



Convention on  
Biological Diversity



# Aichi Biodiversity Target 11 Country Dossier: SENEGAL

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## GLOSSARY

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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
OECD	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-OECD	World Database on Other Effective Area-Based Conservation Measures



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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.

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## EXECUTIVE SUMMARY

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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. 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](mailto: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, terrestrial coverage in Senegal is 52,240 km<sup>2</sup> (26.4%) and marine coverage is 2,933 km<sup>2</sup> (1.9%).
- **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 when planning new PAs or OECMs.

#### Ecological Representativeness— Terrestrial & Marine

- **Status:** Senegal contains 4 terrestrial ecoregions, 2 marine ecoregions, and 1 pelagic province: the mean coverage by reported PAs and OECMs is 37.1% (terrestrial), 6.0% (marine), and 0.0% (pelagic); 1 marine ecoregion and 1 pelagic province have no coverage by reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Senegal to increase protection in marine ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs, focus on effective management for PAs and OECMs in ecoregions with higher coverage. Ecoregions which currently have no coverage by PAs or OECMs are key areas for action.



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### Areas Important for Biodiversity

- **Status:** Senegal has 21 Key Biodiversity Areas (KBAs): the mean coverage of KBAs by reported PAs and OECMs is 39.2%, while 4 KBAs have no coverage by reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Senegal 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.

### Areas Important for Ecosystem Services

- **Status:** coverage of areas important for ecosystem services: In Senegal, 27.8% of aboveground biomass carbon, 29.7% of belowground biomass carbon, 25.5% of soil organic carbon, 1.7% of carbon stored in marine sediments is covered by PAs and OECMs.
- **Opportunities for action:** for carbon, there is opportunity for Senegal to increase PA and OECM coverage 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 14.8%.
- **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.
- 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:** the most common governance type(s) for reported PAs in Senegal is: 79.0% under Government (77.5% Federal or national ministry or agency; 1.4% Government-delegated management).
- **Opportunities for action:** explore opportunities for governance types that have lower representation, for Senegal this could relate to governance by Indigenous Peoples and/or local communities (IPLC), etc. Increase efforts to identify the governance types for sites that do not have their governance type reported.



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- There is also opportunity for Senegal 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:** 22.3% of terrestrial PAs and 58.7% 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 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

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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 Senegal. Section I of the dossier presents data on the current status of Senegal’s 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 Senegal, in relation to each Target 11 element. The analyses present options for improving Senegal’s area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Senegal’s existing PA and OECMs 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.



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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](http://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](http://www.wcmc.io/WDPA_Manual)), and these should be directed to [protectedareas@unep-wcmc.org](mailto: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](http://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

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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.



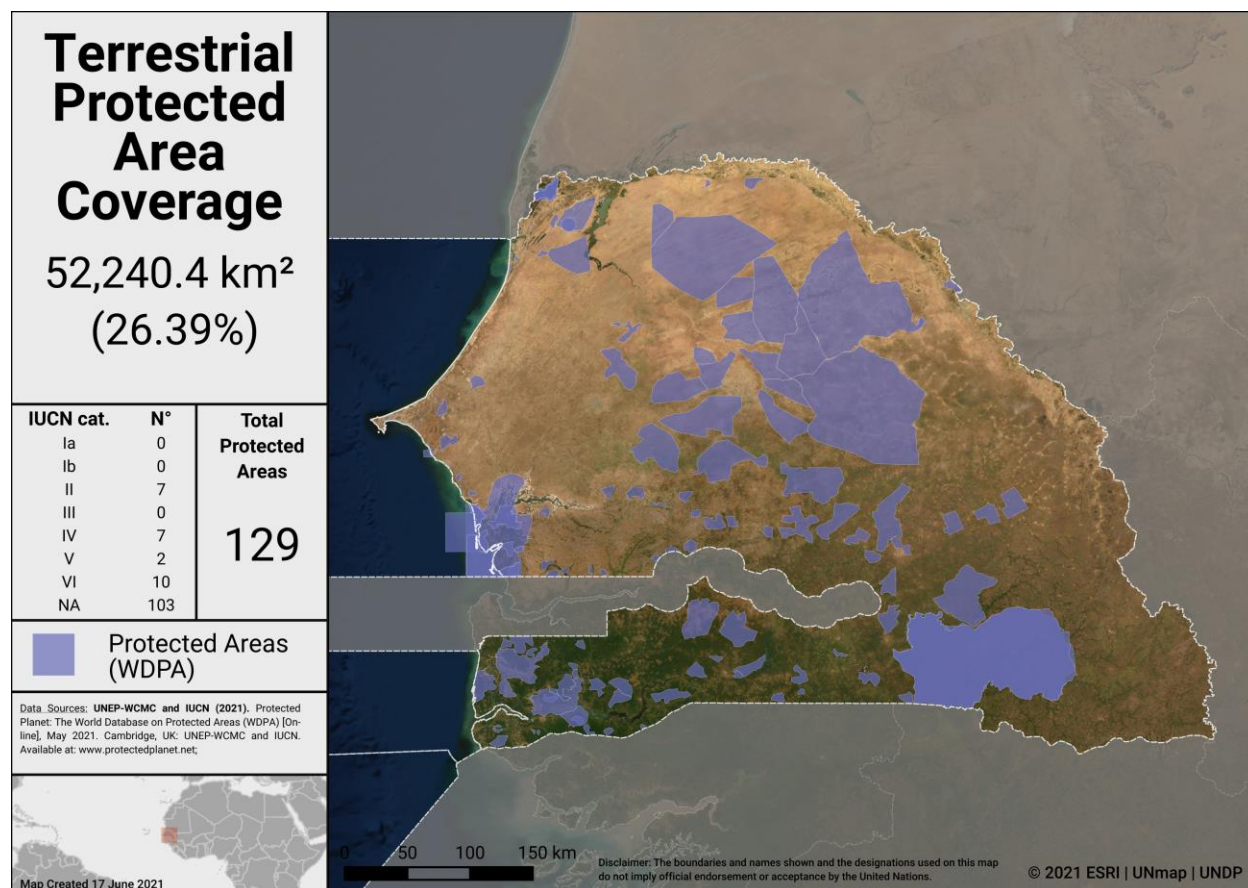
## COVERAGE - TERRESTRIAL & MARINE

As of May 2021, Senegal has **138** 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, and a further 3 UNESCO-MAB Biosphere Reserves, are not included in the following statistics (see details on UNWP-WCMC's methods for calculating PA and OECM coverage [here](#)).

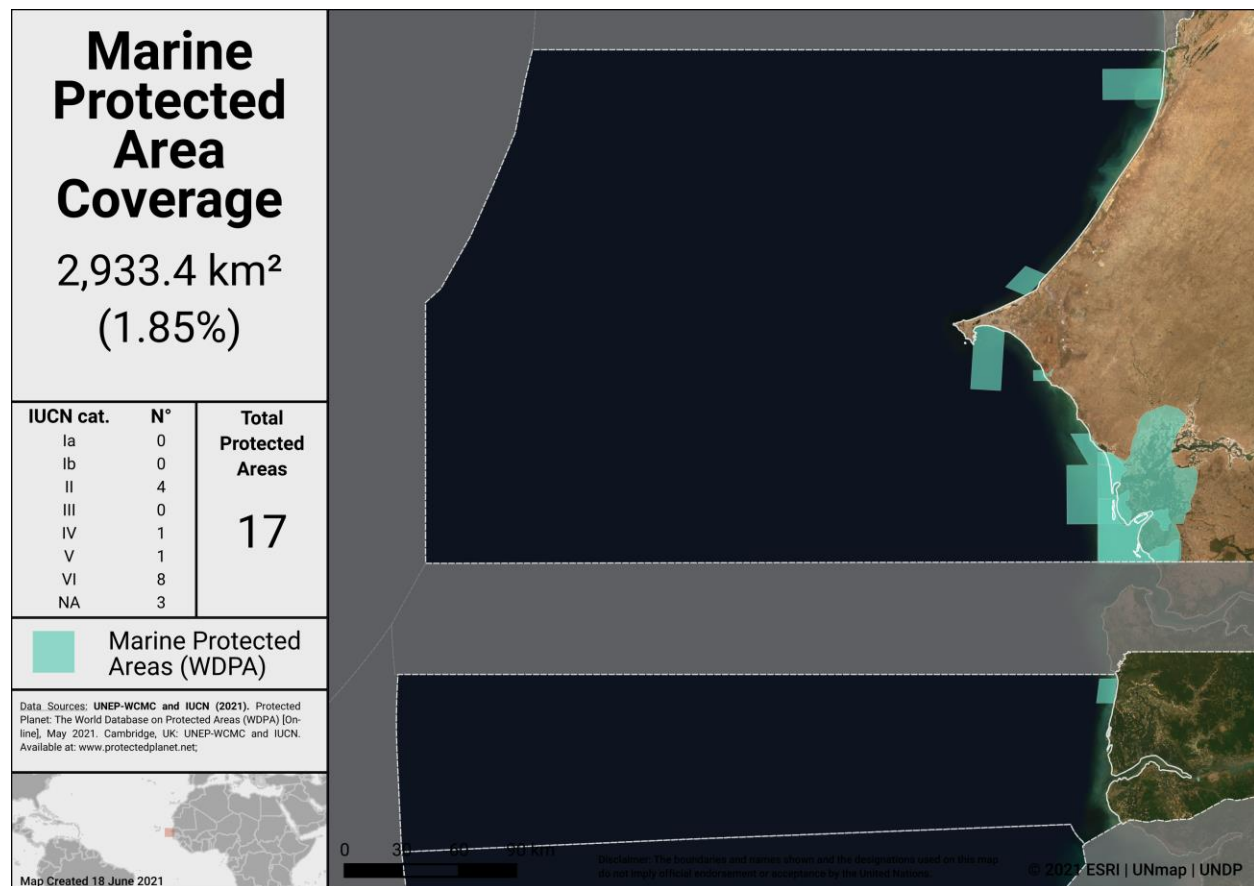
As of May 2021, Senegal has **0** OECMs reported in the world database on OECMs (WD-OECM).

Current coverage for Senegal:

- 26.4% terrestrial (129 protected areas, 52,240 km<sup>2</sup>)
- 1.9% marine (17 protected areas, 2,933 km<sup>2</sup>)



Terrestrial Protected Areas in Senegal



### Marine Protected Areas in Senegal

### Potential OECMs

There are currently no potential OECM examples for Senegal.

### 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, as Senegal considers where to add new PAs and OECMs, the map below identifies areas in Senegal where intact terrestrial areas are not currently protected. Focus on relatively intact areas, while addressing the elements in the following sections, could be considered when planning new PAs or OECMs.



## ECOLOGICAL REPRESENTATIVENESS – TERRESTRIAL & MARINE

Ecological representativeness is assessed 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).

Senegal has 4 **terrestrial** ecoregions. Out of these:

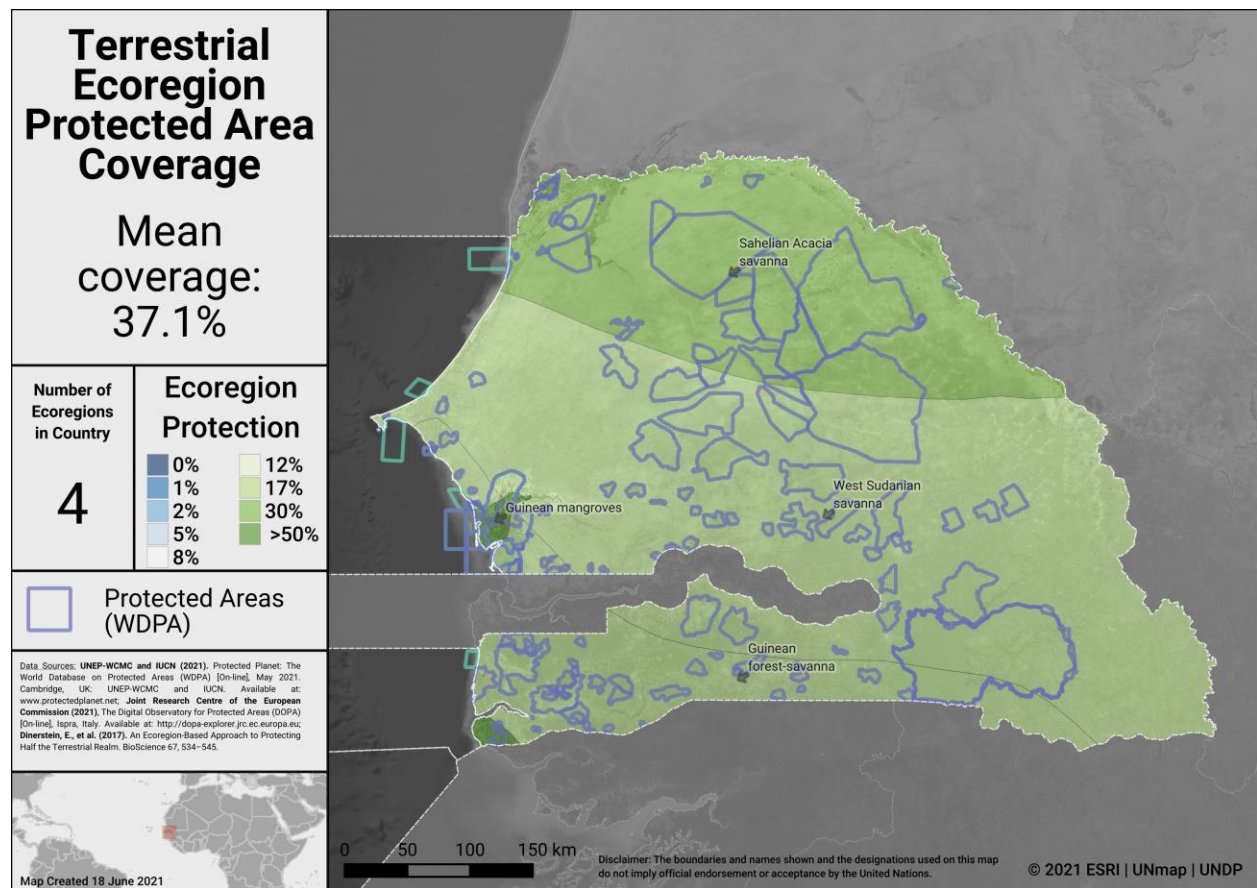
- All 4 ecoregions have >17% protected within the country.
- The average coverage of terrestrial ecoregions is 37.1%.

Senegal has 2 **marine** ecoregions and 1 **pelagic province**. Out of these:

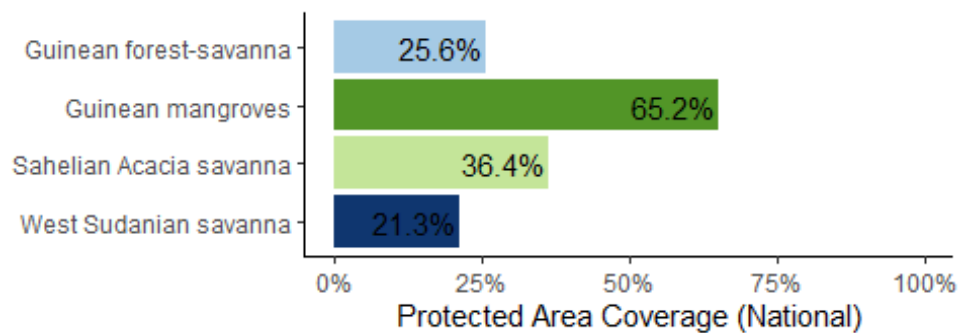
- 1 marine ecoregion and 0 pelagic provinces have at least some coverage from reported PAs and OECMs.
- 1 marine ecoregion and 0 pelagic provinces have at least 10% protected within Senegal's exclusive economic zone (EEZ).
- The average coverage of marine ecoregions is 6.0% and the coverage of the 1 pelagic province is 0.0%

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



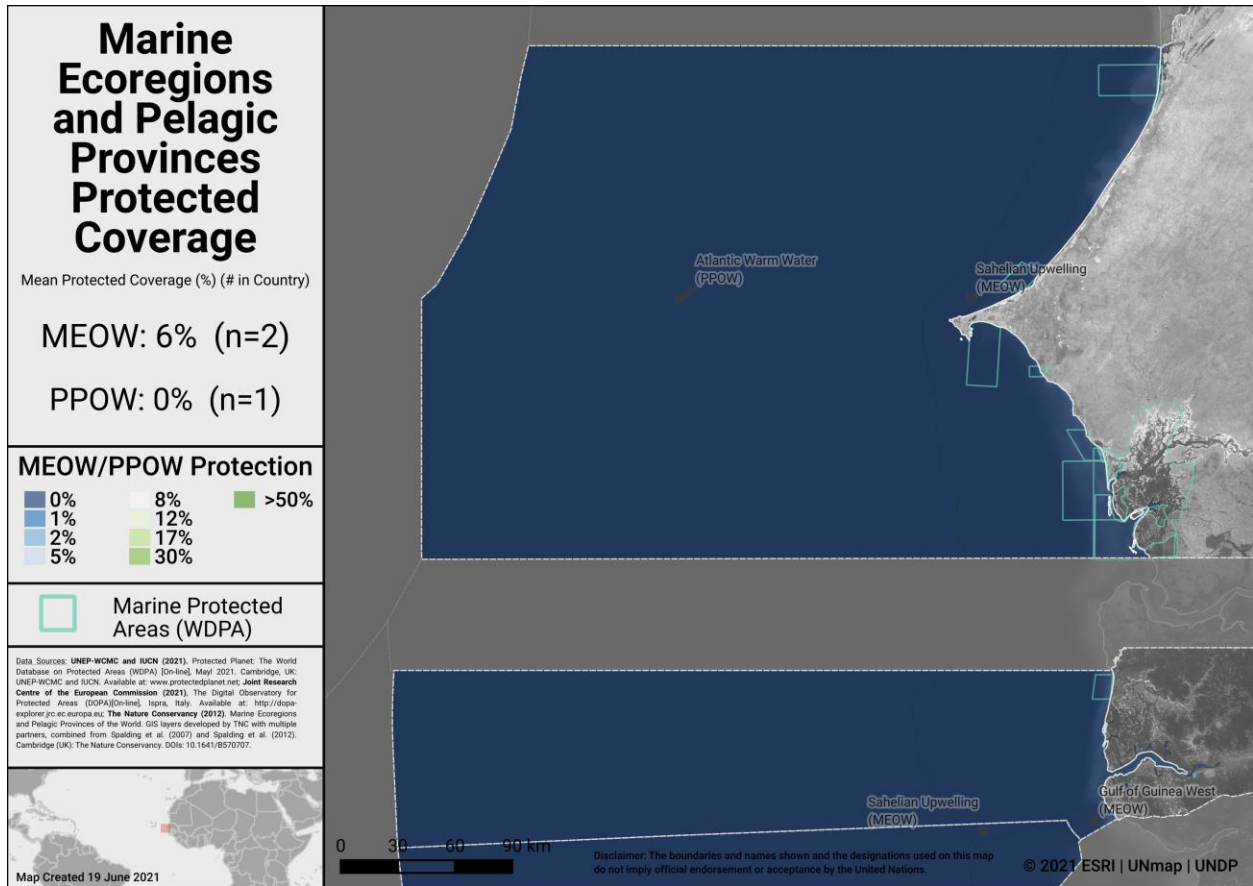


Terrestrial ecoregions in Senegal

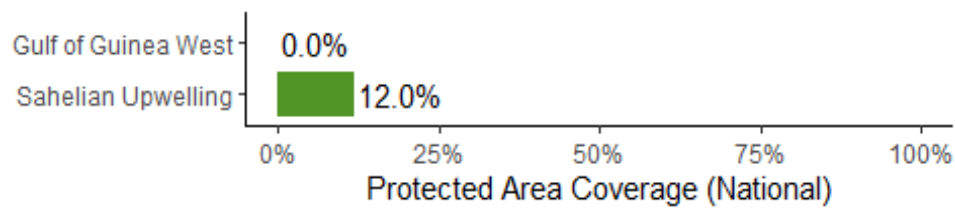


Terrestrial ecoregions of the World (TEOW) in Senegal





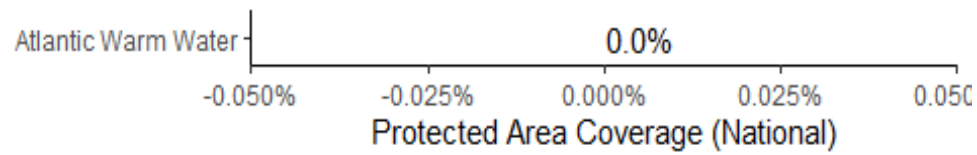
Marine ecoregions and pelagic provinces



Marine Ecoregions of the World (MEOW) in Senegal







Pelagic Provinces of the World (PPOW) in Senegal

### Opportunities for action

There is opportunity for Senegal to increase protection in marine ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs, focus on effective management for PAs and OECMs in ecoregions with higher coverage. Ecoregions which currently have no coverage by PAs or OECMs are key areas for action.



## 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](http://www.keybiodiversityareas.org).

Senegal has **21** Key Biodiversity Areas (KBAs).

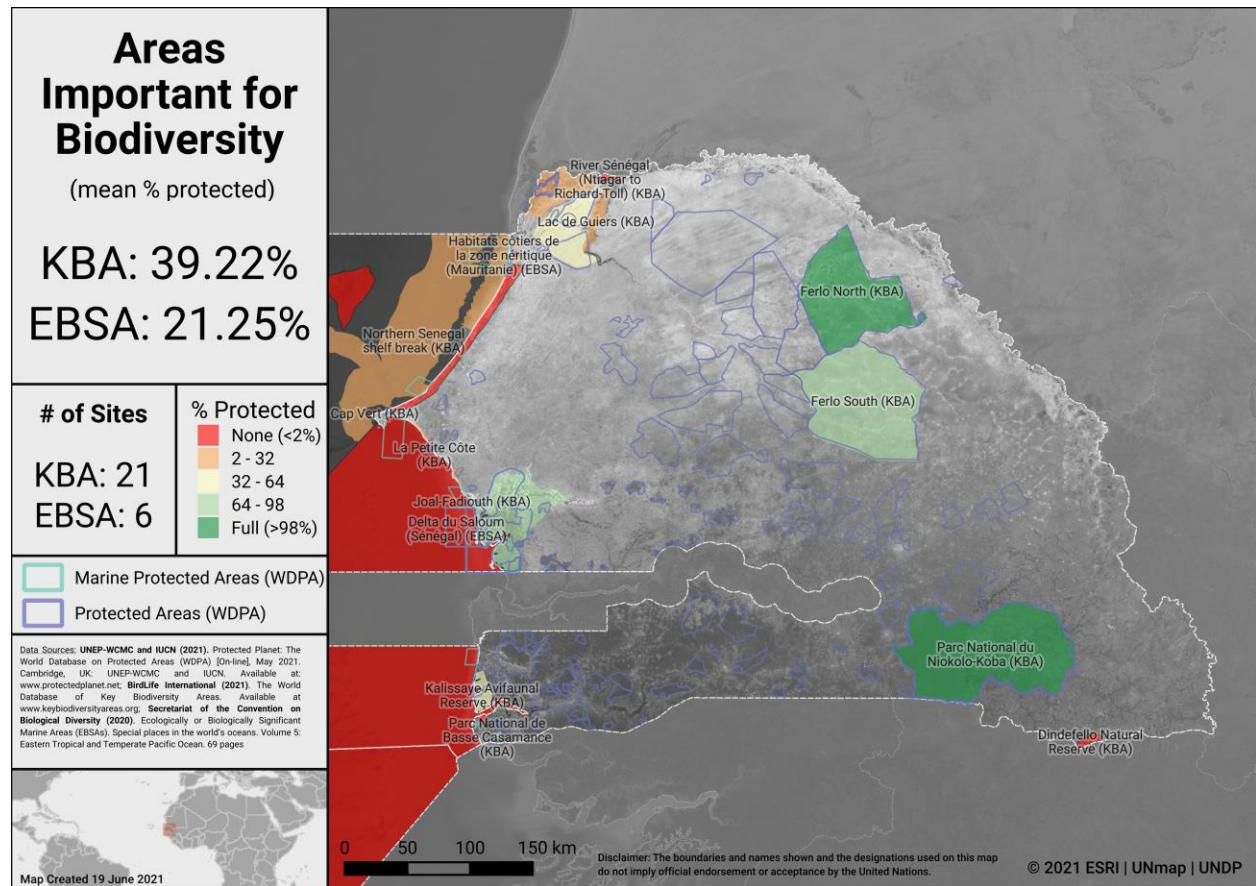
- Mean percent coverage of all KBAs by PAs and OECMs in Senegal is **39.2%**.
- **2** KBAs have full (>98%) coverage by PAs and OECMs.
- **15** KBAs have partial coverage by PAs and OECMs.
- **4** KBAs have no (<2%) coverage by PAs and OECMs.

### Ecologically or Biologically Significant Marine Areas (EBSAs)

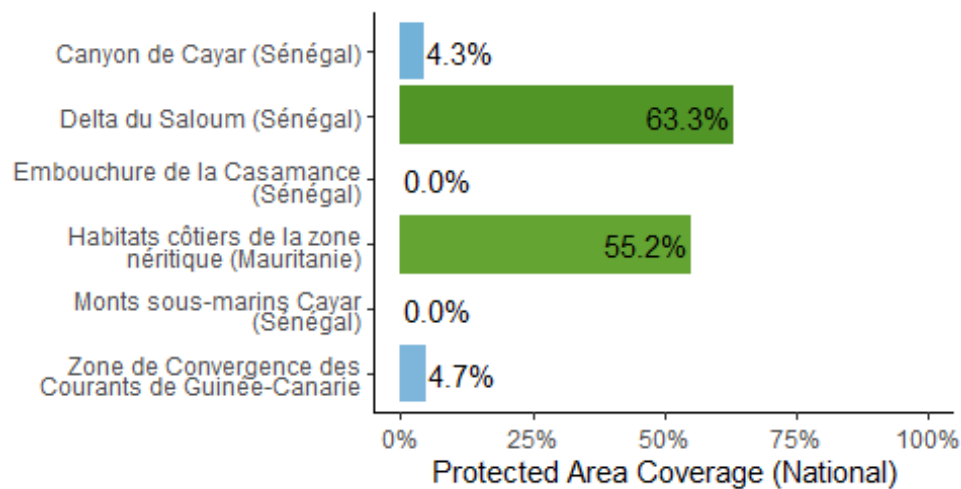
Other important areas for biodiversity may also include Ecologically or Biologically Significant Marine Areas (EBSAs), which were identified following the scientific criteria adopted at COP-9 (Decision IX/20; see more at: <https://www.cbd.int/ebsa/>). Sites that meet the EBSA criteria may require enhanced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

There are 6 EBSAs with some portion of their extent within Senegal's EEZ, of which 2 EBSAs have no coverage from PAs and OECMs.



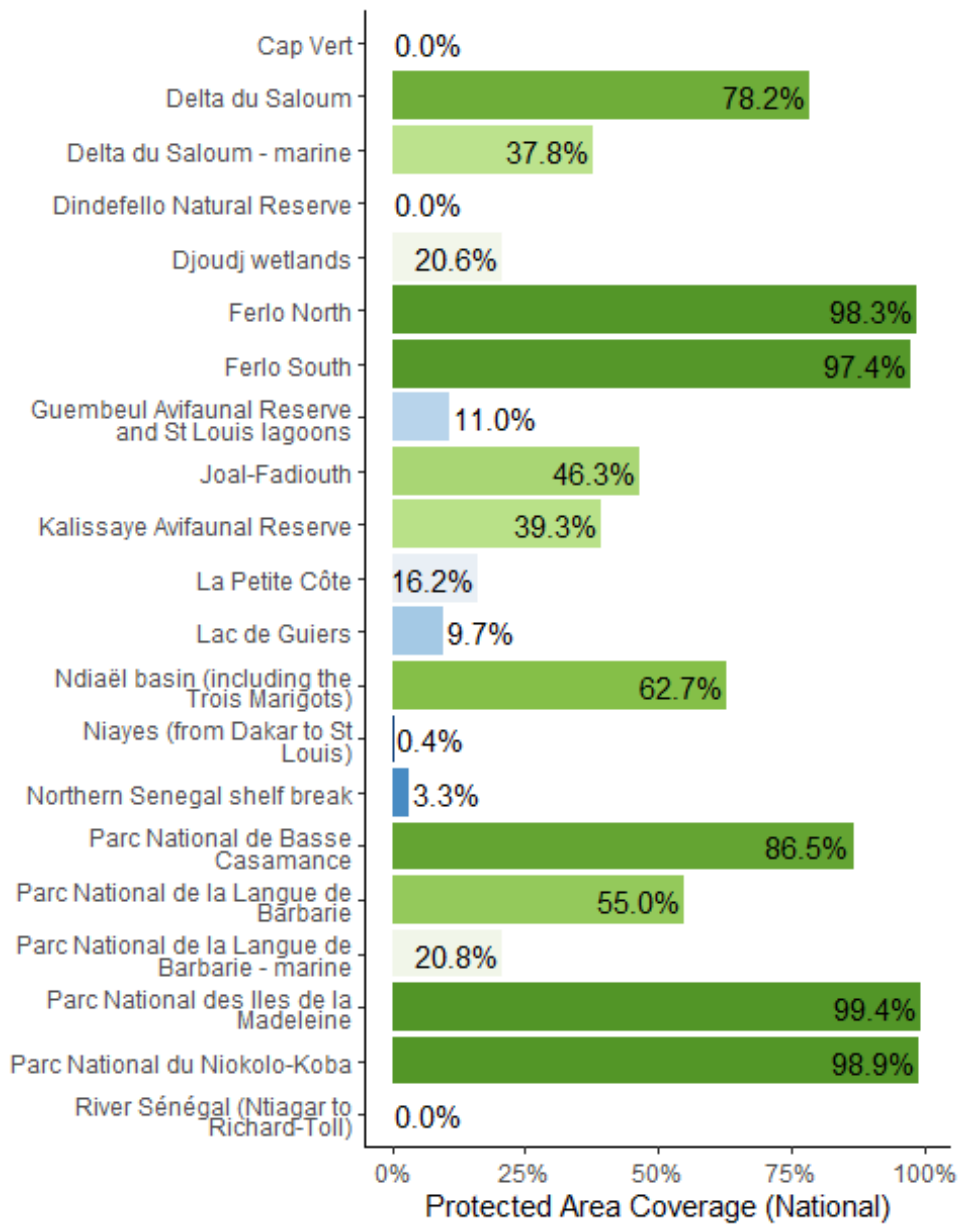


Areas Important for Biodiversity in Senegal



Ecologically or Biologically Significant Marine Areas (EBSAs) in Senegal





Key Biodiversity Area Coverage (KBA) in Senegal

### Opportunities for action

There is opportunity for Senegal 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.



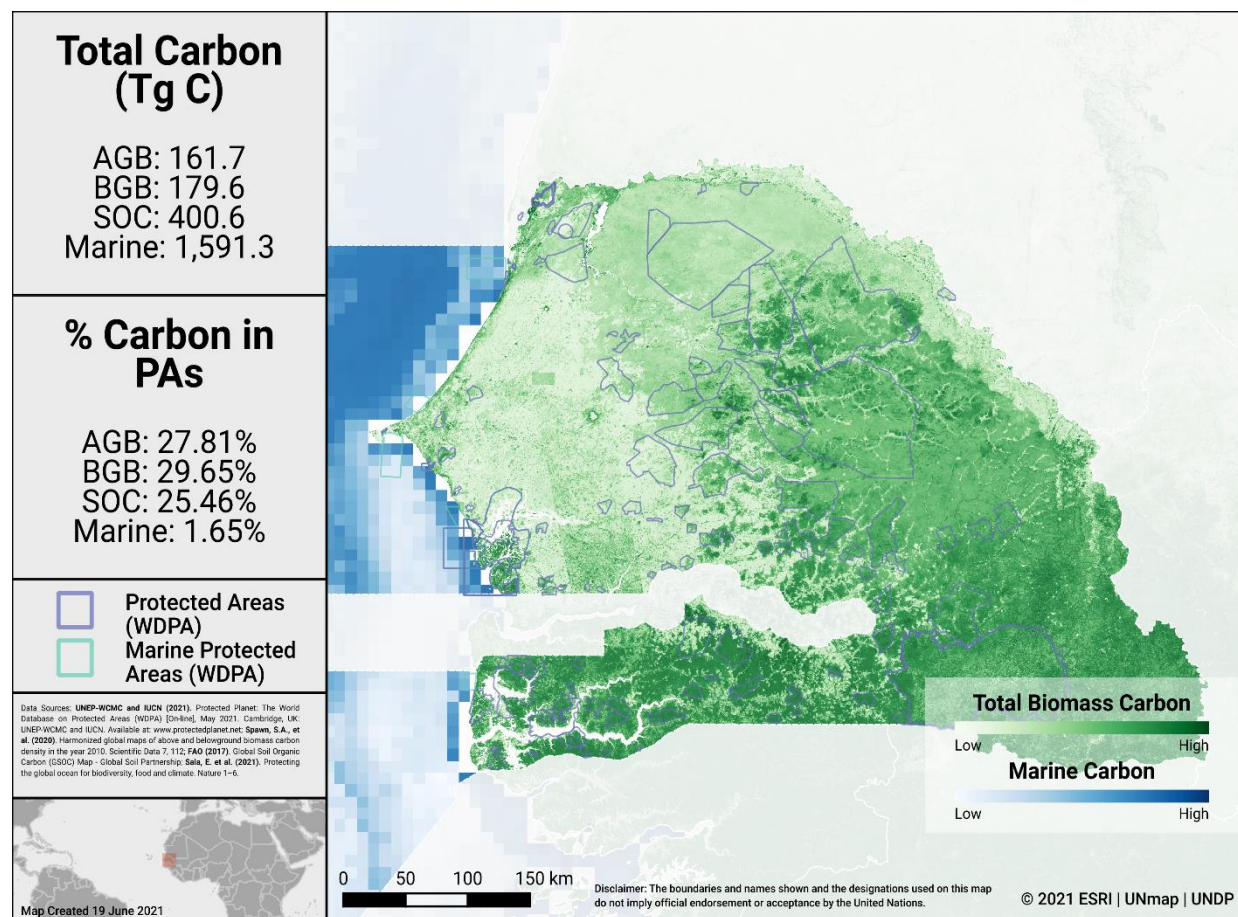
## AREAS IMPORTANT FOR ECOSYSTEM SERVICES

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 Senegal and the percent of carbon in protected areas. The total carbon stocks is 161.7 Tg C from aboveground biomass (AGB), with 27.8% in protected areas; 179.6 Tg C from below ground biomass (BGB), with 29.7% in protected areas; 400.6 Tg C from soil organic carbon (SOC), with 25.5% in protected areas; and 1,591.3 Tg C from marine sediment carbon, with 1.7% in protected areas.



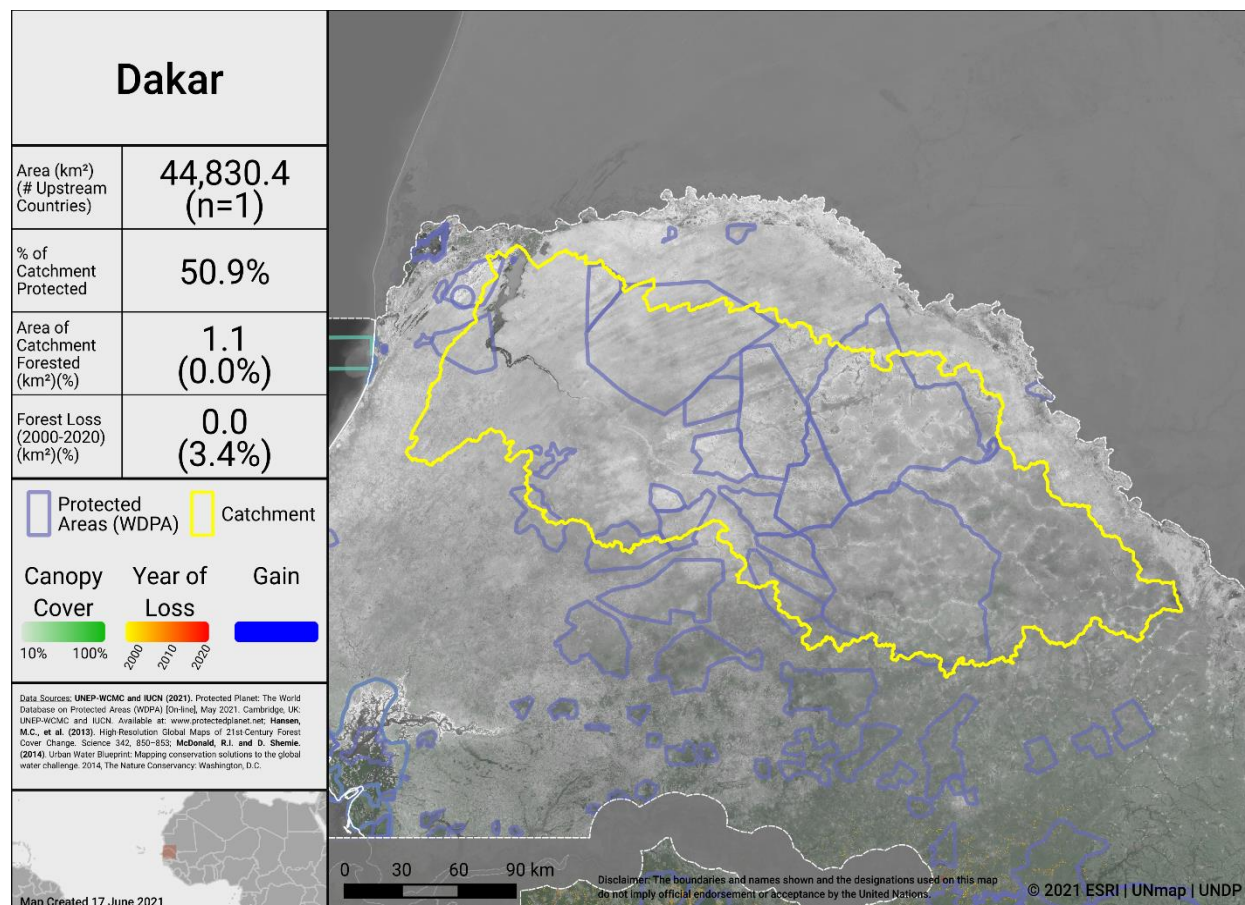
Carbon Stocks in Senegal

Water

Information on the water sources for 534 cities is available via the City Water Map (CWM) and provides details on the catchment area of the watershed that supplies these cities (see McDonald et al., 2014 for details on methodology).

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 Senegal may similarly depend on protected areas within and around water catchments. The map below shows the percentage forest cover and the forest loss from 2000-2020 in the most heavily populated water catchment of Senegal. Intact catchments can support more consistent water supply and improved water quality.



Water catchment in Dakar

### Opportunities for action

For carbon, there is opportunity for Senegal to increase PA and OECM coverage 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 Senegal was 14.8%.

### PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Senegal is 0.45. This represents no significant change since 2010.

### Corridor case studies

There are currently no corridor case studies available for Senegal (but see 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. Increasing connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation.

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.

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

- 79.0% are governed by **governments**
  - 77.5% by federal or national ministry or agency
  - 0.0% by sub-national ministry or agency
  - 1.4% by government-delegated management
- 12.3% are under **shared** governance
  - 0.0% by collaborative governance
  - 12.3% by joint governance
  - 0.0% by transboundary governance
- 0.0% are under **private** governance
- 0.0% are under **IPLC** governance
  - 0.0% by Indigenous Peoples
  - 0.0% by local communities
- 8.7% **do not** report a governance type
  - (All but 1 of these sites are international designations)

### OECMs

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

### Privately Protected Areas (PPAs)

There is currently no data available on PPAs for Maldives (see Gloss et al., 2019, and Stolton et al., 2014 for details) Senegal.

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

From Kothari et al. (2012) potential ICCAs (or similar designation) in Senegal include:

- 33 communal natural reserves (CNR)
  - These cover 7,589.0 km<sup>2</sup>.
  - There may be considerable overlap between government protected areas and Indigenous/community territories.
- Other potential ICCAs include: Several more unrecognized CNRs, and sacred sites

Another example in Senegal includes *Kawawana*, where the Association of Fishermen of the Rural Community Mangagoulack has established an ICCA with no-take zones and other areas of limited fishing to protect local fish stocks. See further case study details in the [ICCA Registry](#).

### Other Indigenous lands

Lands managed and/or controlled by Indigenous Peoples cover an area of 161,601.0 km<sup>2</sup>, of which 116,704.0 km<sup>2</sup> falls outside of formal protected areas. Indigenous lands with a human footprint less than 4 (considered as 'natural landscapes') cover an area of 39,651.0 km<sup>2</sup> (for details on analysis see Garnett et al., 2018).

For Senegal, evidence for the presence of Indigenous Peoples comes from: African Commission on Human and Peoples' Rights & International Work Group for Indigenous Affairs. Report of the African Commission's Working Group of Experts on Indigenous Populations/Communities.

[https://www.iwgia.org/images/publications//African\\_Commission\\_book.pdf](https://www.iwgia.org/images/publications//African_Commission_book.pdf) (2005).

Boundaries of the lands Indigenous Peoples manage or have tenure rights over come from: Harrison, A. Fulfulde Language Family Report (SIL International, 2003).

### Opportunities for action

Explore opportunities for governance types that have lower representation, for Senegal this relates to governance by Indigenous Peoples and/or local communities (IPLC) and private governance. Increase efforts to identify the governance types for sites that do not have their governance type reported.

There is also opportunity for Senegal 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).

### Equator Prize Projects

The Equator Initiative brings together the United Nations, governments, civil society, businesses and grassroots organizations to recognize and advance local sustainable development solutions for people, nature and resilient communities.

The Equator Prize projects provide examples of unique and locally based governance of natural resources. Senegal has the following Equator Prize winners that showcase examples of local, sustainable community action:



Organization	Year	Project Description
Association des Pêcheurs de la Communauté Rurale de Mangagoulack (APCRM, Fishers' Association of the Rural Community of Mangagoulack)	2014	<p>Association des Pêcheurs de la Communauté Rurale de Mangagoulack (APCRM, Fishers' Association of the Rural Community of Mangagoulack) – established by fishers from eight villages in central Casamance – manages a community conserved area with the aim of improving local incomes, strengthening food security and sovereignty, and protecting biodiversity. The association was started in response to declining fish catches and in recognition of the need for a community-driven resource management plan. The tropical estuary ecosystem is now managed through a zoning system based on the traditional zoning practice. In red zones (or sacred groves) fishing is not permitted, in orange zones fishing is limited to local fishers, and in yellow zones fishing is open to all, but there are equipment restrictions (no motorized boats, no monofilament nets) and minimum catch size limits.</p> <p>Once a month, fishers work on behalf of the association, dedicating the sale of their catch towards conservation and surveillance needs. Monitoring shows a 100 percent increase in fish abundance and significant improvements in marine biodiversity since the initiative began. Women in the community have formed an association of shellfish collectors, creating a similar set of rules for management and extraction. The larger association was the first of its kind in Senegal, unique in engaging local and regional governments to legally recognize community fishing rights.</p>
Collectif des Groupements d'Interet Economiques des Femmes pour la Protection de la Nature (COPRONAT, Collective of Women's Groups for the Protection of Nature)	2006	<p>This collective brings together women's groups from communities bordering the Popenguine Nature Reserve, a 1,000-hectare coastal reserve located in the Thies region of Senegal. Since the creation of the reserve in 1986 to prevent overharvesting of marine resources and degradation of mangrove forests, the park's authorities have sought to involve local communities in its management. Volunteer groups of women began forming to help reforest sections of mangrove forest in the late-1980s, eventually leading to the creation of COPRONAT in 1996.</p> <p>Comprising more than 1,500 women organized in economic interest groups (Groupements d'Intérêts Economiques) in eight villages, the collective's work has focused on rehabilitating ecosystems and resources that underpin the local economy. Its successes have included the creation of the co-managed Community Nature Reserve of Somone, and the operation of revolving credit funds that catalyze alternative livelihood activities such as ecotourism.</p>



Photo from the Equator Prize Winner:



## 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, Senegal has 138 PAs reported in the WDPA; of these PAs, 16 (11.6%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

- 5.9% (11,639 km<sup>2</sup>) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
  - 22.3% of the area of terrestrial PAs have completed evaluations.
- 1.1% (1,722 km<sup>2</sup>) of the marine area of the country is covered by PAs with completed management effectiveness evaluations.
  - 58.7% 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.

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

### 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 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

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### PRIORITY ACTIONS FROM 2015-2016 REGIONAL WORKSHOPS

National priority actions for Aichi Biodiversity Target 11 were provided by Parties following a series of regional workshops in 2015 and 2016. The Capacity-building workshop for Africa on achieving Aichi Biodiversity Targets 11 and 12 took place 21 - 24 March 2016 in Entebbe, Uganda. Progress towards the quantitative targets for marine and terrestrial coverage has been assessed based on data reported in the WDPA and WD-OECM as of 2021. For more information, see the workshop report at:

<https://www.cbd.int/meetings/>

The following actions were identified during the workshops:

**Terrestrial coverage:** Create new community nature reserves and areas of Aboriginal and community heritage [*No area provided*].

**Marine coverage:** Create new marine protected areas [*several sites were added in 2020*].

**Ecological representation:** Undertake an ecological gap analysis of the national PA system - taking into account the different ecoregions.

#### **Areas Important for biodiversity and ecosystem services:**

- 1) Strengthen the capacity of stakeholders in the field of economic evaluation of ecosystems
- 2) Develop a national TEEB Senegal and publish widely among decision makers.

#### **Connectivity:**

- 1) Rehabilitate wildlife migration corridors
- 2) Strengthening the scientific and technical capacity of the institutions responsible for the collection, monitoring and processing of data on genes, species and ecosystems
- 3) Implement a national inventory program of biological resources in priority sites. This program will initially have a good baseline and then to ensure regular monitoring of ecosystems and species to better appreciate their dynamics in a changing climate
- 4) Refresh the country study on biodiversity.

#### **Management effectiveness:**

- 1) Complete a comprehensive national assessment of the management effectiveness of all PA classes



- 2) Complete a wildlife inventory, and annually assess the implementation of state of the PoWPA
- 3) Validate and implement the National Strategy for Protected Areas Management
- 4) Redistricting PAs on the basis of an inventory
- 5) redefining PA categorization based on IUCN classes.
- 6) Promote the establishment of a framework law on biodiversity
- 7) Support the operation of the Scientific and Technical Advisory Board on MPAs (CCST / AMP).

**Governance and Equity:** Promote the establishment of a framework law on biodiversity.

**Integration into the wider landscape and seascape:** No actions were identified for this element of Target 11.

**OECMs:**

- 1) Support communities in the management and operation of community areas,
- 2) Sensitize local authorities on the opportunities of community areas
- 3) Revalue and promote traditional knowledge.



## NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

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

*Target 5: By 2025, a better connectivity of the protected area system is put in place and the country's genetic diversity permanently conserved*

*Line of Action B. 2.1. Strengthening the network of protected areas*

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

NBSAP Action number	Action (original language from NBSAP)	Action (English translation)
28	Elaborer des plans de gestion des aires protégées	Develop protected areas management plans
33	Valider et mettre en oeuvre la Stratégie Nationale de Gestion des Aires Protégées	Validate and implement the National Strategy for Protected Areas Management
34	Créer de nouvelles aires protégées	Creating new protected areas
79	Promouvoir les initiatives communautaires et privées de création de réserves animalières	Promote community and private initiatives to create game reserves

## APPROVED GEF-5 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).

GEF ID	PA increase?	Area to be added (km <sup>2</sup> )	Qualitative elements potentially benefitting (based on keyword search of PIFs)
5371	No	N/A	All except Connectivity



## OTHER ACTIONS/COMMITMENTS

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

*Senegal is committed now, more than ever, to the fight against the degradation of its biodiversity. First of all, through the National Biodiversity Strategy and Action Plan launched in 1998, which allowed for the creation of vast networks of protected areas.*

### High Ambition Coalition for Nature and People

Senegal **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

Senegal **has** joined the Global Ocean Alliance: 30by30 initiative

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.



## ANNEX I

### FULL LIST OF TERRESTRIAL ECOREGIONS

<b>Ecoregion Name</b>	<b>Area (km<sup>2</sup>)</b>	<b>% of Global Ecoregion in Country</b>	<b>% of Country in Ecoregion</b>	<b>Area Protected (km<sup>2</sup>)</b>	<b>% Protected in Country</b>
Guinean forest-savanna	26,665.3	4.0	13.5	6,834.6	25.6
Guinean mangroves	1,576.4	6.7	0.8	1,028.1	65.2
Sahelian Acacia savanna	54,199.9	1.5	27.5	19,713.5	36.4
West Sudanian savanna	114,610.7	7.0	58.2	24,433.0	21.3



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