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GLOSSARY

AZEs Alliance for Zero Extinction sites
CEPF Critical Ecosystem Partnership Fund

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

NBSAP National Biodiversity Strategy and Action Plan
OECM Other Effective Area-Based Conservation Measures

PA Protected Area

PAME Protected Area Management Effectiveness

PPA Privately Protected Area

ProtConn Protected Connected land indicator

SOC Soil Organic Carbon

TEOW Terrestrial Ecosystems of the World WDPA World Database on Protected Areas

WD-OECM World Database on Other Effective Area-Based Conservation Measures

Disclaimer

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

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

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

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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 levelThis 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

- **Status:** as of May 2021, terrestrial coverage in Nepal is 34,897.9 km² (23.6%).
- 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

- **Status:** Nepal contains 12 terrestrial ecoregions: the mean protected coverage by reported PAs and OECMs is 27.2% and 2 terrestrial ecoregions have no coverage (1 of which covers <5 km² within the country).
- **Opportunities for action:** there is opportunity for Nepal to increase protection in terrestrial ecoregions 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

• **Status:** Nepal has 30 Key Biodiversity Areas (KBAs): the mean protected coverage of KBAs by reported PAs and OECMs is 54.6%, while 11 KBAs have no coverage by reported PAs and OECMs.

• **Opportunities for action:** there is opportunity for Nepal 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 Nepal, 16.6% of aboveground biomass carbon, 17.4% of belowground biomass carbon and 24.7% of soil organic carbon is covered by PAs and OECMs.
- **Opportunities for action:** for carbon, there is opportunity for Nepal to increase PA and OECM coverage in 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 10.9%.
- **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 Nepal is: 73.5% under Government (Federal or national ministry or agency).
- **Opportunities for action:** explore opportunities for governance types that have lower representation, for Nepal this could relate to governance by Indigenous Peoples and/or local communities (IPLC) and shared governance. Increase efforts to identify the governance types for the 18.4% of sites that do not have their governance type reported.
- There is also opportunity for Nepal 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:** 71.9% of terrestrial 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** been met for terrestrial PAs. Further increasing this percentage could be beneficial overall for understanding how well protected areas are being managed.
- 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 Nepal. Section I of the dossier presents data on the current status of Nepal'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 Nepal, in relation to each Target 11 element. The analyses present options for improving Nepal's area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Nepal'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 commitments to the UN. Furthermore, where data is

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

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

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

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

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

SECTION I: CURRENT STATUS

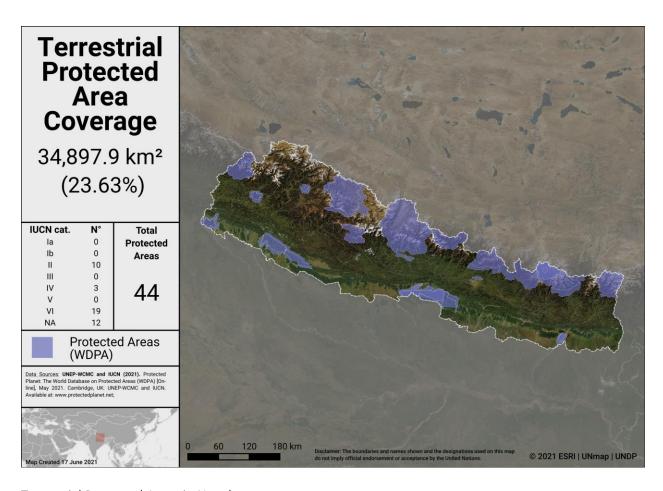
Aichi Biodiversity Target 11 refers to both protected areas (PAs) and other effective areabased conservation measures (OECMs). This section provides the current status for all elements of Aichi Biodiversity Target 11 where indicators with global data are available. Statistics for all elements are presented 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

As of May 2021, Nepal has **49** protected areas reported in the World Database on Protected Areas (WDPA). 5 proposed PAs 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, Nepal has **0** OECMs reported in the world database on OECMs (WD-OECM). Current coverage for Nepal:

• 23.6% terrestrial (44 protected areas, 34,897.9 km²)



Terrestrial Protected Areas in Nepal

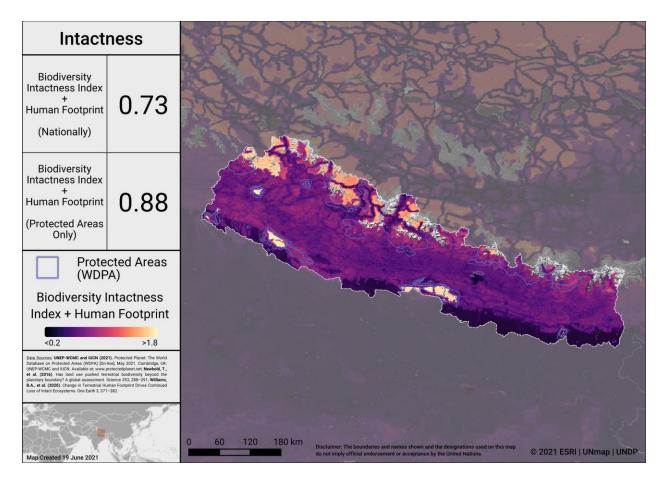
Potential OECMs

There are currently no potential OECM examples for Nepal.

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 Nepal considers

where to add new PAs and OECMs, the map below identifies areas in Nepal where intact 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 Nepal

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

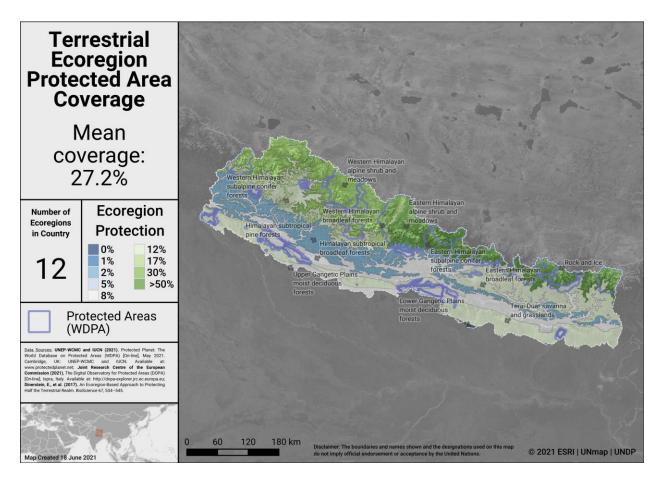
ECOLOGICAL REPRESENTATIVENESS

Ecological representativeness is assessed based on the PAs and OECMs coverage of broadscale 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).

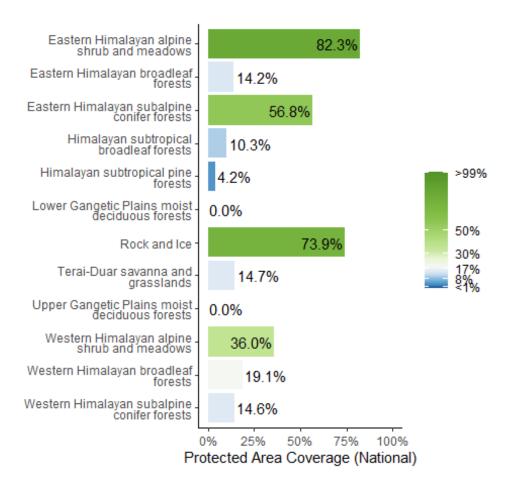
Nepal has 12 **terrestrial** ecoregions. Out of these:

- 10 ecoregions have at least some coverage from PAs and OECMs.
 - The remaining 2 ecoregions cover <0.2% of the country (1 ecoregion covers <5 km² of the country)
- 5 ecoregions have 17% protected within the country.
- The average terrestrial coverage of ecoregions is 27.2%.

A full list of ecoregions in Nepal is available in Annex I.



Terrestrial ecoregions in Nepal



Terrestrial ecoregions of the World (TEOW) in Nepal

Opportunities for action

There is opportunity for Nepal to increase protection in terrestrial ecoregions 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.

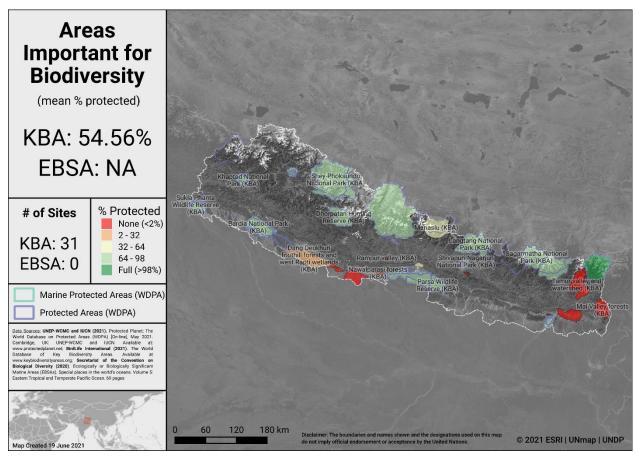
AREAS IMPORTANT FOR BIODIVERSITY

Key Biodiversity Areas (KBAs)

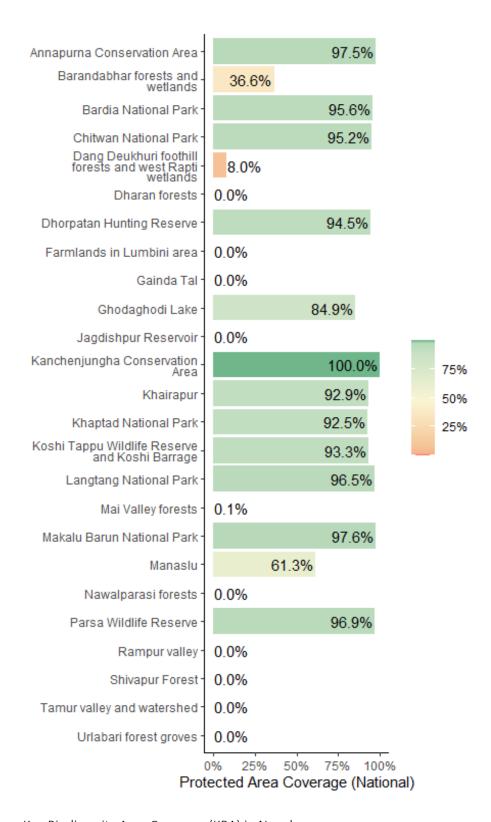
Protected area and OECM coverage of Key Biodiversity Areas (KBAs) provide one proxy for assessing the conservation of areas important for biodiversity at national, regional and global scales. KBAs are sites that make significant contributions to the global persistence of biodiversity (IUCN, 2016). The 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.

Nepal has 31 Key Biodiversity areas (KBAs) [30 KBAs included in the analysis]

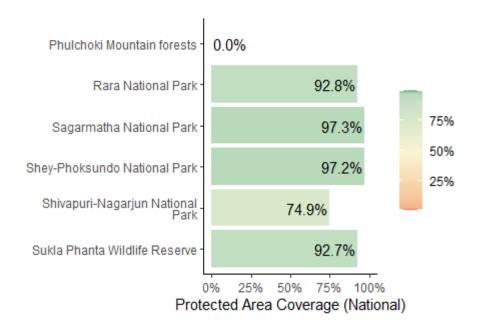
- Mean percent coverage of all KBAs by PAs and OECMs in Nepal is **54.6%**.
- 1 KBA has full (>98%) coverage by PAs and OECMs.
- **18** KBAs have partial coverage by PAs and OECMs.
- **11** KBAs have no (<2%) coverage by PAs and OECMs.
- 1 KBA lacks spatial data to allow PA/OECM coverage to be determined



Areas Important for Biodiversity in Nepal



Key Biodiversity Area Coverage (KBA) in Nepal



Key Biodiversity Area Coverage (KBA) in Nepal

Opportunities for action

There is opportunity for Nepal 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.

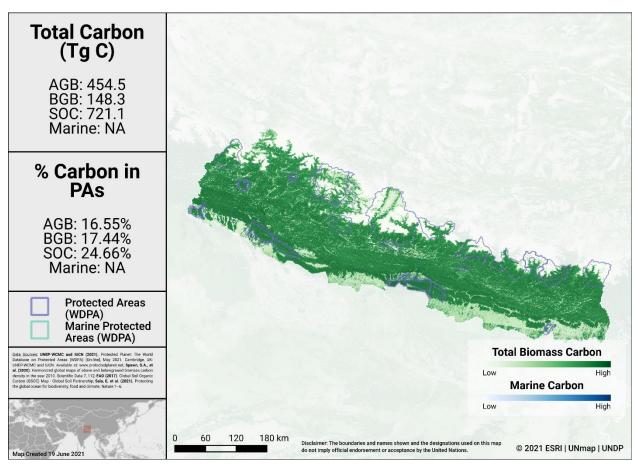
AREAS IMPORTANT FOR ECOSYSTEM SERVICES

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 for details on methodology).

The map below presents the total carbon stocks in Nepal and the percent of carbon in protected areas. The total carbon stocks is 454.5 Tg C from aboveground biomass (AGB), with 16.6% in protected areas; 148.3 Tg C from below ground biomass (BGB), with 17.4% in protected areas and 721.1 Tg C from soil organic carbon (SOC), with 24.7% in protected areas.



Carbon Stocks in Nepal

Water

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 Nepal may similarly depend on protected forest areas within and around water catchments. Intact catchments can support more consistent water supply and improved water quality.

Opportunities for action

For carbon, there is opportunity for Nepal to increase PA and OECM coverage in 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).

Protected Connected Land Indicator (Prot-Conn)

As of June 2018 (the most recent year available), coverage of protected-connected lands (a measure of connectivity of protected area networks, assessed using the ProtConn indicator) in Nepal was 10.9%.

PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Nepal is 0.39. This represents no significant change since 2010.

Corridor case studies

There are no corridor case studies available for Nepal (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.

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

- 73.5% are governed by **governments** (by federal or national ministry or agency)
- 0.0% are under **shared** governance
- 6.1% are under **private** governance (by non-profit organisations)
- 2.0% are under **IPLC** governance
 - 0.0% by Indigenous Peoples
 - 2.0% by local communities
- 18.4% **do not** report a governance type

OECMs

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

Privately Protected Areas (PPAs)

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

- PPAs **are not** formally defined in PA legislation (however, the private sector has been involved in managing land for conservation)
- PPAs **are not** directly identified in Nepal's recent NBSAP (however, it does mention broadening conservation constituencies by involving the private sector)
- PPAs **are not** included as part of the current PA network (however, the WDPA does list 3 conservation Areas under governance by NGOs)

See additional information in Nepal's country profile and summarized in Annex II.

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

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

- 18,000 community forest user groups (CFUG; covering >1.3 mil ha), several hundred of which may be ICCAs, including those in wildlife corridors, and practicing customary forest and rangeland management
 - All CFUGs are not ICCAs, but in practice thousands of forests and other ecosystems are conserved by local people, therefore many of them may be ICCAs; several hundred of the 18,000 CFUGs may be ICCAs but total ICCA area is not known
- Kanchanjunga conservation area (KCA) covering 203,500 ha
- Hundreds of buffer zone areas managed by communities as sacred natural sites, traditional pastures, community Forests (CFs), etc. covering 560,300 ha

• There are also hundreds of religious forests and sacred groves, and hundreds of ponds and lakes (total area is not known

Other Indigenous lands

Lands managed and/or controlled by Indigenous Peoples cover an area of $128,518.0 \text{ km}^2$, of which $97,597.0 \text{ km}^2$ falls outside of formal protected areas. Indigenous lands with a human footprint less than 4 (considered as 'natural landscapes') cover an area of $14,473.0 \text{ km}^2$ (for details on analysis see Garnett et al., 2018).

For Nepal, 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: Gurung, H. (ed). Nepal Atlas and Statistics (Himal Books, 2006); Turin, M. Linguistic diversity and the preservation of endangered languages: a case study from Nepal (International Centre for Integrated Mountain Development, 2007); Turin, M. Harka's Maps (Nepali Times, 2007)...

Opportunities for action

Explore opportunities for governance types that have lower representation, for Nepal this could relate to governance by Indigenous Peoples and/or local communities (IPLC) and shared governance. Increase efforts to identify the governance types for the 18.4% of sites that do not have their governance type reported.

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

Alliance for 20 Integrated Development - Nepal	014	Developed as a response to the overexploitation of natural resources, wildlife poaching, and water pollution, the Alliance for Integrated Development Nepal (AID-Nepal) protects and manages the resources of Jagadishpur, an 'important bird area', a Ramsar site, and the largest manmade reservoir in Nepal. AID-Nepal works to create sustainable livelihoods while also maintaining and enhancing biodiversity in this wetland ecosystem. Organic farming, riverbank restoration, reforestation, ecotourism, and anti-poaching activities are improving incomes in ways that also protect several bird species that are on the verge of extinction, including vultures and cranes. Radio programming and grassroots awareness-raising campaigns have sensitized the public to the links between wetland health and human well-being. Led primarily by women, the initiative has managed to control illegal hunting, promote organic farming, create a revolving micro-credit fund, build an equitable irrigation system, and substantially improve and diversify local livelihoods.



Photo from the Equator Prize Project: Alliance for Integrated Development

PROTECTED AREA MANAGEMENT EFFECTIVENESS

This section 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, Nepal has 49 PAs reported in the WDPA; of these PAs, 20 (40.8%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

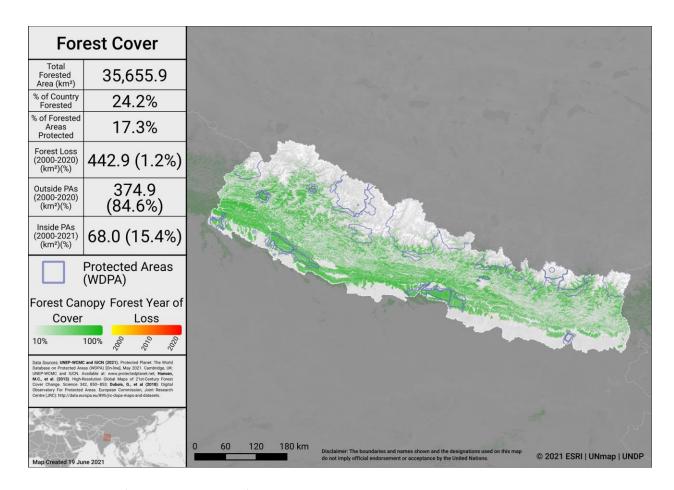
- 17.0% (25,086 km²) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
 - 71.9% of the area of terrestrial PAs have completed evaluations.

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met for terrestrial PAs.

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

Changes in forest cover in protected areas and OECMs

Forested areas in Nepal cover approximately 24.2% of the country, an area of 35,655.9 km². Approximately 17.3% (6,156.3 km²) of this is within the protected area estate of Nepal. Over the period 2000-2020 loss of forest cover amounted to over 442.9 km², or 0.3% of the country (1.2% of forest area), of which 68.0 km² (15.4% of forest loss) occurred within protected areas. The map below shows how forest cover has changed in Nepal from 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 Nepal

Opportunities for action

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met. Further increasing this percentage would be beneficial overall for understanding how well protected areas are being managed.

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 South, Central and West Asia on achieving Aichi Biodiversity Targets 11 and 12 took place 7 - 10 December 2015 in New Delhi, India. 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:

- 1) Awareness campaign on linking Aichi targets 11-12 and Sustainable Development Goal
- 2) Capacity development programme on protected area management and management effectiveness including good governance assessment including fund rising for civil societies
- 3) Increase greater proportion of biodiversity in protected areas (now only 33%)
- 4) Assess impact of climate change on PAs, especially on climate sensitive zones.

Ecological representation:

- 1) Increase PAs to cover wider biodiversity
- 2) The status of some eco-regions must be strengthened
- 3) Improve protected areas/management in mid hills to have proper representation of under representative ecoregions (now only 1.33%) 9 ecoregions.

Areas Important for biodiversity and ecosystem services:

- 1) Gap analysis in biodiversity rich areas outside protected areas and corridors
- 2) Priority interventions on wetlands and rangeland improvements
- 3) Strengthen upstream downstream linkages
- 4) Promotion of payment of Ecosystem services (PES) mechanism in selected subwatersheds.

No actions were identified for the remaining elements of Target 11

NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

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

PA Strategy A: Improvement in management of protected area and species; PA Strategy B: Abatement in poaching and illegal trade of wildlife and wildlife parts; PA Strategy C: Improvement in protected area habitats and connectivity; PA Strategy D: Improvement in management of protected area tourism

NBSAP Actions will address elements of Aichi Target 11 (full list of actions here):

NBSAP Action #	Action (original language from NBSAP)
CEO-C1	Developing on-site lecturing, demonstration and interpretation infrastructure in at least five selected protected areas and Ramsar sites, by 2020
FG-B2	Exploring and promoting possible additional sources of sustainable income from protected areas
LM-B1	Designing and implementation of programmes to raise awareness about the fragility, vulnerability and importance of the Chure (Siwalik) range
LM-B2	Development, by 2015, and effective implementation of Chure conservation strategy by also involving local governments, relevant government line agencies, and community-based forest user groups
PA-A1	Development and effective implementation of the Programme of Work in selected Protected Area
PA-B2	Further strengthening of bilateral and regional cooperation, particularly with China and India
PA-C1	Development and implementation of guidelines for sustainable management of grasslands, wetlands and other important habitats located inside protected areas and corridors
PA-C3	Integrate the concept of Smart Green Infrastructure in physical infrastructure development plans
PA-C5	Banning development projects in core areas of National Parks and Wildlife Reserves
TK-A5	Integrating relevant local cultural and religious practices in the management of sacred natural sites within protected areas and protected forests, by 2016
WB-A2	By 2020, additional five wetlands of international importance to be enlisted as Ramsar sites
WB-B10	Declaration and management and of at least three suitable wetlands as fish sanctuaries, by 2017

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

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

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

GEF ID	PA increase?	Area to be added (km²)	Qualitative elements potentially benefitting (based on keyword search of PIFs)
9437	No	N/A	Effectively managed; Equitably managed; Connectivity; Integration

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

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

GCF ID	Project theme	Result area	Target 11 element
FP118	Cross- cutting	Forest and land use	Ecosystem services; Integration; Equitably managed
FP131	Cross- cutting	Forest and land use	Connectivity; Equitably managed; Integration; Effectively managed; Ecosystem services

OTHER ACTIONS/COMMITMENTS

Leaders' Pledge for Nature

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

Political leaders participating in the United Nations Summit on Biodiversity in September 2020, representing 84 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030. By doing so, these leaders are sending a united signal to step up global ambition and encourage others to match their collective ambition for nature, climate, and people with the scale of the crisis at hand.

Commitments for PAs and OECMs from Other National Policies

Policy document	Ecosystem	Policy text
Nationally Determined Contribution	Forest ecosystems	Coordinate and oversee conservation and resource utilization in the Chure (Siwalik) area
Nationally Determined Contribution	Forest ecosystems	Maintain 40% of the total area of the country under forest cover
Nationally Determined Contribution	Wetland ecosystems	4,000 improved water mills
National Biodiversity Strategy Action Plan	Forest ecosystems	Reclaiming at least 10,000 hectares encroached forest land through effective implementation of the Forest Encroachment Control Strategy
National Biodiversity Strategy Action Plan	Forest ecosystems	Effective enforcement of measures to discourage use of forestland for non-forestry purposes
Reducing emissions from deforestation and forest degradation	Wetland ecosystems	Conserve and increase water sources, and promote efficient water management technologies

Other commitments addressing improved coverage of PAs or OECMs

Based on the commitment made in Nepal's Sixth National Report (*By 2020, at least 25% area of the country will be sustainably managed under protected area system*) an increase in the coverage of terrestrial areas of **2,030 km²** is planned.

ANNEX I

FULL LIST OF ECOREGIONS

Ecoregion Name	Area (km²)	% of Global Ecoregion in Country	% of Country in Ecoregion	Area Protected (km²)	% Protected in Country
Eastern Himalayan alpine shrub and meadows	8,594.4	7.1	5.8	7,069.9	82.3
Eastern Himalayan broadleaf forests	15,305.9	18.5	10.4	2,169.7	14.2
Eastern Himalayan subalpine conifer forests	4,996.0	18.2	3.4	2,837.0	56.8
Himalayan subtropical broadleaf forests	28,222.8	74.0	19.1	2,921.5	10.4
Himalayan subtropical pine forests	22,742.9	29.9	15.4	951.1	4.2
Lower Gangetic Plains moist deciduous forests	210.1	0.1	0.1	0.0	0.0
Rock and Ice	6,766.5	0.0	4.6	5,000.9	73.9
Terai-Duar savanna and grasslands	22,401.1	64.9	15.2	3,299.7	14.7
Upper Gangetic Plains moist deciduous forests	4.9	0.0	0.0	0.0	0.0
Western Himalayan alpine shrub and meadows	21,469.2	30.6	14.5	7,723.3	36.0
Western Himalayan broadleaf forests	4,805.0	8.6	3.3	915.9	19.1
Western Himalayan subalpine conifer forests	12,090.8	30.5	8.2	1,759.6	14.6

ANNEX II

ADDITIONAL DETAILS ON PPAS

- There is no formal definition of a privately protected area (PPA) in Nepal's legislation, nor is official protection of privately-owned land identified by the biodiversity action plans of relevant ministries. No agency of the government collects data on privately-owned conservation areas. This is due largely to an emphasis on communities and the state as the appropriate actors to undertake conservation. Despite this, the private sector has been involved in managing land for conservation in Nepal
- PPAs were not identified in the county's recent NBSAP; however, it does mention "Broadening the conservation constituencies by effectively involving local governments and private sector in conservation and sustainable use of biological resources."
 - Examples include private forests (~2,300 ha of private land) and promoting agro-and private forestry for the purposes of biodiversity conservation)
- There are opportunities for local NGOs to manage government PAs by contract (these examples of shared governance may meet the definition of a PPA, depending on who ultimately has decision-making power over management)
- Special Conserved Sites are discreet sites outside of formal PAs, designed to
 recognize biodiversity in human-dominated landscapes; sites are owned, protected,
 and managed by communities and local conservation leaders (several examples all
 occur on private land). Depending on they are owned, recognized, and managed,
 these may be PPAs or ICCAs
- The WDPA currently lists 3 Conservation areas under private governance.

Case studies/best practices:

Annapurna Conservation Area – designated in 1986, becoming the first 'conservation area' and first PA in Nepal to be managed by an NGO. Annapurna Conservation Area Program launched in 1992, and currently manages 762,900 ha. The Trust created for the purpose of independently governing the PA is now involved in >200 conservation projects and manages three other PPAs.

See additional info in country profile (http://nbsapforum.net/knowledge-base/resource/nepal-country-profile-international-outlook-privately-protected-areas).

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