



## Filling in the gaps in Marine Protected Areas

**Although a total of 1.3 per cent of global marine areas is currently within Marine Protection Areas (MPAs), this is far from the Convention of Biodiversity's (CBD) 10 per cent target. Significant progress has been made over the last few years, but a new report suggests there is room for improvement as MPA coverage is very uneven and not all eco-regions and habitats are represented. The report makes several recommendations for maximising the effects of MPAs.**

**MPAs were established** to manage and protect coastal zone and marine areas. They are recognised as a tool to conserve ecosystems, protect biodiversity and sustain human communities dependent on the ocean. The total number of MPAs now stands at 5880, covering over 4.2 million km<sup>2</sup> of ocean, which is 1.3 per cent of the global marine area. This is still a long way off the CBD's<sup>1</sup> target of 10 per cent, and the report discovered that MPA coverage is very uneven, for example, there are major gaps in the protection of shallow waters around coasts and continents (shelf waters), particularly in temperate regions. In addition, almost all MPAs are located within areas of national jurisdiction, meaning the open ocean or "high seas" are not covered. There is a clear trend in very large MPAs: 11 MPAs are larger than 100,000 km<sup>2</sup> and together make up over 60 per cent of the global coverage. While large sites should be welcomed, their influence on statistics may mask a disproportionate lack of protection in some regions. The report makes recommendations on improving the coverage and impact of MPAs:

**Apply ecosystem-based management principles at large scales**— More efforts should be made to establish regimes based on ecological, rather than political, boundaries. Environmental impact assessments (EIAs) are frequently used to identify risks, but are often linked to a specific activity or sector and do not consider cumulative impacts at an ecosystem level. In particular, climate change impacts must be considered. By protecting important habitats and ecosystem functions, such as storing carbon by the coast, MPAs can play a role in adaptation and mitigation strategies. They are also heavily influenced by climate change themselves. This could be addressed by creating "climate-smart" MPAs. Much work has been done on ecosystem resilience and resilience toolkits in tropical regions, which could be applied to temperate and polar regions.

**Address gaps and select the right places for MPAs** – Under-represented and vulnerable ecosystems, such as shellfish reefs and deepwater corals, could be singled out for urgent need. Ecosystems of high ecological value such as coral reefs and mangrove forests may benefit from higher protection and biodiversity targets. Coverage should be increased close to human populations where threats are high and the use of strictly protected areas (no-take areas or marine reserves) should be maximised.

**Improve effectiveness of management** – MPAs should have a business plan and financing strategy that involves all relevant stakeholders. A full portfolio of financing schemes could include government budgets, payment for ecosystem services, levies and tourism fees. There has been much progress in involving local communities in MPAs, but this should be encouraged further by sharing management responsibilities and determining common benefits to reduce potential conflicts.

**Increase cooperation** – Although there are many large MPAs, there are also important regional efforts to establish MPA networks. These can strengthen collaborative management and partnerships among multiple sectors and stakeholders. Facilitating information exchange on biodiversity and management measures is also a priority, especially with new scientific and technical data available.

1. Convention on Biological Diversity. See: [www.cbd.int](http://www.cbd.int)

**Source:** Toropova, C., Meliane, I., Laffoley, D., *et al.* (2010). *Global Ocean Protection: Present Status and Future Possibilities*. International Union for the Conservation of Nature report. Downloadable from: <http://data.iucn.org/dbtw-wpd/edocs/2010-053.pdf>

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