

Capacity building essential for management of Marine Protected Areas

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Marine wetlands threatened

Marine wetlands are important areas for people who live on the coast and inland. They provide essential life-support systems, play a vital role in controlling water cycles and help to clean up the environment (Maltby, 1986). About two thirds of the shellfish, commercial and sport fisheries rely on coastal marshes for spawning and nursery grounds. Marine wetlands also deliver many other goods



Subsistence fishing by local fishermen is allowed within the borders of this Mafia Island Marine Park, Tanzania. MPAs yield many benefits to fishermen and biodiversity e.g. foster natural age structures in fish populations, increasing fish catches and prevent bycatch of non-target species. (photo: © WWF-Canon / Peter Dento; WWF-MPAs: <http://assets.panda.org/downloads/marineprotectedareas.pdf>)

for local inhabitants in the form of medicines, food and security against flooding. Today more and more tourists visit some of the remoter coastal wetland areas. The existence of these wetlands, so vital for coastal inhabitants, is increasingly threatened. Dams and barrages, providing electricity and irrigation, often have impacts on downstream floodplain fisheries, wildlife habitat and bio-diversity. In the hinterland excessive use by agriculture of artificial fertilisers and industrial pollutants, as well as large-scale non-selective deforestation, degrade downstream wetlands. Draining wetlands, to improve agricultural production, further decreases the area of wetland habitat. The estimated annual area loss of the world coastal wetlands varies between 1 – 2 % over many decades (GVA, 1992).

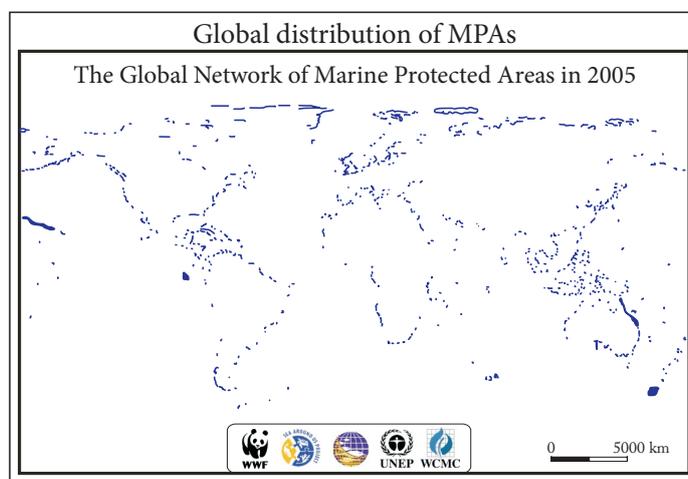


Figure 1: Global distribution of MPAs (blue dots): 4600 MPAs covering 2.2 million km². (source: UNEP, WWF; adapted)

Need for wetland protection

Wetlands are in great need of protection. The signatories to the international 1971 Ramsar Convention agreed the inclusion of wetland conservation in their national planning. The concept of Marine Protected Areas (MPA) was identified by IUCN and further promoted by UNCBD (UN-Convention on Bio-Diversity, Rio de Janeiro 1992) to improve their management around the world.

According to the widely accepted definition of the IUCN, a MPA is: “Any area of intertidal or sub-tidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment.”

MPA is thus a generic term for any marine area that is protected by means of regulating human activities, and includes protected areas differing in purpose, design and management approach.

They include areas where regulation of exploitation, rather than conservation is the primary objective, as well as areas under integrated coastal management programmes, where sustainable use of the marine ecosystem is the primary purpose (multiple-use MPAs).

There are MPAs all around the world. They can be very large (Great Barrier Reef) but also quite small and can be found in arctic, temperate zone and tropical climate zones. Tropical MPAs will often include mangroves, sea-grass fields and coral ecosystems.

Capacity building is important to ensure effective management

Strong support for the management of MPAs will contribute to sustainable development of coastal and marine areas. The UN-Jakarta Mandate (1995), outlining the programme of actions for marine and coastal biodiversity within the UN Convention on Bio Diversity (UNCBD, 1992), stressed the importance of capacity building to ensure effective management of these areas. The availability of skilled personnel is fundamental to the success of establishment and management of MPAs. Quite often, protection of these areas has shown an increase in the numbers and diversity of marine life and improvement of the overall health of the system.

The Dutch Coastal Zone Management Centre (CZM-Centre) began a capacity building initiative for MPA personnel in 1998. Training opportunities and modules to improve the management of MPAs were particularly lacking in the East African Region.

It was therefore decided to develop a MPA training programme for the Region in close cooperation with experts from the region, international organisations and with the support of the World Bank.

The geographical distribution of MPAs around the world (Figure 1) offers ample potentials for interregional sharing of increased MPAs management capabilities. The positive results of MPA training activities obtained in the Western Indian Ocean region are used in the Caribbean Islands and in South Asia.

Development of a regional training programme

Before this MPA Programme began, an analysis was made of training needs and existing capacities. Much of the existing material had a strong focus on nature protection and marine biology and less on integrated planning, legislation, enforcement, surveillance and management.

After consultation with prospective students and other regional experts during a workshop on Zanzibar in 1999, it was decided to develop a very practical and hands-on curriculum, which would cover a broad spectrum of subjects, from communication and fund-raising to monitoring and surveillance, aimed at mid-level managers.

Through close co-operation with regional organisations, namely with the Western Indian Ocean Marine Science Association, the UNEP Regional Seas Programme for East Africa, the Institute of Marine Sciences of the University of Dar es Salaam and the regional offices of IUCN and WWF, the CZM-Centre was able to develop a truly regional training programme. Courses were organised in the regions rather than inviting participants to attend courses in the Netherlands.

A comprehensive MPA Training Manual was produced using the experiences of the East African MPA training programmes.



Julius Francis teaching at one of the regional training courses in MPA Management (photo: C. van Zwol)

Many valuable lessons were learnt by active participation:

- A regional programme has several advantages over national training programmes. Firstly, it is more cost-efficient because the number of potential trainees increases, secondly the students can exchange national experiences, and last but not least, management of marine areas covers cross-boundary issues, best considered within their regional context. Alumni of the course were able to participate in a regional network of MPA managers established under the programme;
- The curriculum was developed mainly by regional experts, and later supplemented with regional case-studies presented by students during the first courses;
- A two-week training programme was developed and carried out three times (Kenya (2000 and 2002) and South Africa (2001) with financial support from the World Bank and the co-operating regional organisations. Either students were sponsored by these organisations, or their government paid the course fees. The courses were as interactive as possible, with plenty of exercises, role-playing and presentations by the students;
- With the closure of the CZM-Centre in 2006, a regional programme for internships for MPA managers and a French-language curriculum were planned but has not been implemented;
- The success of the programme was demonstrated by the fact that it was adopted by regional marine and coastal organisations in East Africa, while other MPA Regions such as the Caribbean have also benefitted from the MPA Training Manual. The South Asian region have created a MPA Training manual, based on the East Africa Region one.

The CZM-Centre also supported regional initiatives to promote policy dialogues on the issue on MPA management and its linkage to Coastal Zone Management. MPAs can be promoted as stepping stones within a broader Coastal Zone Management Programme. Political support for integrated management is an important precondition for the success of MPAs. The training programme was presented at the Ministerial Meeting of the Nairobi Convention (2003). The CZM-Centre has facilitated the production of a video and a vision document to enhance the public and political awareness on the importance of MPAs.

Download the MPA Training Manual

The CCC-web production belonging to this book, contributes to the interaction between East African region with other MPA regions such as in Asia, Pacific and Caribbean Islands. From this CCC-website (www.coastalcooperation.net) you can easily obtain the latest version of the entire MPA Training Manual in the English language. (see CCC V-1-1-4)

A related initiative by IUCN, the MPA toolkit for the Western Indian Ocean, is available at the WIOMSA-website.

Further information

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Websites

Western Indian Ocean Marine Science Association (WIOMSA): www.wiomsa.org