MPAs are critical to ecological integrity and human well-being

Bordering the Bay of Bengal and the Andaman Sea, the Union of Myanmar has 2,832km of coastline. Myanmar is home to diverse marine habitats including mangroves, coral reefs, seagrass, estuaries and mud flats as well as a rich diversity of marine fauna. This includes globally endangered species of dugongs, marine turtles, whales, crocodiles, dolphins and sharks.

Myanmar possesses rich marine fisheries resources which play a significant role in the local economy and livelihoods of rural people. However, these marine resources are under threat from overfishing, destructive fishing practices, sedimentation, pollution, habitat loss and climate change. Marine Protected Areas (MPAs) provide a critical means of ensuring the long-term sustainability of marine resources and the well-being of people dependent on them.

Marine resources provide valuable ecosystem services

Coastal communities rely upon marine resources for their livelihoods, and the sector is thought to indirectly benefit over two million people. Fisheries products are an important protein source for the local population and the country’s fourth largest foreign exchange earner.

Tourism (and associated revenues) are also expected to grow fast in coming years although tourism activities are currently limited within MPAs as there are no recreational facilities on the coastal islands.

MPAs need a strong regulatory framework

There are currently four marine protected areas in Myanmar, designed to protect biodiversity and to sustain fisheries resources. These MPAs take a number of forms including national parks, shark protection areas, wildlife sanctuaries and mangrove reserves.

The 1994 Protection of Wildlife and Protected Areas Law provides the legal structure that governs protected areas throughout the country. The 1995 Myanmar Forest Policy and 1992 Forest Law also have bearing on marine protected areas, as many include large areas of mangrove forest. The Nature and Wildlife Conservation Division of the Forest Department, Ministry of Environmental Conservation and Forestry (MOECAF) is the lead agency for MPA management.

Myanmar’s total mangrove coverage is estimated at 4,219km². National coral reef coverage is estimated around 1,500 km², of which 2 percent is protected in MPAs.

‘Shark protected areas’ have been established along the Tanintharyi coastal region (Ross Island) where it is illegal to fish, collect, sell or carry all species of shark.

The 205 km² Lampi Island Marine National Park in the Myeik Archipelago, is home to rich marine and terrestrial life. Local species include green, hawksbill, olive ridley and leatherback turtles; spinner, spotted and striped dolphins; pilot whales; false killer whales; dugongs; spiny lobster; jacks; tuna; barracuda and other large fish.
MPAs face serious challenges
Though recent years have seen notable improvements in the management of marine protected areas in Myanmar, challenges remain.

Human impacts lead to degradation and depletion of natural resources

- Overfishing and the use of destructive fishing techniques
- Discharge of chemical fertilizer, insecticide and untreated wastewater from agriculture
- Pollution through marine transportation and disposal of sewage and industrial waste
- Increasing marine and coastal aquaculture of shrimp, crab, and grouper for live export
- Offshore oil and gas exploration, and sand mining on islands in the Myeik Archipelago
- Illegal fishing from neighbouring countries
- Sedimentation due to landuse change and increased fluvial inputs
- Climate change and associated impacts

Poor MPA governance limits effectiveness

- Limited government capacity in marine protected area management
- Scarce information on the status of marine ecosystems and their biodiversity
- Plans for major coastal infrastructure development such as the Dawei deep sea port
- Existing regulations for marine resource management are complex and involve multiple departments and ministries, making enforcement particularly challenging.
- Limited means for enforcement of relevant legislation

Recommendations for improving MPA management and effectiveness

- Develop management plans for coastal commercial fisheries to include quotas and permits
- Conduct field surveys to compile species inventories for the marine environment to assess their relative abundance and distribution
- Identify critical habitat areas
- Improve understanding and predictability of the marine and coastal environment
- Promote coordination among stakeholders in sustainable conservation and marine resource management
- Propose, develop and implement new MPAs
- Ensure fisheries management is sustainable to ensure long term food security for coastal communities
- Involve communities in resource management decisions such as future MPA development
- Ensure new plans for coastal development are reviewed by all stakeholders and full environmental impact assessments are conducted
- Marine resources are conserved, managed and harvested in accordance with Aichi Biodiversity Target 6, 10 and 12 of Strategic Plan for biodiversity (2011-2020) of the Convention on Biological Diversity

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