

## Capacity-Building in MPAs: Practitioners Face Challenges, View Opportunities

Amid the growing recognition of marine protected areas as a useful resource management tool, two things stand out to enable MPAs to achieve their resource management goals. Effective institutions and processes must exist to plan and support the MPAs, and qualified managers and other personnel must be available to oversee them. Without these ingredients, an MPA may well "protect" in name only.

Building the capacity of institutional and human resources that support MPAs improves the management of MPAs' natural resources. But this capacity-building is not easy. The still-new field of MPAs is in the midst of a rapid learning curve on issues of planning, management, and science, forcing institutions and managers to learn as they go. To make matters worse, budgetary realities handicap all aspects of MPA management, including the hiring and training of personnel.

This month, MPA News asked managers and capacity "trainers" for their views on capacity-building, the challenges they've faced with regard to capacity, and opportunities for improving resource protection.

### Starting with the basics

Capacity-building on the individual level can be as basic as helping to develop a general environmental awareness among a coastal community's residents. Ilse Kiessling, a natural resource policy manager with WWF Australia's Tropical Wetlands of Oceania Program, said her work in the Arafura Sea/Gulf of Carpentaria region (on Australia's north coast) has involved introducing a conservation mindset to residents more concerned with economic development than environmental protection.

"Australia's Gulf of Carpentaria region is very remote, very development-oriented, and very dynamic in terms of indigenous issues, economic stability, and a lack of regulation, among other things," said Kiessling. "Concepts of conservation and environmental management are only just starting to be discussed, and there is a great deal to be done in building relationships, fostering communication, and gathering information on just what is out there in need of protection."

Kiessling said that the designation of an MPA in the region would not likely occur in the near future. Consequently, capacity-building in terms of training, education, and skill-sharing for the practical management of any future protected area is not a large part of her work. "Nevertheless," she said, "capacity-building from the point of view of awareness raising, generating discussions and ideas, supporting indigenous aspirations for (and title to) their country, and empowering local communities to the development of management planning and environmental policy is definitely part of what we're doing."

In the Indonesian province of North Sulawesi, capacity trainers on coastal management are dealing with some of the same issues as Kiessling. They've used innovative exchanges of personnel with established MPAs outside of Indonesia to further their work. Brian Crawford of the University of Rhode Island (US) Coastal Resources Center helps oversee Proyek Pesisir, an Indonesian coastal resource management project that has taken Indonesians to the Philippines to study the Apo Island Marine Sanctuary, noted for its success in rebuilding local fish stocks ([MPA News 1:3](#)).

Crawford said that by introducing the Indonesian group -- consisting of representatives from three coastal villages, national and provincial government, and national and local universities -- to a successful MPA, "It gave everyone a common view of what a marine sanctuary could be." The visit played a part in establishing the Blongko Marine Sanctuary in North Sulawesi, which Crawford said was the first community-based marine sanctuary in Indonesia to receive government endorsement at the village, provincial, and national levels.

### Distributing lessons

In turn, the project has brought representatives of Apo Island to the Indonesian villages. Although Crawford said the Indonesians had more to learn from Apo's experience than vice versa, he noted that the speed with which the Indonesian villages had accepted the sanctuary idea compared favorably with the Philippines, owing perhaps to the benefit of having the latter's model to follow.

"The coastal communities in our project are rural, quiet fishing villages, which is typical in Indonesia," said Crawford. "For a lot of the people, 'biodiversity' and 'environmental conservation' don't really ring with them. Making a living from day to day does. If they see a benefit accruing from these small MPAs -- such as from improved fishing or tourism -- that can be the hook that gets communities involved. It's not so much the number of hectares saved that's important; we're establishing examples of how improvements can be made."

Now, Proyek Pesisir is working to apply the community-based model to other Indonesian provinces by distributing lessons from the three-village pilot program. In addition, the project will hold a workshop this September with Filipinos and Indonesians to discuss lessons learned from their sanctuary management.

On the subject of what advice he would give to other capacity trainers, Crawford said that several capacity-building techniques applied over the long term were the best method. "One technique alone won't do it," he said. "You need multiple strategies: short-term skills training (such as mapping), mentoring with more experienced professionals, and learning by doing. You should also take an incremental approach. Provide some basic concepts on integrated coastal management and community-based sanctuaries, then meet back in six months and take it a bit further."

## US is training, learning

The US National Oceanic and Atmospheric Administration (NOAA) has engaged in both sides of the capacity-building process, according to Bud Ehler, director of NOAA's International Programs Office. On the training side, his office is partnering with the IUCN (World Conservation Union) World Commission on Protected Areas to offer technical support to workgroups from the Caribbean and the Northwest Pacific.

"With the IUCN workgroups, we're working with countries to develop regional action plans with regard to sustainable fisheries, integrated coastal management, and strengthening the global representative system of MPAs," said Ehler. "The message for us has been that we can work with other countries whose real need is not necessarily financial support from us, but technical and planning support."

"One of the benefits of working internationally is that there's a lot to be learned from the experience of other countries," he continued. "In particular we're looking at the application of no-take reserves by other nations, like the Philippines and South Africa." Ehler pointed to the establishment of a no-take "ecological reserve" in the Florida Keys National Marine Sanctuary ([MPA News 1:1](#)) as an example of the US incorporating a lesson learned from other countries.

Similar to the North Sulawesi project, NOAA has encouraged the development of partnering programs between MPA personnel inside and outside the US. Various partnerships with managers in China, South Africa, Mexico, and Canada have led to staff exchanges with US federal MPAs and training workshops in which personnel of both countries share their experiences and knowledge. The US and China, for example, have established three sets of "sister sanctuaries" which exhibit similar physical properties and environmental challenges. (The partnering projects are described in more detail at <http://www.nos.noaa.gov/ipo/projects/us-china/>.)

## Challenges in the Caribbean

Although some areas of the world have benefited from capacity-building efforts initiated by externally funded programs and governments, other areas remain challenged by needs for funds, information, skilled personnel, and appropriate institutional structure. Tom van't Hof, who has established three MPAs in the Netherlands Antilles and consulted on MPA projects around the world, said that although capacity-building was identified 10 years ago as an area of concern for Caribbean MPAs, it remains a problem. "Many Caribbean MPAs are still struggling with the fact that they exist on paper but do not have the capacity to manage effectively," van't Hof said.

The main reason for the lack of progress, he said, was the lack of institutional structure. "With one or two exceptions, there are no Caribbean nations that have -- or can afford -- specialized park management agencies," he said. "Park management is therefore often delegated to a fisheries or forestry department whose primary mandates are not conservation-oriented. In some cases, management is put in the hands of statutory bodies that operate semi-independently from government, or is contracted out to NGOs."

To counter this, said van't Hof, MPAs need to start building a network of relationships involving government, NGOs, and the private sector. "My advice is to use all available opportunities for training personnel, and for funding MPA management, outside of traditional government subventions," he said. "The private sector, for example, can contribute in many ways. Financially, they can contribute through license fees, sponsorships, and fees for use of the park name in advertising. Dive tour operators can assist with maintenance, surveillance, law enforcement, and resource monitoring."

He is optimistic about the new "Training of Trainers" course offered to Caribbean MPA managers by the United Nations Environment Programme (UNEP) and The Nature Conservancy (TNC). A 10-day course covering everything from marine ecology to planning, management, monitoring, and communication, "Training of Trainers" is designed to offer comprehensive

instruction that managers may then use to train other managers in their countries. UNEP and TNC offered the first course last November in English, and will offer a Spanish-language version in April of this year. Eventually, the course's modules will be used to offer custom-made seminars, like a two-day course on management planning or a one-day workshop on participatory approaches. (For more information on the course, contact Alessandra Vanzella-Khoury, whose contact information is provided at the end of this article.)

## Science of capacity building

There are ongoing efforts by intergovernmental institutions to apply a scientific look at capacity-building. In the interest of becoming more efficient in its assistance to developing nations, for example, the Global Environment Facility (GEF) of the United Nations Development Programme has initiated a project to measure the success of its various capacity-building efforts. Through its Capacity Development Initiative, the GEF will develop a strategic approach to assisting developing nations. Only a minority of the projects under analysis involve marine resource management, although some of the lessons should be transferable. (More information is available at [http://www.undp.org/gef/web\\_files/index.html](http://www.undp.org/gef/web_files/index.html).)

In terms of building human capacity for MPA management, the science may involve a retreat to past mores, in at least one area of the world. Austin Bowden-Kerby, project scientist for the Coral Reef Restoration and Development Project in Fiji, pointed out that the idea of no-take MPAs is a Pacific Island concept that has existed for thousands of years before being discovered recently by scientists. Traditionally called "tabu" or "tapu" areas (or "kapu" in Hawaii, as noted by Jim Bohnsack, [MPA News 1:5]), these zones gave honor to the ancestors and to the gods, ensuring continued benevolence, health, and the continued harvest of fish and crops.

"Unfortunately, the coming of the missionaries caused the opening of most of the tabu areas," said Bowden-Kerby, noting that the zones were based more on belief in the old religion than on a conscious understanding of resource management. "Now the islanders are beginning to realize that that was a mistake, and are beginning to re-establish tabu areas on their coral reefs and lands." In the case of these islanders, capacity-building has involved their return to the practices, if not the reasons, of their ancestors.

### For more information:

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## Capacity Challenges for Caribbean MPA Managers

Georgina Bustamante, The Nature Conservancy's marine conservation coordinator for the Caribbean, said that Caribbean MPA managers face several capacity-related challenges, including:

- Shortages of management plans and of research data needed to support such plans in negotiations with other stakeholders.
- A lack of sustainable funding for implementing regulatory measures, such as mooring buoy placement and maintenance, ecotourism projects, patrolling, and outreach programs.
- Pressure from the fishing community, tourism developers, and government agencies to manage their MPAs in ways favorable to the fishing and tourism sectors.

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