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The potential of other effective area-based conservation measures (OECMs) in Namibia

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ABSTRACT As a signatory to the Convention on Biological Diversity, Namibia is committed to global efforts aimed at preserving biodiversity and promoting sustainable development. The Kunming-Montreal Global Biodiversity Framework (KM-GBF), sets global biodiversity goals and targets for 2021-2030, addressing urgent biodiversity challenges, and guides international conservation and sustainable use efforts. Target 3 of KM-GBF aims to ensure that by 2030, at least 30% of terrestrial, inland/fresh waters, marine, and coastal areas are effectively conserved and managed (including areas crucial for biodiversity and ecosystem services). It emphasises recognising indigenous and traditional territories, integrating these areas into broader landscapes and seascapes, and ensuring sustainable use aligns with conservation outcomes while respecting the rights of indigenous peoples and local communities. Despite having over 30% of its terrestrial area under some form of protection (when considering national parks, state forests, communal conservancies and community forests), several biomes and vegetation types in Namibia remain underrepresented. An 'other effective area-based conservation measure' (OECM) is a geographically defined area, distinct from a protected area, managed to achieve positive and sustained long-term outcomes for in-situ conservation of biodiversity. OECMs offer opportunities to recognise lands that deliver conservation outcomes, even when their primary use is not strictly for conservation. Recognising OECMs in Namibia, including freehold land that is currently not officially recognised to contribute to conservation efforts, could significantly enhance land conservation, leading to improved outcomes and helping achieve KM-GBF Target 3 in terms of representation and quality of management of terrestrial habitats.

KEYWORDS conservation; KM-GBF; Namibia; OECM; protected areas; Target 3; 30x30

OECMS AND THEIR IMPORTANCE IN GLOBAL CONSERVATION STRATEGIES

Other effective area-based conservation measures (OECMs) are defined as geographically defined areas that are not designated as protected areas but contribute significantly to biodiversity conservation. Recognised under the Kunming-Montreal Global Biodiversity Framework (KM-GBF), OECMs play a critical role in complementing conventional protected areas, by incorporating diverse governance systems, including those led by Indigenous peoples, local communities and private landholders (CBD 2018). By integrating conservation objectives with sustainable land use, OECMs can contribute towards the global goal of

protecting 30% of the planet's land and waters by 2030 (30x30 target) while promoting ecological connectivity and resilience (IUCN 2021).

Conventional protected areas, such as national parks and game reserves, are legally designated and managed primarily for conservation (UNEP-WCMC 2026). These areas often impose strict restrictions on land use to preserve ecosystems and wildlife. In contrast, OECMs may include communal land, private reserves and sacred natural sites where conservation outcomes are achieved without formal protected area status. OECMs enable conservation in landscapes where human activities, such as sustainable agriculture, forestry and pastoralism, coexist with biodiversity protection, offering a more flexible and inclusive approach to conservation (Borrini-Feyerabend et al. 2013).

Relevance of OECMs to Namibia's conservation needs and priorities

Namibia's conservation strategy, as outlined in the National Biodiversity Strategy and Action Plan, emphasises ecosystem-based conservation, sustainable land management and community-driven natural resource stewardship (MET 2014). OECMs are central to these priorities because they recognise and strengthen conservation efforts of non-state landowners and land users, including Indigenous Peoples and Local Communities (IPLCs), who might already be protecting, managing and restoring ecological, biological and habitat integrity.

By integrating OECMs into Namibia's existing and future policy frameworks, the country can enhance biodiversity conservation, secure ecosystem services and support climate resilience while maintaining sustainable livelihoods for local communities (Roe et al. 2019).

Enabling OECMs in Namibia should be a highly prioritised action to accelerate meeting Target 3 (30x30) under the National Action Plan roadmap for Target 3 (NAP-T3; Republic of Namibia 2024). OECMs can, for example, enhance connectivity by linking Namibia's existing protected areas with community-managed landscapes, private conservation areas and sustainable use zones. This connectivity would facilitate wildlife movement, preserve ecological corridors and strengthen landscape resilience against climate change. Given Namibia's arid environment and the increasing fragmentation of ecosystems, OECMs offer a mechanism to integrate conservation with productive land use, ensuring genetic exchange among species and sustaining key ecosystem services.

Moreover, OECMs could help Namibia reinforce the ecological integrity of its diverse, unique, rich landscapes while fostering inclusive governance models that empower IPLCs and recognise private landholders. OECMs complement formal protected areas by recognising and strengthening conservation initiatives that are already delivering significant biodiversity benefits, thus expanding conservation coverage without requiring full legal designation. As emphasised in the NAP-T3 (Republic of Namibia 2024), scaling up OECMs as part of the 30x30 target could ensure Namibia's biodiversity is protected within a connected and climate-resilient conservation network.

OECMs have been successfully implemented in terrestrial landscapes, fishery/freshwater and marine ecosystems across the globe. Below are just a few brief examples:

- The Kawawana - Indigenous and Community Conserved Areas (ICCA) in Senegal: Kawawana, a community-managed conserved area in the Casamance region of Senegal, is recognised as an OECM due to its effective conservation governance by local fishers and farmers. Through customary laws and sustainable resource use, the community has revitalised degraded wetlands, leading to increased fish stocks and biodiversity recovery (Govan 2017).
- Tarcoles Community Marine Area in Costa Rica: This is a locally managed fishery in the Gulf of Nicoya, Costa Rica, where artisanal fishers implement sustainable practices that have enhanced fish populations and protected critical mangrove ecosystems. This initiative demonstrates how OECMs can contribute to freshwater and coastal ecosystem conservation while supporting local livelihoods (FAO 2019).
- Great Bear Sea of Canada: The Great Bear Sea on the Pacific coast of Canada includes Indigenous-led conservation initiatives that function as OECMs. Managed collaboratively by First Nations, this marine area protects biodiversity

while allowing sustainable fishing and ecotourism, ensuring both ecosystem health and economic resilience (Living Oceans Society 2021).
- Sacred Forests of Benin: These community-managed forests serve as critical biodiversity refuges and are protected under traditional governance systems. They safeguard species such as the endangered Dahomey Gap endemic flora while maintaining their cultural and spiritual significance (Vodouhê et al. 2010).
- Indigenous Reserves in Colombia: These reserves (Resguardos) managed by Indigenous communities have demonstrated effective conservation outcomes, contributing to carbon storage, habitat protection and sustainable land use while securing Indigenous land rights (Armenteras et al. 2021).
- Community Fisheries in Cambodia: The Tonle Sap Community Fisheries initiative enables local fishers to manage freshwater ecosystems sustainably. This approach has improved fish stocks, protected wetlands and enhanced local food security (Ratner et al. 2017).

As of January 2026, there are already over 7 000 terrestrial & inland water OECMs registered on the World Database on OECMs (UNEP-WCMC 2026).

Ecological basis of OECMs: how they maintain biodiversity, ecosystems, and ecosystem services

OECMs can contribute to biodiversity conservation by maintaining ecological functions and ecosystem services. These areas support habitat connectivity, genetic diversity and climate resilience by preserving ecosystems that would otherwise be fragmented or degraded. OECMs also provide ecosystem services such as carbon sequestration, water purification and soil stabilisation, benefiting both wildlife and human communities (IUCN 2021). In Namibia, where key biodiversity areas lie outside formal protected areas, OECMs could create or enhance conservation corridors to enable wildlife movement, without compromising land use versatility.

OECMs are guided by three fundamental ecological and social principles:
1. Connectivity: They enhance landscape-scale conservation by linking fragmented habitats, ensuring species migration, genetic exchange and climate adaptation (Hilty et al. 2020).
2. Ecological Integrity: OECMs prioritise the maintenance of natural processes, species interactions and ecosystem resilience, which are essential for long-term biodiversity conservation (Dudley et al. 2018).
3. Sustainable Human Practices: Many OECMs integrate conservation with sustainable livelihoods, including agroforestry, community fisheries and eco-cultural tourism, reinforcing the balance between human well-being and biodiversity protection (CBD 2018).

How can OECMs help Namibia achieve Target 3, and why does it matter?

KM-GBF Target 3 aims to conserve at least 30% of terrestrial, inland water and marine areas by 2030 through ecologically representative, well-connected and equitably governed systems. Namibia appears to be ahead of the curve in terrestrial conservation, with State Protected Areas (including State Forests) covering 16.7% of the country, and communal conservancies alongside community forests (with some overlap between the two) contributing an additional 26.1%, bringing the total to 42.8%. However, meeting Target 3 of the KM-GBF is not only based on numerical coverage, but also ecological representation.

A gap analysis undertaken as part of the work to develop Namibia's framework for achieving NAP-T3 revealed that of Namibia's six recognised biomes, national parks adequately represent only three (Succulent Karoo, Namib Desert, and Lakes and Salt Pans), each exceeding 30% coverage (MEFT 2024). The remaining biomes—Nama Karoo, Acacia Savanna, and Broad-leafed Savanna—are significantly underrepresented, with less than 10% coverage (Table 1). When communal conservancies and community forests (collectively referred to here as registered conservation areas) are included, representation improves across all but one biome: the Nama Karoo, which remains critically underrepresented.

By breaking down biomes more finely to recognise different vegetation types, 40 distinct ecosystems emerge (refer to map in Republic of Namibia 2024). The representation analysis reveals that 23 ecosystems—approximately 59%—have little to no coverage by national protected areas (0–10%), while seven ecosystems (18%) fall within the 10–

Table 1 The relative areas of six biomes protected in Namibia by national parks and state forests, and the areas that are protected by including other registered conservation areas (communal conservancies and community forests) (MEFT 2024).

Biome	National	Protected by national parks and state forests		Protected by national parks, state forests and registered conservation areas	
	Area (km²)	Area (km²)	%	Area (km²)	%
Succulent Karoo	20 010	18 092	90.4	18 092	90.4
Nama Karoo	200 835	10 218	5.1	46 051	22.9
Namib Desert	99 930	75 537	75.6	93 305	93.4
Lakes and Salt Pans	5 384	5 213	96.8	5 307	98.4
Acacia Savanna	336 171	15 129	4.5	103 746	30.9
Broad-leafed Savanna	160 948	12 734	7.9	106 995	66.5

30% coverage range. Only nine ecosystems (23%) exceed 30% coverage, aligning with the minimum threshold for adequate protection under Target 3. If registered conservation areas are included, the outlook improves significantly: with only six ecosystems (19%) remaining underprotected, four (12.5%) falling within the 10–30% range, and 22 ecosystems (nearly 69%) surpassing the 30% threshold (Figure 1). All but one (the Acacia-Savanna Cuvelai Drainage) of the ecosystems that remain underrepresented fall primarily within the freehold farmland area of Namibia.

As part of the currently running Spatial Biodiversity Assessment, Prioritisation, and Planning Project, contributing to Namibia's efforts to identify and register Key Biodiversity Areas (KBAs), a more detailed classification map of ecosystems in Namibia is evolving, and the analysis of representation will need to be repeated once this map is finalised. Furthermore, once identified, KBAs will also require an analysis of protection status, and a concerted effort to ensure that these areas are well protected.

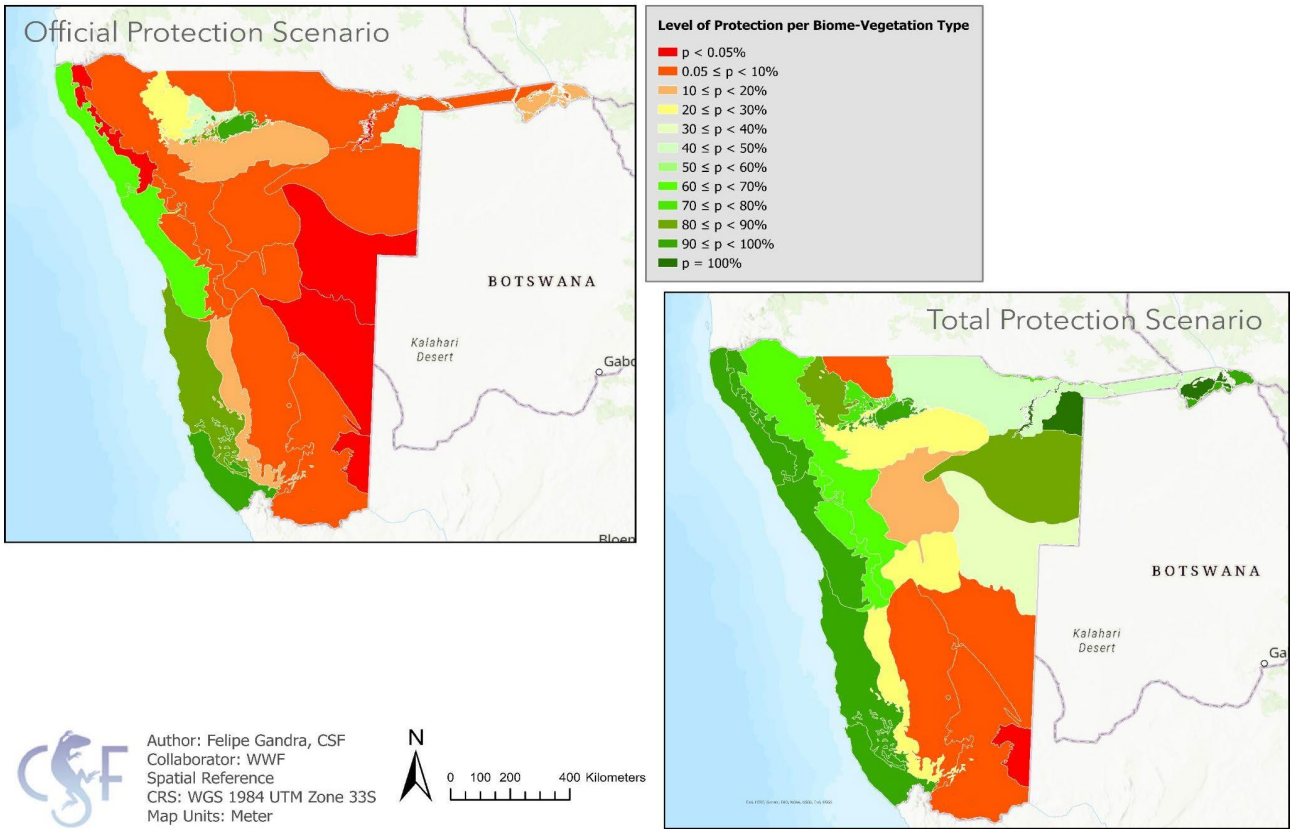

Figure 1 The level of protection (p) per biome-vegetation type when including only state-protected areas (national parks and state forests; left), and when also including registered conservation areas (communal conservancies, community forests and freehold conservancies; right).

Many freehold, especially privately owned, farms in Namibia actively support wildlife, with several adopting fully wildlife-based land uses (e.g., wildlife tourism), and some larger properties, or collection of properties, managed as private game reserves. These areas present strong potential for recognition as OECMs. Formal registration as OECMs would allow them to contribute to national conservation statistics, thereby enhancing ecosystem representation and helping Namibia progress toward its biodiversity targets under the KM-GBF.

Given that registration as an OECM is entirely voluntary, achieving national conservation targets in certain areas will depend on the willingness of private landowners to pursue this designation. While there are currently no direct incentives for landowners, formal recognition of their conservation efforts could serve as a meaningful motivator. To encourage broader participation, it will be essential to raise awareness and generate enthusiasm around the opportunity, while ensuring the registration process remains straightforward. At the same time, sufficient reporting must be built into the system to verify that genuine conservation outcomes are being achieved.

Namibia is renowned for its rich biodiversity, with an impressive array of flora and fauna, including a high number of endemic species and some species with very restricted ranges. This biological richness not only represents global conservation value but also underpins Namibia's nature-based tourism sector, as well as the livelihoods of many local communities. By safeguarding a representative portion of every ecosystem, we will help ensure the survival of more species. But the importance of protection goes beyond biodiversity alone. Ecosystems provide critical services—like air and water purification, pollination and climate regulation—that support human well-being and economic stability.

Ecological representation and connectivity across landscapes are essential for allowing species to migrate, maintain genetic diversity and adapt to environmental changes. In Namibia, the locations and boundaries of most national parks are primarily a result of historical political factors rather than conservation objectives, and thus were not designed to encompass entire ecosystems. Consequently, they are vulnerable to human-induced edge effects (Lindeque & Lindeque 2020). Without compatible, conservation-oriented land uses in adjacent areas, these parks face significant challenges in effectively protecting the full spectrum of habitats and species they host.

While expanding the coverage of protected and conserved areas is a critical step toward achieving Target 3, it is the effectiveness of management and the delivery of tangible conservation outcomes that must remain at the heart of Namibia's efforts. Reaching numerical targets alone will not safeguard biodiversity unless the areas designated, whether national parks, state forests, communal conservancies or OECMs, are well-managed, adequately monitored and effectively enforced. As Namibia explores the potential of OECMs to contribute to its conservation goals, equal, if not greater, attention must be given to ensuring that these areas are delivering real, measurable benefits for ecosystems and species. Ultimately, quality must take precedence over quantity if the country is to achieve lasting and meaningful conservation success.

POLICY AND INSTITUTIONAL FOUNDATIONAL FRAMEWORKS AND STRATEGIES: THE BASIS TO STRENGTHEN GOVERNANCE AND ENABLING CONDITIONS FOR OECMS IN NAMIBIA

Namibia benefits from a progressive environmental policy and legal framework that lays the foundation for advancing area-based conservation beyond traditional protected areas. Instruments such as the Nature Conservation Ordinance No. 4 of 1975 and the Environmental Management Act No. 7 of 2007 have long underpinned biodiversity conservation in the country. Meanwhile, the more recent Protected Areas and Wildlife Management Bill (PAWMB), which is currently being finalised, introduces important elements relevant to the recognition of OECMs. The Bill includes provisions for *the declaration of sites or landscapes of special conservation or scientific importance* and outlines a formal process that could be followed for their designation and registration. These provisions offer a promising legal avenue for integrating OECMs into Namibia's long-term conservation strategy.

Canada has been a global frontrunner in embedding OECMs within its national conservation framework (Environment and Climate Change Canada 2021). Through a detailed federal recognition process (Canadian Parks Council 2018), Canada has identified and reported OECMs that include military lands, Indigenous-managed areas, and fisheries closures, applying rigorous criteria developed in collaboration with Indigenous and local stakeholders. Similarly, South Africa offers a regional example of integrating non-traditional conservation areas through its Biodiversity Stewardship Programme (South African Department of Forestry, Fisheries and the Environment 2023), where legally binding agreements with private and communal landowners enable the formal recognition of sites contributing to biodiversity objectives, even if they are not protected areas under national law. Namibia can draw on these experiences to develop a recognition system that balances national legal structures with practical biodiversity outcomes across diverse governance types.

Although OECMs are not explicitly recognised in Namibia's current legislation, there is no legal impediment to their recognition. In fact, Namibia's constitution provides an enabling framework. Article 95(l) directs the state to actively promote and maintain ecosystems, essential ecological processes and biodiversity. While broadly phrased, this constitutional directive could certainly allow OECMs to be part of Namibia's environmental protection efforts. Besides, Namibia being a Party to the Convention on Biological Diversity (CBD) could easily invoke CBD Decision 14/8, which defines OECMs, and Target 3 of the KM-GBF, which calls for protecting at least 30% of terrestrial, inland waters, and coastal and marine areas by 2030, including through the means of OECMs.

The national and legal instruments, and more refined recent international instruments legitimise any national efforts and allow Namibia to implement their provisions. By law, once Namibia adopts and ratifies international instruments, they become legally binding. However, due to this dualist system, specific instruments must be incorporated into national law by an Act of Parliament, for these to become enforceable in Namibia's domestic legal system. Thus, while the recognition of OECMs can be immediately implemented, it is crucial that the other laws be considered, to strengthen OECMs as a management approach for effective conservation and protection.

Namibia may consider adapting the registration processes outlined in current legislation and the PAWMB, particularly those used for private reserves, as a model for OECM registration and recognition. This process must be rigorous, consistent and benchmarked on international best practices; ensuring that any site recognised as an OECM meets all relevant criteria, including long-term biodiversity conservation in-situ, effective governance and sustained management. Exceptions to the registration process should only be permitted when explicitly outlined in supplementary regulations and supported by robust justification.

To effectively operationalise these provisions, Namibia must consider drafting specific regulations for the operationalisation of the OECM registration framework, ensuring that these are closely aligned with lessons learned from OECM pilot sites across communal and freehold conservancies, private properties, marine sites, rivers and state lands, as applicable. These OECM pilots are being prioritised for implementation in private nature reserves or private sector-led areas, to provide a robust testing ground for verifying OECM in practice. The development of regulations could be informed by these practical Namibian experiences to ensure they are contextually relevant, equitable and implementable across the country's diverse landscapes.

Institutionally, the Ministry of Environment, Forestry and Tourism is best positioned to test and lead OECM implementation and coordination, complemented by other state entities such as the Ministry of Agriculture, Fisheries, Water and Land Reform, as well as by non-state entities including the World Wildlife Fund Namibia, Namibia Association of CBNRM Support Organisations, Namibia Nature Foundation and academic partners. Drawing parallels to South Africa's stewardship councils or Canada's provincial conservation agencies, Namibia has established a multi-stakeholder NAP-T3 OECM Technical Working Group that includes representatives from

government, civil society, conservancy networks and the private sector to guide OECM verification, registry development, implementation and reporting.

In conclusion, Namibia's policy and legal landscape is well-equipped to support the formal registration and recognition of OECMs. A national OECM registration and recognition framework has been drafted and is awaiting ministerial approval; once adopted, this framework will be aligned with the PAWMD and its forthcoming regulations. When combined with constitutional support, CBD obligations, and regional inspiration from other African countries, Namibia has the opportunity to create a robust, inclusive and internationally aligned framework that scales up conservation impacts while respecting governance diversity and cultural values.

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