

Western Indian Ocean Marine Protected Areas Outlook: Towards achievement of the Sustainable Development Goals

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Background

Through decisions of its Conference of Parties (COP), the Contracting Parties to the Nairobi Convention have committed to enhancing collaboration in the region's conservation initiatives. One such decision was to periodically report the progress of conservation initiatives in the coastal and marine environments. The production of the Western Indian Ocean Marine Protected Areas Outlook¹ reflects that commitment. The MPA Outlook, led by the Nairobi Convention in partnership with WIOMSA, the WIO member states and other institutions, reports the progress of individual countries and the region in achieving the Convention on Biological Diversity (CBD) 2020 Aichi Targets and the United Nations 2030 Sustainable Development Goals (SDG). More specifically, the “Outlook” presents the progress of the Nairobi Convention Contracting Parties to achieving Aichi Target 11 (conservation of 10 per cent of coastal and marine areas) and SDG 14 (Life Below Water) through an assessment of the status and implementation of marine protected areas (MPAs) across the WIO region.

The MPA Outlook is the first volume in a series of planned regional reports that presents the latest information on implementing MPAs in the WIO region. The preparation of regular status reports is beneficial to member states as it promotes accountability and supports regional cooperation in achieving the conservation targets and exchanges of best practice and mutual learning. It is also helpful in mobilizing support to overcome shared challenges and identify new and emerging issues.

The two other reports will follow the MPA Outlook - the Critical Habitats Outlook and Recommendations Outlook. These two reports will provide more detailed spatial analyses of MPA and ecosystems in the WIO, and provide suggestions for improving the design, management, and governance of MPAs and the WIO region in general.

How is the MPA Outlook structured?

The MPA Outlook is divided into five parts. Parts I and II describe the process, methods, limitations and the international and regional contexts that served as the impetus to develop this report. Part III is a compilation of country reports on the status, challenges, and trends on MPA establishment and management. This section includes ten chapters for nine WIO states, including two separate reports for the United Republic of Tanzania (URT) mainland (hereafter Tanzania) and Zanzibar. These chapters, written by country representatives, present valuable information on MPAs (e.g., governance arrangements, year established, total area, species and habitats protected), and insights into their MPA management. The last section in Part III

¹ UNEP-Nairobi Convention - WIOMSA, 2021. Western Indian Ocean Marine Protected Area Outlook, *unpublished*..

analyses MPA data presented from the country chapters and presents each country's progress in terms of achieving the Aichi Target 11 and SDG14.5, which aim to conserve at least 10 percent of coastal and marine areas. By synthesizing the MPA country chapters, Part III also discusses key lessons learned and main challenges experienced by each WIO country related to MPA planning and establishment. This section leads to Part IV, which summarizes and analyses the MPA management effectiveness assessment results by each country. Also in Part IV, a more detailed discussion on MPA best practices and further needs for improvement are described for each country. The final section, Part V, presents the review and analysis of the progress made at the regional level towards achieving Aichi Target 11 and SDG 14. The findings are based on the previous sections of this report and used the [WIO MPA Database](#)² to summarize the relevant data. Currently, the development and maintenance of the WIO MPA database are supported by the clearing house mechanism of the UNEP Nairobi Convention. The section also presents recommendations on potential approaches to advancing the establishment of MPAs, monitoring, reporting, and management from individual governance units and countries to the entire WIO region. Part V also presents preliminary recommendations and outlines priorities for further action and other important opportunities beyond 2020. It does this in light of the ongoing discussions on the New Biodiversity Framework under the CBD³, and the comprehensive review of the SDG targets by the [Inter-Agency and Expert Group organized by the UN](#).

Main findings

Reconciling the Aichi Biodiversity Targets (2020) and SDGs (2030)

Both the Aichi Target 11 and SDG Targets 14.5, recommend conservation and effective management of at least 10 percent of coastal and marine areas by 2020⁴. SDG Target 14.5 requires that 2020, conserve at least 10% of coastal and marine areas, consistent with national and international law and based on the best available scientific information⁵. In this Outlook the indicator proposed by the United Nations Statistical Commission (2015) at the 46th Session was used (Table 1).

² UNEP-Nairobi Convention, Marine Protected Areas in the Western Indian Ocean region (<https://nairobi-convention.org/clearinghouse/node/410>)

³ CBD, "Zero Draft of Post-2020 Biodiversity Framework," *Secretariat of the Convention on Biological Diversity*, 2020.

⁴ UN CBD, "United Nations Convention on Biological Diversity Conference of the Parties 10 Decision X/2," *Strategic Plan for Biodiversity 2011-2020*, no. 29 October (2010).

⁵ United Nations, "Global Indicator Framework for the Sustainable Development Goals and Targets of the 2030 Agenda for Sustainable Development," *Work of the Statistical Commission Pertaining to the 2030 Agenda for Sustainable Development*, 2020.

Table 1. SDG 14.5 and the indicator used in the Outlook⁶

Indicators Proposed by the United Nations Statistical Commission (2015) at the 46th Session	Indicator Used in This Outlook Assess Sustainable Oceanic Development Goal 14.5 in the WIO region as agreed in the COP Meeting in Seychelles in June 2017
14.5.1. Percentage area of each country’s exclusive economic zone (EEZ) in Marine Protected Areas (MPA)/ Percentage area of Areas Beyond National Jurisdiction (ABNJ) in MPA/ Percentage area of global ocean under MPA	Percentage area of each country’s EEZ in MPA

In terms of management, both the Aichi Target 11 and SDG 14.5 did not explicitly define what “effective and sustainable management” means. In this Outlook, the Management Effectiveness Tracking Tool (METT) ⁷ was used to assess the level and effectiveness of MPA management.

Regional progress in achieving conservation objectives

Significant progress has been achieved in the region towards the CBD biodiversity conservation targets and goals when examined against previous assessment and studies⁸. Looking closely at the elements described in Aichi Target 11, there are clear gaps that need more attention to improve MPA design and management effectiveness in the region. Table 2 presents a summary of the progress made towards achieving the different elements of Aichi Target 11.

Table 2. Summary of key progress in the Western Indian Ocean (WIO) region towards each element of Aichi Target 11.

Elements	Progress at the regional level in 2019	Shortfalls
Regional coverage	The total number of MPAs established has increased significantly. In the early 1990s there were only a few coral reef MPAs in Kenya, Tanzania, Mozambique and Seychelles ⁹ . As of 2019, a total of 144 MPAs were recorded from the participating countries in this MPA Outlook (Figure 1). This represents the protection of ~678,000 km ² or 8.5 percent of the combined EEZ. Since the launch of the Aichi Targets, 47 MPAs have been established across the region and with more areas proposed for conservation.	The region has not met the 10% target as described by both Aichi Target 11 and SDG 14.5

⁶ United Nations; Wilfried Rickels et al., “Www.Econstor.Eu,” 2016, 0–16, <https://doi.org/10.1002/2016EF000353>.Abstract.

⁷ M. Hockings, S. Stolton, and N. Dudley, *Evaluating Effectiveness: A Framework for Assessing the Management of Protected Area*, IUCN - WCPA Best Practice Protected Area Guidelines Series No. 6, 2000.

⁸ Julius Francis, Agneta Nilsson, and Dixon Waruinge, “Marine Protected Areas in the Eastern African Region: How Successful Are They?,” *Ambio* 31, no. 7–8 (2002): 503–11, <https://doi.org/10.1579/0044-7447-31.7.503>;

⁹ Wells, Burgess, and Ngusaru, “Towards the 2012 Marine Protected Area Targets in Eastern Africa.”

Areas of importance for biodiversity and ecosystem services	There has been some progress in protecting areas that are important for biodiversity and ecosystem services. The majority of the MPAs protect nearshore habitats such as mangroves, seagrass beds and coral reefs that are important to coastal populations. The MPAs established are also notable for protecting a variety of endemic and endangered marine animals including the coelacanth, dugongs, marine turtles and globally significant seabirds.	Offshore habitats including seamounts and river banks are only protected by Seychelles, French territories and South Africa
Ecologically representative	Coastal habitats are relatively well-represented in the region, because the majority of MPAs were established nearshore. Currently, a total of ~4,750 km or 17% of total coastline of the WIO is protected. Portions of offshore areas are also protected, which are mostly due to the recent expansion of MPAs in Seychelles and South Africa. However, significant steps are still required to address the conservation of offshore areas and deep sea habitats in other countries.	MPAs are still insufficient to contribute to achieving representation targets because most are near-shore, are small and can be severely impacted by land-based threats and coastal activities.
Effectively managed	The development of this <i>MPA Outlook</i> facilitated the first management effectiveness assessment of MPAs in the region (~68% of the total number of MPAs). Results of the assessment showed that the majority of the MPAs evaluated were not well-managed. Despite these shortcomings, the assessment allowed systematic identification of strengths and weaknesses of MPA management.	Not all MPAs were assessed to sufficiently report of the management effectiveness. Many MPAs still have management challenges mainly low human capacity and insufficient funding to meet management needs (Fig 3)
Equitably managed	There is very little progress made on measuring equity, including gender equality, in MPA management and outcomes. Only a few MPAs have been assessed but the information was not available at the time of preparing this report. Further research and development is required.	Only a few MPAs have conducted social assessment of protected areas (SAPA) ¹⁰ e.g. Kisite in Kenya to report of equitability.
Connectivity	The links across established MPAs are weak ¹¹ , and require further efforts from governments to increase protection in the region and to consider distances, spacing and ocean currents in MPA design.	There are very few initiatives that considered protection of ecological connectivity in the region
Other effective area-based conservation measures (OECM)	Although they are not recognised by the IUCN, community-managed marine conservation areas play an increasingly important role in the protection of biodiversity and ecosystem services in the region. Currently, there are 173 existing and proposed community-based management initiatives, which translate to protection of at least 1600km ² of nearshore habitats. A supporting policy framework needs to be developed across countries to help facilitate capacity building of local managers and leverage resources.	Most locally managed marine areas are not formally recognized and are not reported in the contributions overall MPA achievements of the conservation targets.
Integrated in the wider landscape and seascape	Only Seychelles and South Africa have developed marine spatial plans that integrated MPAs into relevant policies. Integration of MPAs and OECM into the wider seascape is a priority area for the region and experience from these two countries provide a great opportunity for shared learning across the region, while appreciating specific country contexts.	

¹⁰ Phil Franks, Rob Small, and Francesca Booker, *Social Assessment for Protected and Conserved Areas (SAPA) Methodology Manual for SAPA Facilitators*, n.d.

¹¹ Joseph M. Maina et al., "Aligning Marine Spatial Conservation Priorities with Functional Connectivity across Maritime Jurisdictions," *Conservation Science and Practice*, 2020, <https://doi.org/10.1111/csp2.156>.

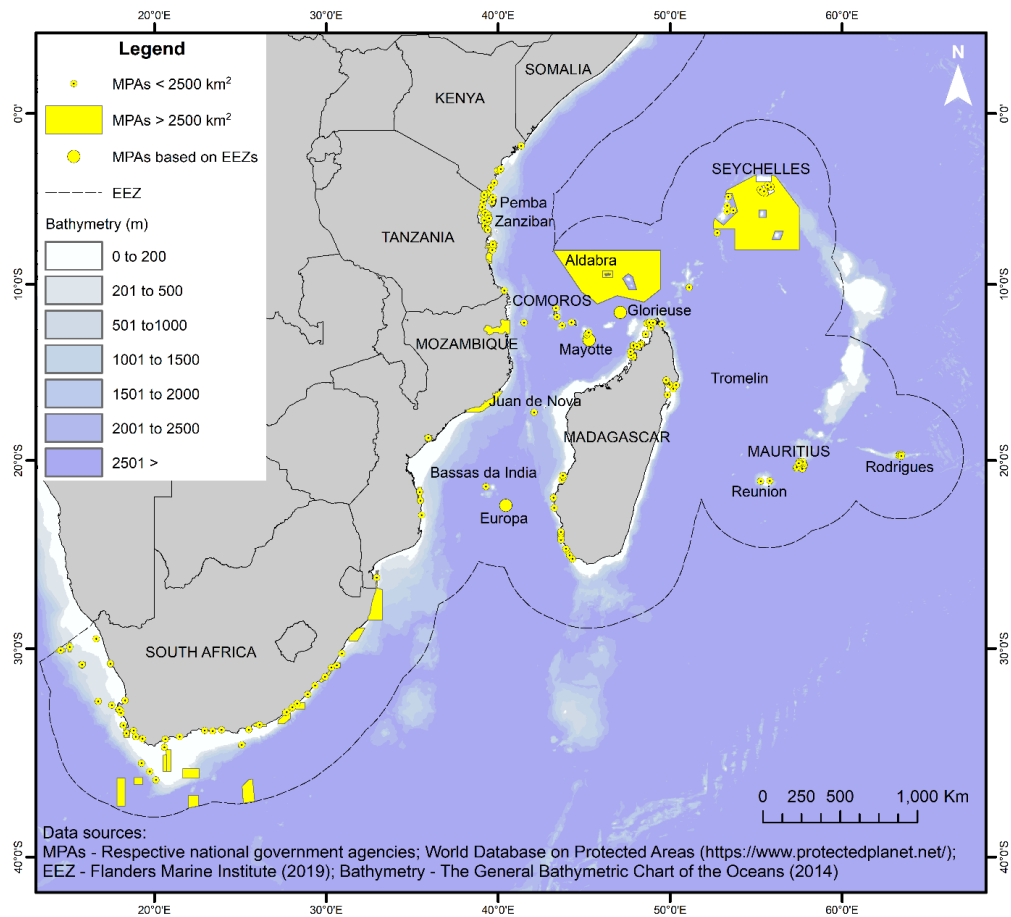


Figure 1. Established MPAs in the WIO region. Note: This map excludes locally-managed MPAs, and excludes the Prince Edward Islands MPA in South Africa and mangrove forest reserves in Tanzania

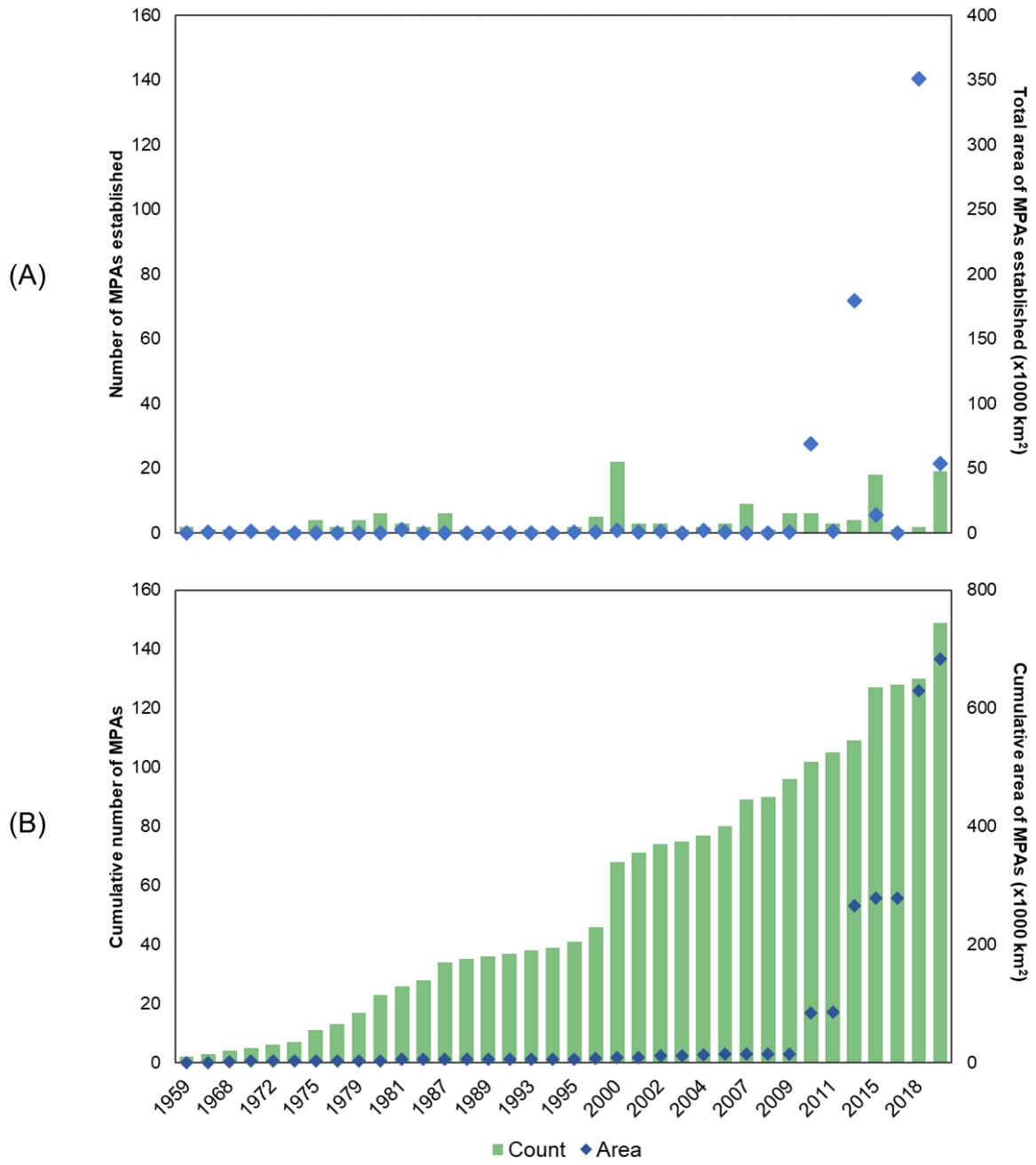


Figure 2. Established (A) and cumulative (B) number and area of MPAs in the WIO from 1959 to 2019.

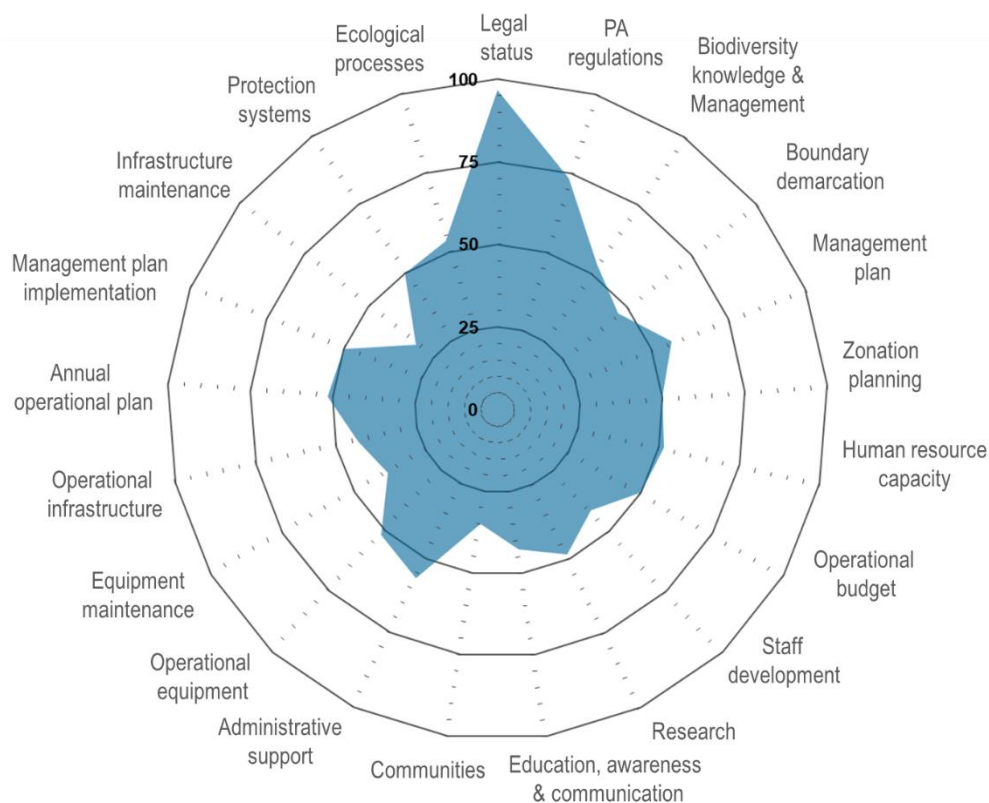


Figure 3. Percentage scores for 21 indicators applied from the METT¹² for the 101 MPAs evaluated in the WIO in 2018.

Policy recommendations

The Outlook gives general recommendations for consideration by WIO countries to strengthen the implementation and performance of their MPAs. However, for this paper, recommendation focusing on regional efforts that could accelerate progress towards the different CBD Targets and SDGs elements is highlighted.

National level

- We urge member states to develop as soon as possible, practicable ambitious national responses to the overall implementation of SDG 14.5 and the new biodiversity target 30% by 2030. With current MPA coverage at 8% of the WIO world ocean, a regional 30x30 goal would require quadrupling MPA coverage in the next 10 years.
- Countries should integrate MPAs within broader marine spatial planning frameworks and apply systematic conservation planning to address MPA design issues, representativity, and connectivity.
- Encourage Member State to conduct regular and inclusive reviews of progress in meeting SDG 14.5 at the national levels.

¹² Leverington F, Stolton S, Hockings M, Dudley N, MacKinnon K, Whitten T, "Management Effectiveness Tracking Tool," WWF, 2007.

Regional level

- Develop a regional strategy for the establishment and implementation of an effectively and equitably managed WIO MPA network.
- New areas under protection will require diversified funding options. Support Members states to develop range of funding options from international cooperation to regional, national, and local finance streams.
- Develop a regional approach and programme to sustain systematic monitoring and evaluation efforts across all important sites, and regularly conduct MPA management effectiveness assessments and social assessment of MPAs using agreed methods that also describe biodiversity outcomes.
- Support capacity building at all levels to address the variety of challenges to increase social responsibility among institutions and communities and strengthen the regional commitment to conservation and resource management.