



Convention on
Biological Diversity



Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

With generous support from:



DEUTSCHE ZUSAMMENARBEIT

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



UK Government



WCMC



Global Partnership on
AICHI TARGET 11



TABLE OF CONTENTS

GLOSSARY	3
EXECUTIVE SUMMARY	5
<i>Aichi Biodiversity Target 11 Elements: Current status and opportunities for action</i>	5
INTRODUCTION	8
SECTION I: CURRENT STATUS	10
<i>COVERAGE - TERRESTRIAL & MARINE</i>	11
<i>ECOLOGICAL REPRESENTATIVENESS – TERRESTRIAL & MARINE</i>	14
<i>AREAS IMPORTANT FOR BIODIVERSITY</i>	19
<i>AREAS IMPORTANT FOR ECOSYSTEM SERVICES</i>	27
<i>CONNECTIVITY & INTEGRATION</i>	30
<i>GOVERNANCE DIVERSITY</i>	31
<i>PROTECTED AREA MANAGEMENT EFFECTIVENESS</i>	36
SECTION II: EXISTING PROTECTED AREA AND OECM COMMITMENTS	38
<i>PRIORITY ACTIONS FROM 2015-2016 REGIONAL WORKSHOPS</i>	38
<i>NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)</i>	39
<i>APPROVED GEF-5 & GEF-6 PROTECTED AREA PROJECTS</i>	41
<i>UN OCEAN CONFERENCE VOLUNTARY COMMITMENTS</i>	42
<i>OTHER ACTIONS/COMMITMENTS</i>	44
ANNEX I	45
<i>ADDITIONAL DETAILS ON POTENTIAL OECMs</i>	45
ANNEX II	47
<i>FULL LIST OF TERRESTRIAL ECOREGIONS</i>	47
ANNEX III	48
<i>ADDITIONAL DETAILS ON PPAs</i>	48
REFERENCES	49



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
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



4 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

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.

This publication may be reproduced for educational or non-commercial purposes without special permission from the copyright holders, provided acknowledgement of the source is made. The SCBD and UNDP would appreciate receiving a copy of any publications that use this document as a source.



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. 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, terrestrial coverage in Philippines is 51,650.3 km² (17.3%) and marine coverage is 66,416.5 km² (3.4%).
- **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:** Philippines contains 13 terrestrial ecoregions, 5 marine ecoregions, and 1 pelagic province: the mean protected coverage by reported PAs and OECMs is 17.9% (terrestrial), 16.6% (marine), and 0.6% (pelagic); 4 terrestrial ecoregions and 1 marine ecoregion have no coverage by reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Philippines to increase protection in terrestrial and marine ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs. Ecoregions which currently have no coverage by PAs or OECMs are key areas for action.



6 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

Areas Important for Biodiversity

- **Status:** Philippines has 134 Key Biodiversity Areas (KBAs): the mean protected coverage of KBAs by reported PAs and OECMs is 40.9%, while 50 KBAs have no coverage by reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Philippines 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 Philippines, 21.6% of aboveground biomass carbon, 21.4% of belowground biomass carbon, 22.2% of soil organic carbon, 2.1% of carbon stored in marine sediments is covered by PAs and OECMs.
- **Opportunities for action:** for carbon, there is opportunity for Philippines 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 12.3%.
- **Opportunities for action:** there is opportunity for a targeted increase in connecting PAs or OECMs and 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 Philippines is: 95.6% under Government (Federal or national ministry or agency); the most common governance type(s) for reported OECMs in Philippines is: 70.8% under Government (38.2% by sub-national ministry or agency; 32.6% by government-delegated management).



7 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

- **Opportunities for action:** explore opportunities for governance types that have lower representation. Increase efforts to identify the governance types for the 3.7% of PAs and 17.4% of OECMs that do not have their governance type reported.
- There is also opportunity for Philippines 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:** 10.8% of terrestrial PAs and 5.2% 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

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

9 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

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 buildup 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.



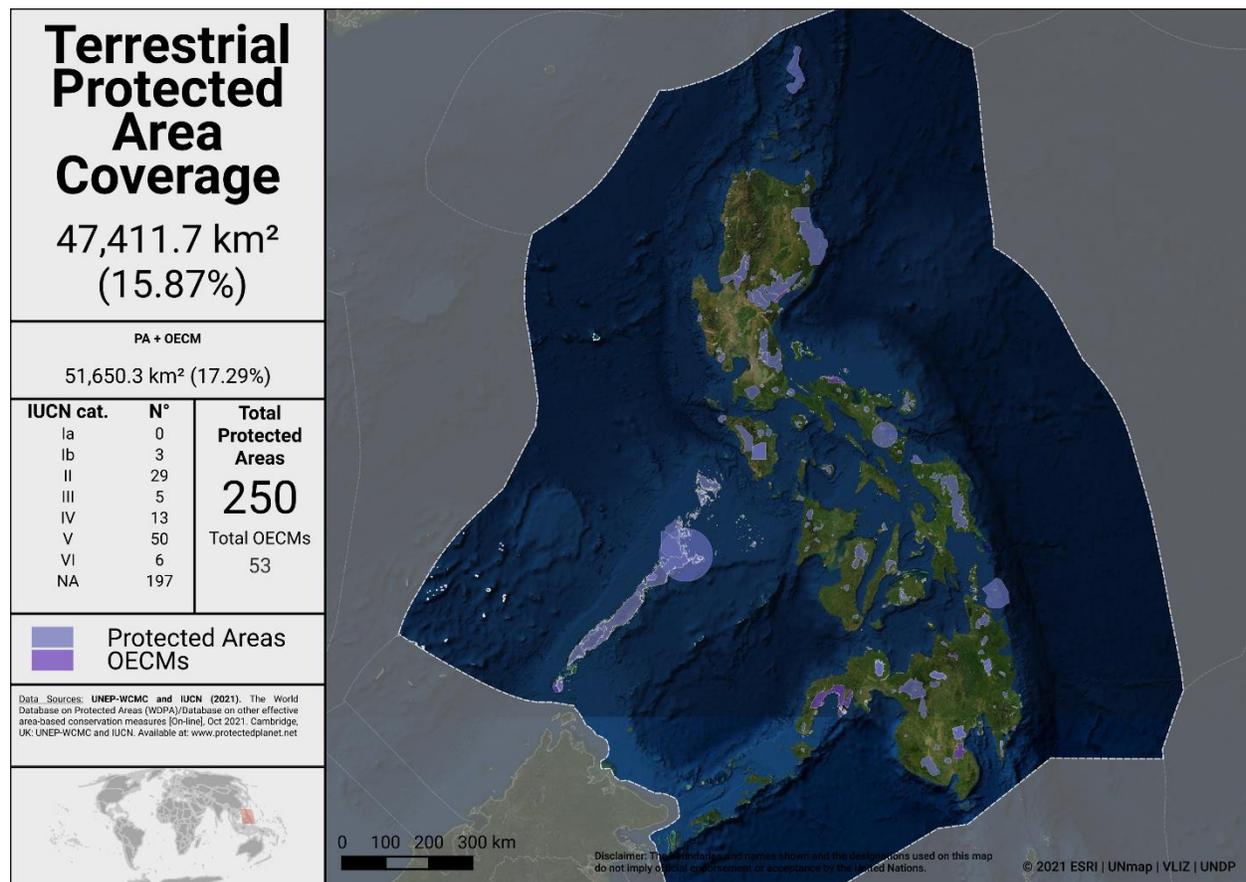
COVERAGE - TERRESTRIAL & MARINE

As of May 2021, Philippines has **273** protected areas reported in the World Database on Protected Areas (WDPA). 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, Philippines has **341** OECMs¹ reported in the world database on OECMs (WD-OECM).

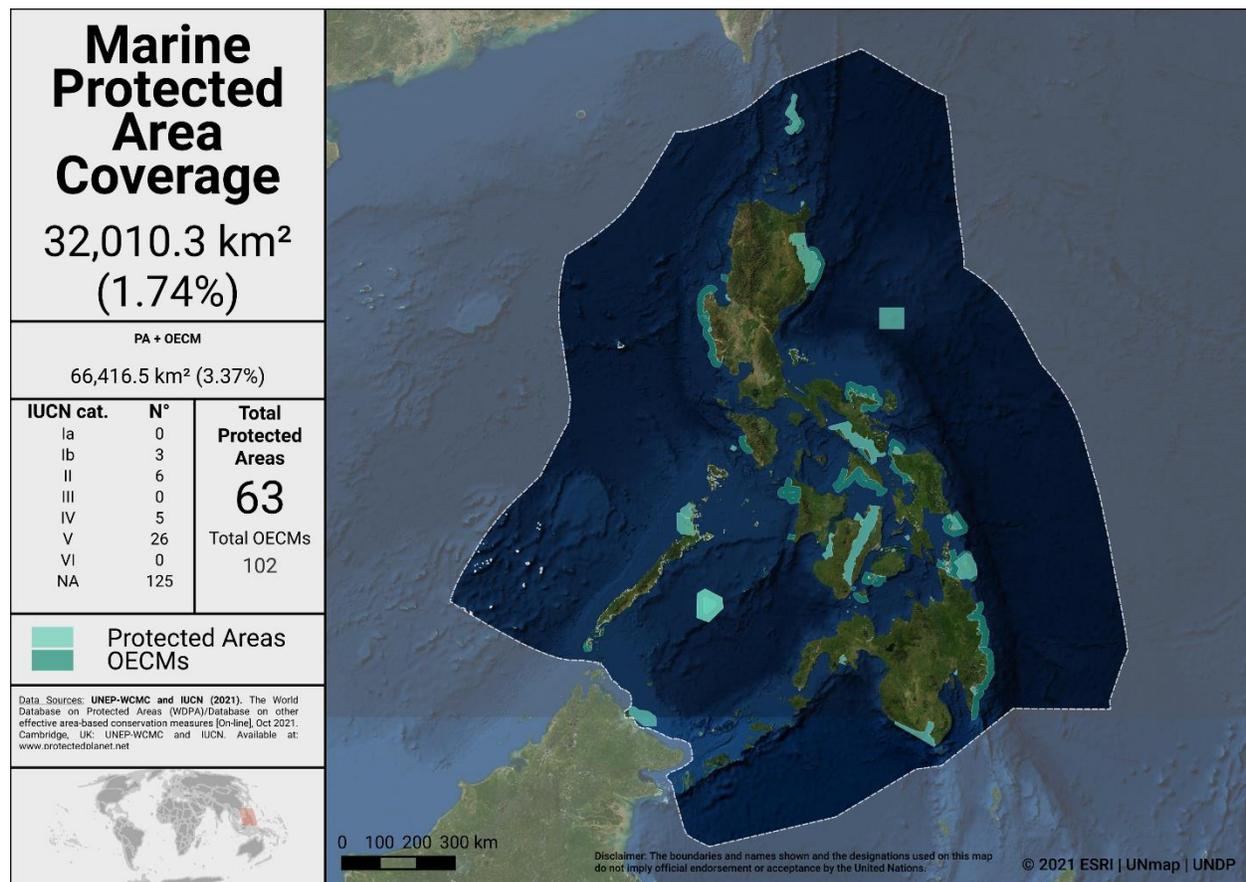
Current coverage for Philippines:

- 17.3% terrestrial (250 PAs, 47,411.7 km²; 53 OECMs, 4,238.6 km²)
- 3.4% marine (63 PAs, 32,010.3 km²; 102 OECMs, 34,406.2 km²)



Terrestrial Protected Areas in Philippines

¹ A geometry error was identified in the data for 163 OECMs in the Philippines. As of August 2021, these OECMs have been removed until the error can be corrected.



Marine Protected Areas in Philippines

Potential OECMs

There are **75** unprotected Key Biodiversity Areas (KBAs) in the Philippines managed in a way consistent with the OECM definition (see Donald et al 2019 for further details, including a full list of sites).

Examples of potential OECMs in Philippines:

Potential OECM example	Area covered
Mount Candalaga Dumut ICCA.	168 km ²
Danjugan Island.	43 ha terrestrial; 200 ha marine
Mount Apo KBA.	>30,000 ha

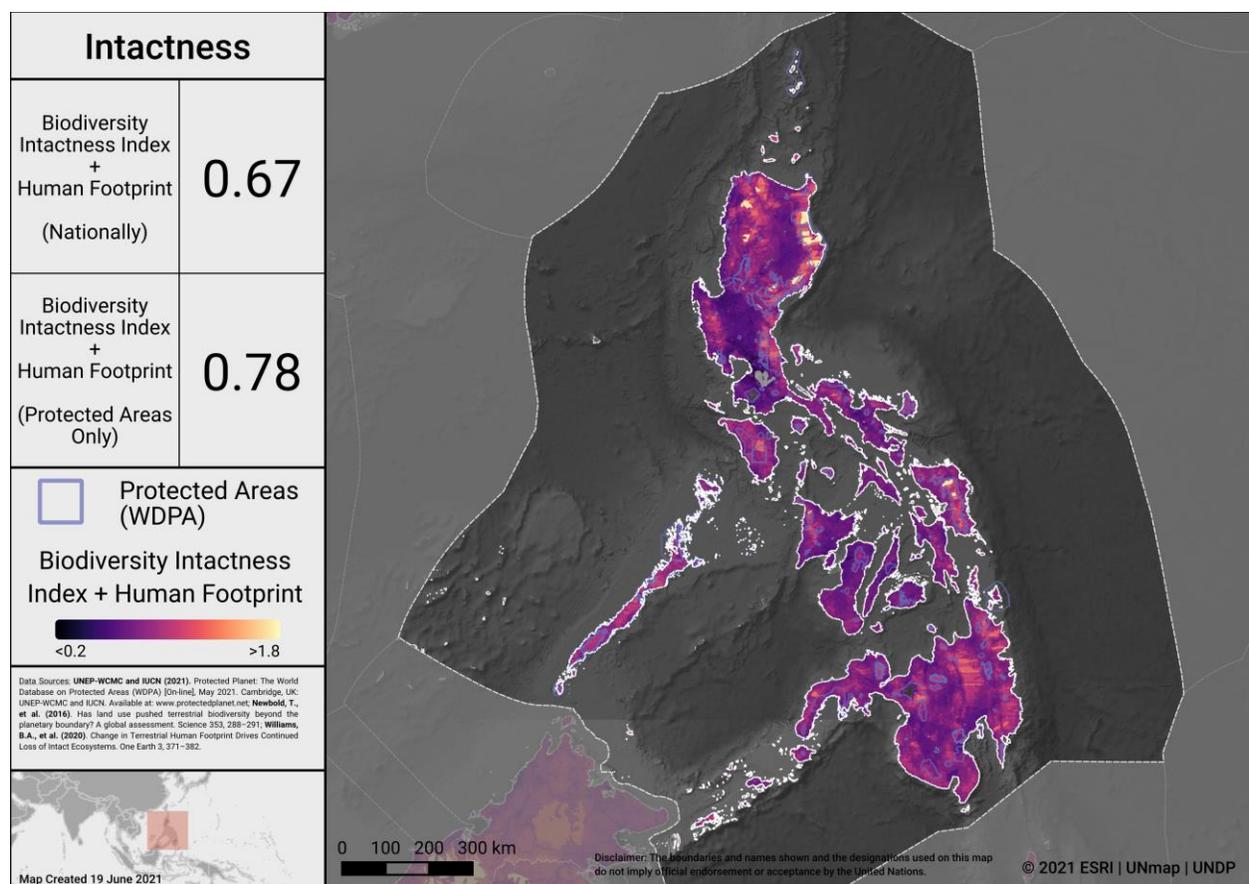
For additional details on these potential OECMs, see Collation of OECM Case Studies (IUCN, 2017), summarized in Annex I in this dossier.

13 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

As of May 2021, the Philippines has **341** OECM(s) reported in the World Database on OECMs (WD-OECM). Some, or all, of the above-mentioned potential OECMs may now be included in the WD-OECM.

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 Philippines considers where to add new PAs and OECMs, the map below identifies areas in Philippines 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.



Intactness in Philippines

To explore more on intactness visit the UN Biodiversity Lab: map.unbiodiversitylab.org.

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).

Philippines has 13 **terrestrial** ecoregions. Out of these:

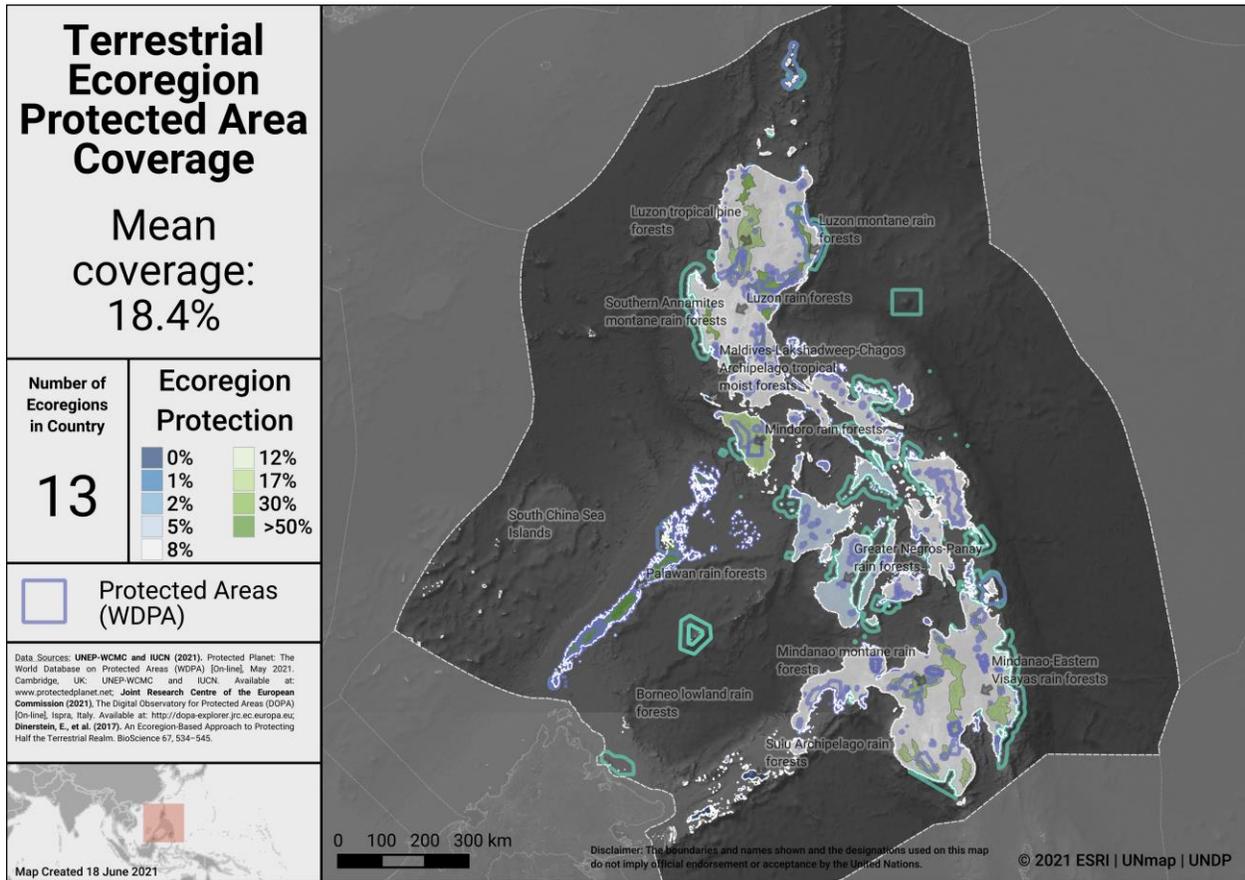
- 9 ecoregions have at least some coverage from PAs and OECMs.
 - The 4 remaining ecoregions all cover <0.1% of the country
- 4 ecoregions have at least 17% protected within the country.
- The average coverage of terrestrial ecoregions is 17.9%.

Philippines has 5 **marine** ecoregions and 1 **pelagic province**. Out of these:

- 4 marine ecoregions and 1 pelagic province have at least some coverage from reported PAs and OECMs.
- 2 marine ecoregions and 0 pelagic provinces have at least 10% protected within Philippines's exclusive economic zone (EEZ).
- The average coverage of marine ecoregions is 16.6% and the coverage of the 1 pelagic province is 0.6%.

A full list of terrestrial ecoregions in Philippines is available in Annex II.

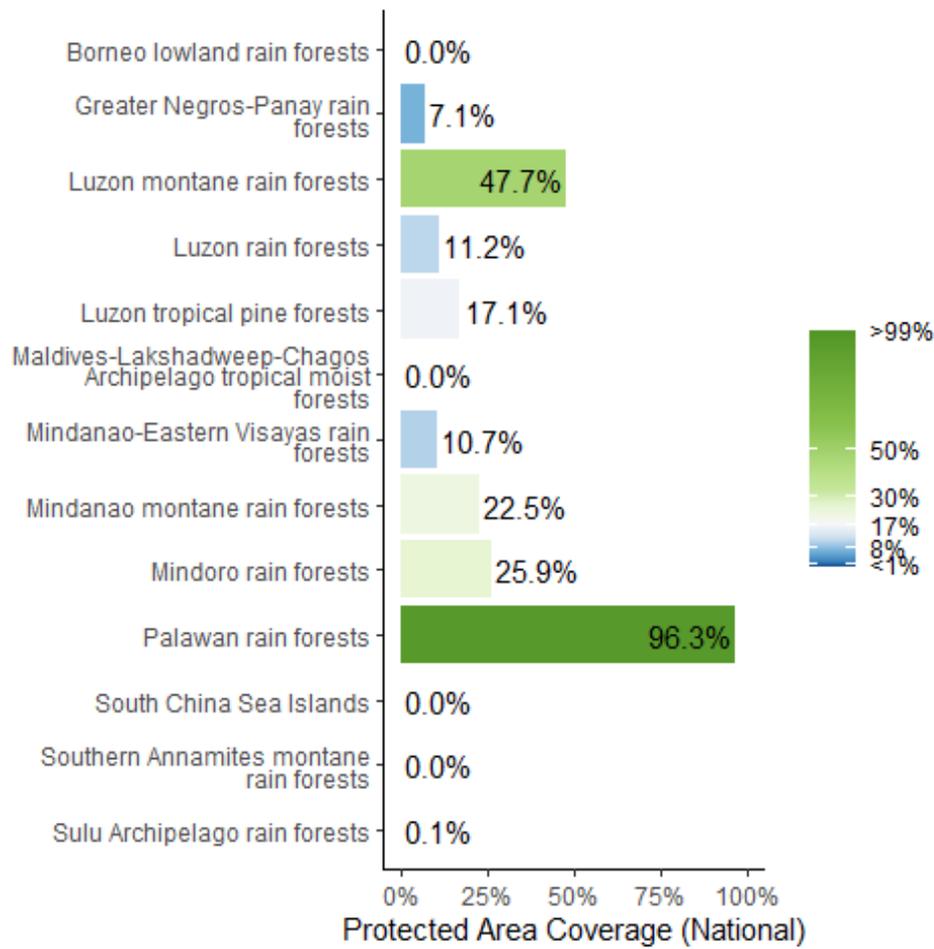




Terrestrial ecoregions in Philippines

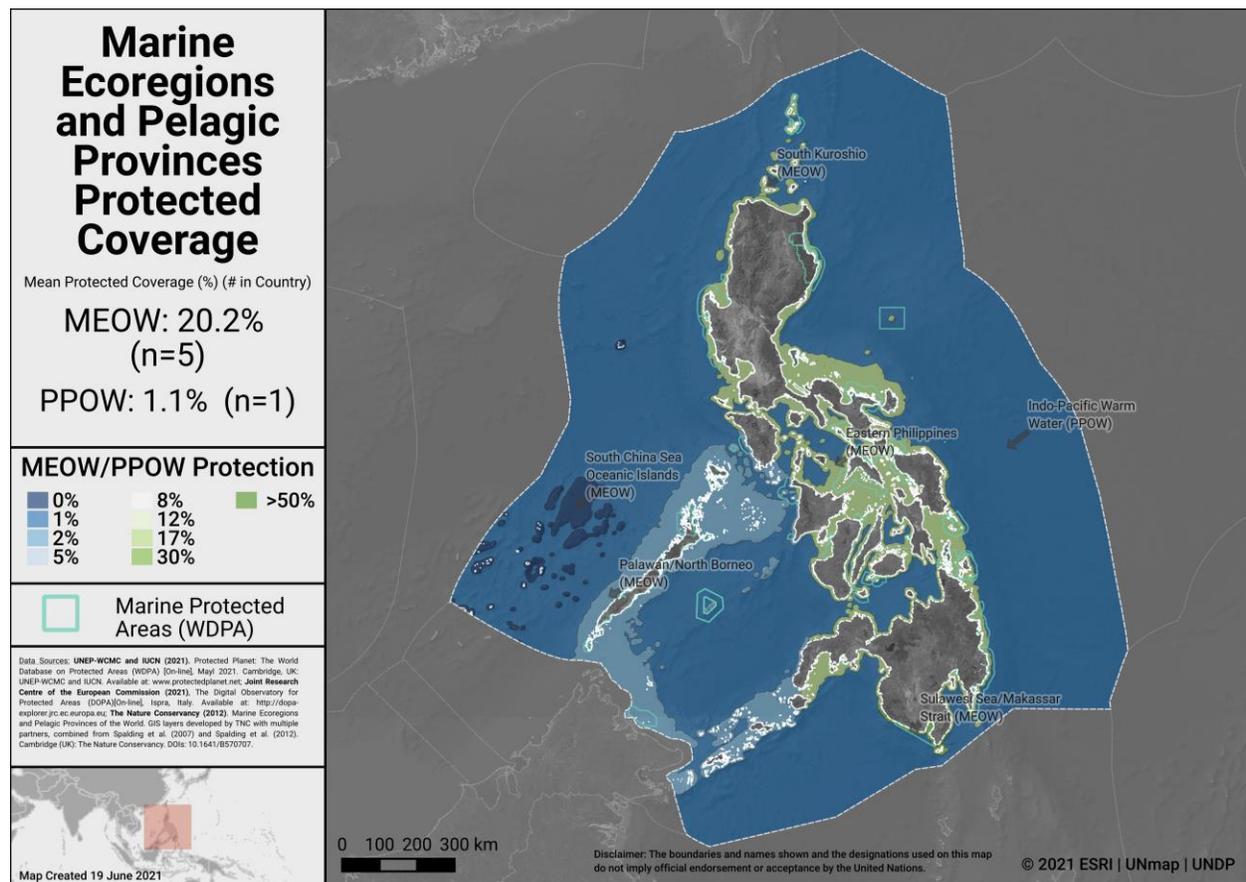


16 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

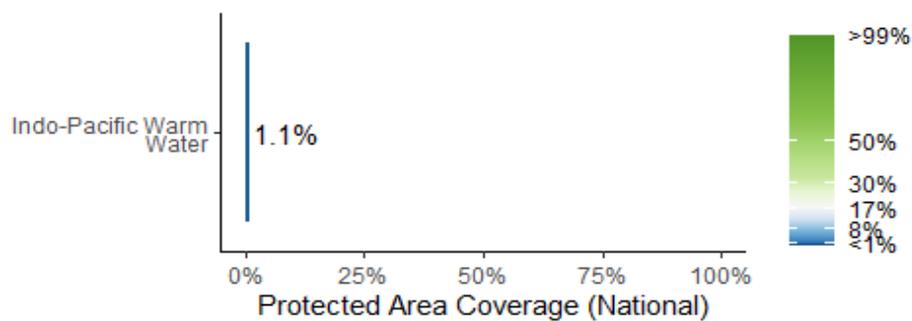


Terrestrial ecoregions of the World (TEOW) in Philippines



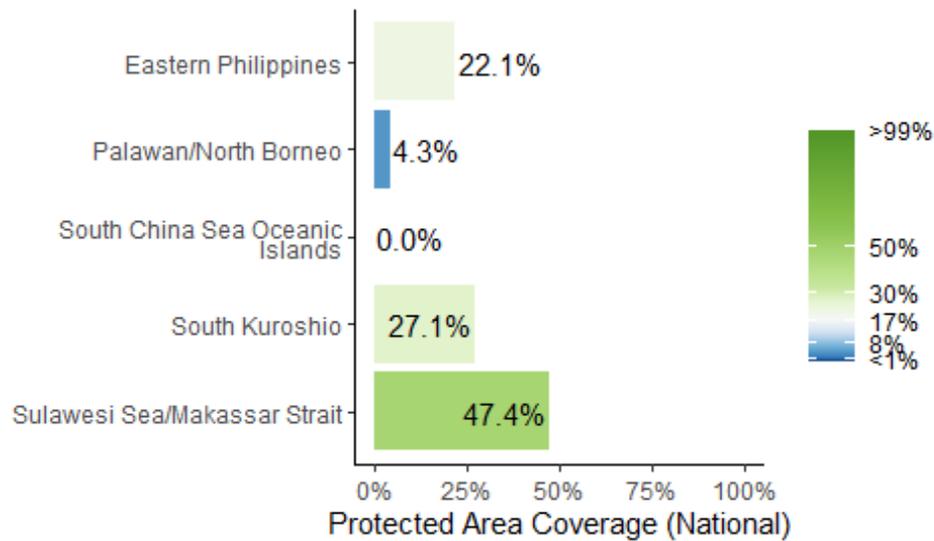


Marine ecoregions and pelagic provinces



Pelagic Provinces of the World (PPOW) in Philippines

18 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES



Marine Ecoregions of the World (MEOW) in Philippines

Opportunities for action

There is opportunity for Philippines to increase protection in terrestrial and marine ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs. 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.

Philippines has 139 Key Biodiversity Areas (KBAs) [**134 KBAs** included in analysis]

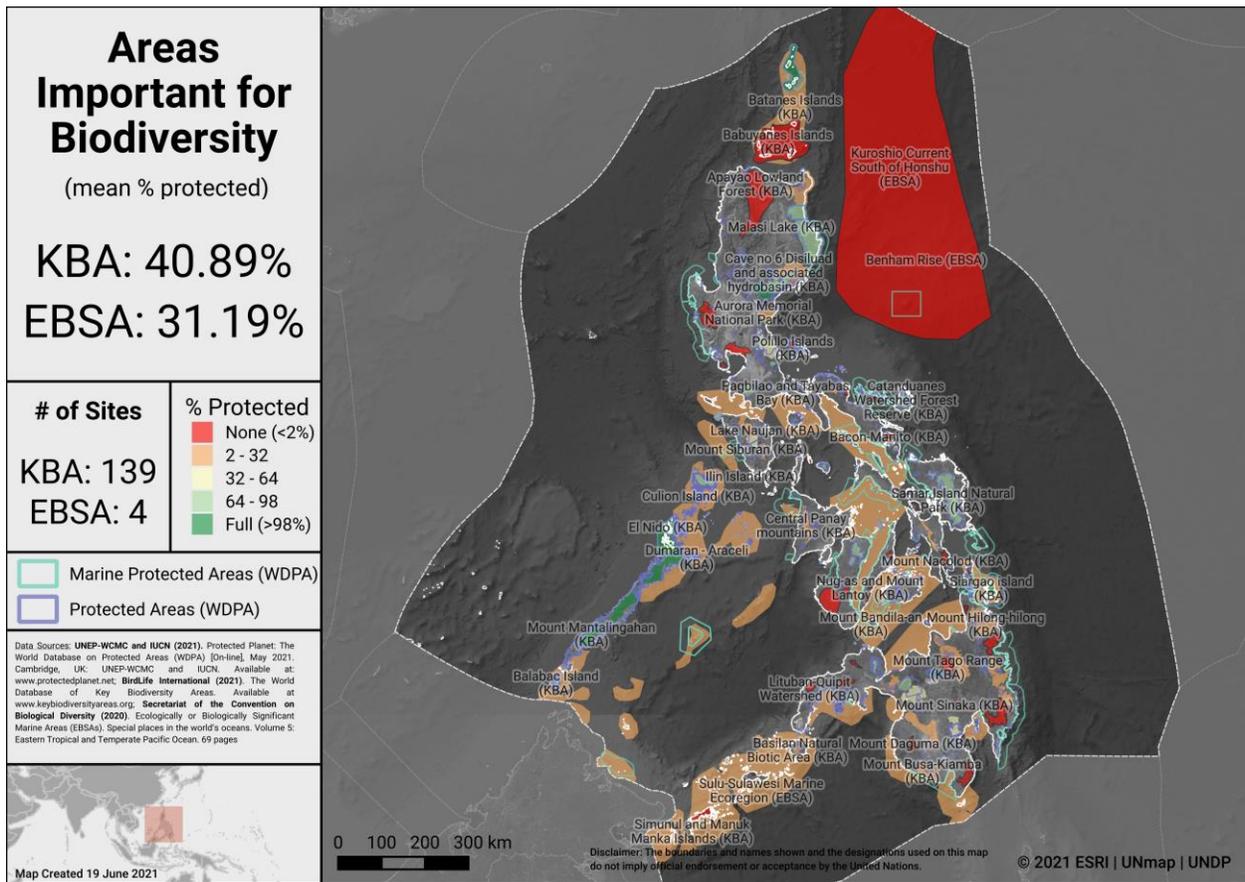
- Mean percent coverage of all KBAs by PAs and OECMs in Philippines is **40.9%**.
- **20** KBAs have full (>98%) coverage by PAs and OECMs.
- **64** KBAs have partial coverage by PAs and OECMs.
- **50** KBAs have no (<2%) coverage by PAs and OECMs.
- *5 KBAs lack spatial data to allow PA and OECM coverage to be determined*

Ecologically or Biologically Significant Marine Areas (EBSAs)

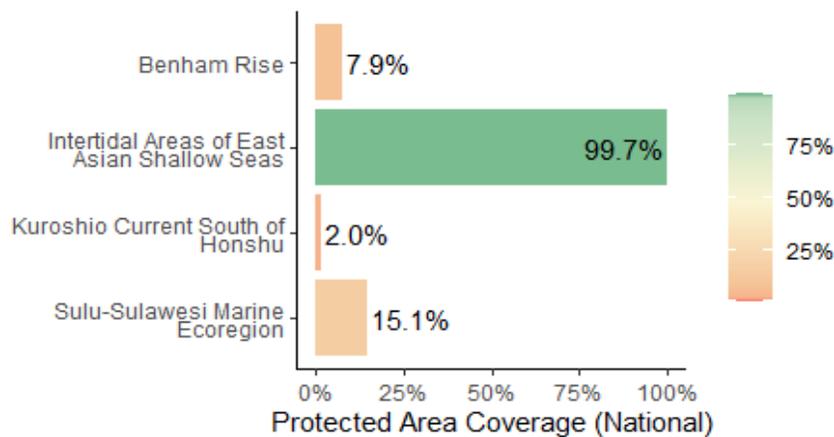
Other important areas for biodiversity may also include Ecologically or Biologically Significant Marine Areas (EBSAs), which were identified following the scientific criteria adopted at COP-9 (Decision IX/20; see more at: <https://www.cbd.int/ebsa/>). Sites that meet the EBSA criteria may require enhanced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

There are 4 EBSAs with some portion of their extent within Philippines's EEZ, all 4 of which have at least partial coverage from PAs and OECMs.



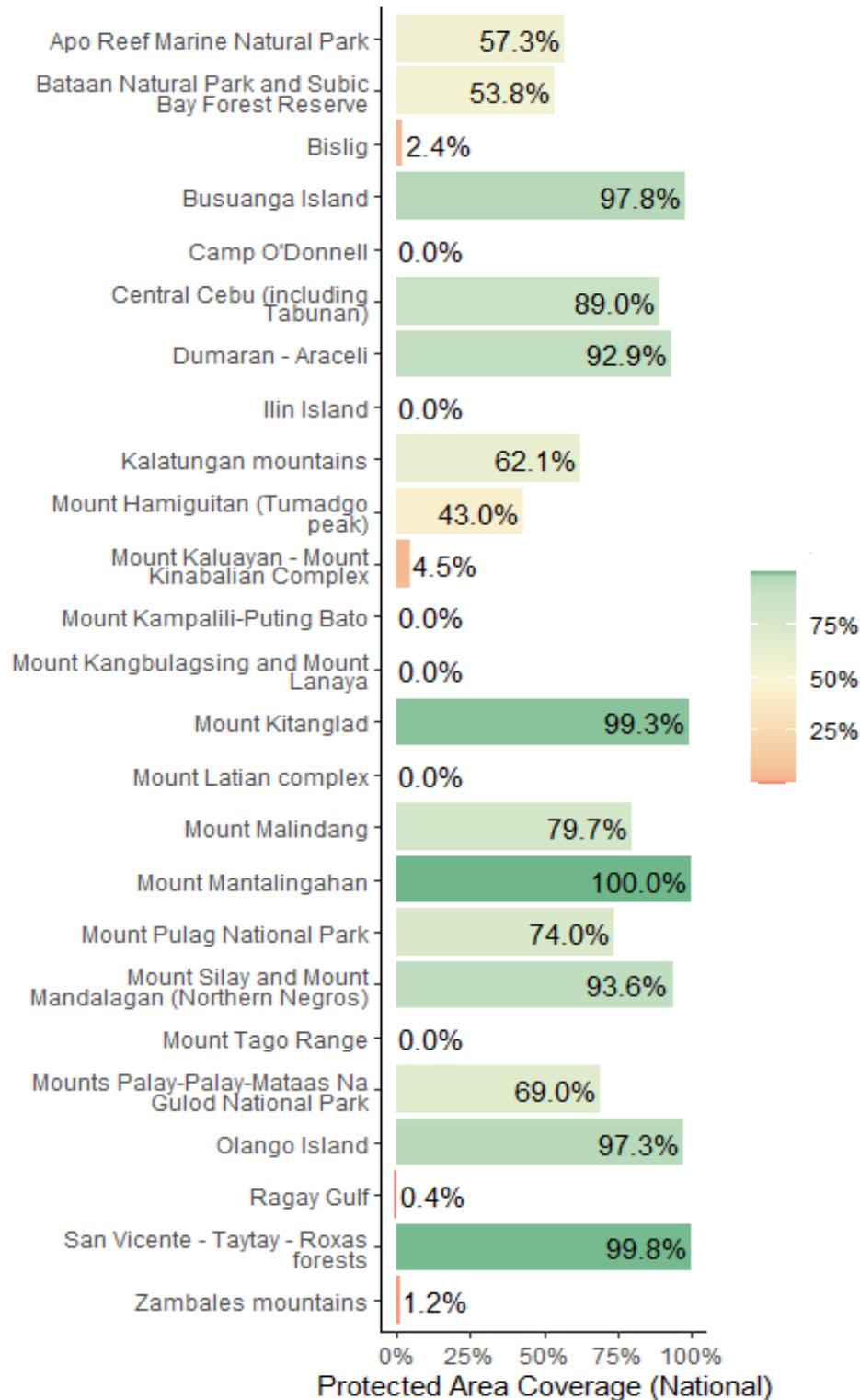


Areas Important for Biodiversity in Philippines



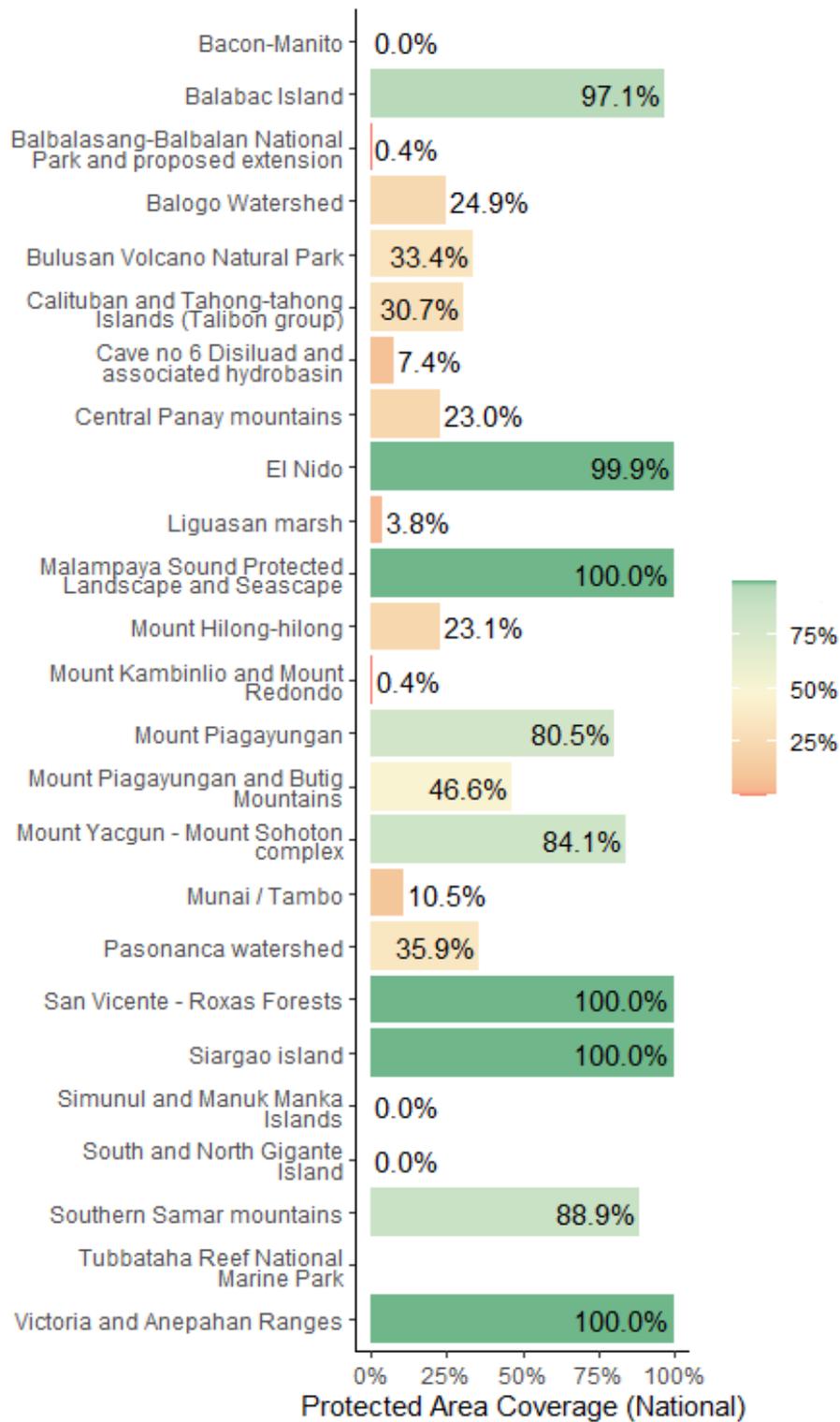
Ecologically or Biologically Significant Marine Areas (EBSAs) in Philippines

21 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

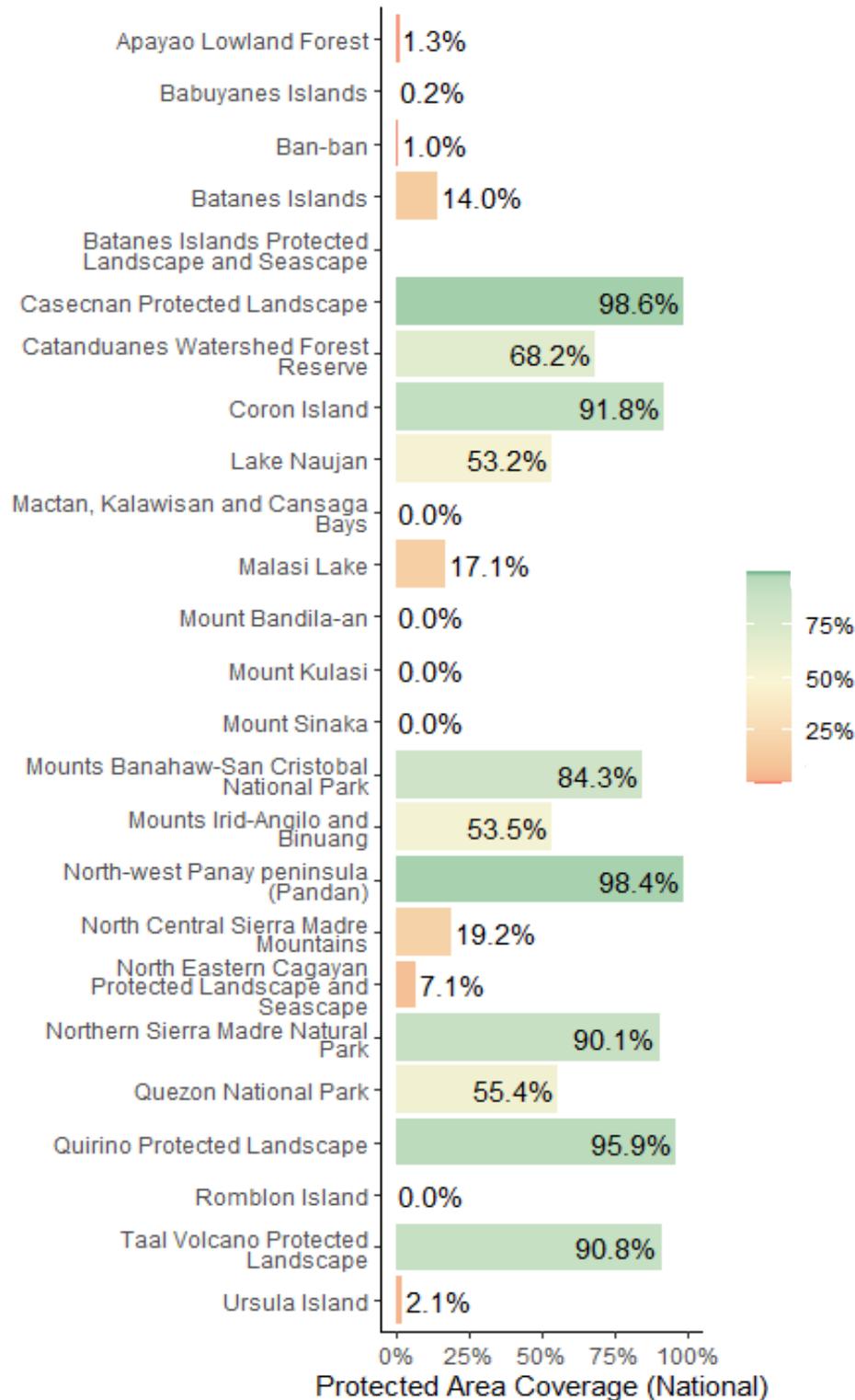


Key Biodiversity Area Coverage (KBA) in Philippines

22 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

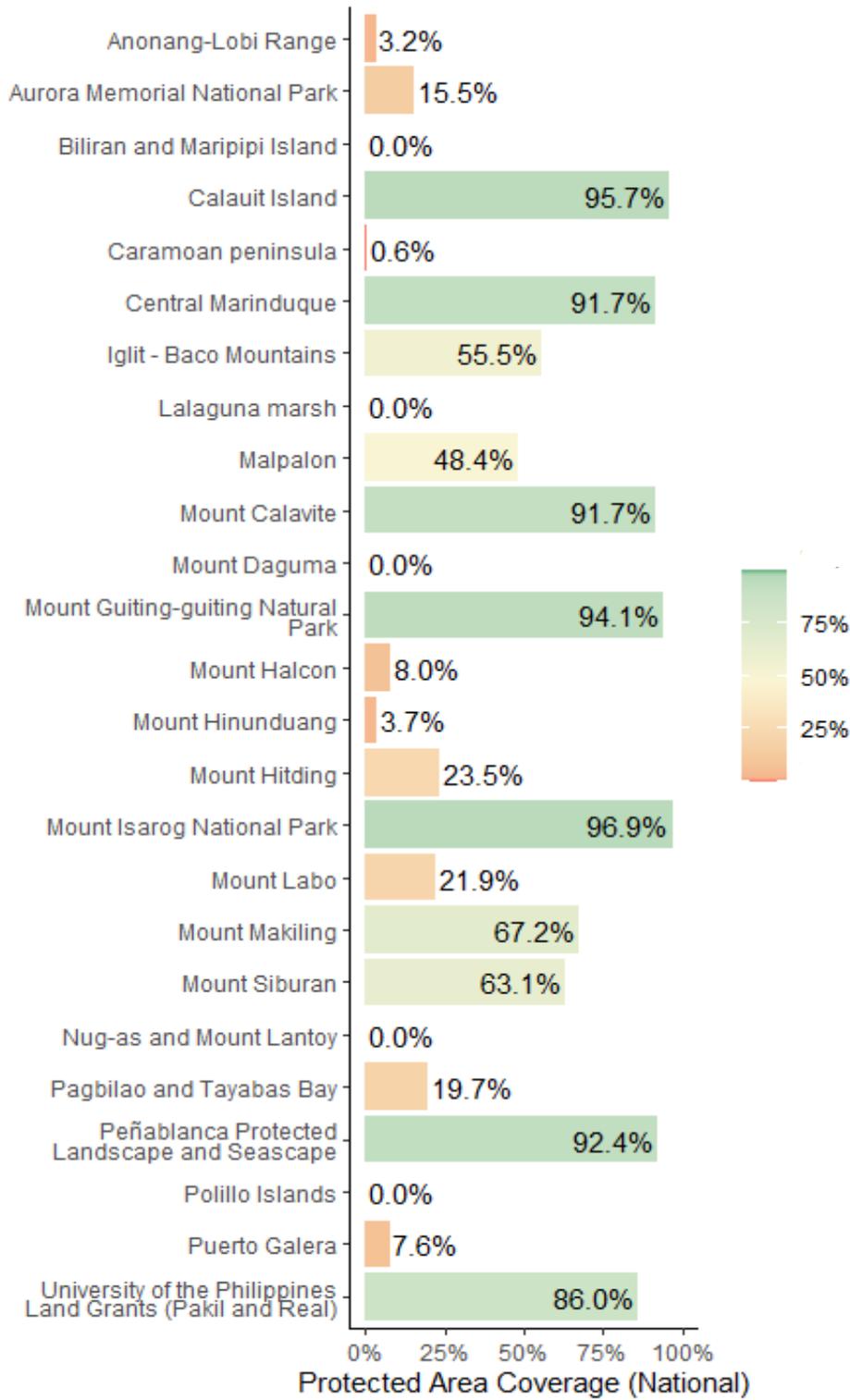


Key Biodiversity Area Coverage (KBA) in Philippines (continued)

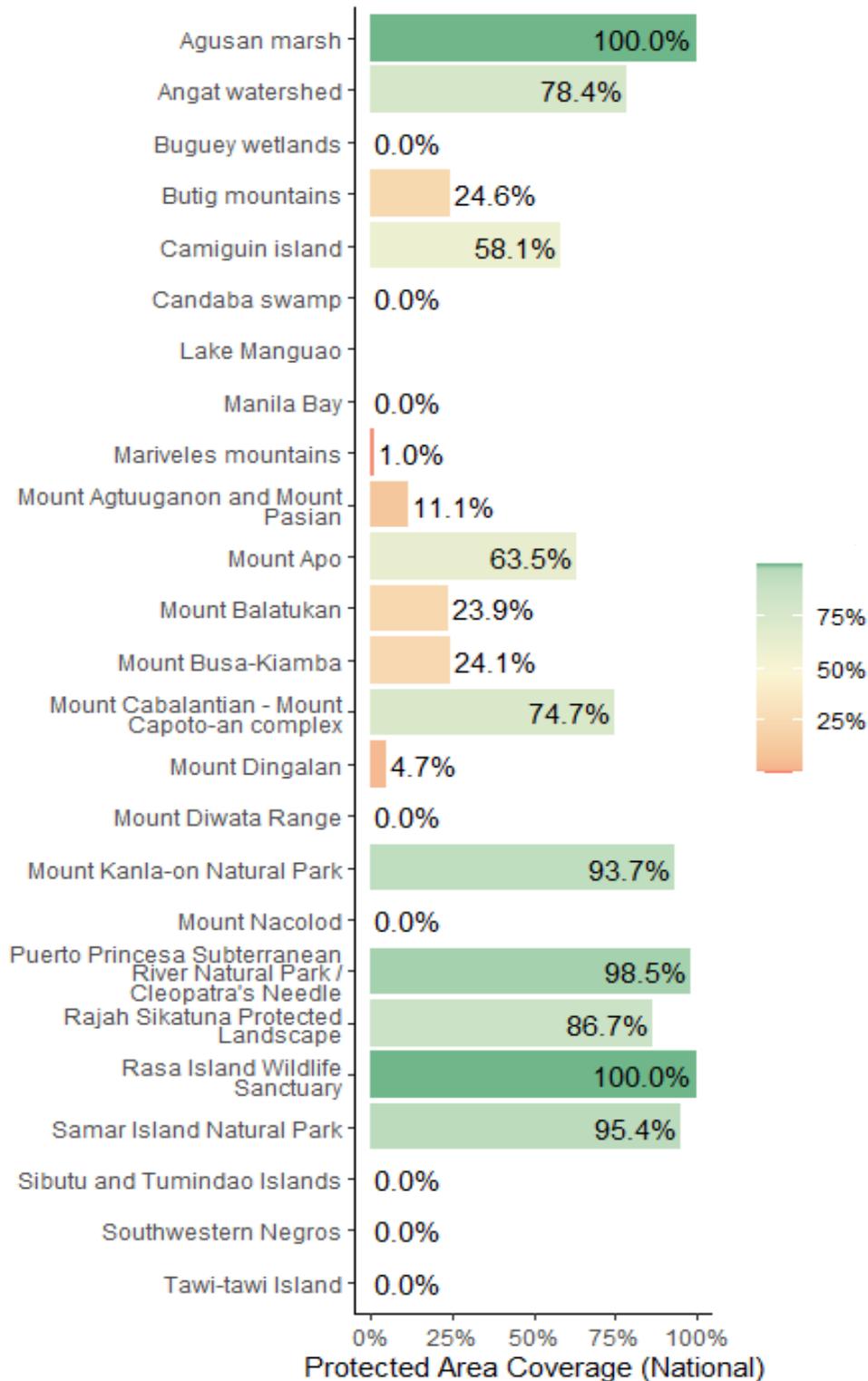


Key Biodiversity Area Coverage (KBA) in Philippines (continued)

24 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

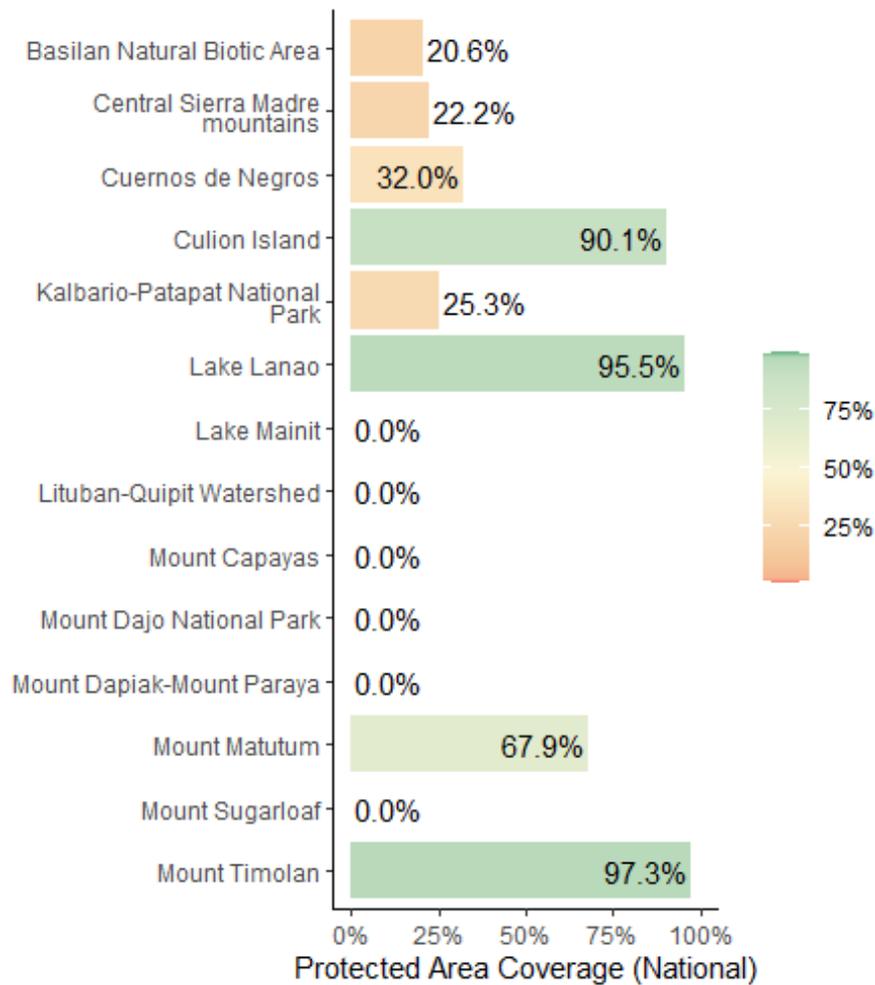


Key Biodiversity Area Coverage (KBA) in Philippines (continued)



Key Biodiversity Area Coverage (KBA) in Philippines (continued)





Key Biodiversity Area Coverage (KBA) in Philippines (continued)

Opportunities for action

There is opportunity for Philippines 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.



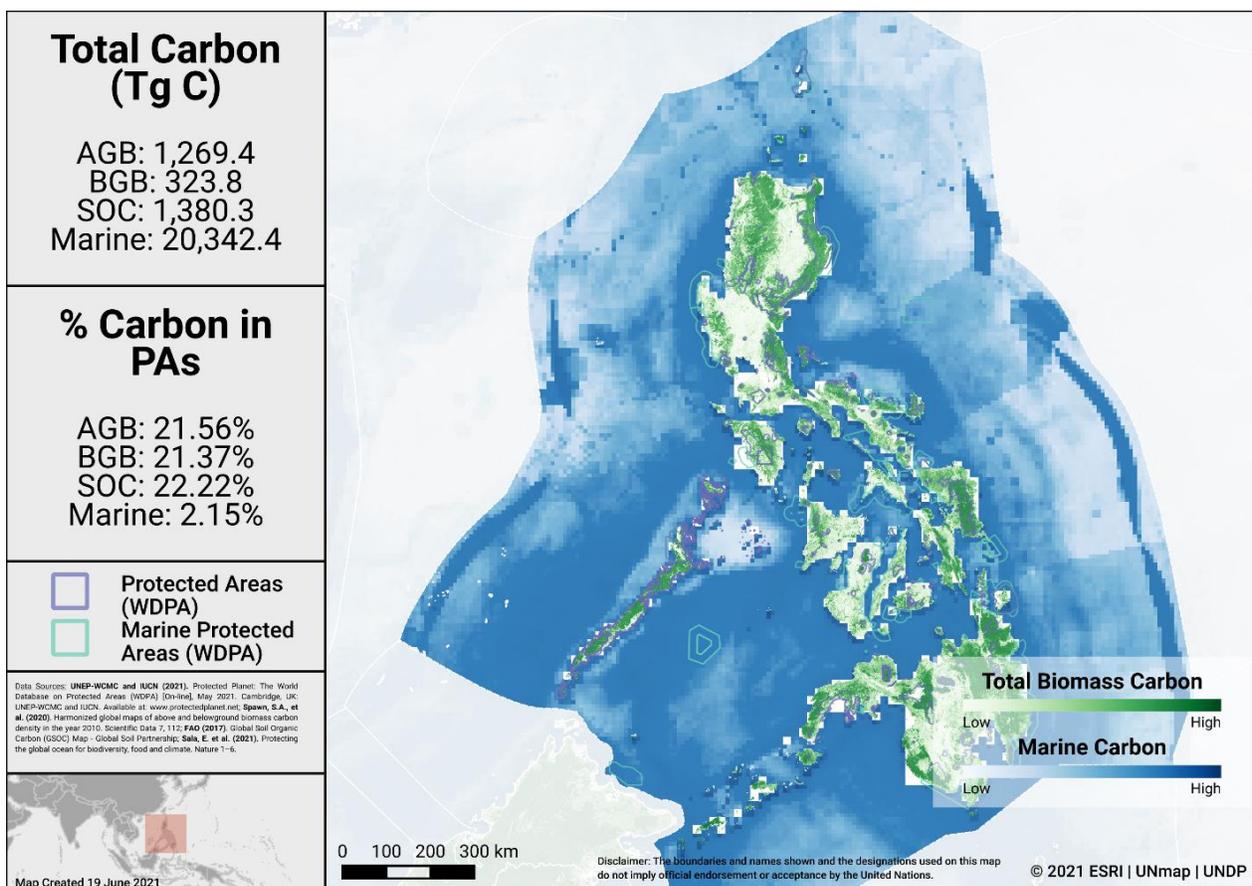
AREAS IMPORTANT FOR ECOSYSTEM SERVICES

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 Philippines and the percent of carbon in protected areas. The total carbon stocks is 1,269.4 Tg C from aboveground biomass (AGB), with 21.6% in protected areas; 323.8 Tg C from below ground biomass (BGB), with 21.4% in protected areas; 1,380.3 Tg C from soil organic carbon (SOC), with 22.2% in protected areas; and 20,342.4 Tg C from marine sediment carbon, with 2.1% in protected areas.



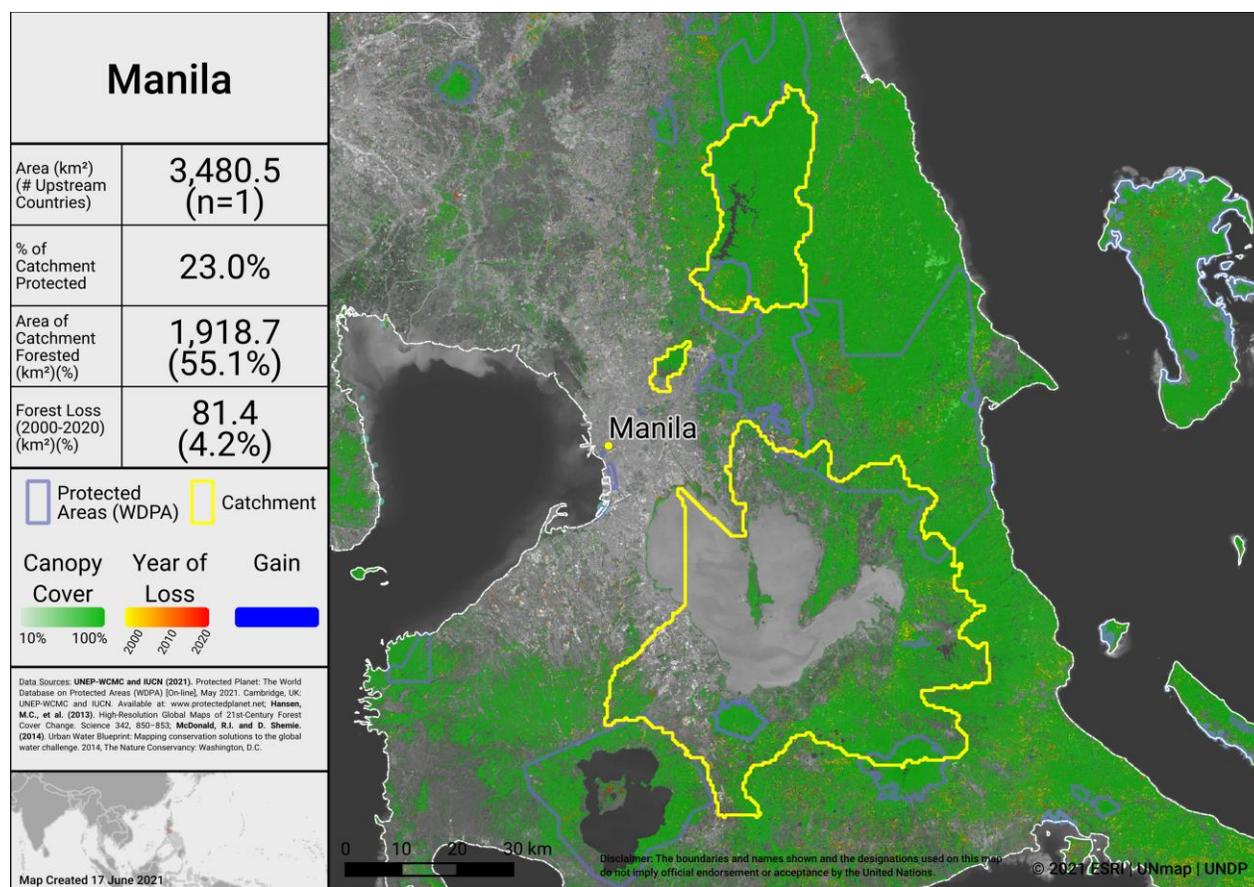
Carbon Stocks in Philippines

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



Water supply area for the city of Manila

Opportunities for action

For carbon, there is opportunity for Philippines 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 are 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 PA and OECM networks, assessed using the ProtConn indicator) in Philippines was 12.3%.

OECMs from the Philippines were added to the WD-OECM in May 2021, so the current figure should be higher than the 12.3% reported in January.

PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Philippines is 0.44. This represents no significant change since 2010.

Corridor case studies

There are currently no corridor case studies available for the Philippines (but see general details on conserving connectivity through ecological networks and corridors in Hilty et al 2020).

Opportunities for action

There is opportunity for a targeted designation of PAs or OECMs in strategic locations for connectivity and 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

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.

Protected Areas

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

- 95.6% are governed by **governments**
 - 95.2% by federal or national ministry or agency
 - 0.4% by sub-national ministry or agency
 - 0.0% by government-delegated management
- 0.4% are under **shared** governance (by collaborative governance)
- 0.0% are under **private** governance
- 0.4% are under **IPLC** governance
 - 0.4% by Indigenous Peoples
 - 0.0% by local communities
- 3.7% **do not** report a governance type

OECMs

As of September 2021,² there are **178** OECMs in Philippines reported in the WD-OECM, they have the following governance types:

- 70.8% are governed by **governments**
 - 0% by federal or national ministry or agency
 - 38.2% by sub-national ministry or agency
 - 32.6% by government-delegated management
- 8.4% are under **shared** governance
 - 6.2% by collaborative governance
 - 2.2% by joint governance
 - 0.0% by transboundary governance
- 0.0% are under **private** governance
- 3.4% are under **IPLC** governance
 - 3.4% by Indigenous Peoples
 - 0.0% by local communities
- 17.4% **do not** report a governance.

² A geometry error was identified in the data for 163 OECMs in the Philippines. These OECMs have been removed until the error can be corrected (in the August 2021 update).

Privately Protected Areas (PPAs)

From Gloss et al. (2019), a UNDP study on PPA data for Philippines:

- PPAs **are not** formally defined in PA legislation (however, private land and private capital both have important existing and potential roles in the national PA network).
- PPAs **are not** directly identified in Philippines's recent NBSAP (however, it does underscore the importance of private sector involvement in conservation).
- PPAs **are not** included as part of the current PA network.

See full details in the Philippines' [country profile](#) and summarized in Annex III.

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

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

- **156** approved ancestral domains
 - These cover 42,500.0 km².
 - Total claims could be 6 to 7 million ha (4.25 million ha approved as of 2012)
- Other potential ICCAs include:
 - 199 ICCAs in Luzon & Islands, Western Philippines (Mindanao), Eastern Philippines (Mapping is ongoing to determine extent)

Examples of ICCAs in the Philippines include the *Apo Island* (situated southeast of the Negros in the Central Philippines, ~70 ha with 106 ha of coral reef, the marine reserve was set up to increase fish abundance and biodiversity), *Zaragoza Fish Sanctuary* (on the southwestern side of Cebu Province, ~9.7 ha declared in 1987, protecting coral reefs, a rocky intertidal area, and a sandy area), and the *Mount Manlaku ICCA* (in the municipality of Tarragona, the ICCA covers more than 21km², is home to over 400 members of the indigenous Mandaya people; its forests range from montane and mossy to lowland dipterocarp; it is now under the governance of a local community governing council and Indigenous Peoples' Organization) among others. See full case study details for these and other ICCAs in the [ICCA Registry](#).

Other Indigenous lands

Lands managed and/or controlled by Indigenous Peoples cover an area of 33,552.0 km², of which 25,883.0 km² falls outside of formal protected areas. Indigenous lands with a human footprint less than 4 (considered as 'natural landscapes') cover an area of 240.0 km² (for details on analysis see Garnett et al., 2018).

For Philippines, evidence for the presence of Indigenous Peoples comes from: Indigenous Work Group on Indigenous Affairs. Indigenous World 2017 (Indigenous Working Group on Indigenous Affairs, 2017).

Boundaries of the lands Indigenous Peoples manage or have tenure rights over come from: National Commission on Indigenous Peoples. Ancestral Domains in the Philippines (Aldrin Mallari, personal communication, Centre for Conservation Innovations, 2016).



Opportunities for action

Explore opportunities for governance types that have lower representation, for Philippines this could relate to governance by Indigenous Peoples and/or local communities (IPLC), shared governance, etc. Increase efforts to identify the governance types for the 3.7% of PAs and 17.4% of OECMs that do not have their governance type reported.

There is also opportunity for Philippines 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. Philippines has the following Equator Prize winners that showcase examples of local, sustainable community action:

Organization	Year	Project Description
Camalandaan Agroforestry Farmers' Association (CAFA)	2008	<p>The Camalandaan Agroforestry Farmers' Association works to conserve fragments of lowland limestone forest on the Philippines island of Negros through on-farm tree conservation in the Southern Cauayan Municipal Forest and Watershed Reserve. The association is made up of local farmers who have been allocated rights to plots of land by the government as part of a community-based forest management agreement.</p> <p>Through a participatory land management plan, the group has divided community land into strict protection zones, publicly-owned multiple-use zones, special management zones, agricultural zones, and built-up areas. In addition to adopting agroforestry practices that improve agricultural productivity and help to actively regenerate the landscape, some members have been deputized as forest wardens – known as the "Bantay Lasang" – to regulate access to forest areas, as well as assisting researchers from Silliman University in biological monitoring.</p>



Organization	Year	Project Description
Farmers' Association for Rural Upliftment (FARU)	2010	<p>The Farmers' Association for Rural Upliftment (FARU) is an initiative of the Chananaw Indigenous People of Kalinga Province in the Philippines. The initiative aims to protect the environmental integrity of the Chananaw's ancestral domain through improved land management and more efficient agricultural techniques. Catalysts for the formation of the initiative included large-scale mining and geothermal projects, as well as local slash-and-burn agricultural practices.</p> <p>In response, FARU revived an Indigenous community conserved area – the Chananaw Ullikong, and improved farm productivity through the introduction of locally-appropriate technologies and agricultural practices. Since the initiative began, rice production has increased by 36 per cent, significantly reducing poverty rates.</p>
Trowel Development Foundation	2010	<p>Trowel Development Foundation is a community-based organization employing climate-adapted aquaculture technology to replant mangroves. Mangrove reforestation efforts have focused on planting native tree species in strategic areas, resulting in restored marine biodiversity, food security, and protection of coastal areas.</p> <p>The initiative also works to increase local incomes and improve livelihoods through a value-chain system to market tie-crabs. The group has established five community-managed tie-crab farms that benefit 250 subsistence fishing households. This innovation has been implemented in idle fishponds, where mangrove-friendly and climate-adapted tie-crab fattening technology has been employed to double the income of fishing households.</p>
Center for Empowerment and Resource Development – Philippines	2006	<p>The Center for Empowerment and Resource Development works in the Caraga region of the Philippines to conserve marine and coastal resources while improving the sustainability of local fisher livelihoods. The Centre's approach has been to put management of natural resources squarely in the hands of fisherfolk associations, working with local governments to develop barangay resolutions, municipal ordinances, and community-based management stewardship contracts that establish zoned fish sanctuaries, marine protected areas, and 'women-managed areas' that are governed by local community.</p> <p>Beginning in 1996 in Hinatuan Bay, by 2011 the initiative was working with seven fish sanctuaries (covering approximately 470 hectares) through its member fisherfolk organizations. Conservation activities have paid dividends for the local fishermen: in Hinatuan Bay alone, fish catch size increased over a three-year period from three to eight kilograms per day.</p>

Organization	Year	Project Description
PENAGMAN NAK – Philippines	2006	<p>Pederasyon sa Nagkahiusang mga Mag-uuma nga Nanalipud ug Nagpasig-uli sa Kinaiyahan (PENAGMANNAK) is a federation of seventeen peoples' organizations – self-help groups or cooperatives – working to conserve biodiversity in the Mt. Talinis area of Negro Oriental province. With their roots in the Mt. Talinis and Twin Lakes Biodiversity Conservation project (1996-1999), these groups' early activities included communal tree-farming and environmental awareness-raising.</p> <p>Since the Mt. Talinis-Twin Lakes area gained protected status in 2000, the groups' work has focused on the development of an area management plan, which has outlined policies for the management of the 15,287-hectare area and delineated land use zones. The role of the federation has been to improve the management capacity of these groups, and to facilitate the development of sustainable livelihoods through including micro-lending, livestock dispersal, and organic fertilizer production, among other activities.</p>



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, Philippines has 273 PAs reported in the WDPA; of these PAs, 14 (5.1%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

- 1.7% (5,146 km²) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
 - 10.8% of the area of terrestrial PAs have completed evaluations.
- 0.1% (1,674 km²) of the marine area of the country is covered by PAs with completed management effectiveness evaluations.
 - 5.2% 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.

OECMs

As of May 2021, there are 341 OECMs in Philippines reported in the WD-OECM; there is currently no information available on the management effectiveness of these OECMs.

See Annex I for details on conservation effectiveness of some potential OECMs.

For the 75 unprotected KBAs which may fit the OECM definition, responding to ‘How effective is the management in conserving biodiversity?’:

- All 75 potential OECMs are ‘Partly effective’

See details in Donald et al., 2019 (some, or all, of these may be included in the OECMs now reported in the WD-OECM, see: <https://www.protectedplanet.net/country/phl>)

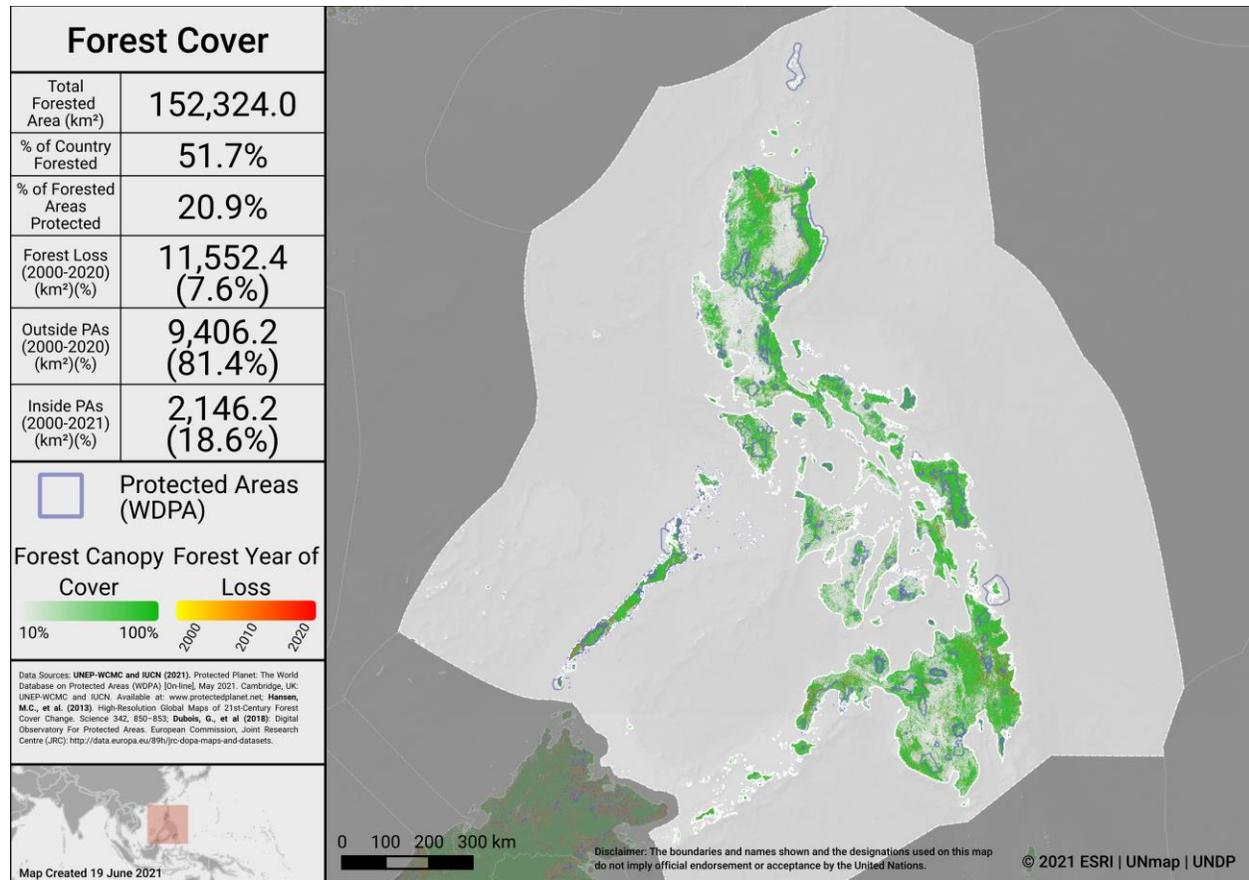
Changes in forest cover in protected areas and OECMs

Forested areas in Philippines cover approximately 51.7% of the country, an area of 152,324.0 km². Approximately 20.9% (31,826.6 km²) of this is within the protected area estate of Philippines. Over the period 2000-2020 net loss of forest cover amounted to over 11,552.4 km², or 7.6% of forest area, of which 2,146.2 km² (18.6%) occurred within protected areas. The map below shows how forest cover has changed in Philippines from



37 | Aichi Biodiversity Target 11 Country Dossier: PHILIPPINES

2000-2020 both inside and outside of PAs. This can indicate how effective PAs are in reducing forest cover loss.



Forest Cover and Forest Loss in Philippines

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

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 East Asia and Southeast Asia on achieving Aichi Biodiversity Targets 11 and 12 took place 15 - 18 September 2015 in Yanji, Jilin Province, China. 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: Expansion of national PA estate to cover 4,000 km² of recognized terrestrial ICCA (c/o UNDP-GEF's Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines) [may be complete; ICCAs added in May 2021 Protected Planet release].

Marine coverage: Expansion of national PA estate to cover 26,744.1 km² (excluding their watersheds) marine KBAs thru UNDP-GEF's (Strengthening the Marine Protected Areas to Conserve Marine Key Biodiversity Areas in the Philippines) Program will increase the coverage and protection of the existing PAs [Covered under GEF#4810 and Ocean Action #19769, see below].

Ecological representation: 1,000 km² of recognized terrestrial/coastal ICCAs improve coverage of 20 terrestrial and marine ecological regions. 4,412.68 km² addition of 10 new PAs covering candidates: Palawan/North Borneo and Eastern Philippines marine ecological regions.

Areas Important for biodiversity and ecosystem services: Complete protection of 9 terrestrial IBAs, elevate the protection status to partial of: Manila Bay, Candaba Swamp, Mariveles Mts. Elevate the protection status to complete of Bataan NP and Mts Palaypalay-MataasNaGulod.

Management effectiveness: Ecological Gap Assessment, Management Effectiveness Assessment, Sustainable Financing Assessment and Implementation, Capacity Needs Assessment, Policy Environment Assessment, PA Integration and Mainstreaming, PA Valuation.

Governance and Equity: Promotion of Biodiversity friendly, livelihood and enterprises, and agricultural practices. Ensuring benefits/incentives for the communities for protecting the PAs.

OECMs: 9 ICCAs; Study on OECM operating.

NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

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

National Target 19: By 2028, there will be a 10% increase in total area from 2015 levels of terrestrial including inland wetlands PAs managed through NIPAS and other conservation measures (Indigenous community conserved areas, local conservation areas, critical habitats) that overlap with KBAs.

- *Indicator:* Proportion of total area of terrestrial PAs in relation to KBAs

National Target 20: By 2028, there will be a 20% increase from 2015 levels in the coverage of established MPAs/sanctuaries across various aquatic habitats.

- *Indicator:* Proportion of area established MPAs/sanctuaries against total area of aquatic habitats.

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

NBSAP Action number	Action (original language from NBSAP)
2.1.1	Formulate and implement an expanded national program for protection and management of PAs with PAs selected to include representative areas of all of the faunal regions (i.e. areas of endemism) and natural habitat types including caves and cave systems
2.1.2	Increase coverage of effectively managed MPAs/sanctuaries and network of PAs across marine habitats such as coral reefs, mangroves, and seagrass beds based on the KBA identification process
2.1.3	Ensure implementation of priority legislation and policies in PAs and other critical habitats
2.2.1	Facilitate the provision of biodiversity-friendly livelihood to the locals (By 2028, 100% of livelihoods in PAs are biodiversity-friendly)
2.2.2	Strengthen law enforcement in and around forest and other natural habitats and seriously pursue prosecution of offenders
2.3.1	Define and operationalize national species conservation action plans for globally and nationally threatened forest species that will complement site-based strategies

NBSAP Action number	Action (original language from NBSAP)
2.3.2	Improve capacities of local stakeholders, including IPs, women and youth and communities to control and limit overexploitation and destructive practices on agriculture and forestry resources
3.2.1	Sustainably manage important Philippine coastal and marine ecosystems through the implementation of relevant action plans
5.1.3	Identify and set aside caves with high conservation value for national and/or international protection
7.4.5	Conduct research and development studies on specific climate change mitigation functions of inland wetlands prioritizing Ramsar sites
8.1.1	Establish models of urban biodiversity conservation and enhancement as part of overall local environmental governance
8.1.3	Incorporate biodiversity concerns in standards and protocols of allied industries and associations who influence or depend on urban ecosystems services



APPROVED GEF-5 & GEF-6 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)
4338	No	N/A	N/A	Ecologically representative; Effectively managed; Equitably managed; Integration
4810	Yes	9,290	Marine	All Qualitative Elements
5826	Yes	1,607	Terrestrial	Areas important for biodiversity; Effectively managed; Equitably managed; Integration
9584	No	N/A	N/A	All qualitative elements

*updates to the WDPA and WD-OECM in 2021 mean that some, or all, of this area may now be reflected in Philippines' current coverage figures.

Based on spatial data available for GEF project 4810, benefits will arise for several elements of Target 11:

Coverage of Terrestrial and Marine Ecoregions:

- 3 Terrestrial Ecoregions will have improved coverage. These Ecoregions are: Greater Negros-Panay rain forests; Mindanao-Eastern Visayas rain forests; Palawan rain forests.
 - The average increase in coverage of Terrestrial Ecoregions will be 0.05%.
- 3 Marine Ecoregions will have improved coverage. These Marine Ecoregions are: Eastern Philippines; Palawan/North Borneo; Sulawesi Sea/Makassar Strait.
 - The average increase in coverage of Marine Ecoregions will be 6.92%.

Coverage of KBAs:

- Coverage will improve for 3 KBAs.



Ecosystem services:

- 0.28 % increase in the PA coverage of aboveground biomass.
- 0.22 % increase in the PA coverage of important aboveground biomass areas.
- 0.26 % increase in the PA coverage of soil organic carbon (SOC).
- 0.27 % increase in the PA coverage of areas important for SOC.

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:

#OceanAction17929: Coastal and Marine Ecosystems Management Program, by Department of Environment and Natural Resources (Government).

- Area to be added: 0 km².
- Notes on area added: Part included under GEF project (#4810); Philippine Rise now designated and reported in WDPA.
- Progress report: No progress report submitted (as of March 2021).
- Further details available at:
<https://oceanconference.un.org/commitments/?id=17929>.

#OceanAction19769: Fifth Operational Phase of the GEF Small Grants Programme in the Philippines, by United Nations Development Programme (UNDP) (UN entity).

- Area to be added: **1000 km²**.
- Notes on area added: ICCAs added in May 2021 WDPA release (Action may now be complete).
- Progress report: No progress report submitted (as of March 2021).
- Further details available at:
<https://oceanconference.un.org/commitments/?id=19769>.

#OceanAction17454: Strengthening Marine Protected Areas to Conserve Marine Key Biodiversity Areas in the Philippines (SMARTSeas PH Project), by UNDP Philippines

- Area to be added: Area not given.
- Progress report: No progress report submitted (as of March 2021).
- Further details available at:
<https://oceanconference.un.org/commitments/?id=17454>.



Other Ocean Actions

Other Ocean Actions submitted as voluntary commitments for SDG 14.5, will also create benefits for the qualifying elements of Aichi Biodiversity Target 11:

#OceanAction21316: National Search for Outstanding Coastal Community Malinis at Masaganang Karagatan (MMK) (CLEAN AND PLENTIFUL OCEAN), by Department of Agriculture – Bureau of Fisheries and Aquatic Resources (BFAR), Philippines (Government).

- Types of actions involved: MPA management and/or enforcement; ecosystem approach to fisheries management; mangrove protection and rehabilitation; enhance partnerships.
- Target 11 element addressed: Integration; Effectively managed; Equitably managed.
- Progress report: No progress report submitted (as of May 2021).
- Further details available at:
<https://oceanconference.un.org/commitments/?id=21316>



OTHER ACTIONS/COMMITMENTS

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

[This law] mobilizes government resources to conserve and protect ecologically rich areas of our country, this new law includes 94 more protected areas in terrestrial and marine ecosystems for conservation and is thus a direct contribution to Aichi biodiversity target 11.

Commitments for PAs and OECMs from Other National Policies

Policy document	Ecosystem	Policy text
National Tourism Development Plan	Forest ecosystems	Promote green technologies and innovative conservation measures in the development of tourist sites and facilities by acknowledging such in accreditation processes
Reducing emissions from deforestation and forest degradation	Forest ecosystems	Conserve and protect steep slopes within production forests
Master Plan for Climate Resilient Forest Development	Forest ecosystems	Protection of Existing Natural Forests and Established Plantation
National Biodiversity Strategy Action Plan	Wetland ecosystems	Creation and implementation of National Wetlands Action Plan, which provides the framework to conserve Philippine wetlands
Coastal and Marine Ecosystem Management Programme	Coastal ecosystems	Comprehensively manage, address and effectively reduce the drivers and threats of the coastal and marine ecosystem degradation in order to achieve and promote sustainability of ecosystem services, food security and climate resilience

ANNEX I

ADDITIONAL DETAILS ON POTENTIAL OECMs

Mount Candalaga Dumut ICCA:

- **Overview:** designated by the Mansaka people within their Ancestral Domain (it is within a KBA, home to threatened and restricted-range species); no natural resource use is permitted.
- **Boundaries & Geographical Space:** 168km²; defined as a “Strict Protection Forest” within their Ancestral Domain.
- **Governance Type:** by Indigenous Peoples.
- **Permanence:** Ancestral Domain Sustainable Development and Protection Plan has the support of the government, but the area is not recognized in law as a PA; it is governed through written and oral communication; the measures are meant to be in place over the long-term, and are in place year-round.
- **Management Objectives:** Cultural/traditional preservation; Spiritual/sacred sites protection; Supporting traditional livelihoods; Maintaining and enhancing natural resources; Biodiversity/species conservation; Territorial security (control of access to land and resources); Increasing rights for self-rule and empowerment; Land ownership security.
- **Conservation Effectiveness:** Unknown – the area had been sustainably managed by the community for generations, however with population changes it became increasingly threatened by overexploitation. As a result, the community designated it as an area where no natural resource use is permitted.

Danjungan Island:

- **Overview:** Together with Sipalay City and the Municipality of Hinobaan, it forms the southern border of the province and is situated in the Sulu Sea, an important ecoregion for marine biodiversity; site is being protected and managed by a local NGO, Philippine Reef and Rainforest Conservation Foundation.
- **Boundaries & Geographical Space:** 43 ha of limestone forests, with 200 ha of coral reefs, seagrass beds and lagoons that are protected under a local ordinance; the entire island is protected and managed by PRRCFI, aside from the MPA (under the Cauayan LGU)
- **Governance Type:** Private protection by the PRRCFI, while the surrounding waters is a joint patrol with the LGU of Cauayan; Strict protection and regulation of human activities (e.g. fishing) promotes conservation outcomes.
- **Permanence:** measure will be in place for at least 25 years.
- **Management Objectives:** Protection of existing limestone forests including flora and fauna; biodiversity conservation is an explicit objective through strict protection of all resources (e.g. hunting, fishing and timber collection).



- **Conservation Effectiveness:** Yes, the area is effectively conserving biodiversity, measured via resource monitoring (e.g. bird counts, UW coral reef assessment).

Mount Apo KBA:

- **Overview:** Unprotected (Non-NIPAS) Regions of the Mount Apo KBA (municipalities of Arakan, Magpet, Davao City (Barangays Tamayong, Carmen)) are mainly covered by different pristine and secondary rainforest biotopes, with high biodiversity.
- **Boundaries & Geographical Space:** >30,000 ha, based on the boundaries defined by vegetation type.
- **Governance Type:** by Indigenous Peoples/local communities with the LGUs, DENR (Department of Environment and Natural Resources); Land use restrictions due to Ancestral Domains and DENR protection forests, extensive resource use/conservation due to sacred places and low population pressure due to remote location promote conservation outcomes.
- **Permanence:** measures are in place year-round, over the long-term; IPRA law, customary laws set out the area's governance and conservation management arrangements.
- **Management Objectives:** Culture-based conservation framework, protection and management of endangered species, resource use policies and enhancement, incorporation in ADSDPP (Ancestral Domain Sustainable Development Protection Plan), FLUPs, CLUPs (Forest/Comprehensive Land-use Plans)/CDPs (Comprehensive Development Plans), conservation agreement pledges with other institutions, processed and documented cultural frameworks that integrate IKSP in BCSD (biodiversity conservation and sustainable development), best practices and knowledge transfer.
- **Conservation Effectiveness:** An indicator for the effective conservation of biodiversity is the maintenance of a high biodiversity compared with surrounding areas is an indicator of effective conservation; measuring and monitoring will be part of the project follow up (185 forest guards engaged in forest patrolling and biodiversity monitoring).

See full details in the Collation of OECM Case Studies (IUCN, 2017). As of May 2021, OECMs from the Philippines have now been reported in the WD-OECM (see details at: <https://www.protectedplanet.net/country/phl>).



ANNEX II

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
Borneo lowland rain forests	67.2	0.0	0.0	0.0	0.0
Greater Negros-Panay rain forests	34,855.9	100.0	11.8	2,459.1	7.1
Luzon montane rain forests	8,272.8	100.0	2.8	3,942.7	47.7
Luzon rain forests	94,876.8	100.0	32.1	10,677.0	11.3
Luzon tropical pine forests	7,052.4	100.0	2.4	1,209.5	17.2
Maldives-Lakshadweep-Chagos Archipelago tropical moist forests	253.4	46.7	0.1	0.0	0.0
Mindanao-Eastern Visayas rain forests	104,666.6	100.0	35.4	11,158.6	10.7
Mindanao montane rain forests	18,120.2	100.0	6.1	4,080.1	22.5
Mindoro rain forests	10,079.0	100.0	3.4	2,614.4	25.9
Palawan rain forests	14,278.4	100.0	4.8	13,747.5	96.3
South China Sea Islands	10.3	33.7	0.0	0.0	0.0
Southern Annamites montane rain forests	3.3	0.0	0.0	0.0	0.0
Sulu Archipelago rain forests	2,326.0	100.0	0.8	2.1	0.1

ANNEX III

ADDITIONAL DETAILS ON PPAs

- Of the 14.19 million ha of alienable and disposable lands in the Philippines, 9.63 million ha are already titled
- Although PPAs are Not formally defined in PA legislation, private land and private capital both have important existing and potential roles in the national PA network.
- Philippines law does not include any incentive programs for landowners who protect or manage their land for conservation. However, payment for ecosystem services and ecotourism may be used to such ends
- Although The Philippines' most recent NBSAP does not include an explicit strategy for the incorporation of PPAs, it does underscore the importance of private sector involvement in biodiversity conservation (Goal 12: "by 2028, capacity for biodiversity conservation of public and private sector groups in terrestrial and marine PAs/KBAs [key biodiversity areas] will be strengthened." It notes that "Other types of conservation tools include critical habitats, Indigenous community-conserved areas (ICCA), local conservation areas (LCA) and private reserves."
- The right of private property owners to place an easement upon their property is substantiated by the *Civil Code of the Philippines*; to date, easements in the Philippines have not been used by organizations or individuals for conservation purposes.

Case studies/best practices:

- *Masungi Georeserve (1,600 ha)* is a local conservation area that protects unique, ancient limestone formations and numerous endemic and endangered species; Blue Star Construction & Development Corp (BSCDC) entered into a joint venture agreement with DENR to manage >300 ha; the site is opened to ecotourism, combining environmental preservation, community involvement, and sustainable tourism together with the local communities
- *Secret Paradise Resort & Turtle Sanctuary* is a private ecotourism resort on the island of Palawan, which has protected a 28-ha cove for 12 years through a permit with the local municipality, San Vicente.

See full details in Philippines' country profile (<http://nbsapforum.net/knowledge-base/resource/philippines-country-profile-international-outlook-privately-protected-areas>).



REFERENCES

- Atwood, TB, Witt, A, Mayorga, J, Hammill, E, & Sala, E. (2020). Global patterns in marine sediment carbon stocks. *Frontiers in Marine Science*. *Paper*
<https://doi.org/10.3389/fmars.2020.00165>
- BirdLife International (2021). World Database of Key Biodiversity Areas. Available at:
<http://www.keybiodiversityareas.org>
- CBD (2010). Decision adopted by the Conference of the Parties to the Convention on Biological Diversity at its tenth meeting. Decision X/2. Strategic plan for biodiversity 2011–2020. Retrieved from <https://www.cbd.int/doc/decisions/cop-10/cop-10-dec02-en.pdf>.
- CSIRO (2019). Protected area connectedness index (PARCconnectedness).
<https://www.bipindicators.net/indicators/protected-area-connectedness-index-parcconnectedness>
- Dinerstein, E., et al. (2017). An ecoregion-based approach to protecting half the terrestrial realm. *BioScience* 67(6), 534-545.
- Donald et al., 2019, The prevalence, characteristics and effectiveness of Aichi Target 11' s “other effective area-based conservation measures”(OECMs) in Key Biodiversity Areas. *Conservation Letters*, 12(5).
- EC-JRC (2021). DOPA Indicator factsheets: <http://dopa.jrc.ec.europa.eu/en/factsheets>
- FAO (2017). Global Soil Organic Carbon (GSOC) Map - Global Soil Partnership [WWW Document]. URL <http://www.fao.org/global-soil-partnership/pillars-action/4-information-and-data/global-soil-organic-carbon-gsoc-map/en/>.
- Franks, P and Booker, F (2018). Governance Assessment for Protected and Conserved Areas (GAPA): Early experience of a multi-stakeholder methodology for enhancing equity and effectiveness. IIED Working Paper, IIED, London. <https://pubs.iied.org/17632IIED>
- Franks, P. et al. (2018). Social Assessment for Protected and Conserved Areas (SAPA). Methodology manual for SAPA facilitators. Second edition. IIED, London.
<https://pubs.iied.org/14659iied>
- Garnett et al. (2018). A spatial overview of the global importance of Indigenous lands for conservation. *Nature Sustainability*, 1(7), 369.
- Global Environment Facility (GEF-5 and GEF-6); all projects can be found online at:
<https://www.thegef.org/projects>
- Gloss, L. et al. (2019). International Outlook for Privately Protected Areas: Summary Report. International Land Conservation Network (a project of the Lincoln Institute of Land Policy) and United Nations Development Programme. Summary report, and individual country profiles, available at: <https://nbsapforum.net/knowledge-base/resource/international-outlook-privately-protected-areas-summary-report>

Hansen, M.C., Potapov, P.V., Moore, R., Hancher, M., Turubanova, S.A., Tyukavina, A., Thau, D., Stehman, S.V., Goetz, S.J., Loveland, T.R., Kommareddy, A., Egorov, A., Chini, L., Justice, C.O., Townshend, J.R.G., (2013). High-Resolution Global Maps of 21st-Century Forest Cover Change. *Science* 342, 850–853. <https://doi.org/10.1126/science.1244693>

Hilty, J et al. (2020). Guidelines for conserving connectivity through ecological networks and corridors. Best Practice Protected Area Guidelines Series No. 30. Gland, Switzerland: IUCN. <https://portals.iucn.org/library/sites/library/files/documents/PAG-030-En.pdf>

IIED 2020. Site-level assessment of governance and equity (SAGE) <https://www.iied.org/site-level-assessment-governance-equity-sage>.

IUCN (2016). A Global Standard for the Identification of Key Biodiversity Areas, Version 1.0. First edition. Gland, Switzerland: IUCN. <https://portals.iucn.org/library/sites/library/files/documents/2016-048.pdf>

IUCN-WCPA (2017). IUCN-WCPA Task Force on OECMs collation of case studies submitted 2016-2017. <https://www.iucn.org/commissions/world-commission-protected-areas/our-work/oecms/oecm-reports>

Joint Research Centre of the European Commission (JRC) (2021), The Digital Observatory for Protected Areas (DOPA) Explorer 4.1 [On-line], [Apr/2021], Ispra, Italy. Available at: <http://dopa-explorer.jrc.ec.europa.eu>

Kothari, A., et al. (Eds) (2012). Recognising and Supporting Territories and Areas Conserved By Indigenous Peoples And Local Communities: Global Overview and National Case Studies. Secretariat of the CBD, ICCA Consortium, Kalpavriksh, and Natural Justice, Montreal, Canada. Technical Series no. 64.

Lausche, B., Laur, A., Collins, M. (2021). *Marine Connectivity Conservation 'Rules of Thumb' for MPA and MPA Network Design*. Version 1.0. IUCN WCPA Connectivity Conservation Specialist Group's Marine Connectivity Working Group.

McDonald, R.I., Weber, K., Padowski, J., Flörke, M., Schneider, C., Green, P.A., Gleeson, T., Eckman, S., Lehner, B., Balk, D., Boucher, T., Grill, G., Montgomery, M., (2014). Water on an urban planet: Urbanization and the reach of urban water infrastructure. *Global Environmental Change* 27, 96–105. <https://doi.org/10.1016/j.gloenvcha.2014.04.022>

National Biodiversity Strategy and Action Plan (NBSAPs); most recent NBSAP is available at: <https://www.cbd.int/nbsap/search/>

Newbold, T., Hudson, L.N., Arnell, A.P., Contu, S., Palma, A.D., Ferrier, S., Hill, S.L.L., Hoskins, A.J., Lysenko, I., Phillips, H.R.P., Burton, V.J., Chng, C.W.T., Emerson, S., Gao, D., Pask-Hale, G., Hutton, J., Jung, M., Sanchez-Ortiz, K., Simmons, B.I., Whitmee, S., Zhang, H., Scharlemann, J.P.W., Purvis, A., (2016). Has land use pushed terrestrial biodiversity beyond the planetary boundary? A global assessment. *Science* 353, 288–291. <https://doi.org/10.1126/science.aaf2201>

Sala, E. et al. (2021). Protecting the global ocean for biodiversity, food and climate. *Nature*, 592(7854), 397-402.

Saura, S. et al. (2018). Protected area connectivity: Shortfalls in global targets and country-level priorities. *Biological Conservation*, 219, 53-67.

Saura, S. et al (2017). Protected areas in the world's ecoregions: How well connected are they? *Ecological Indicators*, 76, 144-158.

Spalding, M.D., et al. (2012). Pelagic provinces of the world: a biogeographic classification of the world's surface pelagic waters. *Ocean & Coastal Management* 60, 19–30.

Spalding, M.D., et al. (2007). Marine ecoregions of the world: a bioregionalization of coastal and shelf areas. *BioScience* 57(7): 573–583.

Spawn, S.A., Sullivan, C.C., Lark, T.J., Gibbs, H.K., (2020). Harmonized global maps of above and belowground biomass carbon density in the year 2010. *Scientific Data* 7, 112.
<https://doi.org/10.1038/s41597-020-0444-4>

Stolton, S. et al. (2014). *The Futures of Privately Protected Areas*. Gland, Switzerland: IUCN.

UNEP-WCMC and IUCN (2021) *Protected Planet Report 2020*. UNEP-WCMC and IUCN: Cambridge UK; Gland, Switzerland.

UNEP-WCMC and IUCN (2021), *Protected Planet: The Global Database on Protected Area Management Effectiveness (GD-PAME)* [On-line], [May/2021] , Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net.

UNEP-WCMC and IUCN (2021), *Protected Planet: The World Database on Protected Areas (WDPA)* [On-line], [May/2021] , Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net.

UNEP-WCMC and IUCN (2021), *Protected Planet: The World Database on Other Effective Area-based Conservation Measures (WD-OECM)* [On-line], [May/2021] , Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net.

UN Ocean Conference Voluntary Commitments, available at:
<https://oceanconference.un.org/commitments/>

Williams, B.A., Venter, O., Allan, J.R., Atkinson, S.C., Rehbein, J.A., Ward, M., Marco, M.D., Grantham, H.S., Ervin, J., Goetz, S.J., Hansen, A.J., Jantz, P., Pillay, R., Rodríguez-Buriticá, S., Supples, C., Virnig, A.L.S., Watson, J.E.M., (2020). Change in Terrestrial Human Footprint Drives Continued Loss of Intact Ecosystems. *One Earth* 3, 371–382.
<https://doi.org/10.1016/j.oneear.2020.08.009>

This document was created using the knitr package with R version 4.0.5.

For any questions please contact support@unbiodiveristylab.org.

