

WESTERN INDIAN OCEAN

# MARINE PROTECTED AREAS OUTLOOK

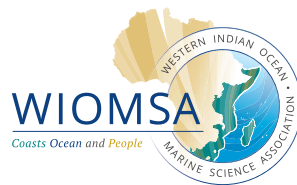
Towards achievement of the Global Biodiversity Framework Targets



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**Cover:** Rocky shores, KwaZulu-Natal Province, South Africa © Judy Mann. Insets (left to right): Great White Pelican watches a purse-seine trawler, Dassen Island, South Africa © Peter Chadwick; Coral garden, Mnazi Bay, Tanzania © Jennifer O’Leary; Landing site, Kipini, Kenya © Remy Odenyo.

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## FOREWORD

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It is indeed an honour to launch the *Western Indian Ocean (WIO) Marine Protected Areas (MPA) Outlook* in my capacity as the Minister for Agriculture, Climate Change & Environment in the government of Seychelles. I commend the Contracting Parties to the Convention for this excellent example of regional collaboration in documenting the progress made towards the attainment of the SDG 14.5 Target of 10 percent protected area of each country's EEZ.

The WIO region has a coastline stretching for more than 15 000km, a continental shelf area of some 450 000km<sup>2</sup> from Somalia in the north to South Africa in the south and covers ten countries (Comoros, France, Kenya, Madagascar, Republic of Mauritius, Mozambique, Seychelles, Somalia, South Africa and the United Republic of Tanzania) five of which are island States. The combined population for the WIO region is 244 million, and the ten countries in the region are Contracting Parties to the Nairobi Convention for the protection, management and development of the coastal and marine environment of the WIO region.

The combined economic value of the WIO ecosystems goods and services is estimated at over USD 20 billion Gross Marine Product per annum and a total asset base of over USD 333.8 billion. With over 30 percent of the WIO population (about 60 million people) living within 100km of the coastline, the coastal and marine ecosystems provide essential sources of livelihoods and income to coastal communities and significantly contribute to national economies.

However, the WIO is threatened by ecosystem degradation from rapid urbanization, increased population growth, coastal development, land reclamation and conversion. Impacts of climate change and variability have led to coral bleaching, sea-level rise, flooding and other effects. In response to the emerging natural and anthropogenic challenges, Contracting Parties to the Nairobi Convention are adopting an integrated approach in the management of ocean resources to maintain a balance between conservation and development. The approach aligns with the 2030 Global Agenda for Sustainable Development with Sustainable Development Goal (SDG) 14 focusing on the need to mobilize global effort to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

The *MPA Outlook* outlines the significant strides made in the region in promoting the protection of critical coastal

and marine resources. The *MPA Outlook* prepared by the Contracting Parties to the Convention documents the progress made in the WIO region towards achieving MPA targets based on the Convention of Biological Diversity (CBD)'s Aichi Target 11/SDG 14.5 and provides a baseline for the post 2020 Global Biodiversity Framework.

The region has established 143 MPAs (or equivalent), covering a total of 555 436.68km<sup>2</sup>, representing 7 percent of the total combined exclusive economic zone (EEZ) of the nine countries covered in the *MPA Outlook*. Most of the MPAs predominantly protect coastal habitats. Notably, a few MPAs have been proclaimed over very large areas of deep-sea habitats contributing to a larger proportion of the 7 percent.

By March 2020, Seychelles had designated 30 percent of its EEZ as protected marine areas, tripling the UN CBD Target 11 for 10 percent marine protection by 2020, and the UN SDG-14.5 for 10 percent coastal and marine protection. Seychelles with an EEZ of 1 374 000km<sup>2</sup> and a land mass area of 455km<sup>2</sup> achieved this milestone through the debt for nature swap spearheaded by The Nature Conservancy (TNC). Promising initiatives on trans-boundary MPAs are being developed between Kenya and Tanzania and between Mozambique and South Africa.

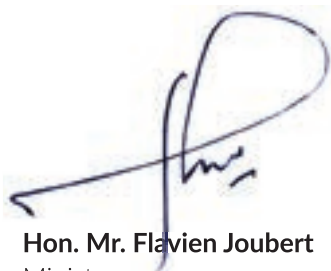
The establishment of MPAs has a long history in the region. South Africa declared the first MPA in 1964, the Tsitsikamma MPA, which was the first MPA in the region and since then South Africa has steadily increased the number and coverage of its marine conservation estate. By 2019, South Africa had 42 MPAs raising the total MPAs cover from <0.5 percent to 5.4 percent of the EEZ.

The *MPA Outlook* comes at a time when the region has embarked on large-scale socio-economic developments that are equally exerting pressure on MPAs. The *MPA Outlook* thus provides some answers and innovative approaches to minimize the scale of negative impacts on MPAs.

The *MPA Outlook* is the best form of experience sharing, and documenting best practices in MPA management across the WIO.

On behalf of the Contracting Parties, I wish to acknowledge and thank the Nairobi Convention Secretariat for the overall coordination of the process; the Western Indian Ocean Marine Sciences Association (WIOMSA) for technical and financial support through the Marine Science for Management (MASMA) Programme and the Global Environment Facility for funding the preparation and production of the *MPA Outlook* under the GEF funded

Project on the Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities (WIO-SAP) executed by the Secretariat.

A handwritten signature in blue ink, appearing to read 'F. Joubert', with a large loop at the top and a horizontal line extending to the left.

**Hon. Mr. Flavien Joubert**

Minister

Ministry of Agriculture, Climate Change & Environment

Republic of Seychelles



## EXECUTIVE SUMMARY

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The Western Indian Ocean (WIO) is renowned for the richness of its marine biodiversity, especially that associated with the region's widespread coral reef systems. The mangroves, seagrasses, rocky and sandy shorelines with associated dune systems and coastal forests, and the deep-sea features such as seamounts, ridges and abyssal plains also contribute substantially to the biodiversity of the region. The innumerable islets and atolls scattered across the WIO also support extraordinary biodiversity, including vast numbers of often rare, endemic and endangered marine species.

This rich marine biodiversity supports burgeoning coastal populations both directly, through the provision of a variety of marine resources and vital ecosystem services such as coastal protection, and indirectly, through the opportunities it provides for economic growth through sectors such as fisheries, tourism, infrastructure development and others. However, the marine resources are coming under increasing pressure in the coastal areas through the escalating needs of the local populations, exacerbated by the use of illegal fishing techniques, such as "blast" or dynamite fishing and the use of poisons, and in deeper waters from the legal and illegal harvesting of vast quantities of resources by international commercial fishing fleets. The tourism sector that brings benefits to coastal communities is in many places damaging the very resources the tourists wish to enjoy. In addition, interest in mineral resources including oil and gas reserves, found under the seabed, is exacerbating pressure on coastal ecosystems. Developing coastal nations in the WIO region, particularly those faced with financial constraints, are keen to exploit mineral resources for the benefit of their populations, leading to an exponential increase in the issuing of prospecting and extraction rights.

To these pressures are added increased levels of land and sea-based pollution, sedimentation from silt-laden rivers, and extensive coastal development; together with the increasingly evident impacts of climate change including sea-level rise, ocean warming and acidification, and increased frequency and intensity of storm events. If the twin threat from coastal development and climate-related pressure, is left unmitigated, with no protection afforded to the marine and coastal systems, there is every likelihood that the marine biodiversity of the WIO region would be irreversibly compromised. The consequential impacts on the livelihoods of coastal communities, and the well-being of the populations across the region, are likely to have long-term and negative ramifications on the national economies of the coastal states.

Aware of the global threat from both human-caused and climate change-related stressors, the global community in 2015 committed to achieving the United Nations Sustainable Development Goals (SDG). With particular relevance for the marine environment is SDG 14, "Life below Water".

The SDG 14 has several targets including Targets 14.2 on sustainable management and protection of marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans by 2020; and 14.5 that aimed at all countries conserving at least 10 percent of coastal and marine areas, essentially their exclusive economic zones (EEZs), consistent with national and international law and based on the best available scientific information by 2020. Target 14.5 was aligned to the Convention on Biological Diversity (CBD) Strategic Plan for Biodiversity 2011–2020 Aichi Target 11, which encouraged all signatory nations to ensure that:

"By 2020, at least 17 percent of terrestrial and inland waters, and 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascapes." (Secretariat of the Convention on Biological Diversity, 2010).

This *MPA Outlook* reviews the commitment by governments to achieve 10 percent protection of important marine and coastal areas through effectively and equitably managed MPAs and other effective area-based management measures (Aichi Target 11 and SDG 14). The review takes into account the formulation of the CBD's post 2020 biodiversity framework, that proposes, among other goals a zero net biodiversity loss by 2030, as well as providing a baseline for the post 2020 framework.

The declaration of marine protected areas (MPAs), has long been considered a key tool in the fight to conserve the world's marine biodiversity, and the WIO countries have played their part, by identifying and declaring MPAs; from Tsitsikamma, the first MPA in Africa, proclaimed by the Government of the Republic of South Africa in 1964, to the MPAs proclaimed in 2019 by the Governments of Seychelles and the Republic of South Africa, and those proposed for imminent declaration by the government of Comoros. It is also evidently clear that the mere proclamation of an MPA is no guarantee of effective protection. An assessment on MPA management effectiveness showed

that many MPAs in the region lack human resources, skills, equipment, and institutional commitment to fulfil their functions adequately. The assessment also revealed serious declines in conservation funding. The COVID-19 pandemic led many countries to adopt lockdown measures, affecting tourism revenues on which many MPAs in the WIO depend to finance MPA operations. Marine conservation in the WIO region needs a post-COVID recovery plan and marine conservation efforts must now be funded not only at the level that they were at before the pandemic but at an even higher amount that reflects the severity of the unprecedented threats to biodiversity and associated economic sectors.

Madagascar has pioneered an interesting approach to protecting marine areas through a rapid increase in the number of Locally Managed Marine Areas (LMMAs), where coastal communities work in collaboration with government and other stakeholders to protect their coastal resources. A similar approach has been recorded under a variety of names in different countries, across the region. Over three hundred LMMAs have been established across the region in the last ten years. While most of these do not, as yet, provide the levels of protection afforded by the more established formal and effectively managed MPAs, they have great potential to increase the coastal areas under conservation management in the region quite substantially.



At a transnational scale, the moves to initiate trans-boundary MPAs, such as between Kenya and mainland Tanzania, and Mozambique and South Africa, must be lauded and supported. Coastal states are also taking a large-scale approach to marine conservation, often within “Blue Economy” initiatives such as the Blue Economy Roadmap developed by the Government of Seychelles and Operation Phakisa in South Africa. In both cases, these initiatives have involved thorough and complex marine spatial planning processes, identifying areas suitable for different uses and activities, including for conservation.

In Seychelles, two new MPAs covering an area of 208 365km<sup>2</sup> were declared as a result of this process. In South Africa, 20, mostly offshore MPAs covering an area of 54 214km<sup>2</sup>, have been proclaimed under Operation Phakisa following an intense consultation process with all stakeholders. The Seychelles and South African experiences provide excellent models for other WIO countries for the planning, identification and declaration of offshore MPAs. These two experiences were underpinned by strong policy support, evidence-based decision making and requisite financing. These are key lessons in any successful MPA establishment and eventual operationalization and management programmes.

The Republic of Mauritius, Kenya, Tanzania, and other countries have embarked on Blue Economy initiatives and adopted the application of area-based planning tools such as marine spatial planning processes, underpinned by scientific information and understanding of the marine environment. The WIO region is fortunate to be home to some highly productive and effective marine science institutions and scientists, all linked to the Western Indian Ocean Marine Science Association (WIOMSA), which has partnered with the Nairobi Convention Secretariat in the production of this *MPA Outlook*. It is the science emanating from these institutions which provides the evidence required firstly to identify and assess

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