance (management plan, stakeholder Socioeconomic Monitoring / Long-term Trends participation...)

Are the resources protected?



# **Data Collection Methods**

- Secondary sources
- Semi-structured interviews
- Structured questionnaires
- Focus groups
- Observations
- Tailored to the site needs

http://www.socmon.org/publications.aspx









# **Required SocMon Activities**

What activities are most important?
SocMon Manual (*Bunce et al 2000*)
SocMon/SEM Pasifika guidebook
Training
Technical assistance to sites (e.g. expert team)
Site funding to implement
Translation

Other:

- Annual meetings
- Website
- Regional database
- Incorporation into university curricula
- Other topics e.g. economic indicators



# SocMon and MPAs







#### MPAs have different objectives

- Mixed use, no take zone, fishing, tourism
- Tensions between user groups
- SocMon used as a tool for data collection
  - Data can then feed into management
- Caribbean and Micronesia Challenges
  - Most of the SocMon pilot sites were MPA focussed



## Socioeconomic Monitoring 6 Step Process



## Socioeconomic Information – Potential Uses





# **Types of Data – Fishing Communities**









## **Other Applications: Community Development**



Employment





#### Standard of Living



Shoreline Protection



Environmental Awareness

#### SocMon Data Can: Inform MPA Design



#### **& Enhance Public Consultation Process**



# Selected Examples

- First local socioeconomic data collection effort
  - Management questions and findings:
    - 68% say that illegal/destructive fishing methods are primary factor destroying reefs
    - 96% of local residents willing to support MPAs
    - 44% say education, 36% say more enforcement, 12% say provision of alternative livelihoods is the solution to marine resource degradation
- Lapu Department of Agriculture adopted SocMon questions regular use





## CASE STUDY-CORN ISLAND, NICARAGUA (2002-2005)

- Management questions
   How is closed season for affecting local fishermen?
- Cost of study: US \$1,000
- Findings:
  - Local fishermen support seasonal closures and believe that closures will increase lobster stocks
  - During closed periods, Corn Island experienced increased drug trafficking, alcohol abuse, and delinquency
- Recommendation: local government needs to provide alternative livelihood options during seasonal closures





③ 2006 TravelPost.com

#### CASE STUDY-LAKSHADWEEP, INDIA (2002)

#### Management questions

- How do customary traditions in reef management fit with governance laws?
- How do islanders interact with the reef?
- Cost of study: US \$10,000

#### • Findings:

- Coral boulder collection continues after
   Ministry of Environment has banned this practice
- Islanders don't believe debris collection harms coral growth
- Illegal activity: some collectors break coral boulders into debris in order to "legally" harvest it
- Results of study presented to Lakshawadeep Administration for management planning
- Management actions?????





## **Caribbean SocMon studies**

Socio-economic profiles of fisheries St. Louis, A. et al. 2010. Socio-economic monitoring assessment of coastal management in the Colihaut, Dublanc and Bioche villages of Dominica Sill, D. et al. 2007. Socio-economic profile of fisheries in the Grenadine Islands 📚 Franklin. 2007. Socio-economic importance of the lobster fishery of the British Virgin Islands

## Type of information

- Fisher demographics
- Temporal & spatial fishing practices
- Market orientation
- Revenue
  - Expenditures
- Attitudes towards and perceptions of resources and management
- Material style of life



# **Benefits of SocMon**

- Understanding the socio-economic contexts of coastal resource use by various stakeholders
- Assessing, predicting and managing coastal resource use over time
- National and regional fisheries, MPA and other management plans call for socioeconomic data
- Assists social and institutional learning and decisions that develop adaptive capacity and resilience, reduce vulnerability





## **Benefits of Establishing a SocMon Program**

- Provides tools (e.g. guidelines, training) to assist coastal management sites
- Provides a framework of activities for building capacity (e.g. manual, training, site implementation, etc), which organizations can tap into as interested
- Provides a mechanism to share results and lessons learned
- Establishes standard guidelines, so can compare site conditions and determine regional trends



# **Benefits of participating in SocMon**

Suild on existing global and regional tools and experiences (e.g. training agendas, SocMon publications) as well as frameworks for planning

- Builds local capacity
- Tie into global network of sites compare results and lessons learned
- Leverage sources of funding (if available)

Be part of the global marine conservation community – e.g. International Coral Reef Action Network, WorldFish Centre, Global Coral Reef Monitoring Network, United Nations



# Challenges

- Funding challenges
  - Include in future RFPs
- Repeat monitoring exercises needed
- Loss of regional capacity (personnel changes)
- Little evidence of SocMon Data incorporation into actual decision/policy making
- Dissemination of findings

# **Next Steps**

- Survey of regional managers (completed)
- Scheduled SocMon trainings (Caribbean & Micronesia)
- New variable development
- Possible GCRMN and SocMon Meeting
  - Combining Bio-Physical Science and Social Sciences
- Dissemination of monitoring information
  - SocMon data in actual decision making and planning
  - Demonstrate usefulness of data
- Expansion of Regional SocMon nodes (Brazil)
- Climate change and social vulnerability -addendum

# **Climate Change - Addendum**

#### **EXPOSURE**

Demographically vulnerable groups

#### SENSITIVITY

Dependence on resources and services vulnerable to CC impacts



Indicators to assess community-level social vulnerability to climate change: An addendum to SocMan and SEM-Posifika regional socioeconomic manitering guidelines

FIRST DRAFT FOR PUBLIC CIRCULATION AND FIELD TESTING APRIL 2011

ADAPTIVE CAPACITY

- Current livelihood and income diversity of household
- Perceived alternative and supplemental livelihoods
- Awareness of household vulnerability to climate hazards
- Access and use of climate-related knowledge
- Formal and informal networks supporting climate hazard reduction and climate adaptation
- Ability of community to reorganize
- Leadership and governance
- Equitable access to resources

http://www.socmon.org/publications.aspx

## www.socmon.org







# Thank you!



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