PACIFIC MARINE MANAGED AREAS (MMAs)





KEY POINTS

- Marine managed areas (MMAs) and marine protected areas (MPAs) involve the spatial management of natural areas for a number of reasons, including ecosystem services, economic growth, biodiversity conservation, and species protection. MMAs may be created by delineating zones with permitted and non-permitted uses within that zone.
- Healthy marine resources require healthy, intact ecosystems. Well-managed marine and coastal ecosystems are highly productive and deliver multiple goods and services that support communities and economies.
- With well-designed and managed MMAs, and especially networks of such areas, we can achieve sustainable use at multiple scales, boost the health of ecosystems, and even reverse the decline of marine biodiversity.
- Establishing networks of smaller MMAs may help to increase connectivity, supporting genetic diversity and migration, while maintaining conservation and fisheries benefits. The implementation of MPA networks that cover all major marine habitats and ecosystems will be a major step in restoring and sustaining the health of the oceans.
- Effective MMAs can contribute to food security and livelihoods by sustainably managing the fisheries and biodiversity of the Pacific.

HOW ISSUE LINKS TO/IMPACTS SDGs BEYOND

SDG14 LIFE BELOW WATER

- SDG1.5: MPAs can build the resilience of poor communities, reducing their vulnerability to climate-related extreme events and other economic, social and environmental impacts
- SDG2.4 & 2.5: helps ensure sustainable food production systems that help maintain ecosystems and genetic diversity of wild species.
- SDG12.2: contributes to the sustainable management of natural resources.
- SDG15.5: MPAs reduce habitat degradation and protect biodiversity.

BACKGROUND

- 1. MMAs are a management tool to boost marine biodiversity. An MMA or MPA is a clearly defined coastal or ocean space, recognised, dedicated and managed, through legal or other means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. MMAs may include marine reserves, fully protected marine areas, no-take zones, marine sanctuaries, ocean sanctuaries, marine parks, and locally managed marine areas. Differing levels of protection and different activities may be allowed or prohibited within their boundaries. MMA management techniques are broadly grouped into prohibiting and limiting activities.
- 2. MMAs have multiple benefits that support nearby economies and livelihoods:
 - Maintaining and protecting biodiversity;
 - Providing connections between zones to boost genetic diversity of wild populations and support species throughout their life cycle as they transition between habitats;
 - Protecting critical habitats from damage by destructive <u>fishing</u> practices and other human activities and allowing them to recover:
 - Providing areas where fish are able to reproduce, spawn and grow to their adult size;
 - Increasing fish catches (both size and quantity) in surrounding fishing grounds;¹
 - Building resilience against damaging external impacts, such as <u>climate change</u>, by, for example, minimising stressors on keystone species that are not mobile in their adult stage, such as corals;
 - Maintaining carbon sinks, if the managed area contains key <u>blue carbon</u> ecosystems;
 - Helping to maintain the resources that support local cultures, economies, and livelihoods, including through wildlife tourism.











- 4. Marine management requires an integrated approach. Invasive species, pollution, poaching, human encroachment, unsustainable take, inadequate boundaries, land-based influences, inadequate resources for compliance and enforcement, and much more challenge the management of protected areas. Water links ecosystems, meaning that impacts and benefits both spread easily. In addition, societal practice and health is closely linked to marine systems. The manner in which protected areas are planned, developed, implemented, and adopted is essential to their success. MPAs are just one of many marine resource management tools; they are most effective when used as part of integrated ocean management.
- 5. Setting boundaries alone is not enough. Biodiversity conservation and the economic benefits that it brings must be supported by policies and practice that protect the ecosystem and build its resilience. Monitoring and enforcement are key challenges, particularly over vast ocean areas, although emerging technologies can assist.
- 6. The Pacific has many examples of traditional boundary-based spatial and temporal management. Communities in the region, generally the customary owners of the land, inshore areas and natural resources therein, are critical stakeholders to achieve wise resource management. Pacific island countries have an extensive networks of locally managed coastal and marine areas: approximately 12,000 km² of community based systems of marine resource management, involving over 500 communities in 15 Pacific countries and territories, contribute to livelihood and conservation objectives based on traditional knowledge and customary tenure and governance.
- 7. Pacific MMAs could be globally relevant case studies. The Pacific has a chance to lead on this <u>scientific research</u> into the scale and mechanisms of connectivity, providing essential information about species ecology and effective governance methods. Identification of important biodiversity areas requires further research.
- 8. Healthy ecosystems are the most cost-effective resilience-building mechanisms. Just as impacts can multiply, so can benefits. For example, healthy coastal wetlands protect coral reefs and provide a buffer against storm surges and sea level rise.
- 9. The Pacific needs allies for enforcement and species protection, particularly for mobile species that cross EEZ boundaries. While a few Pacific countries are making great strides in MPA establishment, the average regional MMA coverage is below target. Effective MMAs must coincide with the most important biodiversity areas. National system planning for protected areas is limited in most countries and management resources, and capacity is generally inadequate.
- 10. The Pacific is a world leader in large marine ecosystem protection. The Pacific Ocean contains over 15 million square kilometres of MMAs protected by SPREP members. In recent years, the Cook Islands, Kiribati, New Caledonia, and Palau have put in place large MMAs, while the USA established the Pacific Remote Islands Marine National Monument. These provide a 'blue belt' of protection against impacts on ocean health and marine species.