

Networking Marine Protected Areas in the SSME:

Maximizing the full value of protection

Tested tool for conservation

Marine protected areas (MPAs) are here to stay. Named according to the purpose for their establishment, the scientific evidence of their efficacy, particularly in protecting habitats and species, is growing. Moreover, they have gained wide acceptance in tropical developing countries as a tool for the conservation of critical habitats like coral reefs, and vulnerable, endangered, or threatened species like sea turtles. The importance of MPAs in the protection of key ecological areas for fisheries such as spawning and nursery sites has also been recognized.

As a result, the number of MPAs has increased dramatically over the last 10 years. To date, there are over 400 sites in the SSME alone. MPA size varies from a few hundred square meters to several hundred square kilometers.

There are MPAs designed to protect particular species, habitats, and cultural sites. Accordingly, human activities are disallowed or regulated. Extractive activities are not allowed in “no-take-zones” (NTZs), in fully protected reserves, and in core zones of protected areas. In other MPAs such as in marine reserves and parks, access and use—extractive or non-extractive—are regulated.

These variations in size, purpose, and level of protection have a concomitant effect on the degree of effectiveness. Many small MPAs are virtually paper parks with no existing plans and governance mechanisms. On the other hand, there are areas where protection and support are well established and whose objectives are achieved.

In the SSME there are several outstanding MPAs.



Like many other MPAs, these areas are isolated patches over a wide span of unprotected area. Implementation of management measures is limited to the area under protection. While MPAs, in isolation of each other, could address certain conservation objectives, they may not address other goals of conservation.

The WWF SSME Program aims to address the fundamental goals of conservation: representation of biodiversity, viability of populations of species,

maintenance of natural processes, and resiliency. The establishment of more or larger MPAs does not hold the key to achieve these goals. Rather, the establishment of a network of ecologically connected protected areas that capture the representative biodiversity features and the processes that sustain them helps ensure the conservation of the fullest possible range of biodiversity in an ecoregion.



FOUR FUNDAMENTAL GOALS

OF CONSERVATION IN THE SSME

1. *Representation: The Network should include examples of all biological communities and habitats within the ecoregion.*
2. *Viability: The areas protected within the Network should be large enough and their distribution broad enough to maintain viable populations of all species of special concern in the ecoregion.*
3. *Ecological and Evolutionary Processes: The areas protected within the Network should be large enough, their distribution broad enough, and cross-boundary controls on activities occurring outside Protected Areas should be strong enough to ensure the continuation of the ecological and evolutionary processes that have shaped the characteristics of the ecoregion.*
4. *Resilience: The areas within the Network that are selected for high levels of protection should include those known or likely to be particularly important sources of recruits for other parts of the ecoregion. They should also include areas that have a high survival or recovery rate following impacts.*

Defining an MPA network

The term “network” is used to describe a biological feature of MPAs, where a level of functional connectivity among MPAs, such as provided by larval transport, is present. By protecting large areas through networks, the aspect of uncertainty associated with long-term impacts is better cushioned. The term is also being used in a socio-economic or learning context, where a specific issue, such as sustainable financing or community-based resource management, is being tested or developed at a number of parks that can constitute a network.

Towards effective networking

Building on the Biodiversity Vision, which is the 50-year conservation goal for the ecoregion, the WWF SSME Program, through the participation of MPA experts within and outside of the ecoregion, formulated the Framework for a Network of Marine Protected Areas in the SSME. This technical framework provides biophysical and socio-economic decision rules that will guide the selection of sites for the MPA network and facilitate its successful implementation. While selection of sites for an

MPA network will vary based on the conservation targets—species, ecosystems, fisheries—the goal is to strengthen the management of these networks by linking them into a broader MPA network that captures a representation of biodiversity in the SSME.

Call for unity: sharing bounties and responsibilities

By establishing networks of MPAs in the SSME individually or jointly, Indonesia, Malaysia, and the Philippines contribute their commitments to the Convention on Biological Diversity (CBD) and the World Summit on Sustainable Development (WSSD). This initiative also fits the framework of the World Commission on Protected Areas (WCPA) Regional Marine Action Plan for Southeast Asia and the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) Sustainable Development Strategy. Given the inherent links that exist between countries that share bodies of natural resources, networking is an important next step to the development of trans-boundary efforts towards restoring marine fisheries and ecosystems where everyone can come out as a winner in the long term.



Major marine protected areas in the SSME.