

Alcala 1996, Luchavez *et al.* 1984). Live coral cover in the other reefs are still low: Takot, 26%; Buta, 18.66%; and Sojotan Pt., 14.88% (SUML 1997). Catch landing has increased from 2.0 mt to 4.9 mt. The estimated *bangus* (milkfish) fry seasonal collection also increased from 249,770 in 1995 to 305,956 in 1997 (Luchavez in prep.). These data however, are based on observations made for two seasons only. While the results are very much encouraging, it will take more studies to determine the exact trends in harvest.

Out of three groups initially organized in 1994, the Calaogao Marginal Fishers and Farmers Association has persisted to continue management of the reef upon the project's termination. Whereas at the start, the Association was equipped with only an outrigger canoe, manned by four *bantay dagat* (community

volunteers deputized by the government to patrol the coasts against illegal fishing activities), today, they, numbering 20, have two motorized patrol crafts. Some local stakeholders donated an engine for the patrol boat, binoculars, 2 units of VHF radio transceivers, 2 units of CB radio transceivers, a searchlight and T-shirt uniforms. Thus far, more than 10 groups of illegal fishers, all from other barangays, have been apprehended and fined. More importantly, the number of violators has recently diminished.

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By **Teodulo F. Luchavez**, Silliman University Marine Laboratory, Dumaguete City, Negros Occidental, Philippines



Malang, Indonesia Hosted International Symposium for Agenda 21 Strategy

An international symposium focusing on Chapter 19, Integrated Management and Sustainable Development of Coastal and Marine Areas, of the Indonesian Agenda 21 Strategy was convened in Malang, East Java, Indonesia in November last year. The symposium was jointly organized by the National Technology Institute (ITN Malang), the National Coordination Agency for Surveys and Mapping (BAKOSURTANAL) and Proyek Pesisir (the Coastal Resources Management Project of the Natural Resources Management Program of the United States Agency for International Development which is implemented through the Coastal

Resources Center of the University of Rhode Island (URI). It was attended by 170 representatives from the government, industry, academia, non-government and community organizations as well as aid organizations.

The Indonesian Agenda 21 Strategy was released by State Minister for Environment Sarwono Kusumaatmadja in March 1997. The strategy is designed as a "one policy package with the objective of making sustainable development, with an environmental perspective, a reality in Indonesia." The Malang symposium sought to provide a forum for sharing information among integrated coastal management (ICM)

practitioners that would enrich and enhance Indonesian ICM knowledge and capacity to implement the Agenda 21 Strategy.

About 39 papers were presented within 5 thematic sessions corresponding to parts of Chapter 19 of the Indonesian Agenda 21 Strategy. The 5 thematic sessions were: 1) Integrated Coastal Zone Management; 2) Marine and Coastal Mapping, Monitoring and Environmental Protection; 3) Utilization of Marine and Coastal Resources for Sustainable Development; 4) Vulnerability to Sea Level Rise, Climate Change and Tsunami; and 5) Training, Education and Research.

In addition to these five sessions, a special evening seminar on coastal and marine geographic information sessions (related to item no. 2) was conducted by the Marine and Coastal Information Systems team of the Marine Resources Evaluation and Planning Project, an Asian Development Bank and Government of Indonesia project. Five papers dealing with various aspects of coastal and marine information systems, including Geographic Information System and remote sensing applications, metadata and spatial data standards were presented.

In the concluding session, co-convenors Prof. Jacob Rais (National Research Council) and Ian Dutton (Coastal Resources Center, URI) noted that the symposium generated an unprecedented level of interest in ICM as a framework for resolving the many challenges of managing Indonesia's vast marine and coastal estate. The symposium "showcased" aspects of Indonesia's rapidly developing ICM capability and highlighted key strategic needs for further development of capacity. Of particular note, the symposium assisted in linking Indonesian ICM practitioners with

the broader global ICM community.

The Symposium proceedings are now being edited and will be published by ITN Malang in 1998. Copies may be ordered directly from Mr. Leo Pantimena (ITN Malang) via e-mail (geodesi@malang.wasantara.net.id) or fax (62-341-553015).

By **Ian Dutton**, Proyek Pesisir (Coastal Resources Management Project), NRM Secretariat, Jl. Madiun No. 3, Mentang 10320, Jakarta, Indonesia, Tel: 62-21-3926424, Fax: 62-21-3926423



updates

Enterprising Olango

On March 28, 1998, the Enterprise component of the Coastal Resource Management Project (CRMP) conducted a special tour of Olango Island to help stimulate development and explore feasible alternate livelihood for the learning area. The endeavor, fully supported by Region VII's Department of Tourism, Department of Environment and Natural Resources (DENR) and the Protected Area Management Board of the Olango Island Wildlife Sanctuary (OIWS), was organized by Monette Flores, CRMP Enterprise Development Specialist. A test group of "tourists" were taken on a day trip to the site to determine its viability as a tourist destination (see lead article on page 1).

Located in the southern portion of Olango Island, the area which is now the Olango Island Wildlife Sanctuary was recognized as a critical stopover point for tens of thousands of birds travelling the East Asian Migratory Flyway, an important international route for migratory birds. The 920 hectares of tidal flats, mangroves, seagrass beds and sandy ridges were officially declared a sanctuary in 1992 and is managed by the DENR. The OIWS is the

first and only Ramsar Site in the Philippines. The Ramsar Convention is the world's oldest international conservation treaty in which signatory countries designate and protect wetlands of international importance.

The tour group comprised of delegates from the Global Congress of the Pacific Asia Travel Association (PATA), in town for the yearly international conference on tourism development and operation. The PATA delegates who joined the tour were from Germany, the United Kingdom, Malaysia, Monaco, Canada, the United States, Australia and New Zealand. Also present was a Filipino tour operator. The tour consisted of a boat ride beginning from Mactan Island, then around the southern islands and islets of Olango, finally landing in Sabang, one of the gateway villages to the wildlife sanctuary. The "tourists" were greeted and served refreshments by a women's group from one *barangay* (village) and then escorted to small paddleboats rowed by members of the community youth group and fishers for site-seeing in the mangroves and bird sanctuary.

The response to the pilot tour was extremely positive. Evaluation results unanimously show that the trip can be successful as currently packaged. Virtually all respondents desired more interaction with the local community. This is a key indicator that low-impact ecotourism that **integrates and benefits the local residents** is a viable livelihood option for Olango. Plans to set up an actual tour operation are in the works as well as plans for a variation of the tour which will focus on the southern islands and will include snorkeling around the Hilutungan marine sanctuary.

Caution must be exercised however, in choosing a national tour operator. The tour operator's goals must be in keeping with CRMP's objective to help local islanders prosper and become co-managers of the environment. This means that the residents must be an essential partner in the operation and not alienated from their own resources,



Paddling through the shallows and mangroves.

as is oftentimes the case when tourism enters a small island. This pilot tour initiated by CRMP puts particular importance on community involvement in resource conservation and providing them optimum economic benefit from the enterprise.

By **Diane Antoinette Parras**, Intern, CRMP

For more information, contact: **Ma. Monina Flores**, Enterprise Development Specialist, CRMP



CRMP's Mangrove Management Component Begins Pilot Operations in Bohol

The Mangrove Management Component of the Coastal Resource Management Project (CRMP) began full operation in January of this year and has been moving towards establishing its pilot areas in Bohol. As of March 16, the MMC staff have identified four municipalities and obtained verbal approval from the concerned mayors or from senior municipal staff to initiate the program. The pilot program will encompass Candijay, Getafe, Inabanga and Mabini.

Locally hired community organizers (CO) will work in two sites in each of the municipalities to strengthen or form organizations that are interested in managing mangroves. After they have been

organized, the CO will work with the groups to develop and apply for Community-based Forest Management Agreements.

When awarded with these agreements, the organizations will be able to pursue a variety of livelihood activities (more than 35 have been identified) including use of amatong (a local method of catching fish using an excavation filled with rocks and mangrove branches that provide a niche to fishes), manufacture of nipa alcohol and nipa shingles and bee keeping. As a result of the new Department Administrative Order (DAO) 98-10, the participants will now be able to cut mangroves that have been planted unlike before when it was banned. The DAO will enable the

people to pursue livelihood such as charcoal manufacture, sale of tangal (Ceriops tagal) bark and the sale of mangrove timber.

The pilot program aims to hire and train the four community organizers and to initiate organizing activities immediately thereafter. The community organizers will work for CRMP for one year. After that, CRMP hopes that the COs will eventually be absorbed by the Municipal Agriculturist Office or in other appropriate offices in the municipality. This will help institutionalize the mangrove management process.

By **J.A. Atchue**, Field Operations Leader, Mangrove Management Component, CRMP

Philippine Navy, Coast Guard and BFAR Awarded for Coup

On March 19, 1998 the Coastal Resource Management Project presented certificates of appreciation to the Philippine Navy, Coast Guard and Bureau of Fisheries and Aquatic Resources for confiscating a stash of illegally extracted corals.

The corals were found in a deserted field near the University of Visayas marine office training outpost in Mactan Island. Most were left out in the open to dry, some were in styrofoam boxes soaking in bleach while others were already

packed for shipping. A relatively fresh batch was found just near the shore piled in a heap.

This makes the third truckload of illegally collected corals seized within recent months. The entire assemblage is estimated to be worth P70,000.00 (US\$1,891.00). The extractors sell the corals for about P15-20 per piece to souvenir shops, who then turn around and sell them to tourists for US\$5-10 per piece, depending on the kind and quality of each individual specimen. Some are

also smuggled abroad, mostly to Europe and the United States.

Most of the corals sold in trinket shops are illegally extracted. Please do not support this industry. It is better to have the living coral in the sea where it belongs, than a lifeless one wasting away on your mantel-piece!

By **Diane Antoinette Parras**, Intern, CRMP



Sharing ICM Experiences from Rhode Island

Hermenigildo J. Cabangon, Learning Area Coordinator for Sarangani Bay of the Coastal Resource Management Project (CRMP) and one of four Filipino participants to the Summer Course on Coastal Zone Management held at the Coastal Resources Center, University of Rhode Island (URI), Rhode Island, USA from June 1-28, 1998, came back exuberant after four weeks of sharing experiences on integrated coastal management (ICM) with representatives from Fiji, Hongkong, Sri Lanka, Barbados, Jamaica, Trinidad, Tobago, Ghana, Kenya, Tanzania, Mexico, Nicaragua, Sweden and the Philippines.

The course helped participants to better understand many of the elements in a strategically designed ICM program and the strategies, tools and techniques that promote its sustainability. The major topics were:

- Introduction to coastal management.
- Coastal management tools and solutions.

- Managing geographic areas of concern.
- Applying the coastal management tools.

Sessions were loaded with case studies, meticulously examining a myriad of coastal management approaches. Exercises focused on community participation, networking, tapping of resources and mobilization. According to Mr. Cabangon, this aspect "is not different from the Philippines' community organizing and development approach to management. In fact, the Philippine experience has more options to offer "although perhaps, efforts at sustaining the momentum and elevating it to the next step still need to be improved."

After exploring the coastal management models provided by both the URI and the participants, they all realized that they were practically doing the same things, only at different levels, with varying approaches depending on culture, the

willingness and the capacity of the people to accept change as well as how much the government is willing to commit.

The last three days were spent mostly in trying to say "goodbye" and sharing ideas on how to optimize the opportunity provided by the course. Indeed, the 14 country participants found much in common with respect to their coastal management problems and solutions!

The other Filipino participants were Ms. Emma Melana of the Department of Environment and Natural Resources Region VII, Ms. Rose-Liza Eisma of the Silliman University and Ms. Mercy Teves of the Provincial Government of Negros Oriental. Their participation were supported by the CRMP as part of its institutional strengthening effort.

By **Dolores Ariadne D. Diamante-Fabunan**, CRM Specialist, CRMP





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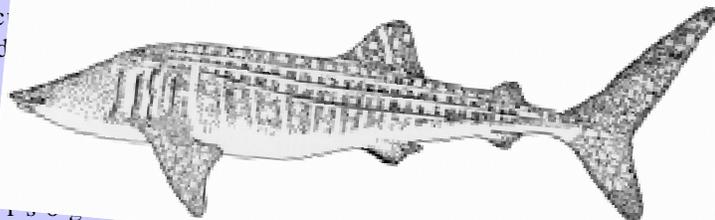
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Saving the Whale Sharks and Manta Rays

On March 25, 1998, the government promulgated Fisheries Administrative Order (FAO) No. 193, Series of 1998. The law took effect on April 12, 1998 prohibiting the catching, selling, buying, possessing, transporting and exporting of whale sharks and manta rays in Philippine waters. The Order also forbids wounding or killing these animals while in the course of targeting other fish. Whale sharks and manta rays accidentally caught must immediately be released unharmed. Those that die and are washed ashore must be turned over to the regional office of the Department of Agriculture (DA) or to the Bureau of Fisheries and Aquatic Resources (BFAR) regional or provincial office. These offices are responsible for the disposal of the carcasses. Exempted from the ban are scientists doing research work. However, they must first get a permit from the Secretary of Agriculture. Violators of this Order could be fined from P500 (\$13.50) to P5,000 (\$135) and/or imprisoned from six months to four years or the BFAR Director could fine them a maximum of P5,000 and/or cancel their fishing license and confiscate the whale shark or manta ray.

In some parts of the Philippines, hunting whale sharks as well as manta rays, whales and dolphins mainly for local consumption is a tradition among fishers who are highly dependent on fishing for their livelihood. However, whereas before, the purpose of the hunt was limited to local consumption, now it is more in response to increasing export demand. Today, at least two companies, one of which is the Filmosa Trading Corporation, buy the sharks from fishers at P10,000 (\$270) to P20,000 (\$540) each, to export mainly to Taiwan, Hong Kong, Singapore and Japan. These companies sell each shark, cut and frozen, for as much as P800,000 (\$21,000) each. Whale sharks are considered delicacies and it is thought prestigious to serve them in banquets.

However, articles in the national press, such as the *Philippine Daily Inquirer*, and coverage by the GMA television network brought public attention to the issue. The slaughter of whale sharks is a major concern.



Whale sharks and manta rays of the subclass *asmobranchii* (*Selachii*) are cartilaginous fishes with a skeleton of cartilage and a skin covered by a layer of scales. Today, there are about 250 species of sharks and about 300 species of rays and skates. Whale sharks or *Rhincodon typus* are locally known as balilan, butanding, tawiki, isdang tuko, or tuki-tuki. They measure from 12 to 21 m, and can weigh up to 25 t. They are pelagic and can be found in all tropical seas. Their bodies may be dark and gray, blue gray, purplish to reddish brown, reddish or greenish grey above, with large white or yellow spots and transverse stripes. Whale sharks have small, conical teeth on their huge, almost terminal mouths for filter feeding. They feed on plankton, squids, crustaceans and small fishes like anchovies and sardines. Whale sharks are oviparous (egg-layers).

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price to P80,000 (\$2,162), even offering boats and other means of support to the fishers. To facilitate enforcement and compliance of FAO 193, BFAR will soon launch a public information drive. It will include basic information about whale sharks and manta rays. The government could also increase the penalties by classifying the resources under the rare, threatened or endangered species categories and listing them in the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Then, violations would be punishable by 12 to 20 years imprisonment, P120,000 (P3,243) fine, forfeiture of the catch and cancellation of the permit (sec. 97, RA 8550). Still, what law is strong enough when there are poor, hungry, desperate fishers? To date, fishers from Bohol and Mindanao made it clear that they will stop hunting the whale sharks, which they claim to be their traditional right, only when they are given alternative livelihood. Obviously, other income diversification alternatives, which have to be site-specific, need to be explored, too. Thus, management has to be both resource- and people-oriented, employing the “stick” of enforcement and the “carrot” of incentives for compliance.

By **Ruperto Sievert**, Technical Assistant, CRMP

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Mangrove Cutting Is Now Allowed... in CBFM areas!

Finally, cutting of planted mangrove is allowed. Department administrative Order (DAO) 98-10 provides the guidelines for the establishment of community-based forest management (CBFM) projects within mangrove areas. Section 3 of said DAO states that “cutting or harvesting of mangrove species shall be allowed provided that these are planted by CBFM agreement holders themselves and that the harvesting operations are included in the affirmed Community Resource Management Framework, Ancestral Domain Management Plan or Protected Area Management Plan, as the case may be, and Annual Workplan; provided, further that replanting of area harvested shall be undertaken within six months after harvesting operations and provided, finally that the harvesting operations shall be closely monitored by the Community Environment and Natural Resource Office concerned.”

DAO 98-10 is consistent with other issuances that reflect the Department of Environment and Natural Resources’ (DENR) policy of “putting people first so that sustainable forestry may follow”. Such issuances include Executive order 263, adopting community-based forest management (CBFM) as the national strategy to ensure the sustainable development of the country’s forestland resources and providing mechanisms for its implementation; DAO 96-29, its Implementing Rules and Regulations that pertains to its operationalization; and AO 96-30, Integration of all community-based forest management strategy and people-oriented forestry programs and projects into the DENR regular structure. A key feature of the CBFM is the assignment of access and use rights to CBFM agreement holders including indigenous peoples and migrant forest-dependent communities, the frontline managers or stewards of the resource. The CBFM also integrates all types of tenurial instruments including that of the Mangrove Stewardship Agreement.

By **Annabelle Cruz-Trinidad**, Policy Advisor, CRMP, PRIMEX,
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Useful References and Sources of Information

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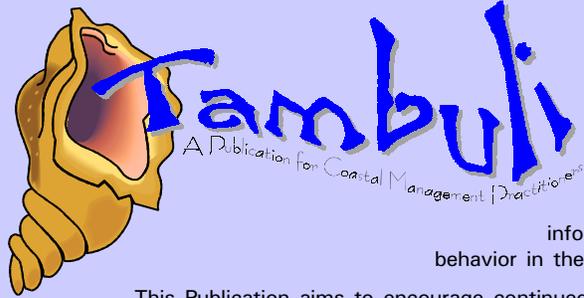
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CRMP focuses on leadership and empowerment, informed decision-making, and positive changes in human behavior in the implementation of CRM.

This Publication aims to encourage continued exchange of information, experience and ideas on coastal management among planners, managers, community leaders and other coastal resource users, given the increasing need for improved coastal management and in recognition of the need for sustained environmental advocacy.

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