

## **POLICY BRIEF: Western Indian Ocean Marine Spatial Planning Strategy**

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29 September 2021*

### **1. Background**

“The Western Indian Ocean (WIO) region, also referred to as the Nairobi Convention (NC) area, is composed of Comoros, France (Reunion), Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa and Tanzania, who are also parties to the NC<sup>1</sup>. Over 60 million people in the WIO islands and Eastern Africa coastal communities rely on the coastal and marine environment for goods and services. Coastal and island communities are largely dependent on fishing, shipping and tourism for their livelihoods. Yet the natural resources that provide sustainable livelihoods and fuel economic activity are already under pressure from threats such as poverty, overfishing, overdevelopment, pollution, and environmental degradation. The impacts of climate change are exacerbating these problems and are already presenting mounting challenges to the sustainable development of the region as evidenced by widespread ocean warming, coral reef bleaching (with limited recovery), prolonged droughts, sea level rise and flooding/sedimentation which have significant potential to retard economic growth and slow realization of respective national development targets including the Sustainable Development Goals (SDGs)”<sup>2</sup>.

“The importance of the ocean to the people of the WIO region cannot be overstated. Over a quarter of the population, some 60 million people, lives within 100km of the shoreline and cultures based on fishing, maritime trade and marine resource use go back hundreds of years. Today, healthy ocean and coastal ecosystems underpin the economies of the region and offer huge potential for sustainable development. However, the region could suffer severe losses if current pressures on the ocean are not alleviated....the natural capital of the Western Indian Ocean region is being eroded, undermining the ocean’s value for present and future generations”<sup>3</sup>.

The estimated annual “gross marine product” of the WIO region is at least USD20.8 billion. Whereas the total “ocean asset base” of the WIO region is estimated to be at least US\$333.8 billion. In light of the ocean’s natural capital valuation, the WIO countries are undergoing rapid economic diversification and transformation by utilising the vast coastal and marine ecosystem goods and services. While agriculture, tourism, and fisheries continue to be the mainstay in WIO economies, new sectors such as oil and gas, coal, mineral, and sand mining concessions are increasing in the region<sup>4</sup>.

The need for a regional marine spatial planning (MSP) strategy was emphasized by the Parties to the NC and partners in 2019, whereafter a stakeholder process was undertaken to develop the strategy. The strategy is intended to inform both regional MSP processes as well as to provide a framework to underpin national processes. The WIO MSP strategy<sup>5</sup> (and Figure 1) outlines a regional response to

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<sup>1</sup> The Nairobi Convention is a partnership between governments, civil society and the private sector, working towards a prosperous WIO Region with healthy rivers, coasts and oceans (<https://www.nairobiconvention.org/>)

<sup>2</sup> United Nations Environment. 2017. Concept Note to the Green Climate Fund: Transition to a Resilient Blue Economy in the Western Indian Ocean Region. [https://wedocs.unep.org/bitstream/handle/20.500.11822/25678/WIO-ResilienceP\\_to\\_CC\\_2018.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/25678/WIO-ResilienceP_to_CC_2018.pdf?sequence=1&isAllowed=y)

<sup>3</sup> Obura, D., Smits, M., Chaudhry, T., McPhillips, J., Beal, D. and Astier, C. 2017. Reviving the Western Indian Ocean economy: actions for a sustainable future. WorldWide Fund for Nature (Formerly World Wildlife Fund), Gland, Switzerland, pp.1-63

<sup>4</sup> ASCLME/SWIOFP. 2012. Transboundary Diagnostic Analysis for the western Indian Ocean. Volume 1: Baseline. <https://wedocs.unep.org/handle/20.500.11822/26101>

<sup>5</sup> UNEP-Nairobi Convention, WIOMSA, Nelson Mandela University, and Macquarie University. 2021. A regional Marine Spatial Planning Strategy in the Western Indian Ocean. UNEP-Nairobi Convention, WIOMSA, Nelson Mandela University, and Macquarie University.

the challenges of managing the WIO region for healthy oceans and people. Many of the pressures and challenges are transboundary, and national and sectoral approaches are unable to address them.

MSP is a conduit for sustainable use of the marine environment because it determines “the viability of spatial and temporal exercise of human activities against the long-term health of the natural environment”.<sup>6</sup> Several coastal States across the globe are at the implementation phase of MSP. It is expected that by 2030, a third of the world’s exclusive economic zones will be managed with the framework of approved marine area plans.<sup>7</sup>

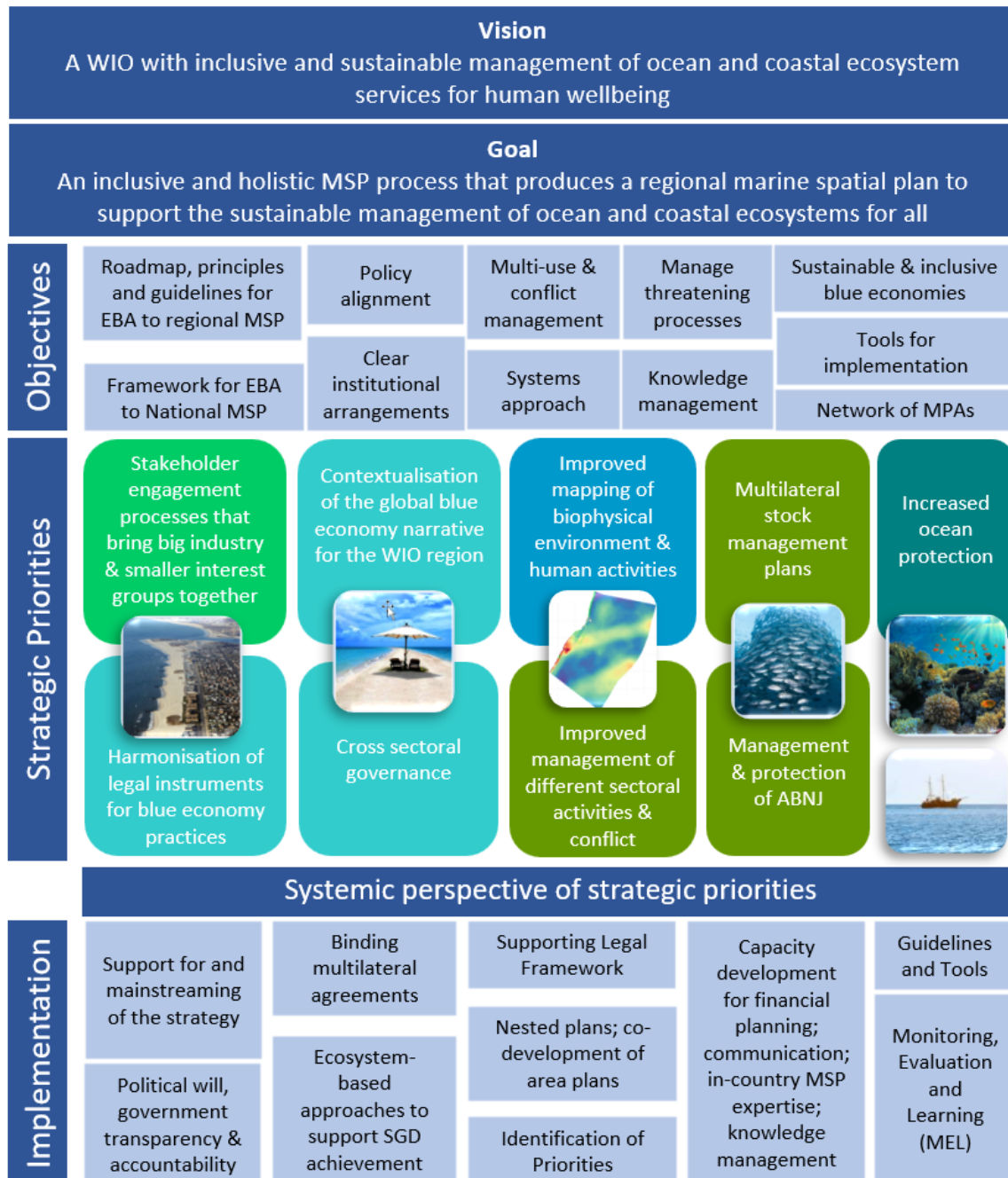


Figure 1. Summary of the Western Indian Ocean Marine Spatial Planning strategy.

<sup>6</sup> Metuge, D. 2021. The impact of marine spatial planning legislation on environmental authorisation, permit and license requirements in Algoa Bay. *Journal of Ocean Governance in Africa*, 1(1), 79-121.

<sup>7</sup> Ibid. See also Ehler, C., Zaucha, J., & Gee, K. 2019. Maritime/marine spatial planning at the interface of research and practice. In *Maritime spatial planning* (pp. 1-21). Palgrave Macmillan, Cham.

## 2. *Rationale for a Regional MSP Strategy for the WIO*

There is no doubt that healthy ocean and coastal ecosystems underpin the region's economies and offer tremendous sustainable development potential. However, if the growing pressures on the region's ecosystem resources and service are not decreased, it could suffer severe losses. Indeed, the progressive erosion of the WIO region's natural capital compromises the continued enjoyment of ocean resources for present and future generations.<sup>8</sup>

Most of the WIO region falls within two Large Marine Ecosystems (LMEs): the Somali Current LME and the Agulhas Current LME.<sup>9</sup> The region also includes areas beyond national jurisdiction (ABNJ). A fragmented governance regime for the vast and diverse WIO region remains one of the main challenges to achieving sustainable development and effective marine and coastal management.<sup>10</sup> The region's governance challenges are compounded by the fact that marine physical and ecological processes typically occur at regional scales and do not adhere to the political and jurisdictional boundaries.<sup>11</sup>

Natural and anthropogenic threats to the region's marine ecosystem are not limited to national boundaries. These threats occur across broad spatial and temporal scales.<sup>12</sup> Some of the main transboundary issues and challenges are identified in the WIO Lab, UNDP/GEF ASCLME, WIO-SAP, and SAPPHIRE project documents.<sup>13</sup> As part of the development of this MSP Strategy, through the use of questionnaires, the regional MSP Technical Working Group (TWG) and stakeholders have gained insight into regional expectations regarding MSP and identified regional governance challenges and threats to the region's ecosystems.

A regional strategy will address transboundary and cross-sectoral marine management challenges, focusing on ecosystem-based MSP as an approach to promote a healthy social-ecological system in the coasts and oceans of the WIO. A regional MSP strategy will establish a harmonised process for the analyses and allocation of parts of the coastal environment and three-dimensional marine environment to specific uses or objectives to achieve ecological, economic, and social objectives that are usually specified through a political process.<sup>14</sup>

Collated responses from stakeholders across the region on how they envision a regional MSP strategy, and its implementation is indicative that a broad and multi-sectoral approach to MSP that better represents the needs and interests of individuals and groups in each WIO context is the preferred approach. Some WIO countries have progressed in implementing MSP strategies. However, the regional strategy reiterates the importance of cross-sectoral management approaches, where some cross-cutting themes and transboundary issues can be adequately managed only at a regional scale.

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<sup>8</sup> Obura, D. et al. 2017.

<sup>9</sup> UNEP-Nairobi Convention and WIOMSA. 2015. *The Regional State of the Coast Report: Western Indian Ocean*. UNEP and WIOMSA, Nairobi, Kenya, 546 pp.

<sup>10</sup> Carneiro, G., Thomas, H., Olsen, S., Benzaken, D., Fletcher, S., Méndez Roldan, S. and Stanwell-Smith, D. 2017. *Cross-border cooperation in Maritime Spatial Planning, Reporting on the Service Contract: EASME/EMFF/2014/1.3.1.8/SI2.714082: Study on international best practices for cross-border Maritime Spatial Planning*.

<sup>11</sup> Kark, S., Tulloch, A., Gordon, A., Mazor, T., Bunnefeld, N. and Levin, N. 2015. Cross-boundary collaboration: Key to the conservation puzzle. *Curr. Opin. Environ. Sustain.* 12, 12–24. <https://doi.org/10.1016/j.cosust.2014.08.005>. See also, van Tatenhove, J.P.M. 2017. Transboundary marine spatial planning: a reflexive marine governance experiment? *J. Environ. Policy Plan.* 19, 783–794. <https://doi.org/10.1080/1523908X.2017.1292120>.

<sup>12</sup> Kark et al., 2015; UNEP-Nairobi Convention and WIOMSA, 2015; UNEP-Nairobi Convention. 2020. *The State of Ocean Governance in the Western Indian Ocean*. Nairobi, Kenya.

<sup>13</sup> ASCLME/SWIOPF, 2012a. *Transboundary Diagnostic Analysis for the western Indian Ocean. Volume 1: Baseline*; ASCLME/SWIOPF, 2012b. *Transboundary Diagnostic Analysis of the Large Marine Ecosystems of the Western Indian Ocean*.

<sup>14</sup> See definition of MSP by the Intergovernmental Oceanographic Commission (IOC) of UNESCO at <http://msp.ioc-unesco.org/about/msp-facts/>.

Moreover, a regional approach will be able to address issues in ABNJ. It can assess trade-offs for transboundary activities that are likely to affect multiple countries, for example, shipping lanes,<sup>15</sup> large offshore wind farms,<sup>16</sup> fishing (mobile/migratory species), and resource extraction and pollution.<sup>17</sup> Through the use of various tools and decision-making frameworks to assess trade-offs among sectors, the regional MSP strategy will take a future-oriented approach that can address conflicts among ocean users and manage various human activities, especially as new sectors (e.g., marine renewable energy and mariculture) emerge in the development of the Blue Economy.<sup>18</sup> The UNEP-NC (2020) report also emphasises the need for regional ocean governance to address emerging issues such as maritime safety and security, deep seabed mining, and ocean acidification.

Furthermore, a regional MSP strategy supports, amongst other things,<sup>19</sup> the implementation of the strategic priorities identified in UNEP's report on the state of ocean governance in the region<sup>20</sup>, providing a regional and multi-sectoral approach to simultaneously cover: i) maritime security and maritime boundaries, ii) fisheries, iii) exploitation of offshore mineral resources, iv) climate change, v) maritime transport and transport corridors; and vi) management of river basins draining into the WIO. Implementing the WIO MSP will improve and add to the reporting on further challenges to collaborative strategies and inform best practices for future international and regional guidelines and policies.

At the Eighth COP (COP8) held in Seychelles in 2015, Contracting Parties to the NC agreed to cooperate to improve the governance of ABNJ, build on existing regional institutions, and develop area-based management tools, including MSP, to promote the blue economy pathways in the region (Decision COP8/10.4). At the Ninth COP 9 held in 2018 in Kenya, the Contracting Parties adopted a stand-alone decision on MSP.<sup>21</sup>

### **3. Strategic impact and implementation of a regional MSP strategy within the WIO Region**

WIO countries are aware of spatial extents of marine species distributions, ecosystem service provisions, physical and ecological processes as well as threatening processes, within the region. Accordingly, they have already established various intergovernmental institutions and partnerships, such as the NC and regional fisheries bodies, that can assist with implementing a regional MSP strategy. These institutions and partnerships will provide necessary support and facilitate joint coordination and collaboration towards a common goal.<sup>22</sup> Regional implementation of MSP provides a coordinated structure for knowledge and data sharing, incorporates broad stakeholder engagement, and increases communication and collaboration with relevant organisations in the region. A more

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<sup>15</sup> Cameron, L., Hekkenberg, M. and Veum, K. 2011. Transnational maritime spatial planning: recommendations. SEANERGY 2020.

<sup>16</sup> Bonnevie, I.M., Hansen, H.S. and Schrøder, L., 2020. SEANERGY - a spatial tool to facilitate the increase of synergies and to minimise conflicts between human uses at sea. *Environmental Modelling & Software*, 132, p.104808.

<sup>17</sup> Levin, N., Beger, M., Maina, J., McClanahan, T. and Kark, S. 2018. Evaluating the potential for transboundary management of marine biodiversity in the Western Indian Ocean. *Australas. J. Environ. Manag.* 25, 62–85. <https://doi.org/10.1080/14486563.2017.1417167>; UNEP-Nairobi Convention and WIOMSA, 2015; UNEP-Nairobi Convention, 2020.

<sup>18</sup> White, C., Halpern, B.S. and Kappel, C.V. 2012. Ecosystem service tradeoff analysis reveals the value of marine spatial planning for multiple ocean uses. *Proceedings of the National Academy of Sciences*, 109(12), pp.4696-4701; Lukic, I., Schultz-Zehden, A., Ansong, J.O., Altvater, S., Przedzimirska, J. and Lazic, M. 2018. Multi-Use Analysis. Edinburgh: MUSES Project; AU-IBAR. 2019. Africa Blue Economy Strategy. Nairobi, Kenya.

<sup>19</sup> UNEP-Nairobi Convention, WIOMSA, Nelson Mandela University, and Macquarie University. 2021. A regional Marine Spatial Planning Strategy in the Western Indian Ocean.

<sup>20</sup> UNEP-Nairobi Convention. 2020. The state of ocean governance in the Western Indian Ocean. UNEP and NC, Nairobi, Kenya. 65pp.

<sup>21</sup> UNEP/EAF/CP.9.5, 6 November 2018. Decision CP.9/10: MSP for the blue and ocean economy

<sup>22</sup> UNEP-Nairobi Convention. 2020; Kark et al. 2015.

holistic approach where sectors and institutions interact and cooperate is more likely to deliver sustainable benefits for all.<sup>23</sup>

The proposed MSP Strategy differs from the strong economic focus of the African Union (AU) Integrated Maritime Strategy (AIMS), Agenda 2063, and the AU-IBAR Blue Economy Strategy (BES) (2019) and rather aims to support sustainable wealth creation through multi-sector and ecosystem-based approaches to development. Whereas the Blue Economy Strategy highlights economic importance in every goal and the AIMS has a strong focus on wealth creation through the potential of the blue economy, the WIO MSP provides guidelines on systems thinking approaches to ensure the prosperity of people and environment.

The role of the strategy in relation to the BES is to support the objective of strengthening institutions for 'governance to coordinate African Blue Economy' (2019). With regard to the AIMS, this strategy supports and adds to the goal of achieving comprehensive and coordinated approaches to improve 'maritime conditions with respect to environmental and socio-economic development'.<sup>24</sup> Finally, the WIO MSP supports the AU Agenda 2063<sup>25</sup> aspirations of i) inclusive growth, sustainable development, and iii) good governance. The strategy represents a roadmap to implementing the priority areas of 'blue economy for accelerated economic growth' whilst emphasising 'sustainable and inclusive economic growth'.

Moreover, the WIO MSP strategy will complement national MSP strategies (that are at different stages in the countries of the WIO). It is thus positioned within a governance structure that draws from and supports both International and National, law and policy. It also provides guidance and example templates for countries to follow as they develop their own national marine spatial plans.

Effective implementation of a regional MSP strategy for the WIO will require significant commitment and investment from member states and funding agencies. It will also require a shift from business-as-usual approaches to innovative and adaptive new approaches. Global best-practice examples of regional MSP initiatives are recommended. There is no one-size-fits-all best practice, as each region has a unique characteristic in governance and social-ecological systems. A regional MSP must thus be fit-for-purpose.

## **4. Recommendations**

### **4.1 Strategic Recommendations (Actions for the parties to the Nairobi Convention)**

Contracting parties are encouraged to:

- Support and mainstream this marine spatial planning strategy to achieve improved governance of the WIO.
- Harmonise in-country MSP development in support of regional marine ocean use and planning, without compromising national MSP processes.
- Adopt an ecosystems-based approach to MSP, according to the "Malawi Principles" and the IOI-UNESCO steps.
- Secure funding and develop capacity for regional and in-country MSP.

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<sup>23</sup> African Union. 2012. 2050 Africa's Integrated Maritime Strategy (2050 AIM Strategy), Available at: [www.au.int/maritime](http://www.au.int/maritime); Wright, G., Schmidt, S., Rochette, J., Shackeroff, J., Unger, S., Waweru, Y. and Müller, A. 2017. Partnering for a Sustainable Ocean: The Role of Regional Ocean Governance in Implementing SDG14. PROG: IDDRI, IASS, TMG & UN Environment; AU-IBAR. 2019; UNEP-Nairobi Convention. 2020.

<sup>24</sup> African Union. 2012.

<sup>25</sup> African Union Commission. 2015. Agenda 2063 report of the commission on the African Union Agenda 2063 The Africa we want in 2063. [www.agenda2063.au.int](http://www.agenda2063.au.int)

- Develop regional partnerships with regional economic communities (e.g., SADC), regional fisheries management organizations and other regional bodies and commissions (e.g. the IOC).

#### **4.2 *Technical Recommendations (Actions for the MSP Technical Working Group)***

The technical working group is encouraged to:

- Provide a platform for shared learning and promote regional best practice.
- Promote an enabling policy environment for the development of in-country MSP legislation.
- Assist with establishing in-country cross-sectoral forums/committees/working groups to provide integration of sectoral policies and assist with the MSP process.
- Develop in-country knowledge management systems that contribute to, and benefit from, a regional knowledge management system.
- Develop a communication and stakeholder engagement plan to ensure co-development and support for regional and national area plans.
- Support capacity development within and between countries to support strategy implementation.

#### **5. *Acknowledgements***

We thank Victoria Goodall, Jai Clifford-Holmes, Vera Horigue, Kaylee Smit, Mia Strand, Hannah Truter, the Technical Working Group and all the stakeholders who participated in the development of the Regional WIO MSP Strategy on which this policy brief was based.