

# Getting It Right:

**Incorporating  
Social Aspects into  
MPA Planning and  
Implementation**





## Getting It Right: Incorporating Social Aspects Into MPA Planning and Implementation

Marine Protected Areas (MPAs) are increasingly being used by governments as instruments for conservation and management of coastal and marine biodiversity. The Convention on Biological Diversity (CBD) has set a target of bringing at least 10 per cent of oceans under protection by 2012. The present decision to increase area under MPAs undoubtedly has significant implications for small-scale fishing coastal communities, the primary traditional users of coastal and marine areas, although across the world they have been setting aside 'no-take' or 'limited-use' areas as part of their own generations-old management systems.

Small-scale fishing communities, threatened as they are by biodiversity loss and degradation of coastal ecosystems, have been demanding effective action to protect and manage coastal and marine habitats and resources, given the close links between their

livelihoods and the health of the resource base. In several parts of the world, they have been known to take their own initiatives, as part of traditional and more recent systems, to protect and manage their resources.

However, the current target-driven approach to expanding areas under MPAs, with a primary focus on meeting quantitative goals and the expansion of 'no-take areas', rather than on ensuring that processes undertaken are inclusive, recognize and build on existing local and traditional knowledge and governance systems, and respect principles of sustainable use, is inherently problematic.

The International Collective in Support of Fishworkers (ICSF) commissioned a series of case studies in eight countries—Brazil, India, Indonesia, Mexico, South Africa, Senegal, Tanzania and Thailand—in the context of Programme Element 2 on governance,

participation, equity and benefit sharing in CBD's Programme of Work on Protected Areas (PoWPA). The studies reveal a mixed picture. They throw up stories of conflict and the growing socioeconomic vulnerability of communities traditionally fishing in areas declared as MPAs, faced with displacement from fishing grounds, arrests and other forms of harassment. They also throw up positive examples of community-led management, where communities are using MPAs as one among several available tools, with evident benefits for biodiversity conservation and social well-being.

These case studies demonstrate that communities can be powerful allies in efforts for conservation and management of coastal and marine resource. It has equally been demonstrated that processes that are not inclusive serve only to alienate and 'criminalize' local communities. The ability of such processes to meet conservation goals, in a context where local communities are excluded and alienated, is equally suspect.

This brochure summarizes the eight case studies. They underline the need for systematic attention, capacity building, funding and other resources for effective implementation of Programme Element 2 on governance, participation, equity, and benefit sharing. This is the challenge for States, environmental groups and others committed to management and conservation of coastal and marine resources.



## Marine Protected Areas and Artisanal Fisheries in Brazil

by Antonio Carlos Diegues (adiegues@usp.br)

In 2000 Brazil introduced two new categories under the national system of protected areas—Marine Extractive Reserves (MERs) and Reserves for Sustainable Development (RSD). Such sustainable-use extractive reserves in terrestrial and marine areas, introduced in response to demands of grassroots movements of rubber tappers, fishers and extractivists, open new possibilities for the involvement of traditional communities in biodiversity conservation from the planning to the implementation phases. They also signify a shift from the primary focus on no-take reserves that had characterized coastal and marine conservation efforts in the past.

Detailed studies of three sites—the Peixe Lagoon National Park in Rio Grande do Sul, and the MERs of Mandira, São Paulo, and Corumbau, Bahia—were undertaken. In 2008 there were 38 no-take MPAs—24 federal and 14 under provincial jurisdiction—and five reserves for sustainable development, four of which were federal and one provincial. In most no-take MPAs in Brazil, such as in the Peixe Lagoon National Park in Rio Grande do Sul, local fishers and others dependent on natural resources face great difficulties in continuing with their traditional activities and sustaining their way of life, and conflicts involving fishers and park administrations are common.



A large number of MERs are located in the northeastern and Amazonian coast, where around 28,250 people live within them. Basic principles guiding MERs include: social and ecological sustainability, the precautionary principle, adaptive management, participatory approach, synthesis of traditional and scientific knowledge and management approaches, and a multi-use approach that allows for fishing and other livelihood activities, such as agriculture. An MER is established only in response to a formal demand made by local communities, fishermen's co-operatives and other associations. The implementation of MERs is based on co-management arrangements between the government and a users' association. Rules and regulations are framed by users' associations, which can also impose penalties on those who violate them. No-take zones can be also declared within these reserves. It is also required to set up deliberative councils, with representation from local stakeholders standing for different interests, as well as from local, State and federal government bodies.

MERs vary largely in size. While the Mandira MER, established in a mangrove area for oyster management, is only 600 ha and managed by 25 families, the Corumbau reserve is spread over 90,000 ha and is home to five communities, including semi-urbanized ones. Smaller reserves with more homogeneous communities, such as in the Mandira MER, are seen to be more sustainable than larger ones with several communities inside their boundaries. The Corumbau reserve, for example, also involves urban fishers and those involved in the tourism trade.

MERs are considered 'new commons' that are being built by coastal communities, particularly fishing communities, to protect their fishing territory from encroachment by other economic activities such as tourism, industrial fisheries and commercial shrimp farms. However, there are many challenges facing communities in the process of setting up sustainable-





use MERs. These are related to, among other things, the need for capacity building of government functionaries and communities; funding; strong community/fishworker organizations; an interdisciplinary approach; and integration of scientific and traditional knowledge. Moreover, expansion of MERs is facing major resistance from other actors, who include shrimp farmers, industrial fishers, tourism developers and fish traders.

**At the recently organized Conference on Artisanal Fishers, Protected Areas and Climate Change, held from 31 August to 3 September 2010 at Recife, Brazil, fisher leaders highlighted the importance of MERs as a tool for marine resource conservation, ensuring the survival of the diversity of cultures and protecting the livelihoods of artisanal fishers. The conference brought together fishers, researchers,**

**and government officials. It recognized the need for strengthening local social organizations and institutions for better management of MERs. It reinforced the need to extend legal status to, and protect, the rights of, women in fisheries, including in the management of MERs. It called for inclusion of the terrestrial area occupied by fishers within the context of MERs, not restricting such MERs to just the marine area. The conference also called for greater recognition and use of the traditional ecological knowledge of fishers in the planning, monitoring and management of MERs. The fisher leaders, who included men and women from the younger generation involved with the establishment of MERs, highlighted the increasing delay in the establishment of new reserves due to objections from industrial fisheries interests, the oil drilling industry and other government development projects.**

*The Brazil case study can be downloaded from:*

[http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue\\_99/ALL.pdf](http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue_99/ALL.pdf)



## Marine Protected Areas in India

by Ramya Rajagopalan (ramya.rajagopalan@gmail.com)

India, with a coastline of 8,100 km, reported 31 MPAs as of 2009, of which 18 are fully in the marine environment while the other 13 are partly also on land. There are another 100 protected areas that have terrestrial or freshwater ecosystems that border with seawater, or partly contain coastal and marine environments. The Wildlife (Protection) Act (WLPA) 1972, as amended in 2002 and 2006, is the legal framework for designating protected areas. Some of the important national parks and sanctuaries in coastal and marine areas include the Gulf of Mannar National Park (GOMNP) and Biosphere Reserve (GOMBR), Tamil Nadu, the Gahirmatha (Marine) Wildlife Sanctuary, Orissa, the Malvan (Marine) Wildlife Sanctuary, Maharashtra, the Sunderban Tiger Reserve and Biosphere Reserve, West Bengal, and the Gulf of Kutch (Marine) National Park and Sanctuary (also known as Kachchh).



Community reserves, introduced for the first time in 2002, allow for communities to take the initiative to designate protected areas. However, there are currently no community reserves with a marine component, as these reserves can be designated only in areas with community ownership—which is not applicable in a marine context. The WLPA has some provisions of relevance to coastal communities fishing in national parks and sanctuaries declared under the Act. It is required, for example, that the rights of communities be settled, and that the occupational interests and innocent passage of fishers in territorial waters be protected.

Advisory committees are also to be set up to advise on better conservation and management of the sanctuary, with participation of the people living within, and around, the sanctuary.

Setting up of national parks and sanctuaries in marine and coastal areas has had clear impacts on fishing communities. In the GOMNP, which comprises a group of 21 uninhabited islands located on the Tamil Nadu coast in south India, with an area of 560 sq km, rough estimates indicate that about 150,000 persons—fishers and others dependent on the marine resources—have been affected by the designation of the national park. They include around 35,000 small-scale fishers, including 5,000 fisherwomen who collect seaweed and 25,000 divers. The social consequences faced by fishers range from loss of livelihoods due to reduced access to fishing grounds, and confiscation of vessels and catch. In the case of the Gahirmatha (Marine) Wildlife Sanctuary, Orissa, over 50,000 fishers are directly affected by the restrictions and regulations on fishing put in place to protect turtle habitats. The number of fishing days has been drastically reduced from 240 a year to fewer than 100 days a year, and fishers' access to nearshore fishing grounds has also been greatly restricted.



Notably, in both the above areas, local fishing communities have put forward proposals, yet to be accepted, for the protection of both resources and their livelihoods. Communities have also adopted their own regulations, partly to reduce conflicts with management authorities. In the GOMNP, these include self-imposed bans and restrictions on the area and method of collection of seaweeds, the destruction of corals and the cutting of mangroves. In Gahirmatha, the Orissa Traditional Fishworkers Union (OTFWU) has, since 2004, banned the use of three types of gillnets, namely, sankucha jal (ray net), ring-seine and bhetki/bahal jal, which were considered to be threats to turtle populations.

However, though fishing communities have demonstrated their willingness to take up—or have actually taken up—management initiatives to minimize the impact of their fishing activities, these are yet to be recognized or incorporated into management plans. Moreover, there has been little action on the long-standing demands of fishing communities for effective implementation of existing fisheries legislation—the provisions of the State-level Marine Fishing Regulation Acts (MFRAs) that provide for control of trawling and other destructive fishing methods. Communities feel that control of such destructive fishing practices will, by itself, benefit conservation and management, while sustaining the livelihoods of small-scale fishers.



Overall, while there is now more focus—in legislation, policy and practice—on community participation and co-management of natural resources, which are all changes in the positive direction, there is yet a long way to go. Processes of consultation with communities remain weak and inadequate, and significant provisions in the WLPA that support the rights and occupational interests of communities are yet to be implemented. Much remains to be done to secure full and effective



participation of fishing communities in protected area planning and implementation, and to improve governance, participation, equity and benefit sharing, as outlined in Programme Element 2 of the PoWPA of the CBD.

**In January 2009, representatives of artisanal and small-scale fishworker organizations, other organizations that support fishworkers, environmental groups, and the scientific community, came together at the ICSF workshop on Social Dimensions of Marine Protected Area Implementation in India: Do Fishing Communities Benefit?. The workshop Statement, noting the livelihood problems encountered by a significant proportion of the active marine fisher population of India from unfair restrictions on their fishing operations in the course of implementing marine and coastal protected areas,**

**highlighted the need to integrate fundamental principles of participation, environmental justice, social justice and human rights into the implementation of MPAs. It called for fishing communities to be considered as allies in MPA implementation, and for community-led initiatives for management and conservation to be recognized and supported. Diverse, participatory and site-specific measures for the conservation and management of coastal and marine resources should be promoted, and the fishing rights of small-scale fishers using sustainable fishing gear and practices should be protected, the Statement stressed.**

**(<http://mpa.icsf.net/icsf2006/jspFiles/mpa/indiaWorkshop.jsp>)**



*The India case study can be downloaded from:*

<http://mpa.icsf.net/icsf2006/jspFiles/mpa/casestudies.jsp>

## The Coral Triangle Initiative in Indonesia

by the KIARA Network (mriza\_damanik@yahoo.com)

Indonesia, with 17,508 islands, is known for its rich marine and coastal biodiversity. In 2006, at the COP8 meeting of the CBD, Indonesia's President, Susilo Bambang Yudhoyono, set a target to declare



10 mn ha under MPAs by 2010, and 20 mn ha by 2020. The Coral Triangle Initiative (CTI) was developed as part of this target, in an effort to save coral reefs and related ecosystems in a 75,000-sq km marine area, spanning Malaysia, the Philippines, Indonesia, Papua New Guinea, Solomon Islands and Timor Leste. More than 80 per cent of the area under the CTI falls within Indonesia. With large areas under coral reefs and mangrove forests, the CTI has been called the “Amazon of the Seas”. More than 120 mn people are estimated to be dependent on the resources in the CTI for their livelihoods. Two of the large national parks falling within the CTI in Indonesia—the Bunaken National Park and the Wakatobi National Park—have nearly 60,000 people dependent on such resources for their livelihoods.

National parks have been designated under Law No. 5 of 1990 on Biodiversity Resources and Ecosystem Conservation (BREC). Through

Fisheries Law No. 31 in 2004, the Ministry of Marine Affairs and Fisheries has the authority to establish and manage marine national parks. There are also provisions under Law No. 27 of 2007 on Coastal Areas and Small Islands Management. Some of these recently adopted legal frameworks have provisions for community participation under the decentralization regime; however, these are not implemented in most areas.

According to official records, in 2007 Indonesia had seven marine national parks, 18 marine ecotourism parks, seven marine sanctuaries, nine marine natural preservations and 19 district marine conservation areas. However, there are a number of community-declared local conservation areas, which are not taken into consideration in official records.

The growing pressure to achieve the set target has resulted in a focus on quantitative goals rather than on effective management, governance and equity and benefit sharing of resources. As a consequence, communities are often excluded from the decision-making and management processes. Marine conservation efforts are largely top-down and do not take into account the livelihood interests, traditional knowledge and rights of fishers to access resources in their traditional fishing grounds.

In Bunaken National Park in North Sulawesi Province, there have been conflicts between different user groups related to changes in the zoning system and the rules and regulations put in place, as well as conflicts between communities and management authorities. Fishers' access to productive fishing areas has been reduced, and they are not allowed to use some of their traditional fishing gears, even as the same areas





are open to tourism-related activities. The situation is similar in the Wakatobi National Park, Southeast Sulawesi Province, where almost 40,000 people are dependent on the marine resources, and fishers face restrictions on access to fishing grounds. Traditional rules and norms developed by local communities for regulating resource use, based on traditional knowledge and wisdom, have largely been ignored, and the formal regulations put in place do not build on existing arrangements and social systems. There is also the problem of overlapping authority, with a number of government agencies, projects of international financial institutions, conservation NGOs and private agencies being involved in managing and administering the park.

Collaborative management, which stresses the equal rights of stakeholders to participate and share responsibilities in managing resources, is regarded as the appropriate framework for management of protected areas in Indonesia. However, in practice, community views are not taken into consideration during the decision-making process. The challenge for the coming period is to reverse this situation, securing effective community participation and building on local and traditional knowledge systems and institutions.

### **Customary arrangements and traditional knowledge**

Fishing communities in Indonesia have, over generations, developed their own rules and regulations, as well as customary institutions, for regulating resource use. For example, in Kakorotan, an island located in the northern part of North Sulawesi Province within the Bunaken National Park, communities have been regulating fishing activities through the practice of Eha and Mane'e for several centuries. The word Eha comes from 'e' (warning) and 'ha' (no), implying prohibitions on fishing during certain periods. According to the Eha system, all natural resources on land and sea are prohibited to be used irresponsibly. There are regulations on use of specific resources at specific places, and all regulations are controlled by 'Mangangeha,' a sub-institution within the Kakorotan customary institution. The word Mane'e comes from 'se'e' or 'sasahara' (agree)—it means all people agree to do something. In this traditional way of fishing, there are a number of regulations that are part of the Mane'e ritual, such as the type of fishing gear, the time to start the ritual, a distribution system for fish that is caught, and so on. Similarly, fishers on Kaledupa island, within the Wakatobi National Park, have been, for generations, establishing protected areas, individually or communally. Thus, community protected areas, such as Tuba Dikatutuang, can be found. (The term is from the Bajau language and means a common protection area.) There are several other such traditional systems that provide for rotational fishin, area-based and gear-based regulations, and restrictions on the use of destructive gear.



## Coastal and Marine Protected Areas in Mexico

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Mexico's first exclusive MPA—the Costa Occidental de Isla Mujeres, Punta Cancun y Nizuc National Park—was established in 1973 to protect coral reefs. By 2007, Mexico had designated 76 MPAs, covering an area of 13 mn ha—four mn ha in the marine area and nine mn ha in the coastal area. They include both federal and State protected areas. These sites include world heritage sites, 15 coastal and marine biosphere reserves and 45 coastal wetland Ramsar sites. MPAs in Mexico can be established by federal, State and municipal governments.



The General Law for Ecological Equilibrium and Environmental Protection (LGEEPA) provides the broad framework for regulating access to natural resources and their use, and for designating protected areas, taking into account both the biological features and conditions of local communities and traditional land uses. The LGEEPA has provisions for indigenous people, social, public and private organizations, and those interested in promoting the establishment of protected areas within their own lands, and become managers of the newly protected areas along with the Secretariat for the Environment and Natural Resources (SEMARNAT).

The Secretariat is responsible for managing wildlife and the 20 miles of federal maritime-terrestrial zones, while the Secretariat for Agriculture, Livestock Farming, Rural Development, Fisheries and Nutrition (SAGARPA) is responsible for managing fisheries resources. The LGEEPA has specific provisions for responsible participation in planning, executing, evaluating and supervising compliance with the various policies, and SEMARNAT can enter into partnership arrangements with indigenous peoples and community organizations to form advisory councils to effectively implement these regulations.

However, the institutional framework is segmented and complicated, with various departments having responsibility, along with the involvement of departments at the State and municipality levels and their operative units. Other factors affecting the effective management of MPAs are the absence of management plans, the lack of compliance by local stakeholders due to their poor involvement and





insufficient information on restrictions and regulations, the lack of alternative livelihood options, the lack of financial resources, personnel and infrastructure, weak enforcement mechanisms, and conflicts of interest between various resources users such as those in tourism, the oil and gas industries, and fisheries.

Nevertheless, there are positive experiences of natural resource management, where local resource users have actually contributed towards designating, and have benefited from, protected areas. There are 12 marine and coastal protected areas in Mexico that have been set up through the initiatives of local fishing communities, under various categories. One important bottom-up initiative is the Actam Chuleb MPA, a municipal marine reserve to protect spawning and nursery grounds, set up in 1995 by a group of fishermen from the local fishing co-operative in the Gulf Coast of Yucatan, and supported by the municipality and local organizations in

San Felipe. In 2007, a dozen years after it was initiated, the MPA faced a number of obstacles in its effective management. These were due to poor communication, weak understanding of the legal aspects of MPAs, lack of government support and recognition of traditional management practices, and conflicts of interests and misunderstandings between different stakeholders. However, despite these obstacles, a five-year co-management partnership agreement was signed between the State government and local stakeholder organizations for the administration and management of protected areas.

The experience from the Actam Chuleb MPA highlights the importance of effective decentralization strategies, both at the community and government levels, for effective conservation. Experience also indicates that such initiatives take time and a great deal of effort to consolidate and produce concrete results. However, they empower local resource users and ensure the sustainability of natural resources management and conservation in the long term.



The success of an MPA, as seen in the case of the biosphere reserve in the Upper Gulf of California, also depends on whether social aspects are also taken into consideration, such as the social importance of fishing activities. Experiences from such areas show that any programme to restrict fishing activity should be followed by plans for providing viable, alternative livelihood options that are in accord with fisher's interests, and are developed in consultation with them. It is essential that federal government agencies recognize the rights of local resource users, and support and legitimize local conservation initiatives.



*The Mexico case study can be downloaded from:*  
[http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue\\_92/ALL.pdf](http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue_92/ALL.pdf)

## Marine Protected Areas in West Africa: The Case of Senegal

By Philippe Favreliere (favrelierep@aol.com)

*In a general sense, conservationist measures are imposed on local communities by organizations from outside, often without even consulting them...*<sup>1</sup>

An important milestone in the history of marine protected areas (MPAs) in West Africa was the establishment in 1976 of the Arguin Bank National Park (PNBA) in Mauritania. The PNBA follows the model of the large African nature reserves with the difference that a part covers a marine area. The priority was not to conserve aquatic biodiversity in this vast area, but to conserve the migratory and endemic avifauna. Although fishing is banned within the PNBA, the imraguen fishing communities are allowed to practice their traditional livelihoods, but are confined to ancestral practices and to the use of sailing boats.



In 1986 the Arguin Bank International Foundation (FIBA) was founded, and in 2001, together with the IUCN, the WWF and Wetlands International, the Regional Programme for Conservation of the Coastal and Marine Zone of West Africa (PRCM) was launched. The PRCM has taken on the role of co-ordinating the efforts of various international organizations towards coastal conservation, including through MPAs, in several coastal West African countries, that is Mauritania, Senegal, Guinea Bissau, Sierra Leone, Guinea, Gambia and Cape Vert. Today the PRCM represents a coalition of nearly partner 50 institutions.

### The Case of Senegal

Senegal's coast extends 700 kilometres and its exclusive economic zone covers around 158,861 square kilometres. Its diverse coastal ecosystems provide the basis for a rich coastal and marine biodiversity, and important fishery. The fisheries sector plays a vital role both in the economy and in society at large, providing important foreign exchange earnings, employment and food. There are an estimated 100,000 direct jobs provided in fishing in Senegal, 90 per cent of these being in the artisanal sector.

<sup>1</sup>IUCN. Les Aires du Patrimoine Communautaire/ IUCN Sites of Cultural Patrimony



*Credit: Grazia Borrini-Feyerabend*

There are several examples of initiatives by fishing communities to conserve and manage their resources. In the case of the fishing community of Kayar, in 1994 the Local Fisheries Committee initiated a “strike” on the catching of export species, a measure taken to improve the price obtained, rather than for conservation as such. Currently the Fisheries Committee supervise a ban on long-lining (considered destructive) within a demarcated area within 500 metres of the shore, and a ban on night fishing by small pirogues (essentially long-liners). The community of Mangangoulak in Casamance has advocated successfully to be authorized to manage and protect their resources within a declared Site of Community Patrimony (or an Indigenous and Community Conserved Area - ICCA). The fishers' organization has reintroduced rules for their traditional fishing grounds inside the ICCA, and established the boundaries, internal zoning and fishing regulations in each zone, as well as the means for ensuring that these rules are respected.

The Senegalese government has devised a national action plan with specific strategies for conserving biodiversity in its marine and coastal ecosystems, to conserve and to restore biodiversity in its coastal areas, notably in wetlands, estuaries and deltas. In September 2003, following the 5th World Parks Congress, the Senegalese Government declared its intention to create five marine protected areas (MPAs). One year later this was concretized through the signing of a Presidential Decree creating five marine protected areas with a surface area of 82,500 hectares. However, in 2010 there is only one single MPA functioning to any degree, that of Siné-Saloum. A second (Joal-Fadiouth) has been marked out, and the remaining three—Saint-Louis, Kayar and Abéné-Kafountine—exist only on paper.

In addition to these officially declared MPAs, the Senegalese state has registered two sites on the list of biosphere reserves under the UNESCO Man and the Biosphere Programme: the biosphere reserve in the Saloum delta (RBDS - also a Ramsar Wetland area) and the trans-border biosphere reserve in the Senegal river delta (RTBS). Fishing and shellfish activities are restricted in the national parks with implications for local livelihoods.

# Marine Conservation and Coastal Communities: Who Carries the Costs? A Study of Marine Protected Areas and Their Impact on Traditional Small-scale Fishing Communities in South Africa

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Marine reserves have been used in South Africa for over 80 years as a fisheries management tool, and the country has a relatively well-established network of such reserves. The country has 20 MPAs, covering 21 per cent of the 3,000-km-long coastline, of which 9.1 per cent comprise no-take zones. In the past 15 years, South Africa has taken significant steps to promote marine and coastal biodiversity. In 1998, a new legislative framework was introduced for the management of marine living resources. The Marine Living Resources Act (MLRA) provides the legislative framework for all fisheries rights and management as well as for the declaration of MPAs. Terrestrial and MPA mandates are split across different legal frameworks, which has created a rather fragmented legal and policy framework for managing MPAs and ensuring that the commitments to the CBD PoWPA are implemented. While the country is making some progress in implementing aspects of the PoWPA, it is neglecting to address a critical component, namely -- the full and effective participation of indigenous and local

communities in the governance of MPAs, with the risk that this weakness will undermine progress at an ecological level.

Nearly all of South Africa's MPAs have been designated on, or adjacent to, coastal land and waters closely associated with indigenous and local communities who have historically used a range of marine and coastal resources, and have rich customary traditions and practices associated with these resources. Many of these communities were dispossessed of their customary rights during the colonial and apartheid era. Despite the provisions of the CBD for the protection of these rights and the recognition of the important role that indigenous and local communities may play in the sustainable use and protection of biodiversity, there have been no assessments of the social dimensions of MPAs or of the impact of these areas on the livelihood and rights of indigenous and local communities living in or adjacent to them. On the contrary, this remains a glaring lacunae in the planning and assessment of MPAs as well as in the way in which reporting on the progress of implementing PoWPA happens.

The marine sector lags behind terrestrial parks in ensuring that communities participate fully and effectively in governance, and enjoy equitable benefits from these areas. However, South African reports to the CBD tend to highlight successes in the terrestrial sector, masking the huge gaps in implementation in the marine sector, particularly with regard to Programme Element Two on Governance, participation, equity and benefit sharing. South African MPA legislation and policy make inadequate provisions for community-based governance of MPAs, and all the existing MPAs have been top-down initiatives. Where communities live within traditional authority areas, considerable tensions exist over the power of the local traditional councils to manage access to marine resources vis-à-vis that of the national government.



A study on the impacts of MPAs on traditional small-scale fishing communities in South Africa in 2008 highlighted the fact that these communities are carrying the cost of marine and coastal conservation, to a large extent. The study showed that MPAs are being used both as a fisheries management tool and as a conservation tool. In both instances, small-scale communities are marginalized. Where MPAs are initiated as a management tool to promote the protection of certain stocks, these stocks are inevitably exploited by the large-scale commercial or the recreational sector, while stringent restrictions on the small-scale sector prevents them from benefiting from any spillover effects that the protected areas may generate. Similarly, conservation measures include the enforcement of no-take zones and strict bag limits for those communities who live in protected areas. In general, zonation has been used very conservatively, and the principle of 'sustainable use' for these communities has not been respected.



The study further revealed that the livelihood spinoffs promised from ecotourism are not enjoyed by the fishing communities, and they have realized very few benefits from these conservation initiatives, which tend to be exploited largely by the recreational sector and elite holidaymakers. Where 'co-management' initiatives have been established, they tend to lead to very instrumental participation of leaders, are not located within an integrated, developmental approach to marine resource governance, and have led to little real empowerment of the local community. Women in these communities bear the brunt of the resulting high levels of poverty and social and economic marginalization. The resilience of traditional fishing communities to this exclusion depends on a number of context-specific factors in each MPA.

During the past two years, the organization and mobilization of small-scale fishing communities across MPAs and all along the coast of South Africa has increased. These fishing communities have begun to advocate for a new fishing policy that recognizes their right to participate fully and effectively in the planning, implementation and management of MPAs as one of a range of management tools aimed at protecting marine and coastal biodiversity. They have articulated their right to play a leading role in the custodianship of the coastal areas in which they live and on which they depend for their livelihoods.

**In April 2010, representatives from small-scale fishing communities living in, or adjacent to, MPAs in South Africa came together with researchers, activists and government officials at a national workshop entitled Protecting Community Rights in Marine Protected Areas. In their Statement from the workshop, the participants confirmed that they regarded MPAs as one of several important tools to be used to protect the marine environments. They noted that while MPAs are very important as such, they need to be planned and managed in such a way that they balance the needs to protect the marine environment with the goals of promoting poverty alleviation, integrated livelihoods and a human-rights approach to development along the coast.** ([http://icsf.net/icsf2006/uploads/resources/statements/pdf/english/statements\\_other/1271762631628\\*\\*\\*Statement\\_MPA\\_Langebaan\\_April\\_10.pdf](http://icsf.net/icsf2006/uploads/resources/statements/pdf/english/statements_other/1271762631628***Statement_MPA_Langebaan_April_10.pdf))

*The South Africa case study can be downloaded from:*

[http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue\\_93/ALL.pdf](http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue_93/ALL.pdf)

## Co-managed Marine Protected Areas (AMPC): Artisanal Fishing Community Governance and Sustainability:

### The Case of the Fishing Community of Lira, Galicia, Spain

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The livelihoods of around 20,000 fishers and women shellfish gatherers (*mariscadoras*) in Galicia, an autonomous region in northwest Spain, depend on artisanal fishing. The Galician artisanal fisheries are increasingly in decline, with a reduction in the number of those engaged in fishing. The reasons for this include: environmental degradation and loss of marine habitat and biodiversity, often at a rate greater than their regenerative capacity; progressive decline in fisheries resources; and stagnation and/or decreases in fish prices. In many cases, these are caused by increasing fishing effort, illegal fishing practices, centralized management of fisheries, fishing by semi-industrial and industrial fishing vessels in the same fishing grounds, and market demands for fish that are caught both legally and illegally. The result is a reduction in catch per unit effort, decline in fishers' incomes, impoverishment, abandonment of artisanal fishing activities, loss of local knowledge and cultural patrimony associated with fishing and the

sea, and the decay of the social and economic dynamism of fishing communities.

It was against this background that Fundación Lonxanet decided to establish alternative approaches for sustainable management and use of fisheries resources, along with a few fishers' organizations. Fishermen opted for the creation of Co-managed Marine Protected Fishing Areas (AMPIPC) as the tool with the most potential for reversing the negative situation within the sector. In the case of the Lira fishing community in Galicia, the process was initiated in 2003 and completed in 2007, with the final approval for the establishment of the AMPIPC of Os Miñarzos.



The methodology devised by Fundación Lonxanet to achieve the objective of conserving resources and protecting livelihoods is important. The conceptual framework includes the following principles: participatory bottom-up planning; participation of fishers in the initiative; representation of stakeholders; transparency and accountability; legitimization of all the processes; and integration of the local ecological knowledge of fishers. The Fundación Lonxanet also established a management body for decisionmaking that included members from fisher's organizations and government authorities on an equal basis. The focus was not just on the establishment of the AMPIPC but also on social and biological monitoring on a regular basis.



The AMPIPC of Os Miñarzos, established by the Lira Carnota Fishermen's Cofradía, covers an area of 2,500 ha. Its design, size, shape and location, as well as the zoning and fishery management plan, have been entirely devised by the fishers. The AMPIPC has been created especially for crustaceans such as barnacles (*percebe* or *pollicipes cornucopiae*), swimming crab (*necora púber*) and spider crab (*maja squinado*), but also for resources like octopus (*octopus vulgaris*), squid (*sepia officinales*), bass (*dicentrarchus labrax*), bream (*diplodus sargus*), sole (*solea solea*) and ray (*raja clavata*). Fisheries management measures include gear restrictions on trawling and purse-seining, regulations on fishing with traps and gillnets, exclusion of industrial and semi-industrial fleets from the reserve, and catch quotas per vessel. Two no-take zones have

been established within the reserve, and seasonal closures are also observed. According to experts, tangible results can be expected in five or 10 years. Nevertheless, there are already positive indications, both social and biological. Data from biological monitoring in the 2007-2009 period shows a significant increase in the biomass of some resources, especially barnacles (200 per cent) and sea urchins. The fisheries production level is also well above that in previous years.

Social monitoring indicates that 97.3 per cent of fishers rate the participatory decision-making process for resources management very positively, while 81 per cent say that fisheries resources are better protected after the establishment of the AMPIPC. AMPIPCs are perceived as a tool to promote sustainable management by 75 per cent of the fishers, while 48 per cent consider the economic benefits from the establishment of AMPIPC to be tangible.



### **Towards a new governance**

AMPIPCs must be seen as a pedagogic instrument to achieve a greater commitment from fishers for sustainability through their participation in decision-making processes. It is about reactive-adaptive management and the way fishers behave in response to the changes in the ecosystem, with the objective of maintaining the balance between production and the capacity for recovery. The process is necessarily dynamic and requires, at least during the initial years, the strengthening of fishers' organizations.

The adaptive co-management process initiated is seen to have improved:

- management efficiency, with more flexible and adaptable regulations according to the needs of the sector;
- speed of response to changes in the ecosystem;
- resource evaluation, with improved quality of catch data;
- compliance with rules;
- management of conflicts; and
- how fishers (men and women) relate to marine ecosystems and public officials (a new culture).



## The Social Dimensions of Marine Protected Areas: A Case Study of the Mafia Island Marine Park in Tanzania

by Rosemarie Nyigulila Mwaipopo (ahobokile@udsm.ac.tz)

MPAs have been established in Tanzania since the 1960s to protect against the unsustainable extraction of resources, such as through the use of dynamite and harvesting of live corals. Marine reserves were first designated in 1974. However, lack of resources, expertise and a clear vision on management for conservation of marine areas hampered these initiatives. The Marine Parks and Reserves Act (for mainland Tanzania), 1994, revealed, for the first time, a commitment by the government for organizing MPAs. The Mafia Island Marine Park (MIMP) was designated as Tanzania's first marine park in 1995. Tanzania has two types of MPAs, namely, marine parks and marine reserves.



Mainland Tanzania has all its MPAs under government administration, albeit with significant international donor funding, while Zanzibar has MPAs managed by the private sector and NGOs. In general, most of these initiatives have been State-directed and State-organized. None is locally driven, though some incorporate local communities as participating entities. All MPAs in Tanzania are required to adopt a general management plan (GMP) that outlines the granted activities, rights, licences, titles, interests, franchises, leases, claims, privileges, and exemptions or immunities specific to the MPA. According to the regulations, the preparation of the GMP is supposed to involve the village councils of affected villages in the enactment of regulations or zoning of areas, although the Minister for Livestock Development and Fisheries has the final say on what activities to permit or restrict within the park or reserve.

MIMP lies within the boundaries of the Mafia Island administrative district in Tanzania mainland, 20 km offshore from the eastern extent of the Rufiji delta, one of the largest delta systems in Africa. Most people's livelihoods in Mafia Island combine agriculture and fisheries, with different seasonal emphasis, along with other activities such as handicrafts and trade. Nevertheless, 42 per cent of the population lives below the poverty line. About 18,000 people reside within MIMP's boundaries, mostly traditional fishing communities; half of them depend on exploitation of the marine environment for food, income and other resources like mangroves and coral, for sustenance, and also on other alternative sources of livelihood, such as seaweed farming. The range of stakeholders includes local communities, migrants and seasonal fishers, fish traders, and industrial fishing establishments, with different interests.



Communities highlight that the process of designation of the MIMP was top-down, and that communities were informed about the boundaries of the park without meaningful participation. Residents were made to accept conservation regulations and had to “fit into the process” leaving many of their doubts and questions not clarified. This could partly be due to the “low education and low communication capacity of the community leaders to be effective information disseminators” since they were involved in the MIMP notification workshops and lobbying processes, but also because the ultimate implementation to put the MIMP in place was largely conducted as a pre-conceived government decision about management strategies.

One of the objectives of the GMP of MIMP is to ensure community participation in management, and community access to resources. MIMP's management philosophy, based on an integrated, multi-user approach, accommodates three levels of use—conservation and research, tourism, and livelihood sustenance. The GMP also mentions recognizing and maintaining people's rights to the fisheries, especially in terms of the need to minimize tensions resulting from regulating access to, and use of, resources. The GMP stipulates the integration of local residents' indigenous knowledge and scientific knowledge, and documentation of traditional fishing grounds and traditional and contemporary tenure rights, which can be incorporated into the fisheries management plans. However, these stipulations are often not implemented, leading to conflicts between different user groups and management authorities. People in the MIMP area participate in the management process through two village structures—the village liaison committee (VLC) and the village enforcement unit (VEU). However, these are not structures for articulating, negotiating and making demands of residents as partners in management, but more for implementing the plans and enforcing the regulations. Thus residents are just passive 'recipients' of the MIMP GMP.

Zoning is the most controversial issue in the MIMP management, as local fishers argue that it has redefined their access to the fishing grounds. The inability of MIMP strategies to practically accommodate traditional knowledge into management practices, though stipulated in the GMP, also affects access and ownership issues. The demarcation of boundaries is often viewed as restrictive or prohibitive, as fishers argue that the rules should permit fluidity of movement. The heterogeneous nature of the community, with diverse needs and demands of different sections, and the local politics, have also aggravated the identity and rights to maintain traditional access to the marine environment. Alternative livelihood options do not provide sufficient incomes to most households. There are complaints about the delivery of certain social and material gains, such as loans for alternative income-generating projects, improvement in community services like water supply, school construction, or expansion of healthcare facilities, and a MIMP-facilitated education sponsorship for secondary school children. Tourism has also not contributed sufficiently towards community development, as most of them are entirely foreign-owned businesses, with the locals being confined only to the periphery of the tourist markets. MIMP management has recognized the need to review the GMP of 2000 and in a more participatory process, and this process has begun. Meanwhile, through the MIMP communities have in the recent years benefitted from a secondary school sponsorship programme for girls, and small-scale aquaculture activities for CBOs.

The current social, political and economic diversity of MIMP's stakeholders—in terms of ownership claims, use practices and perceived understanding about the importance of resources, and how they should be managed—has generated significant contestations. In the absence of strong fishers' organizations in the MIMP area, there are few forums for resident fishers to articulate demands; many fishers end up raising complaints in an ineffective manner. Some local MIMP residents feel that they are being pressurized and pushed into a context with less capacity to negotiate and decreasing viable livelihood options beyond the sea.

*The Tanzania case study can be downloaded from:*

[http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue\\_94/ALL.pdf](http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue_94/ALL.pdf)



# Time for a Sea Change: A Study of the Effectiveness of Biodiversity Conservation Measures and Marine Protected Areas along Southern Thailand's Andaman Sea Coastline

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Thailand has a broad and comprehensive policy and legislative framework related to the management of marine and coastal resources and biodiversity. Participation of communities in natural resource management is an essential element, as highlighted in the Thai Constitution (2007). The National Park Act (1961) and the Fisheries Act (1947) are the important acts of legislation in the designation of marine national parks. The key agency at the ministerial level is the Ministry of Natural Resources and the Environment (MoNRE) and at the departmental level, it is the Department of Marine and Coastal Resources (DMCR). However, the institutional framework is overall quite complex, with the activities of many government agencies potentially impacting either directly or indirectly on the management of marine and coastal resources and biodiversity, especially at the local level.

MPAs have been designated in different parts of Thailand to conserve and protect coastal and marine resources.

However, there is no one definitive source listing all the different MPAs in Thailand. Also, in any one place, it is entirely possible that several different types of MPAs have been established in an overlapping manner. This is seen, for example, in the case of Had Chao Mai Marine National Park–Koh Libong Non-hunting Area–Trang River Estuary in the Trang Province of southern Thailand's Andaman Sea coastline, a Ramsar-registered wetland site of international importance.

A study commissioned to look into the effectiveness of biodiversity conservation measures on fishing communities, and to document the various efforts undertaken by the fishing communities themselves to protect these resources, focused on the Had Chao Mai Marine National Park. The park, covering an area of approximately 230.87 sq km, includes mangrove forests, seagrass beds and several islands and islets.

One village is located almost completely within the park, while many other villages are located on the boundaries of, or close to, the park, and villagers fish within its boundaries. According to interviews carried out with villagers on Muk Island, there has been no process of public consultation with communities prior to the declaration of the park. This absence of proper public consultation, lack of information dissemination to the public following the establishment of the park, and poor demarcation of MPA boundaries are all factors that have led to conflicts between villagers and management authorities. Small-scale fisherfolk have found it difficult to fish and harvest resources due to confusion over boundary demarcation, and cases of arrests of local villagers have been recorded. The problems have also extended to land entitlement issues faced by small-scale fisherfolk residing within the park, as many of them have no land title deeds or documents, whether in terms of tenure for agricultural activities or for habitation and settlement, and are threatened with displacement.

Despite the establishment of the park, degradation and depletion of marine and coastal resources have continued. This is also because large commercial fishing boats using illegal fishing gears such as push-nets and drag-nets, and



coming primarily from outside the local area, continue to fish within the park boundaries.

Notably, in the same Trang Province where the park is located, there are many examples of community-led conservation and management. They include community mangrove forest management areas, 'fish houses' (underwater structures built from wood which allow juvenile fish stocks to flourish), 'swimming crab banks' (areas set aside for the rehabilitation of swimming crab stocks), and community natural resources conservation, rehabilitation and management zones.



The 'Lae Sae Ban' or 'Four-village Marine Conservation Zone' is an example of a community initiative to protect, conserve and rehabilitate marine and coastal resources. This initiative is a collaborative effort between four small-scale fishing communities to regulate the use of inappropriate and illegal fishing gears and practices. These communities are now trying to carry out monitoring and evaluation activities to quantify the positive effects of their initiatives on marine and coastal resources. Such initiatives, designed, implemented, enforced, monitored and evaluated by the communities themselves, have great potential to expand and include large areas and other communities as well.

Small-scale fishing communities, NGOs and local government agencies are increasingly becoming more aware of an ecosystem approach to effective MPA management. Efforts to implement the 'ridge-to reef' approach, where management of lowland watershed and highland water resources are also undertaken along with MPA management, are being undertaken. It is essential to further expand and formalize such approaches for sustainable natural resource management.

Apart from the efforts of various NGOs and academic institutes in working together with small-scale fisherfolk communities, community organizations and small-scale fisherfolk networks, a number of government agencies have also demonstrated increasing willingness to work with small-scale fisherfolk, particularly at the local level. To date, local government agencies and small-scale fisherfolk communities have worked together in addressing land entitlement issues, proposing amendments to the Fishery Act and establishing zones for the conservation, rehabilitation and management of marine and coastal resources.

The experience from Trang indicates that rural communities, rather than being viewed as a threat to natural ecosystems and biodiversity, must instead be considered an integral part of natural ecosystems and biodiversity, with a key role to play in the protection, conservation, rehabilitation and sustainable use of natural resources and the environment.

*The Thailand case study can be downloaded from:*

[http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue\\_110/ALL.pdf](http://icsf.net/icsf2006/uploads/publications/monograph/pdf/english/issue_110/ALL.pdf)



## Recommendations

These case studies highlight key challenges for the implementation of the CBD PoWPA, with special reference to Programme Element 2 on governance, participation, equity and benefit sharing. They point clearly to specific issues requiring future attention in order to ensure that the commitments under the Convention are honoured.

The case studies put forward the following recommendations:

1. Member States should develop appropriate legislative and policy frameworks that recognize the rights of indigenous and local fishing communities, including mechanisms that recognize and enable community-based conservation and management.



2. A range of types of MPAs and governance approaches should be recognized, in tune with the existing diversity of such community-led approaches, and tailored to meet the needs and capacities of local fishing communities.

3. The principles of preferential access to, and sustainable use of, marine resources by indigenous and local fishing communities living in, and adjacent to, MPAs should be promoted.

4. Traditional and local knowledge of indigenous and local communities should be recognized and integrated into MPA planning and management processes.

5. The right of indigenous and local fishing communities to participate fully and effectively in the planning,

management and evaluation of protected areas should be affirmed and, where necessary, appropriate capacity-building support provided to such communities.

6. Policy mechanisms to ensure the equitable sharing of benefits from MPA interventions should be developed, implemented and monitored as part of ongoing governance effectiveness evaluations.

7. Institutional arrangements that promote coherence and an integrated approach across different governing agencies must be ensured. Decentralization of governance enhances continuity and maximizes opportunities to match governance processes with the needs of local communities and the marine and coastal resources that they depend on for their livelihoods.

8. MPA management frameworks should be nested within an ecosystem approach that encompasses broader land- and sea-scapes, for effective conservation and sustainable use of biodiversity.





9. Special measures to eliminate discrimination against women in all aspects of MPA planning, implementation and monitoring should be adopted, and progress towards gender equity routinely evaluated as part of management effectiveness evaluations.

10. Management plans should be based on understandings of the social and cultural contexts of MPAs, and indicators and corresponding objectives to address poverty and other social inequities should be developed and implemented.

11. The necessary institutional arrangements, financial and human capacity needed to promote viable livelihood alternatives for those impacted by MPAs must be put in place.

12. Training and capacity building, particularly of government agencies, for improving governance of protected areas consistent with obligations under the CBD, should be facilitated.

Most critically, all the case studies highlight the key role that indigenous and local communities can play as allies in the protection of biodiversity. The biggest challenge for States is to find ways of recognizing, respecting and promoting this role, reversing the top-down legacy of the past towards genuine partnerships with communities. There is the real danger, otherwise, that the current target-driven approach to the extension of protected area networks, at the expense of principles that are integral to the lives and livelihoods of these communities, will compromise the long-term sustainability of these interventions themselves. Further, the case studies stress that MPAs should be seen as only one in a range of conservation and fisheries management tools available for the protection of marine and coastal biodiversity, and that these should be located within a broader, socially just ecosystem approach for effective conservation of biodiversity.



This brochure summarizes a series of case studies done in nine countries—Brazil, India, Indonesia, Mexico, Senegal, South Africa, Spain, Tanzania and Thailand—on the role of communities in the planning and implementation of marine protected areas (MPAs).

The studies demonstrate that communities can be powerful allies in efforts for conservation and management of coastal and marine resources. They also underline the need for systematic attention, capacity building, funding and other resources for effective implementation of Programme Element 2 on governance, participation, equity, and benefit sharing of the Programme of Work on Protected Areas (PoWPA) of the Convention on Biological Diversity (CBD).



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