

EDITORIAL ESSAY: PROTECTED AND CONSERVED AREAS: CONTRIBUTING TO MORE AMBITIOUS CONSERVATION OUTCOMES POST -2020

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ABSTRACT

In 2010, Parties to the Convention on Biological Diversity (CBD) adopted Aichi Biodiversity Target 11, committing to conserve, by 2020, at least 17 per cent of terrestrial and inland waters and 10 per cent of coastal and marine areas through systems of protected areas and other effective area-based conservation measures (OECMs). Once national data are updated it is expected that Parties will have met the coverage elements of Target 11, especially as more OECMs are reported. There is still, however, more effort needed to address equitable governance, effective management, ecological representation, connectivity and other quality elements of the target. Post-2020 momentum is growing to adopt more ambitious global targets of at least 30 per cent of terrestrial, freshwater and marine ecosystems protected by 2030 to halt biodiversity loss. This will require a three-pronged approach: creating new protected areas focussed on areas important for biodiversity; improving management and governance to ensure that existing and new protected areas are effective; and recognising and supporting OECMs. The substantial expansion of protected areas over the last decade, new opportunities to recognise OECMs, and increasing recognition of effective protected and conserved areas as nature-based solutions to climate change and other global challenges, all give reasons for optimism for making even greater progress by 2030 towards the CBD 2050 Vision of Living in Harmony with Nature.

Key words: biodiversity outcomes, global targets, OECMs, nature-based solutions

In 2010, Parties to the Convention on Biological Diversity (CBD) adopted Aichi Biodiversity Target 11, committing to conserve, by 2020, at least 17 per cent of terrestrial and inland waters and 10 per cent of coastal and marine areas through systems of protected areas and other effective area-based conservation measures (OECMs) (CBD, 2011). The fifth Global Biodiversity Outlook, based on 2019 data, reported 15 per cent of land areas and almost 8 per cent of the ocean were under designated protected areas (SCBD, 2020). By the end of the UN Decade on Biodiversity (December 2020), countries had reported further progress on protected area establishment and it is expected that Parties will have met the coverage elements of Target 11 (with implications also for some of the other elements of the target) once all the data are collated and updated in the World Database on Protected Areas. Further

gains will be made as more OECMs are recognised and reported.

Since 2010 there has been a remarkable expansion of protected areas – more than 21 million square kilometres of new and expanded terrestrial and marine sites; thus 42 per cent of the current coverage, an area equivalent to almost three times the land mass of Australia, has been added in the last decade (UNEP-WCMC 2021). The expansion of marine protected areas (MPAs) during the last five years has been especially noteworthy with some very large MPAs already established and more proposed including large areas in French Polynesia¹ in the Pacific and a new Southern Atlantic MPA extending over 690,000 sq. km around the island of Tristan da Cunha². The latter is almost three times the size of the United Kingdom. While there has been substantial progress in expanding the number and area of protected areas, there is, however, still some way to go in improving governance and management effectiveness and other quality elements included in Aichi Target 11 (Gannon et al., 2019).

As more protected areas are established and more OECMs are recognised and reported, we can expect further increases in levels of ecological representation, connectivity, and coverage of areas important for biodiversity and ecosystem services. For example, an analysis of 740 terrestrial Key Biodiversity Areas in ten countries found that 76 per cent of those containing no protected areas were at least partly covered by potential OECMs (Donald et al., 2019).

Achieving the coverage elements of Target 11 during the UN Decade of Biodiversity has established a good foundation for more ambitious global targets in the post -2020 global biodiversity framework currently being negotiated by Parties to the CBD for approval at the fifteenth Conference of the Parties (COP15). Many countries are calling for protection of at least 30 per cent of the planet across terrestrial, freshwater and marine habitats by 2030 to halt further biodiversity loss and begin to reverse the trend.

To achieve more ambitious conservation targets, we need a three-pronged strategy to expand the protection of remaining natural habitats, including:

- 1. Creating additional protected areas, focusing especially on areas that are important for biodiversity; without such a focus, an increase in coverage alone will not be sufficient to meet biodiversity goals and greater ecological representation.
- 2. Ensuring that existing and new protected areas are well-protected, well-managed and well-governed to ensure effective biodiversity outcomes.
- 3. Recognising, reporting and supporting othereffective area-based conservation measures.

Each of these will require the full and effective participation of indigenous and local communities and recognition of their rights as well as greater engagement with private landholders (Maxwell et al., 2020).

More effective protected areas

Protected areas are widely recognised as one of the most effective ways to conserve biodiversity and reduce loss of forests and other natural habitats (Watson et al., 2014; Woodley et al., 2019; MacKinnon et al., 2020). While countries have made good progress in expanding coverage especially in terrestrial ecosystems, freshwater habitats are still much less well represented in protected area networks. In addition, many designated marine protected areas (MPAs) have little or no effective protection or management. Indeed, it is estimated that at present only 2.7 per cent of the ocean is highly protected, with many MPAs subject to unsustainable fishing and other extractive uses (Sala et al., 2021). Well -managed MPAs are an effective tool for restoring ocean biodiversity and ecosystem services; a substantial increase in ocean protection could provide multiple benefits, boosting fishery yields and secure marine carbon stocks as well as protect marine biodiversity (Sala et al., 2021).

The proposed CBD targets in the post-2020 global biodiversity framework are not just about designation but also effectiveness; the current proposed Target 2 emphasises effective systems of protected areas and OECMs (CBD, 2020). Unless protected areas are effective in sustaining long-term biodiversity outcomes, they will achieve little in halting biodiversity loss.

Moving forward, it is essential to address the issues of 'paper parks' and ensure that all protected areas are effectively protected and managed to deliver biodiversity outcomes. The IUCN Green List of Protected and Conserved Areas is the first global sustainability standard describing key elements of quality for areabased conservation (Hockings et al., 2019). The standard recognises that good governance, sound design and planning and effective management are all necessary to deliver successful conservation outcomes. The Green List standard provides a useful framework for strengthening management effectiveness in protected areas of all categories and under all types of governance.

Other effective area-based conservation measures (OECMs)

While strengthening the management of protected areas is important, the recognition and support of OECMs alreadv delivering effective areas biodiversity conservation long term - will be essential to achieving more ambitious conservation targets by 2030. The CBD adoption of criteria on OECMs in 2018 provides a great opportunity to recognise areas under a wide range of governance and management regimes, including government, private sector, Indigenous Peoples, and communities, which deliver effective in situ conservation of intact ecosystems and important biodiversity (IUCN/WCPA, 2019). Potential OECMs may include some Indigenous and Community Conserved Areas (ICCAs) and Locally Managed Marine



Areas (LMMAs), as well as areas managed by government and the private sector. While OECMs do not need a primary conservation objective, they must deliver effective long-term conservation of important biodiversity (IUCN/WCPA, 2019). It will be important to understand why such areas are effective in maintaining biodiversity so that appropriate support can be provided to help maintain those values. This may require a range of mechanisms depending on the actors involved, but could include ensuring greater security of land tenure, access and use rights for Indigenous Peoples, provision of economic incentives such as payments for ecosystem services or better integration of biodiversity values into spatial planning and practices in production sectors.

It has been estimated that 37 per cent of all remaining natural lands on the planet are traditionally owned, managed, used or occupied by Indigenous Peoples (Garnett et al., 2018). These lands contain about 13 per cent of all carbon stored in terrestrial ecosystems and make up about 35 per cent of the total area that is formally protected (Diaz et al., 2019; Garnett et al., 2018). Increased appreciation of the role of Indigenous Peoples in conservation and formal recognition of OECMs could result in better land management that protects carbon, biodiversity and the cultural values important to indigenous communities (Dinerstein et al., 2019; Maxwell et al., 2020).

Protected and conserved areas as nature-based solutions to climate change

There is increasing evidence that the climate crisis and the biodiversity crisis are so intricately entwined that neither can be effectively addressed without attention to the other (Diaz et al., 2019; Smith et al., 2019). The current COVID-19 pandemic further highlights the need for improved environmental management, better land management and the need for coordinated actions across sectors (Hockings et al., 2020). The urgency of addressing these crises requires a new focus on the role of protected and conserved areas, not only as places to conserve biodiversity, but also as a means to maintain intact ecosystems, prevent further land degradation and maintain ecosystem services, including natural carbon sinks and stores (Dinerstein et al., 2019; MacKinnon et 2020). IPBES notes that expanding and al..

strengthening of ecologically representative, wellconnected protected area networks and other effective conservation measures (OECMs) is one of a few policies that can address the challenges of biodiversity loss and climate change simultaneously (Diaz et al., 2019). Furthermore, protected areas have been estimated to store about 12 per cent of terrestrial carbon stocks and to account for about 20 per cent of the carbon sequestered annually by all land ecosystems (Smith et al., 2019). Conservation of carbon-dense ecosystems such as peatlands, wetlands, rangelands, mangroves and forests has an immediate impact, whereas other actions such as restoration can take decades to deliver measurable results (IPCC, 2019). As the UN Decade on Ecosystem Restoration begins, there is, however, a need to use ecosystem restoration in strategic ways to reverse biodiversity losses in - and between - protected and conserved areas, to restore habitats, enhance connectivity and strengthen ecological networks.

Rapid climate change and other global challenges underscore the need for better synergies between national actions under the CBD, UNFCCC and UNCCDD. Natural climate solutions, including enhanced protection of areas important for climate change mitigation and adaptation, was a central theme at the UNFCCC COP25 in Madrid. Revisions to Nationally Determined Contributions (NDCs) to the Paris Agreement provide the mechanism by which countries can enhance their ambition on climate change through increased protection and improved management of carbon-dense, high biodiversity



Gwaii Haanas National Park Reserve and Haida Heritage Site Photo: S. Fung $\ensuremath{\mathbb{C}}$ Parks Canada

ecosystems (Smith et al., 2019). Large tracts of intact carbon-dense ecosystems remain in high biodiversity regions such as the Amazon Basin, Congo Basin, Southeast Asia, as well as in boreal and tundra ecosystems (Dinerstein et al., 2019).

Several countries, including Madagascar and many in South America, are already including expansion and improved management of protected areas as naturebased climate solutions. Colombia, for example, committed to expand its protected area network by 250 million hectares as a contribution to addressing climate change (MacKinnon et al., 2020). Increased recognition of the values of nature-based solutions to climate change could be particularly useful for promoting restoration and conservation of wetlands, peatlands and coastal marine ecosystems that store large amounts of carbon.

Many protected areas are already contributing towards several of the Sustainable Development Goals including food and water security, disaster risk reduction and protecting human health. The COVID-19 pandemic has highlighted the important, yet complex, relationship between protected areas and human health benefits. It is clear that protected areas conserve ecosystems, prevent habitat fragmentation, minimise edge effects and protect wildlife, all benefits that reduce the likelihood of exposure and transmission and spread of zoonotic diseases (Hockings et al., 2020; Reaser et al., 2021). It is also encouraging to see that countries as diverse as Canada, Pakistan and New Zealand are already looking to strengthen their protected area networks as part of greener economic stimulus packages after the COVID-19 pandemic (Golden Kroner et al., 2021).

Target 11 has been one of the most successful elements in the Strategic Plan for Biodiversity (Woodley et al., 2019) and momentum is growing to adopt much more ambitious global targets for protected and conserved areas. The priority is now to ensure that protected areas are effectively and equitably managed, well connected, and integrated into wider landscapes and seascapes. The success of national efforts to conserve terrestrial and marine areas over the last decade, and new opportunities to recognise and support OECMs, give reasons for optimism for making even greater progress by 2030 towards the CBD 2050 Vision of Living in Harmony with Nature.

ENDNOTES

¹https://www.codim.pf/wp-content/uploads/2018/06/ProjetdAire-Marine-Prote%CC%81ge%CC%81e-aux-MarquisesCODIM_lowres.pdf ²https://www.gov.uk/government/news/worlds-most-remoteisland-helps-uk-exceed-protected-ocean-target

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RESUMEN

En 2010, las Partes del Convenio sobre la Diversidad Biológica (CDB) adoptaron la Meta 11 de Aichi para la Biodiversidad, comprometiéndose a lograr en el año 2020 la conservación de al menos el 17 por ciento de las aguas terrestres y continentales y el 10por ciento de las zonas costeras y marinas a través de sistemas de áreas protegidas y otras medidas efectivas de conservación basadas en áreas (OMEC). Una vez que se actualicen los datos nacionales, se espera que las Partes hayan cumplido con los elementos de cobertura de la Meta 11, especialmente a medida que se reporten más OMEC. Sin embargo, sigue siendo necesario redoblar esfuerzos para el abordaje de aspectos tales como la gobernanza equitativa, la gestión eficaz, la representación ecológica, la conectividad y otros elementos de calidad de la meta. Desde 2020 existe un interés creciente en adoptar objetivos globales más ambiciosos de al menos el 30 por ciento de los ecosistemas terrestres, de agua dulce y marinos protegidos para detener la pérdida de biodiversidad de aquí a 2030. A este efecto, será necesario un enfoque en tres direcciones: la creación de nuevas áreas protegidas centradas en áreas importantes para la biodiversidad; la mejora de la gestión y la gobernanza para garantizar que tanto las áreas protegidas existentes como las nuevas sean efectivas, además del reconocimiento y apoyo a las OMEC. La gran expansión de las áreas protegidas en la última década, las nuevas oportunidades para reconocer las OMEC y el reconocimiento cada vez mayor de las áreas protegidas y conservadas efectivas como soluciones basadas en la naturaleza para hacer frente al cambio climático y otros desafíos globales, dan pié al optimismo para avanzar aún más en el logro de las metas establecidas para el año 2030 en términos de la visión 2050 del CDB de vivir en armonía con la naturaleza.

RÉSUMÉ

En 2010, les parties à la Convention sur la diversité biologique (CDB) ont adopté l'Objectif 11 d'Aichi pour la biodiversité, s'engageant à conserver, d'ici 2020, au moins 17 pour cent des eaux terrestres et intérieures et 10 pour cent des zones côtières et marines grâce à des systèmes d'aires protégées et autres mesures de conservation efficaces par zone (AMCE). Une fois les données nationales mises à jour, nous nous attendons à ce que les parties puissent satisfaire aux éléments de couverture de la cible 11, d'autant plus que de nouveaux AMCE seront recensés. Des efforts supplémentaires seront toutefois nécessaires pour mettre en œuvre la gouvernance équitable, la gestion efficace, la représentation écologique, la connectivité et d'autres objectifs de qualité de la cible. L'élan post-2020 prend de l'ampleur en adoptant des objectifs mondiaux plus ambitieux pour protéger au moins 30 pour cent des écosystèmes terrestres, d'eau douce et marins d'ici 2030 afin d'enrayer la perte de biodiversité. Cela nécessitera une approche en trois volets: la création de nouvelles aires protégées axées sur des zones importantes pour la biodiversité; l'amélioration de la gestion et de la gouvernance pour garantir l'efficacité des aires protégées existantes et nouvelles; et la reconnaissance et le soutien apportés aux AMCE. L'expansion substantielle des aires protégées au cours de la dernière décennie, les nouvelles opportunités de recensement des AMCE, et une prise de conscience croissante de l'importance des aires protégées et conservées en tant que solutions fondées sur la nature pour lutter contre le changement climatique et d'autres défis mondiaux, sont toutes autant de bonnes raisons d'être optimistes à propos d'une accélération des progrès d'ici 2030 vers la vision CDB 2050 de vivre en harmonie avec la nature.