



## ***Climate change vulnerability assessment continues in WIO***

By Brigid Mibei, CORDIO

Data analysis and data compilation is still underway to assess socio-economic vulnerability to climate change effects at the coastal village of Vanga, Kenya. The location of the community is adjacent to the sea, thus exacerbating the effects brought by climate change. Drought, floods, storms, strong winds, and unreliable rainfall were some of the climatic hazards mentioned and discussed by the livelihood groups.

After the data collection, a feedback session was later organized for the community, where all respective stakeholders from different government departments and partner NGOs were invited to help in the facilitation of the process. This meeting created a forum where communities and the other stakeholders would share information and help create links with respective livelihoods.

The community was taken through an adaptation plan process that enabled the different livelihood groups to propose actions for building adaptive capacity. For each hazard a coping strategy was identified. For example, in cases of drought and extreme heat, tree planting and proper physical planning of the village were proposed to help in the circulation of air in the village. Obstacles to implementing this coping strategy included lack of human resources to educate and sensitize the community, lack of proper care of seedlings, lack of knowledge about physical planning, greed, and

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negligence of responsibilities by the local authority, among others.

## ***SocMon and coastal land use in Honduras***

By Arie Sanders, University of Zamorano

During the last few years we have conducted various SocMon analyses on the northern coast of Honduras. As mentioned in the July 2011 issue of the SocMonitor, the northern coast of Honduras is a dynamic area, where in recent decades an expanding population and economy and a more intensive use of the natural/coastal resources has been observed. According to census data, the population of the coastal zone increased at an annual rate of 4% between 1990 and 2005. At the same time, there has been a strong expansion of palm oil production, resulting in forest loss and watershed degradation. The strong link among economic growth, palm oil expansion and migration has created pressures on the coastal resources and drastically changed the use of land. In a new socio-economic monitoring initiative we are trying to examine the effect of land use and land use change on climate change sensitivity of coastal populations in Honduras.

The objective is to analyze the spatial and temporal variations in sensitivity derived from land use differences and their implications on the utilization of land use policy as a tool for climate change adaptation in integrated coastal zone management (ICZM). By combining a community-based interactive approach with spatial analysis we will take advantage of available local knowledge on climate change sensitivity.

The conceptual framework adopted is IPCC's Exposure - Sensitivity - Adaptive Capacity approach which collectively determines a community's level of vulnerability to climate change impacts. Based on the Socio-economic Monitoring Guidelines for coastal areas (SocMon) developed by NOAA (2006 and 2010) we elaborate a vulnerability index for each of the 83 coastal communities and linked this information with the actual land use applying statistical spatial models. Sea level rise (SLR), dry season extension (DSE) and heavy rainfall (HR) will be considered as the climate impacts. Sensitivity to each impact will be estimated through expert judgment, emphasizing variations between land use categories to progressive exposure level to each impact.

The fieldwork will start during this trimester and the first results will be available in October this year.

## ***SocMon Caribbean Challenge***

*By Maria Pena*

### *Project progress*

Twenty-four more Caribbean Challenge MPA managers and stakeholders were trained in the SocMon Caribbean methodology during the second and third SocMon training workshops for the NFWF-funded SocMon Caribbean Challenge project. The 5-day learning-by-doing workshops were conducted from 16-20 January in Vieux Fort, St. Lucia and 6-10 February in Grenada. Two

additional videos of the training experience have been produced and will shortly be available for viewing.



SocMon trainee (right) conducting an individual survey in the town of Vieux Fort, St. Lucia

One of the three St. Lucia project sites, the Pointe Sable Environmental Protection Area (PSEPA) has submitted a draft site monitoring plan for review by CERMES. The Pitons Management Area (PMA) and Soufriere Marine Management Area (SMMA) are combining forces to conduct a joint project. These sites are due to submit their draft site monitoring proposals shortly as are the Grenada sites.

Additionally, a webpage for this project has been developed and is available for viewing at [http://www.cavehill.uwi.edu/cermes/cc\\_socmon.html](http://www.cavehill.uwi.edu/cermes/cc_socmon.html). Please have a look.

### *Information sharing*

Maria Pena was an invited participant at the regional update meeting of UNEP-CEP project, *Regional support for the Caribbean Challenge Initiative: Networking, consolidation and regional coordination of MPA management*, hosted by the Caribbean Marine Protected Areas Management (CaMPAM) Network and Forum. At the meeting, Ms. Pena gave a presentation on the Caribbean Challenge SocMon project and its progress. Project information was shared with 13 Caribbean Challenge representatives and 17 UNEP-CEP project

partners and related participants.

## ***South Asia SocMon underway***

*By Vineeta Hoon*

The NOAA–supported Socioeconomic Monitoring Project for Coastal Managers of South Asia is progressing well at all the five sites and is scheduled to be completed this quarter. SocMon surveys with households, fisherfolk, resort managers and governmental establishments have been conducted to create monitoring mechanism for the region. Data is stored in a newly created database.

The Andaman SocMon team has completed a first time baseline survey of stakeholders from Havelock and Neil Islands, adjacent to the Rani Jhansi Marine National Park. Havelock and its adjacent islands are known for their white sandy beaches, coral reefs, fish life, estuarine mangroves and evergreen rainforests.

A population of about 14,000 people reside on the island, with approximately 50,000 foreign tourists visiting the island on a yearly basis. Indian tourists form a bulk of the visitors to the islands with about 100,000 visiting the island per year. Given the load of tourists, a large amount of garbage is visible and is the one singular development obvious to all, particularly after the advent of tourism.

Apart from this very obvious phenomenon, the impact of tourism on coral reefs is not so evident. Dive operators and fishers report that unregulated access to many reef areas has resulted in large numbers of visitors who could potentially have an impact on the coral reefs. Storm surges and sedimentation are other issues that have affected the diversity and productivity of the reef to both recreational divers and fishermen.



The very visible problem of garbage on Havelock Island

The above are some trends that are emerging from the survey. Analysis of the preliminary data will help characterize stakeholders and hopefully aid in emphasising the importance of the inclusion of biophysical monitoring. It is evident that the region has great potential given the need to sustain livelihoods, business, build on the diversity of environmental awareness and evident developmental fall outs that will induce change in the long term.

The Lakshadweep team has completed the data collection phase and is in the process of data analysis. Preliminary analysis notes that the percapita income on the island has gone up from Rs 7150 in 2001 to Rs 28,450. At the same time the gap between the rich and poor is widening and we note that 25% of the households had incomes less than Rs15,000/month. With tourism is being widely accepted as a revenue earner, some people are trying to accrue blocks of land either by purchasing or leasing the land to start new resorts. Noting that garbage disposal is becoming a big problem on the islands, an awareness poster has been produced on how long it takes garbage to degrade.

The Gulf of Mannar team has completed the data collection phase at the project site, covering three villages. They are in the process of analyzing the data and preparing key learnings.

The SocMon team at Maldives has completed data collection at the two focal islands. They have completed the Perceptions on MPAs survey with reference to Bananna reef and Nassimo Thila reef. The survey respondents were individuals, dive schools and resorts. Preliminary analysis shows that the resorts and dive schools were better aware of MPAs.

The SocMon team at Srilanka has produced a guide book on Mangroves, “Kandalum Soolalum” (Tamil) meaning “Mangrove Environment.” This book was published with the generous financial contribution made by the IUCN–MFF programme. The main objective of this effort is to enhance public awareness of the value of the mangrove habitat and its conservation importance for the Tamil–speaking

community. This book has fulfilled the current vacuum of Tamil medium books in this subject area. A book launching ceremony was held on 30 December 2011 at Kalpitiya with the participation of leading community members and eminent environmental professionals.



Author ACM Niyas presenting a copy of the guide book to Dr. RnijthMahindapala