



Short communication

UN Ocean Conference needs transparent and science-based leadership on ocean conservation



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ABSTRACT

The United Nations Ocean conference convened in June 2022. Heads of state, businesses, and civil society organizations met in Lisbon to discuss how to scale up ocean action to achieve SDG 14 goals. In the face of the existential challenges of the climate emergency and species extinction crisis, bold and decisive action on ocean conservation through a shift in the protection paradigm is needed now. Recognizing existing barriers (e.g., political, organizational, social, economic) that operate at various scales (e.g., international, regional and national) and that are precluding achieving a healthy ocean is key and has to be addressed with strong leadership and sound commitments. A roadmap with clear steps and achievements including metrics assessing protection levels, stages of establishment, management effectiveness and equity is now needed to guarantee the success of marine conservation goals. Portugal can and should help lead the way by adopting such a roadmap and approach, but post-2020 decisions need to incorporate, beyond area goals, both the quality and effectiveness of ocean protection through metrics and standards such as those provided by the MPA Guide, Green List and Blue Parks.

1. Policy analysis

Marine protected areas (MPAs) are one of the most effective tools to protect biodiversity and restore marine ecosystems and the services they provide [13,16]. Their increasing use and documented success led MPAs to be globally recognized as a renowned ocean conservation tool.

International commitments (e.g., the Convention on Biological Diversity Aichi target 11 or the United Nations Sustainable Development Goal 14) have driven an exponential increase in the number and size of MPAs in the last two decades [13], but the agreed SDG 14 (to protect 10% of the ocean by 2020) has not been met.¹ Moreover, the quality of protection associated to the area targets has been challenged by several scientific studies which show that a large percentage of the existing MPAs are weakly regulated (with many extractive and impactful activities allowed) and/or not implemented [15]. In spite of the clear science supporting this criticism, the most politically relevant international conferences, such as the United Nations Ocean Conferences, the Our Ocean Conferences, and the One Ocean Summit in Brest, have almost

exclusively focused the attention around ocean conservation goals on amount of area protected and not on effectiveness of natural, economic and social indicators, including recovery measures, that can assess the quality of that protection. Country leaders use these stages seeking recognition by peers in what can be seen by the public as a race to announce “my MPA is bigger” [12].

In face of the existential challenges posed by the climate emergency [10] and species extinction crisis [9], the science case is clear and calls for action have been repeatedly announced. International ocean protection targets are being updated to include 30% of effective and equitably managed MPAs or OECMs (other effective area-based conservation measures), in the context of the new post-2020 global biodiversity framework,² of the Convention on Biological Diversity which is expected to be approved in COP 15 to be held later this year.

The current pandemic crisis has delayed COP 15 of the CBD but also the UN Ocean Conference, co-hosted by Portugal and Kenya, initially scheduled for July 2020, which now occurred from 27 June to 1 July 2022 in Lisbon, Portugal. On this second ever United Nations gathering

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¹ <https://mpatlas.org/> (accessed June 2022)

² <https://www.cbd.int/article/draft-1-global-biodiversity-framework>

of heads of states to discuss the status of implementation of SDG 14 on oceans, governments' leadership is key to achieve ocean conservation targets. There is therefore a unique opportunity for this UN Ocean Conference to rally country leaders and the international community in calling for transparent and science-based targets to be included in the global biodiversity framework decisions.

By co-hosting this international conference with the overarching theme "scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions", Portugal can position itself to lead the ocean conservation agenda. A small country if one measures its terrestrial territory (position 111th), Portugal is however an ocean giant (21st largest exclusive economic zone worldwide and the 3rd of the European Union countries) with a strong historical, cultural and geopolitical ocean-centered reputation. Its waters contain the most diverse "oceanscapes" in Europe with the associated richness of marine species (many still to be discovered and described), from deep water canyons, estuaries, rocky reefs, marine forests, seagrass beds and salt marshes, to seamounts, hydrothermal vents, mud volcanoes, deep water plateaus and abyssal plains, including a large portion of the open water systems in the northeast Atlantic [17]. It is therefore appropriate and timely to assert Portugal's ocean geopolitical role in the international conservation landscape by acting now. Recently, the largest fully protected MPA in the north Atlantic was created in the autonomous region of Madeira by expanding the Selvagens Islands Nature Reserve [1]. Also, the autonomous region of Azores declared the intention to protect 30% of the ~1million km² EEZ around the islands by 2023³ with at least 15% as fully protected MPAs, with funding and procedural mechanisms in place to guarantee their effectiveness.⁴ In southern mainland Portugal, an innovative approach to co-design MPAs was tested with local and regional stakeholders to protect a hotspot of biodiversity and human activities [8]. The resulting proposal with zoning and main regulations was delivered to the government a year ago. The Portuguese government just announced at the UN Ocean conference 2022 that it will approve this new MPA. It requires political will to change the traditional top-down management approaches and laws, but international examples show this is the way to go for effective MPAs [4,5]. Portugal has also worked in defining and prioritizing a mutually agreed list of MPA performance indicators through collaborative work with managers, practitioners and researchers [3].

In spite of these advances, the latest scientific guidance included in the recently published MPA GUIDE [6] shows that the vast majority of Portugal's MPAs are minimally protected. Most are also only designated and not implemented, with management being also weak in most MPAs due to the lack of staff and cooperation among entities [7]. This is a pattern seen in many other countries, which calls for an urgent change in the way MPAs have been declared and implemented [14,18]. The MPA GUIDE provides a framework to assess protection levels and stages of establishment, which are strongly associated to MPA outcomes [2,19]. Other tools that can be adopted by countries in measuring MPAs quality are the frameworks provided by the Green List [11] or Blue Parks Awards.⁵ These are based on the most updated science-based standards to measure marine conservation effectiveness. Their criteria are meant to recognize and acknowledge outstanding MPAs but could be adapted by countries to assess the quality of their MPAs. Simple and clear metrics assessing management effectiveness, equity and justice, ecological representativity, connectivity, vulnerability or how MPAs are integrated in the seascape, are also needed to monitor the success of MPA establishment worldwide.

Leadership requires grounding decisions on the best available

³ <https://www.acorianooriental.pt/noticia/marine-protected-areas-will-cover-30-of-the-azores-sea-333449>

⁴ <https://www.blueazores.org/aboutblueazores1>

⁵ <https://marine-conservation.org/blueparks/>

scientific information and guidance and recognizing with transparency the existing barriers (e.g., political, organizational, social, economic) to effectively protect the ocean. These barriers operate at various scales (e.g., international, regional and national) and need to be addressed with strong leadership and sound commitments. The UN Ocean conference should represent a shift in the ocean protection paradigm by ocean leaders. Decisions around the post-2020 targets and implementation of SDG 14 need to highlight, beyond area goals, both the quality and effectiveness of ocean protection, through specific and clear metrics. Countries need to work to define them (making use of existing science-based tools) and commit in accomplishing standards to ensure MPAs quality and effectiveness. Stronger protection levels, higher management effectiveness, equity goals and stakeholders' involvement are among the priorities for discussion. After the big announcements at the UN Ocean conference 2022, it is now time for action to achieve high quality standards in existing and future MPAs. The urgency of the climate emergency and species extinction crisis calls for bold and effective leadership of multilateral institutions, such as the United Nations, and countries like Portugal can and should help lead the way at the UN Ocean conference and beyond.

CRedit authorship contribution statement

Barbara Horta e Costa wrote the manuscript with Emanuel J. Gonçalves and Jorge M.S. Gonçalves. All authors approved the manuscript.

Declaration of Competing Interest

The authors declare no competing interests.

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