

# Marine Protected Areas in the 21st Century: "Strings of Pearls" Strengthening a Network of Effective Marine Protected Areas in Southeast Asia Development of a Regional Action Plan World Commission on Protected Areas (WCPA - Southeast Asia - Marine Working Group)

## Background

Southeast Asia harbors the global epicenter of marine species diversity. It contains more than one third of the world's coral reefs, housing 600 of the world's 800 reef-building coral species, and has the second highest seagrass diversity on earth. Indonesia and the Philippines together hold 77% of the regions' coral reefs and 40% of its seagrasses. It has been estimated that 88% of Southeast Asia's reefs, 85% of its mangroves and over 50% of its seagrasses are severely threatened by human activities. The main threats are over-fishing, destructive fishing, and sedimentation and pollution from land-based sources. Over-fishing is the most pervasive threat to coral reefs in Southeast Asia. If fishing in Southeast Asia is not reduced to more sustainable levels, food security from marine resources will be further imperiled.



The establishment of networks of marine protected areas (MPAs) and/or fisheries restricted areas, is widely considered as the most effective way to protect ocean bio-diversity and its economic values. They protect valuable resources, the habitat that sustains them, as well as the interest of the people who depend on them. State-of-the-art marine conservation strategies are focusing on the protection of networks of MPAs, which are designed to survive, managed to last and connected like strings of pearls across seas and oceans. The direction for strategic marine conservation in Southeast Asia will be set by applying the best current science on how to select, design and manage MPAs and MPA networks.

## Chronology

The WCPA - SEA - Marine Working Group was officially launched during the 9th International Coral Reef Symposium in Bali (Oct 2000); 40 participants from 10 countries participated in identifying the issues and constraints in relation to a network of marine reserves. Five major themes were identified as the pillars for the development of a Regional Action Plan (RAP) that would focus on strengthening of a network of effective MPAs in Southeast Asia. These are:



I. Planning and design, II. Adaptive management, III. Coordination and enforcement, IV. Community awareness, involvement, empowerment and development, V. Sustainable financing.

Through a series of smaller thematic workshops in the region, an ongoing network dialogue with conservation practitioners and experts in the region and a larger regional workshop in 2002, the regional action plan will be completed in June 2003. It will contain a clear vision, 10-year goal, strategies and a portfolio of action-oriented proposals that will support a network of MPAs in the region as well as strengthen a network of conservation practitioners and experts. 43 representatives from 8 countries participated in the regional workshop held in Bangkok, 9-11 May 2002. A collective vision and 10-year goal were articulated and adopted and a portfolio of project proposals were produced:

Southeast Asia a region with an effective, self-sufficient, representative system of marine reserves, sustaining bio-diversity and human uses, designed to adapt to local and global environmental change, managed by an empowered, responsible citizenry.

Its 10-year goal is to develop an effective, functional representative system of marine reserves established, officially recognized at all levels by governments in SE Asia, implemented by a regional, national and/or local management authority.

## The five 'working groups' (themes)

### I. Planning and Design

Its primary objective is to plan, design and build capacity for a network of MPA's in Southeast Asia in order to protect its bio-diversity and be able to adapt to future environmental change. It also aims to address marine conservation issues through a synthesis of all relevant data and information from different disciplines and

sectors. This application of the systems approach involves consideration of the presence and effects of local domestic uses, tourism, other industries, urbanization, and offshore uses, in addition to conservation objectives, and economic and political factors. The approach seeks to make national and regional efforts comparable and compatible.

## II. Adaptive Management

The primary objective of the working group “adaptive management” is to provide innovative but practical models that will accommodate new and emerging threats to the region's marine reserves. Adaptive management includes the ability to monitor indicators and being receptive to changes in the biophysical, socioeconomic, institutional, and political environment. It also includes monitoring trends in local, national, regional and global economies (e.g. tourism trends), forecasting trends in markets, capturing option values of the resource (e.g. future benefits from innovative techniques, technologies.) and constantly linking the science of biodiversity conservation to the benefits received. This requires managers to constantly look beyond the boundaries of the MPA or network of MPAs, employing dynamic approaches to management and seizing opportunities as they arise.

## III. Coordination and Enforcement

The primary objective of this working group is to develop innovative practical models that will engage more stakeholders towards better coordination and enforcement of laws in support of marine protected areas.

In their effort to conserve coastal and marine resources, countries in Southeast Asia are confronted with the problem of minimal coordination among agencies mandated to uphold the law. A much bigger problem is the enforcement of legislation. They realize that the appropriate approach to developing law for conservation, management and protection of marine resources can only be developed by those with a detailed understanding of the culture, tradition and legal processes that exist in their countries. They agree and accept that cross-sectoral coordination in the coastal zone is critical for successful

implementation of management and enforcement of rules in marine reserves. Overlapping jurisdictions and unclear mandates hamper effective management.

## IV. Community Awareness, Involvement, Empowerment, and Development

The primary objective of this working group is to build constituencies for MPAs. There is an urgent need to develop strategic communication strategies in support of a network of MPAs in the region. The strategies should focus on:

- the role and function of MPAs
- the economic links between MPAs and the livelihood of coastal communities
- the importance of no take zones/reserves for the recovery and development of sustainable fisheries.

When communities are fully a part of the design, planning and implementation processes, they become empowered and also share the perceptions of results based on monitoring and evaluation, which then reinforces their support for the protection regimes.

## V. Sustainable Financing

The primary aim of this working group is to develop an innovative portfolio of financing mechanisms in support of the network of MPA's coupled with good governance and co- management plans for the MPA's. Effective management through financing mechanisms entails at least two essential ingredients: developing a sense of ownership over the resource and products and livelihood alternatives that support marine conservation. A very important positive incentive for marine conservation is giving individuals or groups clear responsibility for the resources they exploit. This involves putting in place a mechanism that enables them to benefit from marine conservation or to personally bear the costs associated with degradation. Local coastal communities whose livelihoods have been displaced or whose productive opportunities have been reduced as a result of a marine protected area may benefit from the development of new products and markets that support marine conservation. Such new markets can provide good incentives for supporting conservation.



Website:

<http://wcpa.iucn.org/biome/marine/seasia/workshop.html>

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