Convention on Biological Diversity

UNDP

Aichi Biodiversity Target 11 Country Dossier: SEYCHELLES

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UNBiodiversity Lab

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GLOSSARY

AZEs	Alliance for Zero Extinction sites
CEPF	Critical Ecosystem Partnership Fund
EBSA	Ecologically or Biologically Significant Marine Area
EEZ	Exclusive Economic Zone
GCF	Green Climate Fund
GD-PAME	Global Database on Protected Area Management Effectiveness
GEF	Global Environment Facility
IBA	Important Bird and Biodiversity Area
ICCAs	Indigenous and Community Conserved Area Area (may also be referred to as territories and areas conserved by Indigenous peoples and local communities or "territories of life")
IPLC	Indigenous Peoples and Local Communities
KBA	Key Biodiversity Area
MEOW	Marine Ecosystems of the World
MPA	Marine Protected Area
NBSAP	National Biodiversity Strategy and Action Plan
OECM	Other Effective Area-Based Conservation Measures
PA	Protected Area
PAME	Protected Area Management Effectiveness
PPA	Privately Protected Area
PPOW	Pelagic Provinces of the World
ProtConn	Protected Connected land indicator
SOC	Soil Organic Carbon
TEOW	Terrestrial Ecosystems of the World
WDPA	World Database on Protected Areas
WD-OECM	World Database on Other Effective Area-Based Conservation Measures

Disclaimer

The designations employed and the presentation of material in this dossier do not imply the expression of any opinion whatsoever on the part of the Secretariat of the Convention on Biological Diversity (SCBD) or United Nations Development Programme (UNDP) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The information contained in this publication do not necessarily represent those of the SCBD or UNDP.

This country dossier is compiled by the UNDP and SCBD from publicly available information. It is prepared, within the overall work of the Global Partnership on Aichi Biodiversity Target 11, for the purpose of attracting the attention of the Party concerned and other national stakeholders to facilitate the verification, correcting, and updating of country data. The statistics might differ from those reported officially by the country due to differences in methodologies and datasets used to assess protected area coverage and differences in the base maps used to measure terrestrial and marine area of a country or territory. Furthermore, the suggestions from the UNDP and SCBD are based on analyses of global datasets, which may not necessarily be representative of national policy or criteria used at the national level. The analyses are also subject to the limits inherent in global indicators (precision, reliability, underlying assumptions, etc.). Therefore, they provide useful information but cannot replace analyses at a national level nor constitute a future benchmark for national policy or decision-making.

The preparation of this dossier was generously supported by: the Government of the Federal Republic of Germany, *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GMbH*; the European Commission; the Government of the United Kingdom of Great Britain and Northern Ireland; and the Government of Japan (Japan Biodiversity Fund). The dossier does not necessarily reflect their views.

EXECUTIVE SUMMARY

This document provides information on the coverage of protected areas (PAs) and other effective area-based conservation measures (OECMs), as currently reported in global databases (the World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM)). It also includes details on the status of the other qualifying elements of Aichi Biodiversity Target 11 based on this data. These statistics might differ from those reported officially by countries due to difference in methodologies and datasets used to assess protected area coverage, differences in the base maps used to measure terrestrial and marine area of a country or territory, or if global datasets differ from the criteria and indicators used at the national level. Where available, data from national statistics for the elements of Target 11 are included alongside records from these global databases. This dossier also provides a summary of commitments made under Aichi Biodiversity Target 11, and a summary of potential opportunities regarding elements of the target for future planning.

The dossier has been developed in consultation with the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), which manages the WDPA, WD-OECM and Global Database on Protected Area Management Effectiveness (GD-PAME). Parties to the CBD are requested to contact protectedareas@unep-wcmc.org with any updates to the information in these databases.

Aichi Biodiversity Target 11 Elements: Current status and opportunities for action

Coverage - Terrestrial & Marine

- **Status:** as of May 2021 (per the WDPA), terrestrial coverage in Seychelles is 299.5 km^2 and marine coverage is 439,996.7 km^2 (32.8%); National reporting lists terrestrial coverage of 47.64%, and marine coverage of 444,097km^2 (32.89%)

- **Opportunities for action:** opportunities for the near-term include updating the WDPA with any unreported PAs, and the recognizing and reporting OECMs to the WD-OECM. In the future, focus on relatively intact areas, while addressing the elements in the following sections, could be considered if planning new PAs or OECMs.

Ecological Representativeness– Terrestrial & Marine

- **Status:** Seychelles contains 2 terrestrial ecoregions, 1 marine ecoregion, and 1 pelagic province (all of which have at least 10% coverage from PAs and OECMs): the mean coverage by reported PAs and OECMs is 16.5% (terrestrial), 90.9% (marine), and 29.6% (pelagic).

- **Opportunities for action:** there is opportunity for Seychelles to increase protection in ecoregions that have lower levels of coverage by PAs or OECMs, and to focus on effective management for those that already have adequate coverage.

Areas Important for Biodiversity

- **Status:** Seychelles has 62 Key Biodiversity Areas (KBAs): the mean protected coverage of KBAs by reported PAs and OECMs is 53.7%, while 25 KBAs have no coverage by reported PAs and OECMs. Key Biodiversity Areas coverage falls both under existing PAs and also those that are not currently under legal protection.

- **Opportunities for action:** there is opportunity for Seychelles to increase protection of KBAs that have lower levels of coverage by PAs and OECMs; priority could be given to those with no current coverage. There is also opportunity to reassess KBA coverage based on recent national updates of KBA data.

Areas Important for Ecosystem Services

- **Status:** coverage of areas important for ecosystem services: In Seychelles, 44.9% of aboveground biomass carbon, 44.9% of belowground biomass carbon, 60.3% of soil organic carbon, 35.2% of carbon stored in marine sediments is covered by PAs and OECMs.

- **Opportunities for action:** for carbon, there is opportunity for Seychelles to focus on effective management for PAs in both marine and terrestrial areas with high carbon stocks. Protecting areas with high carbon stocks secures the benefits of carbon sequestration in the area.

- For water, there is opportunity to increase the area of the water catchment under protection by PAs and OECMs, or in cases where there is high levels of protection, focus on effective management for these areas. Protecting the current area of forested land and potentially reforesting would have benefits for improving water security.

Connectivity and Integration

- **Status:** coverage of protected-connected lands is 60.2%.

- **Opportunities for action:** there is opportunity to focus on PA and OECM management for enhancing and maintaining connectivity. Improving connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation. There is also opportunity to continue implementation of the Ridge to Reef Project that is looking to identify terrestrial corridors.

- As well, a range of suggested steps for enhancing and supporting integration are included in the voluntary guidance on the integration of PAs and OECMs into the wider land- and seascapes and mainstreaming across sectors to contribute, inter alia, to the SDGs (Annex I of COP Decision 14/8).

Governance Diversity

- **Status:** most PA are under Government governance, but with new designations on the marine side, there is supposed to be increased governance of PAs by non-state actors (figures have not yet been updated in the WDPA to reflect this). As of May 2021, the most common governance type(s) for reported PAs in Seychelles is: 96.1% under Government (Federal or national ministry or agency).

- **Opportunities for action:** explore opportunities for governance types that have lower representation, for Seychelles this could relate to shared governance, etc. Increase efforts to identify the governance types for the 3.9% of sites that do not have their governance type reported.

- There is also opportunity for Seychelles to complete governance and equity assessments, to establish baselines and identify relevant actions for improvement. As well, a range of suggested actions are included in the voluntary guidance on effective governance models for management of protected areas, including equity (Annex II of COP Decision 14/8).

Protected Area Management Effectiveness

- **Status:** 55.8% of terrestrial PAs and 0.6% of marine PAs have completed Protected Area Management Effectiveness (PAME) assessments reported.

- **Opportunities for action:** the 60% target for completed management effectiveness assessments (per COP Decision X/31) **has not** been met for terrestrial PAs and **has not** been met for marine PAs. Therefore, there is opportunity to increase protected area management effectiveness (PAME) evaluations for both terrestrial and marine PAs to achieve the target. There is opportunity to update the figures in the GD-PAME once the national exercise (with a new generation of management plans that are being developed as part of the Marine spatial plan implementation plan) is completed.

- There is also opportunity to implement the results of completed PAME evaluations, to improve the quality of management for existing PAs and OECMs (e.g. through adaptive management and information sharing, increasing the number of sites reporting 'sound management') and to increase reporting of biodiversity outcomes in PAs and OECMs.

INTRODUCTION

The Strategic Plan for Biodiversity 2011-2020 was adopted at the tenth meeting of the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) held in Nagoya, Aichi Prefecture, Japan from 18-29 October 2010. The vision of the Strategic Plan is one of "Living in harmony with nature" where *"By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people"* (CBD, 2010). In addition to this vision, the Strategic Plan is composed of 20 targets, under five strategic goals. Aichi Biodiversity Target 11 states that *"By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent 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 landscapes and seascapes."*

With the conclusion of the Aichi Biodiversity Targets in 2020, Target 11 on area-based conservation has seen success in the expansion of the global network of protected areas (PA) and other effective area-based conservation measures (OECMs). The negotiation of the post-2020 Global Biodiversity Framework (GBF) and its future targets provide an essential opportunity to further improve the coverage of PAs and OECMs, to improve other aspects of area-based conservation, to accelerate progress on biodiversity conservation more broadly, while also addressing climate change, and the Sustainable Development Goals. This next set of global biodiversity targets are to be adopted at the fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity. These new targets must aim to build upon lessons learned from the last decade of progress to deliver transformative change for the benefit of nature and people, to realize the 2050 Vision for biodiversity.

The United Nations Development Programme (UNDP) and the Secretariat of the Convention on Biological Diversity have developed the Aichi Biodiversity Target 11 Country Dossiers, which provide countries with an overview of the status of Target 11 elements, opportunities for action, and a summary of commitments made by Parties over the last decade. Each dossier can support countries in assessing their progress on key elements of Aichi Biodiversity Target 11 and identifying opportunities to prioritize new protected areas and OECMs.

This dossier provides an overview of area-based conservation in Seychelles. Section I of the dossier presents data on the current status of Seychelles' PAs and OECMs. The data presented in Section I relates to each element of Target 11. Section I also presents the PA and OECM coverage for two critical ecosystem services: water security and carbon stocks. In addition, the dossier presents potential opportunities for action for Seychelles, in relation to each Target 11 element. The analyses present options for improving Seychelles' area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Seychelles' existing PA and OECM commitments as a summary of existing efforts towards achieving Target 11. This gives focus not only to national policy and actions but also voluntary commitments to the

UN. Furthermore, where data is available, this dossier provides information on potential OECMs, Indigenous and Community Conserved Areas (ICCAs; also, often referred to as territories and areas conserved by Indigenous peoples and local communities or "territories of life") and Privately Protected Areas (PPAs) and the potential contribution they will have in achieving the post-2020 targets.

The information on PAs and OECMs presented here is derived from the World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM). These databases are joint products of UNEP and IUCN, managed by UNEP-WCMC, and can be viewed and downloaded at www.protectedplanet.net. Parties are encouraged to provide data on their PAs and OECMs to UNEP-WCMC for incorporation into the databases (see e.g., Decisions 10/31 and 14/8). The significant efforts of Parties in updating their data in the build up to the publication of the Protected Planet Report 2020 (UNEP-WCMC and IUCN, 2021) were greatly appreciated. UNEP-WCMC welcomes further updates, following the data standards described here (www.wcmc.io/WDPA_Manual), and these should be directed to protectedareas@unep-wcmc.org. The statistics presented in this dossier are derived from the May 2021 WDPA and WD-OECM releases, unless explicitly stated otherwise. Readers should consult www.protectedplanet.net for the latest coverage statistics (updated monthly).

Some data from the WDPA and WD-OECM are not made publicly available at the request of the data-provider. This affects some statistics, maps, and figures presented in this dossier. Statistics provided by UNEP-WCMC (terrestrial and marine coverage) are based upon the full dataset, including restricted data. All other statistics, maps, and figures are based upon the subset of the data that is publicly available.

Where data is less readily available, such as for potential OECMs, ICCAs and PPAs, data has also been compiled from published reports and scientific literature to provide greater awareness of these less commonly recorded aspects. These data are provided to highlight the need for comprehensive reporting on these areas to the WDPA and/or WD-OECM. Parties are invited to work with indigenous peoples, local communities and private actors to submit data under the governance of these actors, with their consent, to the WDPA and/or WD-OECM.

Overall, PAs and OECMs are essential instruments for biodiversity conservation and to sustain essential ecosystem services that support human well-being and sustainable development, including food, medicine, and water security, as well as climate change mitigation and adaptation and disaster risk reduction. The data in this dossier, therefore, aims to celebrate the current contributions of PAs and OECMs, whilst the gaps presented hope to encourage greater progress, not just for the benefit of biodiversity and the post-2020 GBF, but also to recognize the essential role of PAs and OECMs to the Sustainable Development Goals and for addressing the climate crisis.

SECTION I: CURRENT STATUS

Aichi Biodiversity Target 11 refers to both protected areas (PAs) and other effective area-based conservation measures (OECMs). This section provides the current status for all elements of Aichi Biodiversity Target 11 where indicators with global data are available. Statistics for all elements are presented using data on both PAs and OECMs (where this data is available and reported in global databases like the WDPA and WD-OECM). It is recognized that statistics reported in the WPDA and WD-OECM might differ from those reported officially by countries due to differences in methodologies and datasets used to assess protected area coverage and differences in the base maps used to measure terrestrial and marine area of a country or territory. Details on UNEP-WCMC's methods for calculating PA and OECM coverage area available here. The global indicators adopted here for presenting the status of other elements of Target 11 may also differ from those in use nationally. Where available, results from national reporting are also included.

COVERAGE - TERRESTRIAL & MARINE

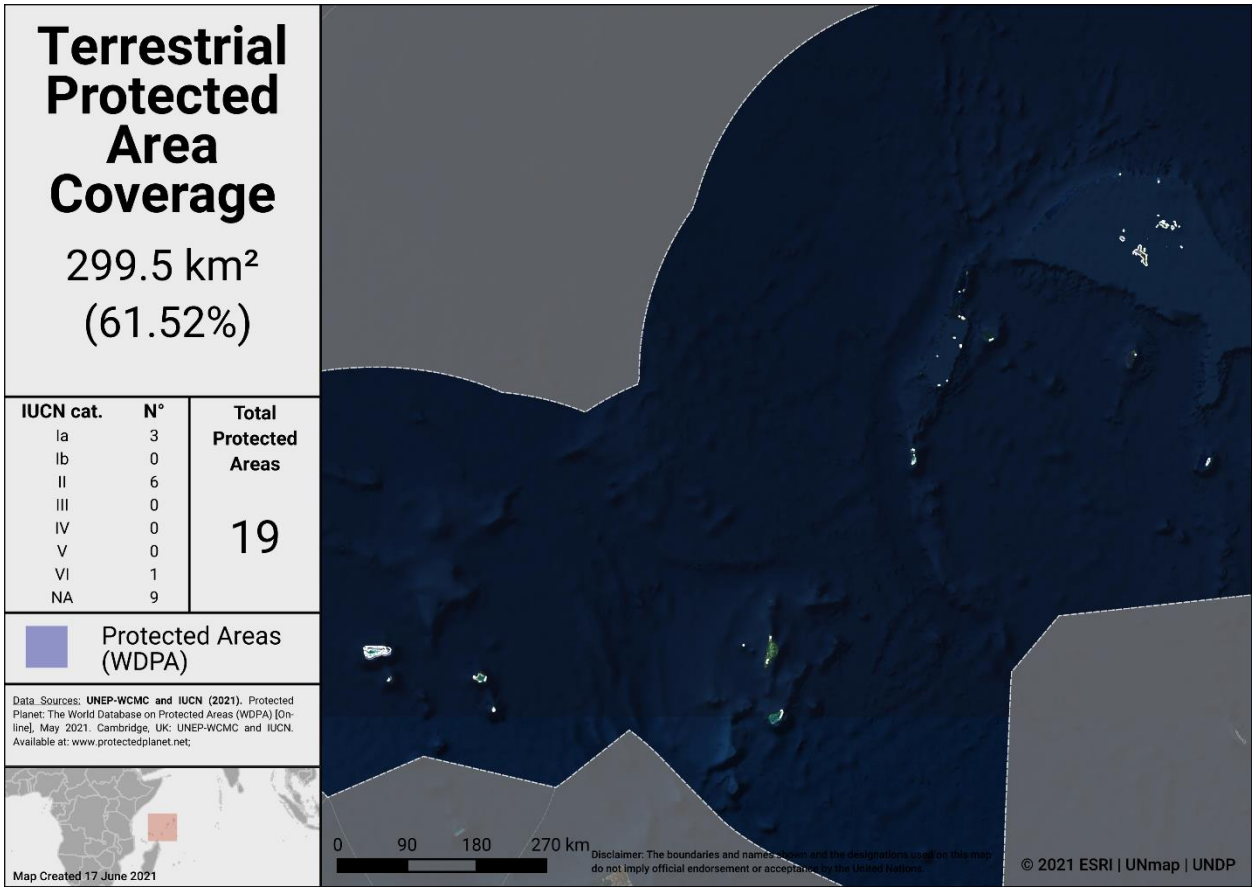
As of May 2021, Seychelles has **51** protected areas reported in the World Database on Protected Areas (WDPA). 1 PA that has no spatial boundary and no area listed in the WDPA is not included in the following statistics (see details on UNWP-WCMC's methods for calculating PA and OECM coverage **here**).

As of May 2021, Seychelles has **0** OECMs reported in the world database on OECMs (WD-OECM).

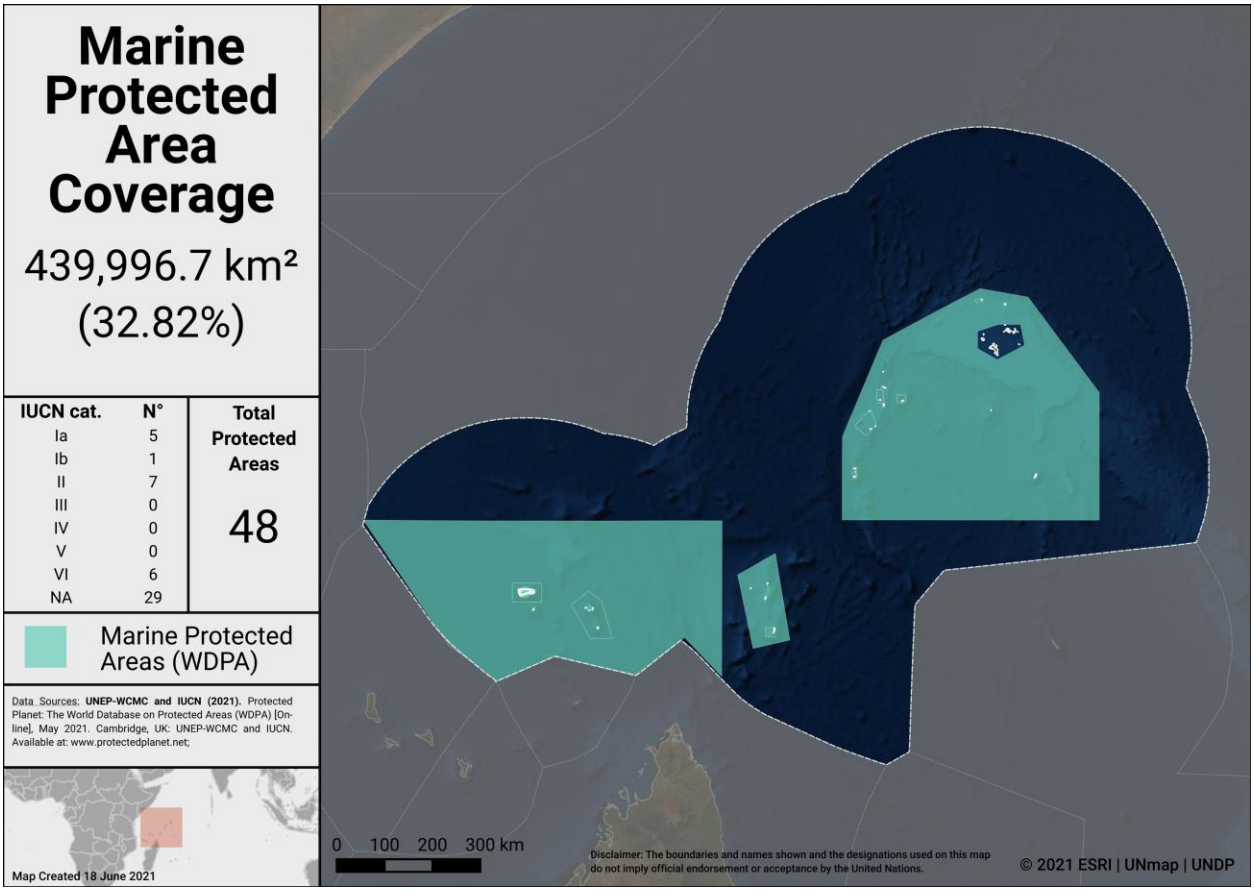
Current coverage for Seychelles (per the WDPA):

- 61.5% terrestrial (19 protected areas, 299.5 km^2)
- 32.8% marine (48 protected areas, 439,996.7 km^2)

National reporting indicates total terrestrial coverage in Seychelles' is 47.64%, and marine coverage of 444,097km^2 (32.89%) [the marine spatial planning team has refined some of the MPA data which potentially accounts for the minor difference in marine figures)



Terrestrial Protected Areas in Seychelles



Marine Protected Areas in Seychelles

Potential OECMs

There are currently no potential OECM examples for Seychelles. The Ministry responsible for Environment is exploring certain areas with potential for OECMs and this includes some of the KBAs that are currently not under legal PA status.

Opportunities for action

Opportunities for the near-term include updating the WDPA with any unreported PAs, and the recognizing and reporting OECMs to the WD-OECM. In the future, focus on relatively intact areas, while addressing the elements in the following sections, could be considered if planning new PAs or OECMs.

ECOLOGICAL REPRESENTATIVENESS – TERRESTRIAL & MARINE

Ecological representativeness is assessed, globally, based on the PAs and OECMs coverage of broad-scale biogeographic units. Globally, ecoregions have been described for terrestrial areas (Dinerstein et al, 2017), marine coastal and shelf ecosystems (to a depth of 200m; Spalding et al 2007) and surface pelagic waters (Spalding et al 2012).

Seychelles' may explore this representation to include as part of thier national records based on the type of data available. Data on marine ecoregions were not submitted as part of the dossier when the coverage data was submitted but the representativeness was considered as part of the Seychelles Marine spatial planning (MSP) process and data layers do exist.

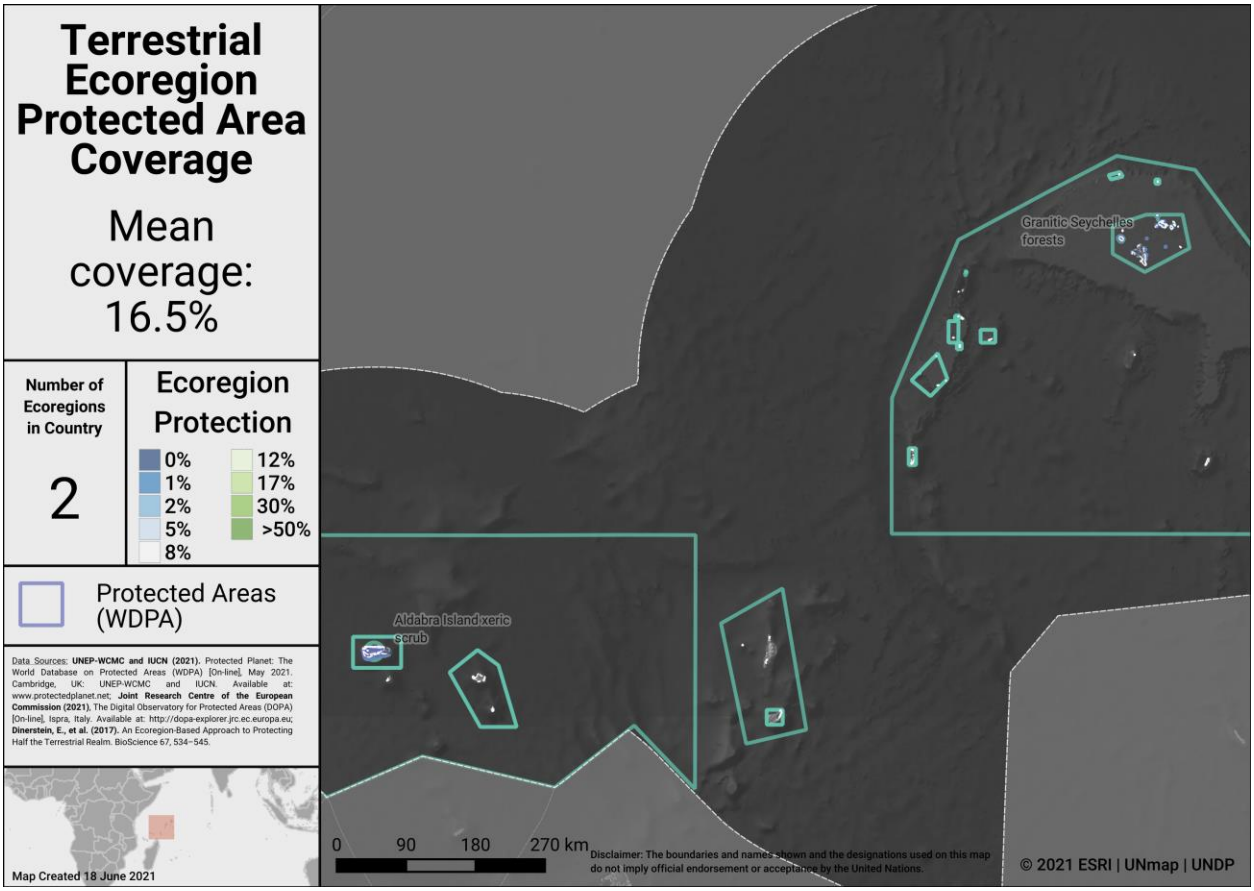
Seychelles has 2 **terrestrial** ecoregions. Out of these:

- All 2 ecoregions have at least some coverage from PAs and OECMs.
- 1 ecoregion has at least 17% protected within the country.
- The average coverage of terrestrial ecoregions is 16.5%.

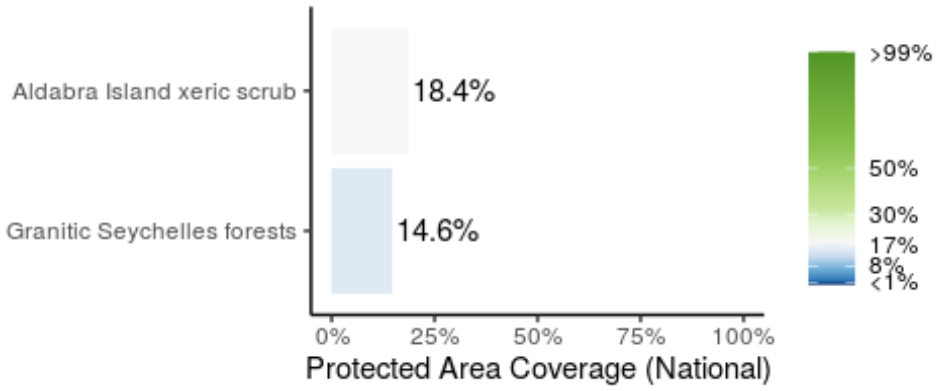
Seychelles has 1 **marine** ecoregion and 1 **pelagic province**:

- Coverage from reported PAs and OECMs is 90.9% (marine ecoregion) and 29.6% (pelagic province)

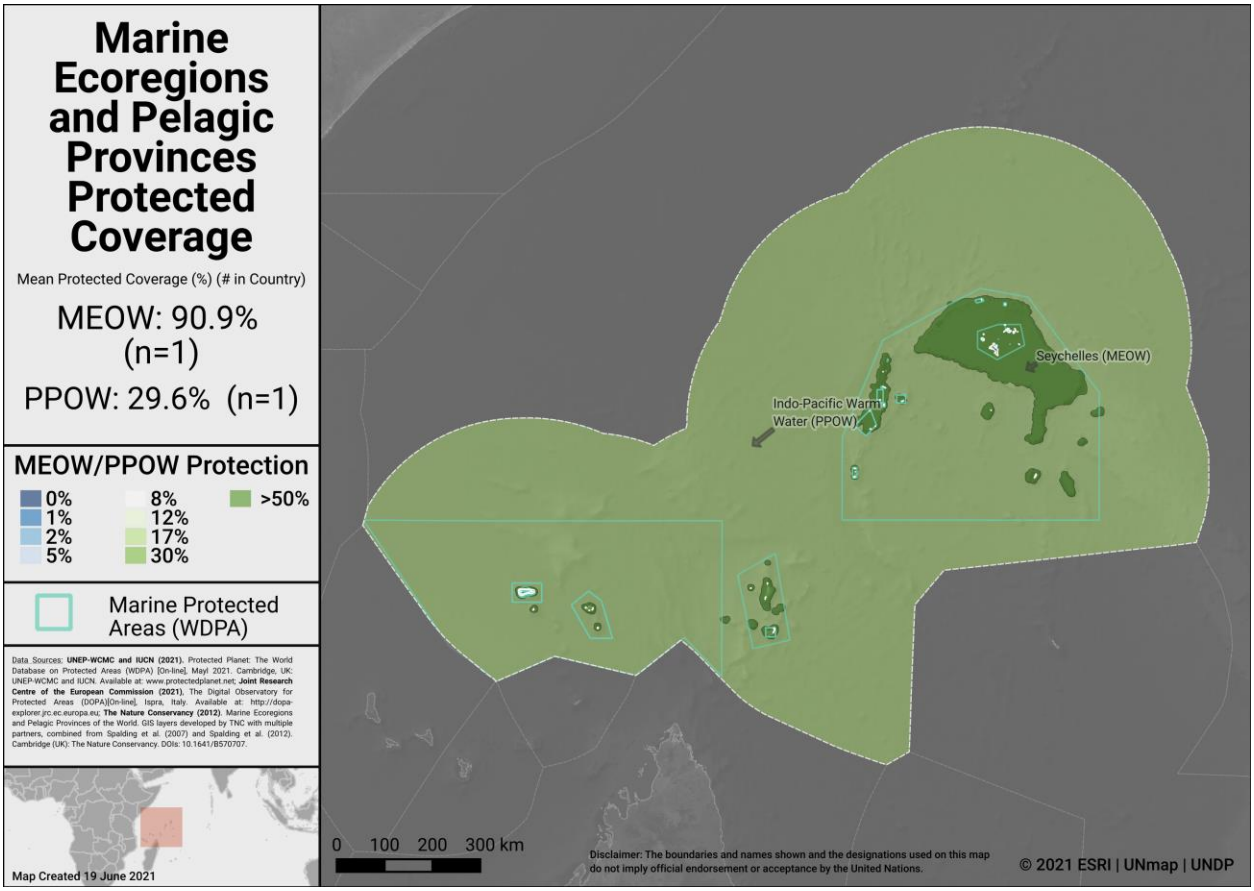
A full list of terrestrial ecoregions in Seychelles is available in Annex I.



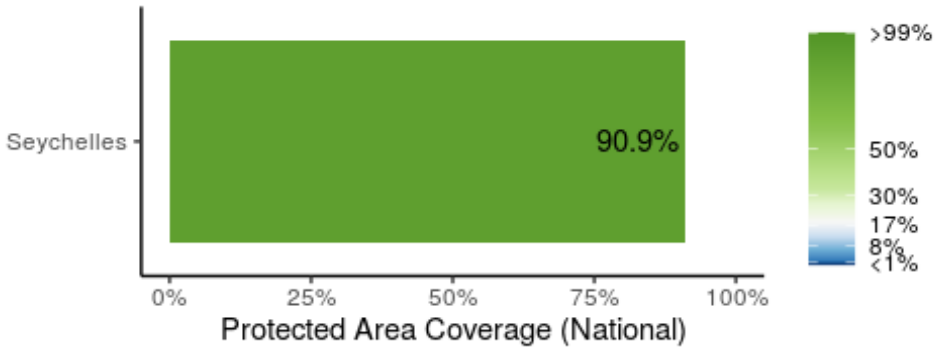
Terrestrial ecoregions in Seychelles



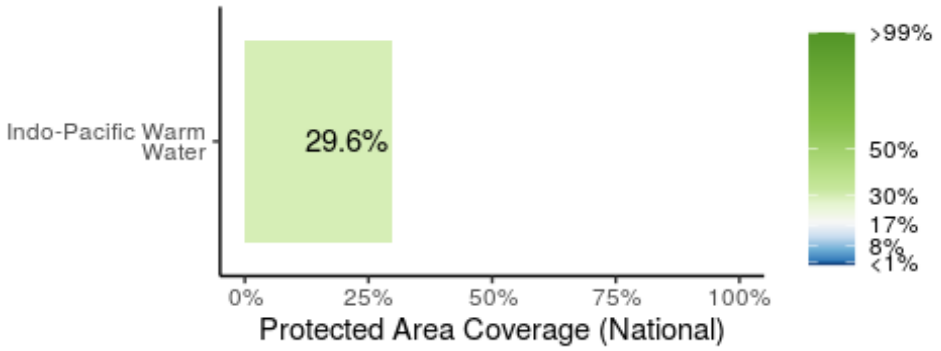
Terrestrial ecoregions of the World (TEOW) in Seychelles



Marine ecoregions and pelagic provinces



Marine Ecoregions of the World (MEOW) in Seychelles:



Pelagic Provinces of the World (PPOW) in Seychelles:

Opportunities for action

There is opportunity for Seychelles to increase protection in ecoregions that have lower levels of coverage by PAs or OECMs, and to focus on effective management for those that already have adequate coverage.

AREAS IMPORTANT FOR BIODIVERSITY

Key Biodiversity Areas (KBAs)

Protected area and OECM coverage of Key Biodiversity Areas (KBAs) provide one proxy for assessing the conservation of areas important for biodiversity at national, regional and global scales. KBAs are sites that make significant contributions to the global persistence of biodiversity (IUCN, 2016). The KBA concept builds on four decades of efforts to identify important sites for biodiversity, including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites, and KBAs identified through Hotspot ecosystem profiles supported by the Critical Ecosystem Partnership Fund. Incorporating these sites, the dataset of internationally significant KBAs includes Global KBAs (sites shown to meet one or more of 11 criteria in the Global Standard for the Identification of KBAs, clustered into five categories: threatened biodiversity; geographically restricted biodiversity; ecological integrity; biological processes; and irreplaceability), Regional KBAs (sites identified using pre-existing criteria and thresholds, that do not meet the Global KBA criteria based on existing information), and KBAs whose Global/Regional status is Not yet determined, but which will be assessed against the global KBA criteria within 8-12 years. Regional KBAs are often of critical international policy relevance (e.g., in EU legislation and under the Ramsar Convention on Wetlands), and many are likely to qualify as Global KBAs in future once assessed for their biodiversity importance for other taxonomic groups and ecosystems. To date, nearly 16,000 KBAs have identified globally, and information on each of these is presented in the World Database of Key Biodiversity Areas: www.keybiodiversityareas.org.

Seychelles has 62 Key Biodiversity Areas (KBAs).

- Mean percent coverage of all KBAs by PAs and OECMs in Seychelles is **53.7%**.
- **29** KBAs have full (>98%) coverage by PAs and OECMs.
- **8** KBAs have partial coverage by PAs and OECMs.
- **25** KBAs have no (<2%) coverage by PAs and OECMs.

Key Biodiversity Areas coverage falls both under existing PAs and also those that are not currently under legal protection, and all data is recorded nationally

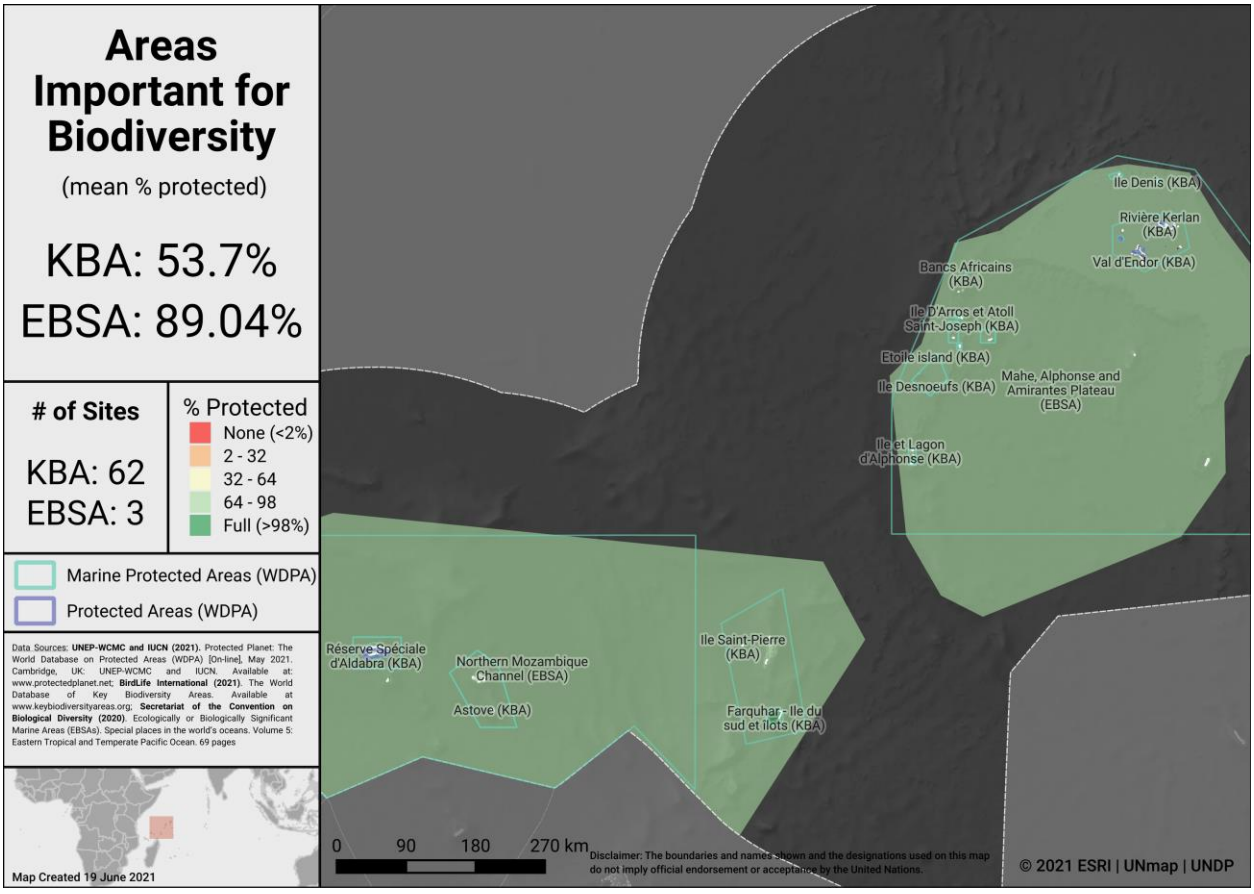
Not all KBA shapefiles for Seychelles were submitted as part of the dossier, as they only provided coverage data on areas important for biodiversity that were already legally protected.

The Key Biodiversity Areas of Seychelles have been updated in 2021 and additional information can be submitted if necessary.

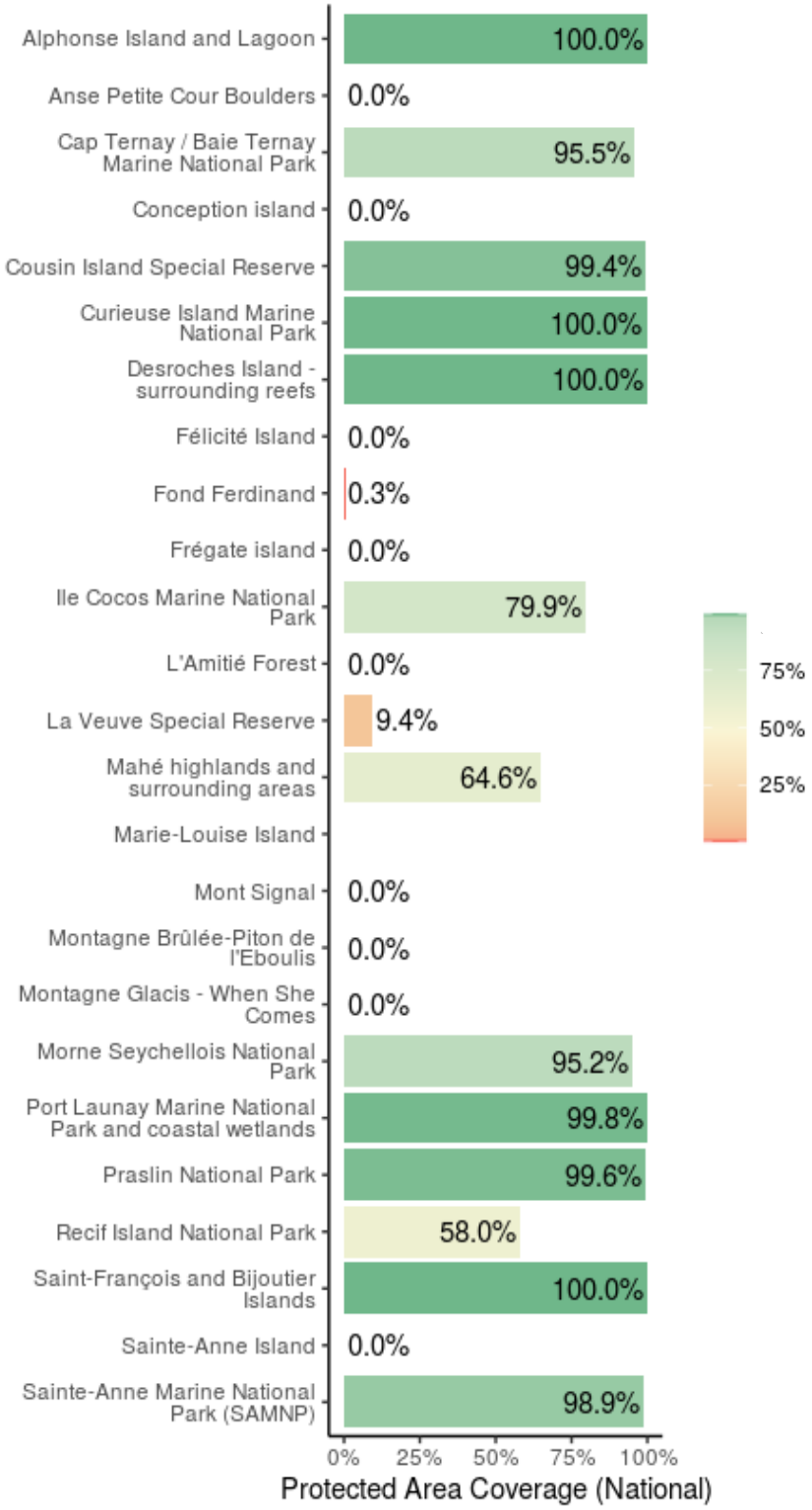
Ecologically or Biologically Significant Marine Areas (EBSAs)

Other important areas for biodiversity may also include Ecologically or Biologically Significant Marine Areas (EBSAs), which were identified following the scientific criteria adopted at COP-9 (Decision IX/20; see more at: https://www.cbd.int/ebsa/). Sites that meet the EBSA criteria may require enhanced conservation and management measures; this could be achieved through means including MPAs, OECMs, marine spatial planning, and impact assessment.

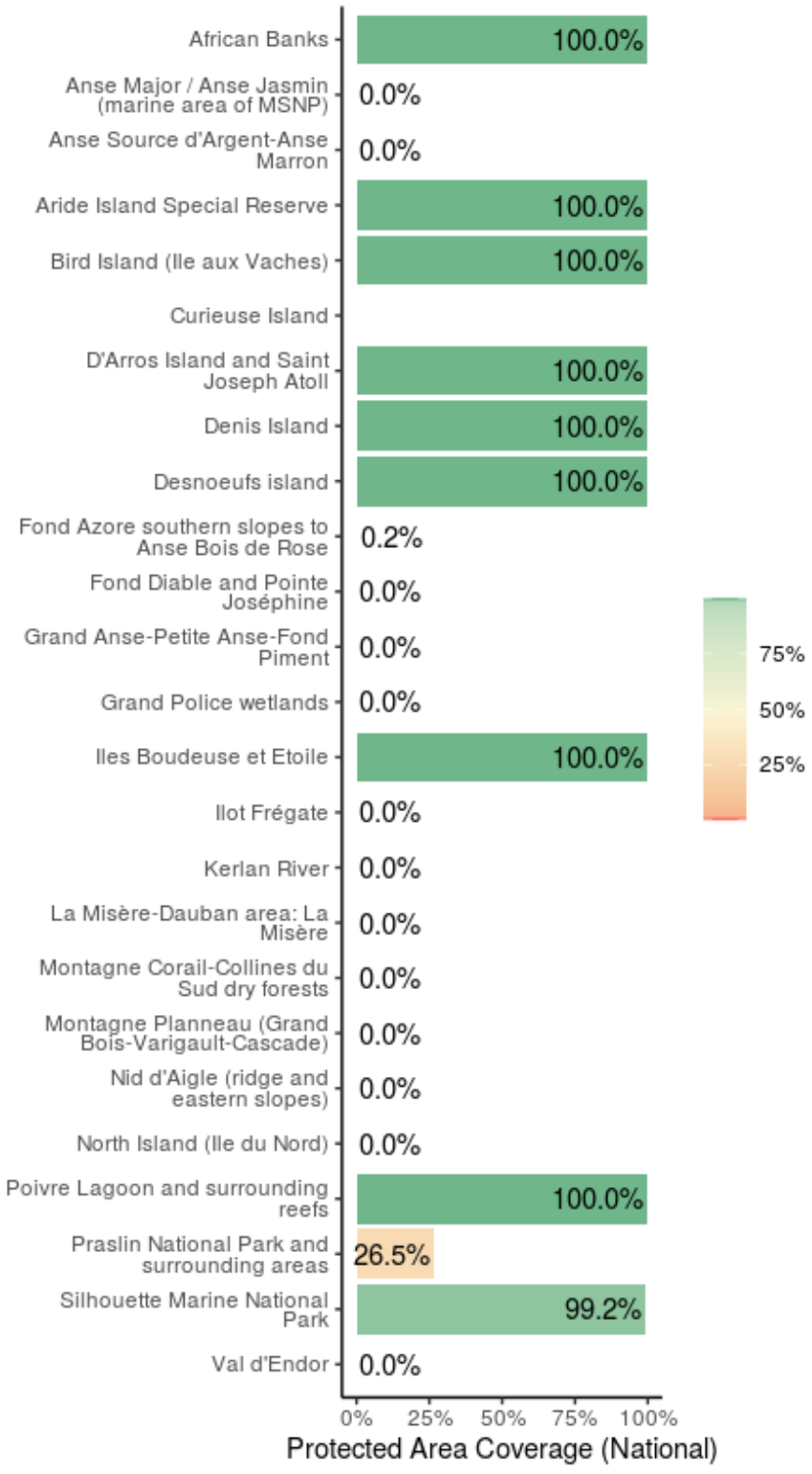
There are 3 EBSAs with some portion of their extent within Seychelles' EEZ, all of which have >80% coverage from PAs and OECMs.



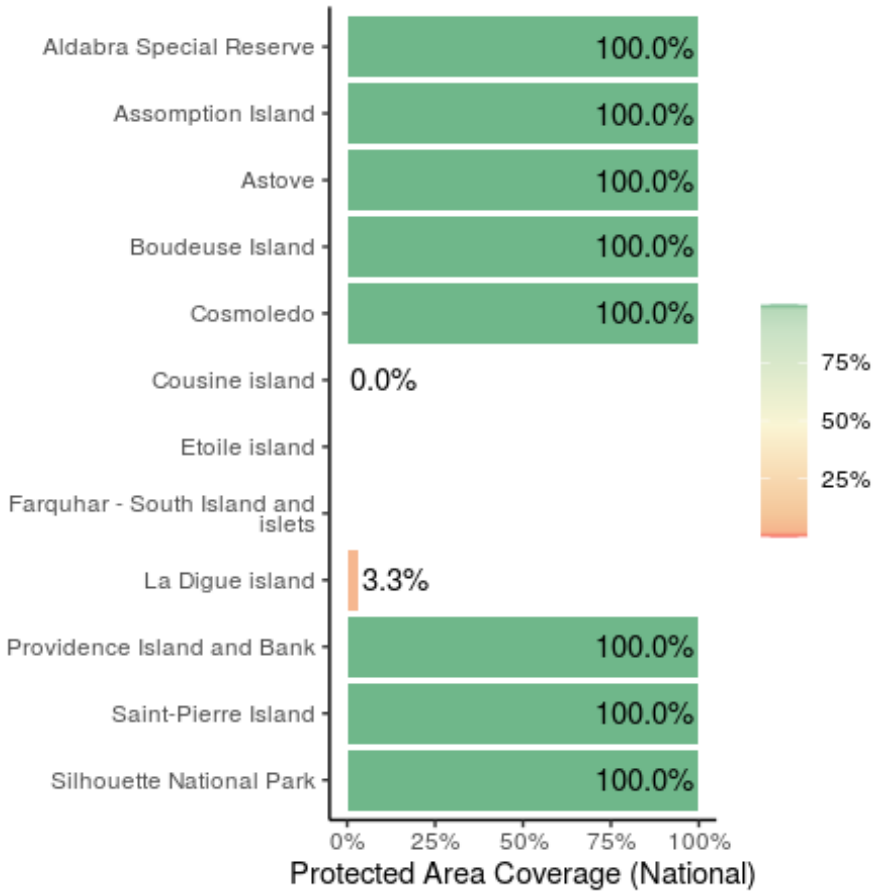
Areas Important for Biodiversity in Seychelles



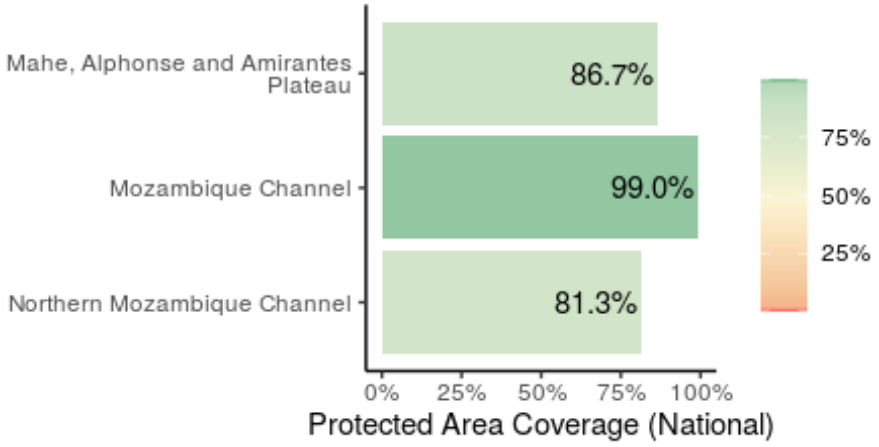
Key Biodiversity Area Coverage (KBA) in Seychelles



Key Biodiversity Area Coverage (KBA) in Seychelles



Key Biodiversity Area Coverage (KBA) in Seychelles



Ecologically or Biologically Significant Marine Areas (EBSAs) in Seychelles

Opportunities for action

There is opportunity for Seychelles to increase protection of KBAs that have lower levels of coverage by PAs and OECMs; priority could be given to those with no current coverage. There is also opportunity to reassess KBA coverage based on recent national updates of KBA data.

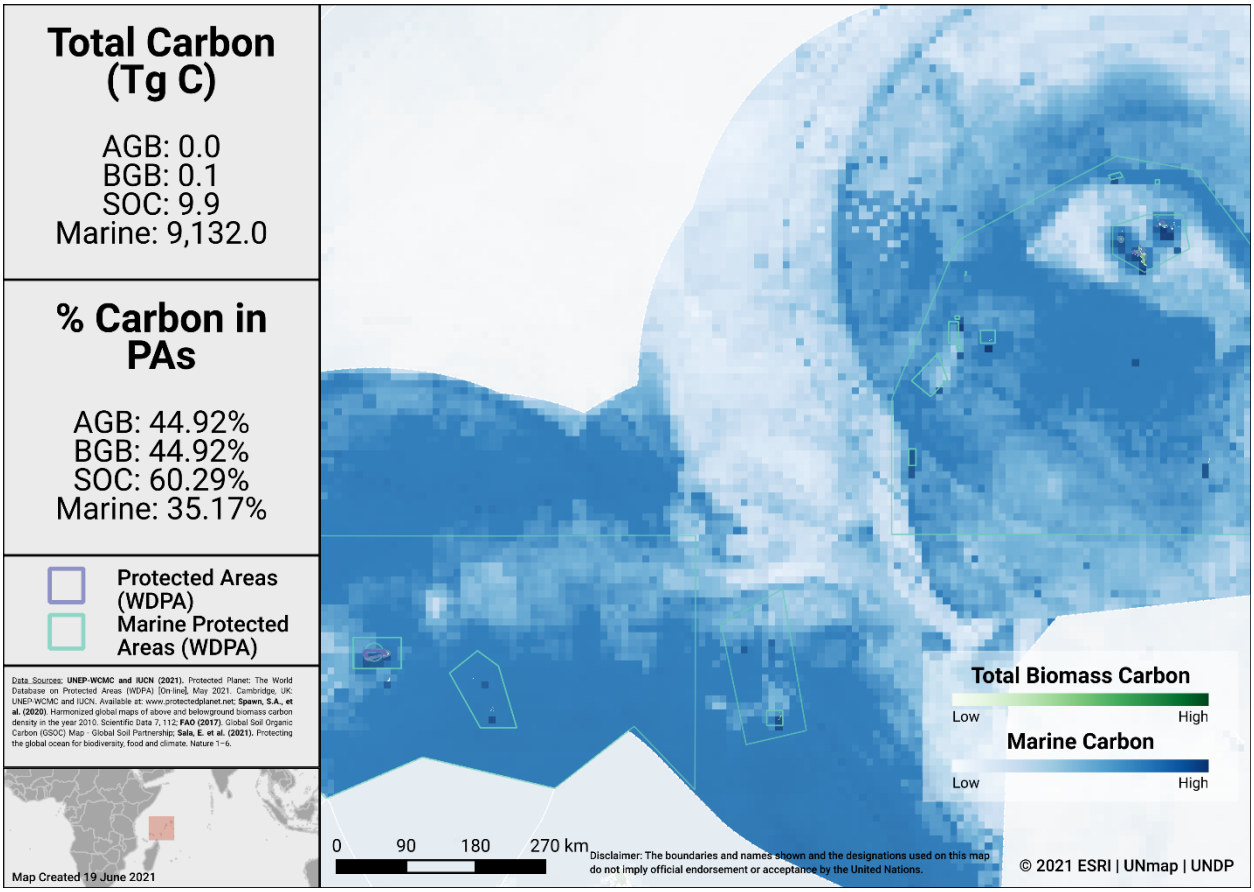
AREAS IMPORTANT FOR ECOSYSTEM SERVICES

There is no single indicator identified for assessing the conservation of areas important for ecosystem services. For simplicity, two services with available global datasets are assessed here (carbon and water). In future, other critical ecosystem services could be explored.

Carbon

Data for biomass carbon comes from temporally consistent and harmonized global maps of aboveground biomass and belowground biomass carbon density (at a 300-m spatial resolution); the maps integrate land-cover specific, remotely sensed data, and land-cover specific empirical models (see Spawn et al., 2020 for details on methodology). The Global Soil Organic Carbon Map present an estimation of SOC stock from 0 to 30 cm (see FAO, 2017). Data is also presented from global maps of marine sedimentary carbon stocks, standardized to a 1-meter depth (see Sala et al., 2021, and Atwood et al., 2020).

The map below presents the total carbon stocks in Seychelles and the percent of carbon in protected areas. The total carbon stocks is 0.0 Tg C from aboveground biomass (AGB), with 44.9% in protected areas; 0.1 Tg C from below ground biomass (BGB), with 44.9% in protected areas; 9.9 Tg C from soil organic carbon (SOC), with 60.3% in protected areas; and 9,132.0 Tg C from marine sediment carbon, with 35.2% in protected areas.



Carbon Stocks in Seychelles

Water

Forests and intact ecosystems support stormwater management and clean water availability, especially for large urban populations. Research that has examined the role of forests for city drinking water supplies shows that of the world's 105 largest cities, more than 30% (33 cities) rely heavily on the local protected forests, which provide ecosystem services that underpin local drinking water availability and quality (Dudley & Stolton, 2003).

Drinking water supplies for cities in Seychelles may similarly depend on protected forest areas within and around water catchments. Intact catchments can support more consistent water supply and improved water quality.

Opportunities for action

For carbon, there is opportunity for Seychelles to focus on effective management for PAs in both marine and terrestrial areas with high carbon stocks, as identified in the map above. Protecting areas with high carbon stocks secures the benefits of carbon sequestration in the area.

For water, there is opportunity to increase the area of the water catchment under protection by PAs and OECMs, or in cases where there is high levels of protection, focus on effective management for these areas. Protecting the current area of forested land and potentially reforesting would have benefits for improving water security.

CONNECTIVITY & INTEGRATION

Two global indicators, the Protected Connected land indicator (ProtConn; EC-JRC, 2021; Saura et al., 2018) and the PARC-Connectedness indicator (CSIRO, 2019), have been proposed for assessing the terrestrial connectivity of PA and OECM networks. To date there is no global indicator for assessing marine connectivity, though some recent developments include proposed guidance for the treatment of connectivity in the planning and management of MPAs (see Lausche et al., 2021).

Protected Connected Land Indicator (Prot-Conn)

As of January 2021, as reported in the Joint Research Centre of the European Commission's Digital Observatory for Protected Areas (DOPA) (JRC, 2021), the coverage of protected-connected lands (a measure of the connectivity of terrestrial protected area networks, assessed using the ProtConn indicator) in Seychelles was 60.2%.

PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Seychelles is 0.59. This represents no significant change since 2010.

Corridor case studies

There is national effort in Seychelles under an ongoing Ridge to Reef Project that is looking to identify terrestrial corridors (see also general details on conserving connectivity through ecological networks and corridors in Hilty et al 2020).

Opportunities for action

There is opportunity to focus on PA and OECM management for enhancing and maintaining connectivity. Improving connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation. There is also opportunity to continue implementation of the Ridge to Reef Project that is looking to identify terrestrial corridors.

As well, a range of suggested steps for enhancing and supporting integration are included in the voluntary guidance on the integration of PAs and OECMs into the wider land- and seascapes and mainstreaming across sectors to contribute, inter alia, to the SDGs (Annex I of COP Decision 14/8).

GOVERNANCE DIVERSITY

There is a lack of comprehensive global data on governance quality and equity in PAs and OECMs. Here, we provide data on the diversity of governance types for reported PAs and OECMs.

Generally, most protected areas are under Government governance, but with new designations on the marine side, there is supposed to be increased governance of PAs by non-state actors. Seychelles also currently has two Privately owned Protected areas namely Aride Island Special Reserve and Cousin Island Special Reserve. Figures have not yet been updated in the WDPA to reflect this.

As of May 2021, PAs in Seychelles reported in the WDPA have the following governance types:

- 96.1% are governed by **governments**
  - 96.1% by federal or national ministry or agency
  - 0.0% by sub-national ministry or agency
  - 0.0% by government-delegated management
- 0.0% are under **shared** governance
- 0.0% are under **private** governance
- 0.0% are under **IPLC** governance
  - 0.0% by Indigenous Peoples
  - 0.0% by local communities
- 3.9% **do not** report a governance type

OECMs

As of May 2021, there are **0** OECMs in Seychelles reported in the WD-OECM, therefore there is no data available on OECM governance types.

Privately Protected Areas (PPAs)

Seychelles does currently have two Privately-owned Protected areas:

- Aride Island Special Reserve
- Cousin Island Special Reserve

Territories and areas conserved by Indigenous Peoples and local communities (ICCAs)

There is currently no data available on ICCAs for Seychelles (see Kothari et al., 2012 and the ICCA Registry for further details).

Other Indigenous lands

There is currently no data available on lands managed and/or controlled by Indigenous Peoples in Tuvalu (Seychelles Garnett et al 2018 for details).

Opportunities for action

Explore opportunities for governance types that have lower representation, for Seychelles this could relate to shared governance, etc. Increase efforts to identify the governance types for the 3.9% of sites that do not have their governance type reported.

There is also opportunity for Germany to complete governance and equity assessments, to establish baselines and identify relevant actions for improvement. Examples of existing tools and methodologies include: Governance Assessment for Protected and Conserved Areas (Franks & Brooker, 2018), Social Assessment of Protected Areas (Franks et al 2018), and Site-level assessment of governance and equity (IIED, 2020). As well, a range of suggested actions are included in the voluntary guidance on effective governance models for management of protected areas, including equity (Annex II of COP Decision 14/8).

PROTECTED AREA MANAGEMENT EFFECTIVENESS

This section provides information on the coverage of PAs and OECMs with completed protected area management effectiveness (PAME) assessments as reported in the global database (GD-PAME). The proportion of terrestrial and marine PAs with completed PAME assessments is also calculated and compared with the 60% target agreed to in COP-10 Decision X/31. Information is also included regarding changes in forest cover nationally within PAs and OECMs.

Protected area management effectiveness (PAME) assessments

As of May 2021, Seychelles has 51 PAs reported in the WDPA; of these PAs, 6 (11.8%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

- 34.4% (167 km^2) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
  - 55.8% of the area of terrestrial PAs have completed evaluations.
- 0.2% (2,435 km^2) of the marine area of the country is covered by PAs with completed management effectiveness evaluations.
  - 0.6% of the area of marine PAs have completed evaluations.

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has not** been met for terrestrial PAs and **has not** been met for marine PAs.

This figure is being updated with a new generation of management plans that are being developed as part of the Marine spatial plan implementation plan. The figures will be updated once the national exercise is completed.

As of May 2021, there are 0 OECMs in Seychelles reported in the WD-OECM and no information available on the management effectiveness of potential OECMs.

Changes in forest cover in protected areas and OECMs

Forested areas in Seychelles cover approximately 1.0% of the country, an area of 4.5 km^2. Approximately 100% (4.5 km^2) of this is within the protected area estate of Seychelles. Over the period 2000-2020 loss of forest cover amounted to over 0.0 km^2, or 0.0%, of which 0.0 km^2 (0.0%) occurred within protected areas. The map below shows how forest cover has changed in Seychelles from 2000-2020 both inside and outside of PAs. This can indicate how effective PAs are in reducing forest cover loss.

Opportunities for action

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has not** been met for terrestrial PAs and **has not** been met for marine PAs.

Therefore, there is opportunity to increase protected area management effectiveness (PAME) evaluations for both terrestrial and marine PAs to achieve the target. There is opportunity to update the figures in the GD-PAME once the national exercise (with a new generation of management plans that are being developed as part of the Marine spatial plan implementation plan) is completed.

There is also opportunity to implement the results of completed PAME evaluations, to improve the quality of management for existing PAs and OECMs (e.g. through adaptive management and information sharing, increasing the number of sites reporting 'sound management') and to increase reporting of biodiversity outcomes in PAs and OECMs.

SECTION II: EXISTING PROTECTED AREA AND OECM COMMITMENTS

NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

Seychelles has submitted an NBSAP during the Strategic Plan for Biodiversity 2011-2020 (most recent NBSAP is available at: https://www.cbd.int/nbsap/search/).

Objective 3.1: To protect through a network of viable, ecologically representative and effectively managed Protected Areas at least 50% of terrestrial areas, 17% of inland waters and 17% and 10 percent of coastal and marine areas

This NBSAP **did** include a quantitative target for **terrestrial** PAs or OECMs.

- As of May 2021 (based on the WDPA/WD-OECM) has the target been met: **YES**

This NBSAP **did** include a quantitative target for **marine** protected areas or OECMs.

- As of May 2021 (based on the WDPA/WD-OECM) has the target been met: **YES**

Actions from the NBSAP will also address other elements of Aichi Biodiversity Target 11:

NBSAP Action number	Action (original language from NBSAP)
1.1.1.	Generate 1st draft and review through stakeholder consultation
1.1.2-5	Finalise 2nd draft for approval by stakeholders, Environment Department and AG's office, amend as necessary; Submit to executive and legislative approval mechanisms, amend as necessary; Commence PE&A campaign to advise public and stakeholders of the timeline for the coming into force of the legislation and its ramifications; Gazette legislation
2.1.1-3	Desk review and collation of maps on current PAs; Desk study of Seychelles Biodiversity and occurrence of endemic and threatened species; Collate information and mapping of spatial information on biodiversity; (To optimise the representative nature and viability of biodiversity covered by the PAN utilising best current information)
2.1.4	Present and amend information through iterative process of stakeholder consultation

NBSAP Action number	Action (original language from NBSAP)
2.1.5.	Define targets and map priority areas for PA expansion using biodiversity conservation planning methodologies and MARXAN software package (To optimise the representative nature and viability of biodiversity covered by the PAN utilising best current information)
3.1.1.	Establish a cooperative governance structure incorporating all PA stakeholders to steer the implementation of the National PA policy and development of standardised measures for the PA planning cycle (identification, justification, designation) review and assessment
3.1.2.-4	Review biodiversity status of each PA and assess specific contributions each can make to the national conservation and sustainable use of Biodiversity; Review existing PA management plans and their status of implementation; Develop standardised format for PA management plans – including: - findings from PA Sustainable Financing project, - X-Referencing international commitments, - robust adaptive management procedures.
3.1.5	Develop through stakeholder consultation new management plans for all PAs; Develop and implement a programme of PA staff training for management, administration of cooperative governance
4.1.1	Financing Seychelles Protected Area management
11.1.3	Incorporate key wetlands not currently protected into the PAN to form a national network of representative managed and protected wetlands
20.1.4.	Identify priority habitats and key exemplars for pilot projects (Develop and implement a programme of PA staff training for management, administration of cooperative governance)

APPROVED GEF-5, GEF-6, & GCF PROTECTED AREA PROJECTS

Approved GEF-5 and GEF-6 PA-related biodiversity projects

This includes biodiversity projects from the fifth and sixth replenishment of the Global Environment Facility (GEF-5 and GEF-6) with a clear impact of the quantity or quality of PAs; also including some projects occurring within the wider landscapes/seascapes around PAs. Only those with a status of 'project approved' or 'concept approved' as of June 2019 were considered. The qualifying elements likely benefiting from each GEF project is assessed based on a keyword search of Project Identification Forms (PIF). Where spatial data for the proposed PAs was available, further details (based on an analysis by UNDP) regarding their impacts for ecological representation, coverage of KBAs, and coverage of areas important for carbon storage is included.

GEF ID	PA increase?	Area to be added (km^2)	Type of new protected area	Qualitative elements potentially benefitting (based on keyword search of PIFs)
4717	Yes	already in WDPA	Marine	All except Connectivity
4717	Yes	6	Terrestrial	All except Connectivity
9563	Yes	Not defined	Marine	Ecologically representative; Effectively managed; Equitably managed; Integration

GEF-6 approved Ridge to Reef project (#9431): project aims to improve connectivity, governance, important biodiversity areas and ecosystem services

Based on spatial data available for GEF project 4717, benefits will arise for several elements of Target 11:

Coverage of Terrestrial and Marine Ecoregions:

- 1 Terrestrial Ecoregion (Granitic Seychelles forests).
  - The increase in coverage of Terrestrial Ecoregions will be 0.57%.

Coverage of KBAs:

- Coverage will improve for 4 KBAs.

Ecosystem services:

- 0.85 % increase in the PA coverage of soil organic carbon (SOC).
- 1.47 % increase in the PA coverage of areas important for SOC.

Approved Green Climate Fund (GCF) Protected Area-related biodiversity projects

The Green Climate Fund's investments listed as approved projects as of May 2021 were considered. The GCF supports paradigm shifts in both climate change mitigation and adaptation that may impact quality of PAs or contribute to better integration within the wider land- and seascapes around PAs. Only projects with result areas for either or both *Forest and Land Use and Ecosystems and Ecosystem Services result areas* were included.

GCF ID	Project theme	Result area	Target 11 element
FP135	Adaptation	Ecosystems and ecosystem services	PA/OECM coverage; Effectively managed; Ecosystem services; Areas important for biodiversity; Equitably managed; Integration

UN OCEAN CONFERENCE VOLUNTARY COMMITMENTS

Voluntary commitments for the UN Ocean Conference are initiatives voluntarily undertaken by governments, the UN system, non-governmental organizations, among other actors—individually or in partnership—that aim to contribute to the implementation of SDG 14 (here we focus in particular on SDG 14.5). The registry of commitments was opened in February 2017, in the lead up to the first UN Ocean Conference (5 to 9 June 2017).

Ocean Actions improving MPA or OECM coverage:

#OceanAction17923: Develop a marine spatial plan for Seychelles' Exclusive Economic Zone, by Ministry of Environment, Energy and Climate Change (Government).

- Area to be added: 0 km^2 [complete]
- Progress report: No progress report submitted (as of March 2021).
- Further details available at: https://oceanconference.un.org/commitments/?id=17923.

#OceanAction19023: Protect 30% of Seychelles marine and coastal waters more than 400,000 square kilometers of improved protection and ocean management, by Ministry of Environment, Energy and Climate Change (Government).

- Area to be added: 0 km^2 [complete]
- Progress report: No progress report submitted (as of March 2021).
- Further details available at: https://oceanconference.un.org/commitments/?id=19023.

OTHER ACTIONS/COMMITMENTS

Leaders' Pledge for Nature

Seychelles **has** signed onto the Leaders' Pledge for Nature.

Political leaders participating in the United Nations Summit on Biodiversity in September 2020, representing 88 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030. By doing so, these leaders are sending a united signal to step up global ambition and encourage others to match their collective ambition for nature, climate, and people with the scale of the crisis at hand.

Seychelles' statement at the 2020 UN Biodiversity Summit mentions PAs, OECMs or corridors:

We are focusing our efforts in developing our blue economy as our catalysts for establishing and supporting management of new protected areas, protecting our carbon stocks and adapting and mitigating against climate change.

High Ambition Coalition for Nature and People

Seychelles **has** joined the High Ambition Coalition for Nature and People.

The High Ambition Coalition for Nature and People (HAC) is an intergovernmental group, co-chaired by France and Costa Rica [currently including 65 countries and the European Commission]. Its objective is to support the adoption of a target aiming to protect 30% of the planet's land and 30% of its oceans by 2030 (30x30 target), within the future global framework of the Convention on Biological Diversity (CBD) for the protection of biodiversity, which is to be adopted at the next COP in China this autumn.

Global Ocean Alliance

Seychelles **has** joined the Global Ocean Alliance: 30by30 initiative.

The Global Ocean Alliance 30by30 is a UK led initiative [currently containing 53 countries as signatories]. Its aim is to protect at least 30% of the global ocean as Marine Protected Areas (MPAs) and Other Effective area-based Conservation Measures (OECMs) by 2030.

Commitments for PAs and OECMs from Other National Policies

Policy document	Ecosystem	Policy text
National Development Plan	Forest ecosystems	Promote energy efficiency and use of renewable energy
Sustainable Development Strategy	Wetland ecosystems	Energy, water & resources conservation
National Development Plan	Coastal ecosystems	Increased conservation of Seychelles land and marine resources
National Development Plan	Coastal ecosystems	Protect 30 percent of marine area through Marine Spatial Plan
National Agricultural Investment Plan	Grasslands & Agricultural systems	Protect agriculture land resources
National Agricultural Investment Plan	Grasslands & Agricultural systems	Construct and rehabilitate barrages and reservoirs that will provide water for agriculture use
Protected Area Plan	Forest ecosystems	Create conditions to effectively conserve 50% of national terrestrial areas
Protected Area Plan	Coastal ecosystems	Implement a system of spatial and temporal conservation-priority zoning for the coastal and marine areas
Protected Area Plan	Coastal ecosystems	Create conditions to effectively conserve and manage 20% of marine area within the EEZ

ANNEX I

FULL LIST OF TERRESTRIAL ECOREGIONS

Ecoregion Name	Area (km^2)	% of Global Ecoregion in Country	% of Country in Ecoregion	Area Protected (km^2)	% Protected in Country
Aldabra Island xeric scrub	159.1	100.0	33.4	29.3	18.4
Granitic Seychelles forests	307.8	100.0	64.7	45.0	14.6

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