

Consolidated guidance notes for the targets of the Kunming-Montreal Biodiversity Framework

Please note that is an offline version of the Target guidance notes, last updated on 26th January, 2024. For the latest guidance notes kindly visit the www.cbd.int or click on this link [2030 Targets \(with Guidance Notes\)](#)

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Target 1

Plan and manage all areas to reduce biodiversity loss: Ensure that all areas are under participatory, integrated, and biodiversity inclusive spatial planning and/or effective management processes addressing land and sea use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.

A. Why is this target important?

Land-use and sea-use change are major direct drivers of biodiversity loss. Land-use change has had the largest relative negative impact on terrestrial and freshwater ecosystems since 1970, with agricultural expansion being the most widespread form of land-use change. Marine and coastal ecosystems have been significantly affected by human activities as well, with research demonstrating increasing cumulative impacts of human activities in more than 60 per cent of the ocean.

Increasing demands and conflicting uses of land, inland water and ocean space and resources underscore the need for cross-sectoral approaches that allow for the consideration of multiple interests, values and types of use. Integrated spatial planning and/or effective management processes allow countries to analyze and then effectively allocate the spatial and temporal distribution of activities in each environment to achieve various social, ecological and economic objectives. Integrated and participatory spatial planning helps bring together all stakeholders for a particular space and thereby ensure the prioritization and proper allocation of various activities and thereby balance the need to safeguard nature, while advancing sustainable socioeconomic development and ensuring food security and human well-being. The ecosystem approach as well as the many examples of guidance and experience in implementing this approach also provide a strong basis for this target.

B. Explanation of the target and its elements

This target aims to ensure that all areas are under spatial planning or other effective management with the purpose of addressing the driver of land use change or sea use change and of bringing the loss of areas of high biodiversity importance close to zero by 2030.

To accomplish this, the target further specifies a number of elements that need to be considered in carrying out action:

- **Spatial planning** – There are different definitions of spatial planning, however it is generally considered to be a method or process for analyzing and allocating the spatial and temporal distribution of human uses and activities in a given area, in order to achieve various social, economic and ecological objectives. It may also include integrating biodiversity considerations using spatial data during land- and sea-use planning exercises. When undertaken in terrestrial areas it is often referred to as “land use planning” while in marine areas it is referred to as “marine spatial planning”. For inland water and related ecosystems, planning processes often take place at the watershed level.
- **Effective management processes** –Effective management process may be utilised instead of or as a complement to spatial planning to address land use and sea use change. This may include such things environmental assessment, environmental impact assessment and strategic environmental impact assessment.

- **All areas** – The spatial planning and/or management approaches should be applied to all areas. In other words, the aim should be that, by 2030, the entire territory of each country has been subject to some degree of spatial planning or effective management. This includes all terrestrial and aquatic ecosystems—both freshwater and marine—as applicable.
- **Participatory** – Landscapes and seascapes are often used for different, and sometimes competing, purposes. For spatial planning and management processes to be effective in addressing habitat loss it is important that these processes consider how space and resources are being used by different actors, including indigenous peoples and local communities, how these uses align with biodiversity objectives and what possible conflicts could exist. Understanding and accounting for these different purposes necessitates a participatory approach to spatial planning and management processes.
- **Integrated and biodiversity inclusive** – Spatial planning and management processes are carried out for various purposes. To be effective in achieving the goals of the Kunming-Montreal Global Biodiversity Framework, these processes must integrate biodiversity considerations, along with other considerations.
- **Addressing land- and sea-use change** – Land- and sea-use change refers to processes by which human activities transform the landscape and sea scape. As noted above these pressures are the leading cause of biodiversity loss in many ecosystems. Spatial planning and other effective management processes should be undertaken with the overall objective addressing such change.
- **Areas of high biodiversity importance** – There is no single definition of areas of high biodiversity importance, and each country will need to identify such areas given their national circumstances and priorities. Generally, such areas would include areas high in species richness or threatened species, areas with unique, important or threatened biomes and habitats. There are various means and metrics by which to identify areas of high biodiversity importance, including (but not limited to) Key Biodiversity Areas, Important Bird and Biodiversity Areas, and ecologically or biologically significant marine areas.
- **High ecological integrity** - Ecosystems can be generally considered to have integrity when their dominant ecological characteristics (e.g., elements of composition, structure, function and ecological processes) occur within their natural ranges of variation and can withstand and recover from most disturbances.
- **Respecting the rights of indigenous peoples and local communities** – The rights of indigenous peoples and local communities must be respected and preserved with their free, prior and informed consent, including their full and effective participation in decision making, in accordance with relevant national legislation, international instruments, including the United Nations Declaration on the Rights of Indigenous Peoples, and human rights law. This may include the recognition of local spatial planning of indigenous peoples and local communities, which takes advantage of the local context, including cultural, governance and spiritual dimensions, as well as the planning and management processes being led by indigenous peoples and local communities within their respective lands and waters.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 1 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).

- Progress towards this target will support the attainment of goals A and B of the Kunming-Montreal Global Biodiversity Framework. In addition, progress towards this target will directly support the attainment of targets [2](#), [3](#), [5](#), [10](#) and [12](#) of the Framework. Conversely, progress towards targets [14](#), [19](#), [20](#), [21](#), [22](#) and [23](#) will help to reach Target 1.
- Target 1 addresses issues that were previously addressed by [Aichi Biodiversity Target 5](#).
- Elements of Target 1 are also addressed in the targets of the Sustainable Development Goals, including targets [14.2](#), [15.1](#), [15.2](#), [15.5](#) and [15.9](#).

D. Guiding questions for national target-setting

- What spatial planning or related management processes already exist in your country? Are these processes participatory, integrated and biodiversity-inclusive? How effective are these processes in bringing the loss of areas of high biodiversity importance close to zero? Do they need to be amended to account for and integrate biodiversity considerations? Do they respect the rights of indigenous peoples and local communities?
- Which authorities and stakeholders, and at which levels (e.g., national, subnational), play an active role in spatial planning or related management processes? What are their respective roles? How can collaboration be promoted to ensure biodiversity elements/concerns are considered in their work?
- What additional resources (e.g., financial, human, technical) will be required to take actions to reach this target? How can additional resources be raised?
- What measures are necessary to ensure the preservation and protection of the rights of indigenous peoples and local communities while implementing this target?
- Which areas in your country are considered to be of high biodiversity importance, and/or high ecological integrity? What are the current rates of loss of areas of high biodiversity importance in your country?

E. Indicators

The monitoring framework for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline Indicators:

- [A.1 Red List of Ecosystems](#)
- [A.2 Extent of natural ecosystems](#)
- [1.1 Per cent of land and seas covered by biodiversity-inclusive spatial plans*](#)

Component indicator:

- Priority retention of intact / wilderness areas

Complementary indicators:

- Number of countries using natural capital accounts in planning processes
- Percentage of spatial plans utilizing information on Key Biodiversity Areas

- Habitat patches located within marine protected areas or integrated marine and coastal area management (IMCAM)
- Other spatial management plans (not captured as IMCAM or marine spatial planning in 14.2.1)
- Number of countries using ocean accounts in planning processes
- Proportion of transboundary basin area with an operational arrangement for water cooperation
- Proportion of total land area that is under cultivation
- Extent of natural ecosystems by type
- Number of countries implementing national legislation, policies or other measures regarding free, prior and informed consent related to conservation
- Ecosystem Integrity Index

F. Relevant resources that can assist implementation

Assessments

- [IPBES Global Assessment Report on Biodiversity and Ecosystem Services \(2019\)](#)

Tools and guidance

- [Information on the Ecosystem Approach under the CBD](#)
- [Sustainable Ocean Initiative Training Module: Strategic Environmental Assessment \(SEA\): A strategic thinking framework for achieving sustainable development](#)
- [Sustainable Ocean Initiative Training Module: Addressing Capacity Needs for Integrated Coastal Management](#)
- [Sustainable Ocean Initiative Training Module: Integrating the Aichi Biodiversity Targets into Integrated Coastal Management Development Program through the application of the Integrated Coastal Management System](#)
- [Information on CBD's Ecologically or Biologically Significant Marine Areas \(EBSAs\)](#)
- [IOC-UNESCO's key resources on marine spatial planning](#)
- [UNDP \(2022\). Integrated Spatial Planning Workbook](#)
- [UNESCO-IOC/European Commission \(2021\). MSPglobal International Guide on Marine/Maritime Spatial Planning.](#)
- [UNEP-WCMC \(2021\). National ecosystem assessments to support implementation of the Convention on Biological Diversity. Cambridge, United Kingdom.](#)
- [CBD Decision 13/9: Marine spatial planning and training initiatives \(2016\)](#)

- [CBD Technical Series No. 76: Integrated Coastal Management for the Achievement of the Aichi Biodiversity Targets: Practical Guidance for Implementation based on Experience and Lessons Learned from Coastal and Ocean Governance in the Seas of East Asia \(2015\).](#)
- [UNEP/CBD/SBSTTA/20/INF/6: Report of the expert workshop to provide consolidated practical guidance and a toolkit for marine spatial planning \(2015\)](#)
- [CBD Technical Series No. 68: Marine Spatial Planning in the Context of the Convention on Biological Diversity \(2012\).](#)
- [UNEP/CBD/COP/11/23, part II: Draft guidance on biodiversity-inclusive strategic environmental assessment in marine and coastal areas \(2012\)](#)
- [UNEP/CBD/SBSTTA/16/7, section III: Marine spatial planning \(2012\)](#)
- [Voluntary guidelines on biodiversity-inclusive impact assessment \(2006\)](#)
- [UNEP/CBD/COP/8/26/Add.1: Enhancing the implementation of integrated marine and coastal area management \(IMCAM\) \(2006\)](#)
- [CBD Technical Series No. 14: Integrated Marine and Coastal Area Management \(IMCAM\) Approaches for Implementing the Convention on Biological Diversity \(2004\).](#)
- [Decision 7/5, annex II: Guidance for the Development of a National Marine and Coastal Biodiversity Management Framework \(2004\)](#)
- [Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessments Regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities \(2004\)](#)

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Target 2

Restore 30% of all degraded ecosystems: Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

A. Why is this target important?

Habitat degradation is the result of human-induced processes that result in a decline in biodiversity, ecosystem functions and services, and resilience and can occur in terrestrial, freshwater or marine and coastal ecosystems. Because degradation can take many forms and be measured in different ways, there are varying estimates on the amount of degraded habitat globally. However, estimates suggest that between 20 and 40 per cent of the global land area alone could be considered degraded, affecting the well-being of at least 3.2 billion people.

The main direct drivers of land degradation are the expansion of crop and grazing lands into natural areas, unsustainable agricultural and forestry practices, climate change, and, in specific areas, urban expansion, infrastructure development and extractive industry. Habitat loss through transformation and the decline in the suitability of the remaining habitat through degradation are the leading causes of biodiversity loss. Ecosystems affected by land degradation mainly include forests, rangelands and wetlands. Wetlands are particularly degraded, with 87 per cent lost globally in the last 300 years, and 54 per cent since 1900. Marine ecosystems are experiencing high rates of habitat loss and degradation as well, particularly along coastlines, mangrove forests and coral reefs.

B. Explanation of the target and its elements

This target aims to ensure that 30 per cent of the total area of degraded terrestrial, inland water and marine and coastal ecosystems are under effective restoration by 2030. To accomplish this, the target specifies several elements that need to be considered:

- **Restoration** – Restoration refers to the process of actively managing the recovery of an ecosystem that has been degraded, damaged or destroyed. Restoration activities can be undertaken for a variety of reasons and across a continuum of actions. For example, ecological restoration includes efforts to increase the area of a natural ecosystem and its integrity through recovering an ecosystem that has been degraded or destroyed, this includes conversion of non-natural transformed ecosystems back to a natural ecosystems state. On the other hand ecosystem rehabilitation includes efforts to increase ecosystem functions and services of transformed ecosystems. Given, the continuum of restoration activities, efforts to reach this target should be specific and identify the type of restoration being undertaken, the overall objectives being sought and the type of area or ecosystem being restored.
- **Effective**—In order for restoration activities to be effective, they need to be appropriately resourced and monitored over time. Further, the potential for restoration should not be regarded as a justification for the further degradation of ecosystems. The target does not require areas to be restored, given that restoration is a long-term process, but that effective restoration activities have been initiated.
- **Degraded ecosystems** - Degradation refers to a persistent (long-term) reduction in the capacity to provide ecosystem services. Degraded land includes natural ecosystems which have included a loss of ecosystem functions and services and transformed ecosystems (such

as agricultural areas). An assessment of degraded areas within a country is a necessary first step for monitoring the total percent of degraded ecosystems which are under restoration

- **Terrestrial, inland water, marine and coastal ecosystems**– The Target specifies the need to restore all types of ecosystems whether terrestrial, inland water or marine and coastal..
- **Enhance biodiversity and ecosystem functions and services** – While restoration activities can be undertaken for various reasons, this target specifies that such activities should be undertaken for the purposes of enhancing biodiversity and ecosystem functions and services, ecological integrity and connectivity. These different objectives should be considered in the design and implementation of actions to reach this target.
- **Connectivity and integrity** – An area with high ecological integrity is one which has a composition, structure, function and ecological process close to that of a natural ecosystem. Connectivity ensures the maintenance of natural species habitats. Taking into account both objectives is an important consideration in the design of restoration activities.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 2 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target will support the attainment of goals A and B of the Kunming-Montreal Global Biodiversity Framework. In addition, progress towards this target will directly support the attainment of targets 3, 8, 11 and 12 of the Framework. Conversely, progress towards targets 1, 14, 19, 20, 21, 22 and 23 will help to reach Target 2.
- Target 2 addresses issues that were previously addressed by [Aichi Biodiversity Target 15](#)
- Elements of Target 2 are also addressed in the targets of the Sustainable Development Goals, including targets [6.6](#), [14.2](#), [15.1](#) and [15.3](#)
- Target 2 also links to processes under the United Nations Convention to Combat Desertification (UNCCD) related to land degradation neutrality and associated target setting, the Global Forest Goals and targets of the United Nations Strategic Plan for Forests developed under the United Nations Forum on Forests, Ramsar Resolution VII.17 as well as to the United Nations Decade on Ecosystem Restoration.

D. Guiding questions for national target-setting

- What areas in your country are currently degraded? What are the opportunities and constraints in undertaking ecosystem restoration, generally and by habitat?
- What are the trade-offs to consider (potential ecological, economic, and social costs and benefits) in undertaking restoration in specific habitats?
- What national or sub/regional restoration commitments and pledges have been endorsed by your country?
- Who are the key actors that may have an interest, responsibility and/or authority in this matter? How can they be involved?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional funds be raised? What are possible funding sources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators) for this target:

Headline indicators:

- [2.2 Area under restoration](#)

Component indicators:

- Extent of natural ecosystems by type
- Maintenance and restoration of connectivity of natural ecosystems

Complementary indicators:

- Habitat distributional range
- Index of Species Rarity Sites, High Biodiversity Areas, Large Mammal Landscapes, Intact Wilderness and Climate Stabilization Areas
- Increase in secondary natural forest cover
- Annual Tropical Primary Tree Cover Loss
- Forest Landscape Integrity Index
- Global Ecosystem Restoration Index
- Free-flowing rivers
- Percentage of cropped landscapes with at least 10 per cent natural land
- Bioclimatic Ecosystem Resilience Index (BERI)
- Priority retention of intact / wilderness areas
- Status of Key Biodiversity Areas
- Biodiversity Habitat Index
- Red List Index
- Red List of Ecosystems

F. Relevant resources that can assist implementation

Assessments:

- [IPBES \(2018\). Assessment Report on Land Degradation and Restoration.](#)
- [UNCCD \(2022\). Global Land Outlook 2, Land Restoration for Recovery and Resilience.](#)
- [FAO \(2020\). The State of the World's Forests.](#)
- [UNEP \(2022\). Global Peatlands Assessment.](#)

- [UNCCD. National Voluntary Land Degradation Neutrality Targets and related country reports submitted under the UNCCD.](#)

Tools and guidance:

- [CBD decision XIII/5 \(2016\). Short-term Action Plan on Ecosystem Restoration.](#)
- [Ramsar resolution VIII/16 \(2002\). Principles, and guidelines for wetland restoration.](#)
- [UNCCD \(2016\). Land Degradation Neutrality Target Setting – a technical guide.](#)
- [SER \(2023\). International Principles and Standards for the Practice of Ecological Restoration, 2nd Edition.](#)
- [Ecosystem Restoration Playbook – a Practical Guide to Healing the Planet.](#)
- [FAO, SER & IUCN CEM \(2023\). Standards of practice to guide ecosystem restoration: A contribution to the United Nations Decade on Ecosystem Restoration – Summary report.](#)
- [Framework for Ecosystem Restoration Monitoring \(FERM\)](#)
- [IUCN. The Restoration Barometer.](#)
- [ITTO \(2020\). Guidelines for Forest Landscape Restoration in the Tropics](#)
- [FAO, IUCN/CEM, SER \(2021\). Principles for ecosystem restoration to guide the United Nations Decade 2021–2030.](#)

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Target 3

Conserve 30% of land, waters and seas: Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

A. Why is this target important?

Well-governed, effectively managed and representative protected areas and other effective area-based conservation measures (OECMs) are a proven method for safeguarding both habitats and populations of species and for delivering important ecosystem services and multiple benefits to people. They are a central element of biodiversity conservation strategies at local, national and global levels. Protected areas and OECMs can take various forms, ranging from strictly protected areas to areas that allow sustainable use consistent with the protection of species, habitats and ecosystem processes.

B. Explanation of the target and its elements

This target calls for the expansion and enhancement of protected and conserved areas, (i.e. areas that are managed with the aim of achieving positive outcomes for biodiversity). The target indicates three approaches that may be employed to achieve this aim:

- **Protected areas** –The Convention on Biological Diversity defines a protected area as geographically defined area which is designated or regulated and managed to achieve specific conservation objectives. IUCN has established a categorization of protected areas.
- **Other effective area based conservation measures** – These are a geographically defined area other than a protected area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the *in situ* conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values.
- **Indigenous and traditional territories** – Indigenous peoples and local communities often own, occupy and/or manage areas with unique and significant biodiversity. The appropriate recognition of these areas could make important contributions towards this target. However, any decisions regarding these areas must **recognize and respect the rights of indigenous peoples and local communities** over them and including obtaining free, prior and informed consent.

The target also sets out several elements that need to be considered:

- **At least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas** – This quantitative element of the target specifies that, globally, at least 30 per cent of terrestrial and inland water areas, and at least 30 per cent of marine and coastal areas should be conserved or protected by 2030.

- **Areas of particular importance for biodiversity and ecosystem functions and services** – Areas particularly important for biodiversity include areas high in species richness or threatened species, threatened biomes and habitats, areas with particularly important habitats and areas that are important for the continued provision of ecosystem functions and services. The protection of such areas should be prioritised in reaching this target
- **Effectively conserved and managed** – Protected areas and OECMs must be managed with the primary objective of achieving positive outcomes for biodiversity. Effective management and sustained positive outcomes for biodiversity conservation requires the adoption of appropriate management objectives and processes, governance systems, adequate and appropriate resourcing and consistent monitoring.
- **Ecologically representative** - Protected area and OECMs should contain adequate samples of the full range of existing ecosystems, ecological processes and regions.
- **Well-connected** – In order for protected areas and OECMs to be effective, they should be connected through corridors as well as **integrated into wider landscapes, seascapes and the ocean**. This is an essential element of creating effective systems or networks of protected and conserved areas that can meet sustained *in situ* conservation outcomes and cope with stresses and disturbances, including from the impacts of climate change.
- **Equitably governed** – A key element of the equitable governance of protected areas and OECMs is ensuring that relevant actors are involved and able to fully participate in their establishment, management and governance and that the costs and benefits of establishing and managing such areas are shared fairly. It also includes effective participation in decision-making, transparent procedures, access to justice in conflicting situations, and the recognition of the rights and diversity of the people that will be affected by the establishment and management of protected areas and OECMs.
- **Sustainable use consistent with conservation objectives** – Some types of protected areas and OECMs allow for limited types of non-industrial, traditional cultural, activities to occur within their boundaries. Examples could include hunting, fishing, gathering and tourism. Where these activities are permitted within protected areas and OECMs, they should be sustainable and consistent with conservation objectives.
- **The rights of indigenous peoples and local communities** - all activities carried out under this target must be done so recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories. This includes, as specified in Section C of the Kunming-Montreal Global Biodiversity Framework that rights, knowledge, including traditional knowledge associated with biodiversity, innovations, worldviews, values and practices of indigenous peoples and local communities are respected, and documented and preserved with their free, prior and informed consent, including through their full and effective participation in decision-making, in accordance with relevant national legislation, international instruments, including the United Nations Declaration on the Rights of Indigenous Peoples.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 3 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).

- Progress towards this target will directly support the attainment of Goal A of the Kunming-Montreal Global Biodiversity Framework. Progress towards this target will also help to reach targets [4](#), [9](#) and [11](#). Conversely, progress towards targets [1](#), [2](#), [12](#), [14](#), [19](#), [20](#), [21](#), [22](#) and [23](#) will help to reach this target.
- Target 3 addresses issues that were also addressed by [Aichi Biodiversity Target 11](#)
- Elements of Target 3 are also addressed in the targets of the Sustainable Development Goals, including targets [6.6](#), [11.4](#), [14.5](#) and [15.4](#)

D. Guiding questions for national target-setting

- What is the current extent of protected areas and OECMs on land, in inland waters and in marine and coastal areas in the country? How representative are these areas of the ecoregions in the country? Do these areas cover areas particularly important for biodiversity, ecosystem functions and services? How are they connected and integrated into the wider landscape, sea scape and ocean?
- Which areas of importance for biodiversity and ecosystem services are not currently protected? Which areas are underrepresented? Which habitats are declining the quickest? Which habitats have little left?
- How effective are existing protected areas in terms of achieving their conservation objectives? How can management effectiveness be improved? Are indigenous peoples and local communities involved in management of protected areas?
- What measures are in place to ensure the equitable governance of protected areas and OECMs? How do these account for the rights of indigenous peoples and local communities and stakeholders? Are there benefit sharing measures or mechanisms in place? How could the effectiveness of these measures be improved?
- What are the opportunities and constraints to expanding protected areas and OECMs, generally and by eco-region? What are the potential ecological, economic, and social costs and benefits of additional protected areas and how could these be shared? Who are the actors, including indigenous and local communities, that may be affected? How can they be involved, and their rights and needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to reach the national target that is set? How can additional funds be raised? What are possible funding sources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicator for this target:

Headline indicators:

- [3.1 Coverage of protected areas and OECMs](#)

Component indicators:

- Protected area coverage of Key Biodiversity Areas
- Protected Area Management Effectiveness (PAME)

- ProtConn
- Protected Area Connectedness Index (PARC-Connectedness)
- Red List of Ecosystems Connectivity Indicator (in development)
- The number of protected areas that have completed a site-level assessment of governance and equity (SAGE)
- Species Protection Index

Complementary indicators

- Protected area downgrading, downsizing and degazettement (PD)
- Status of Key Biodiversity Areas
- IUCN Green List of Protected and Conserved Areas
- Number of hectares of UNESCO designated sites (natural and mixed World Heritage sites and Biosphere Reserves)
- Protected area and OECM management effectiveness (MEPCA) indicator
- Protected Area Isolation Index (PAI)
- Protected Areas Network metric (ProNet)
- Extent to which protected areas and other effective area based conservation measures (OECMs) cover Key Biodiversity Areas that are important for migratory species
- Coverage of Protected areas and OECMs and traditional territories (by governance type)
- Ramsar Management Effectiveness Tracking Tool (RMETT)
- Percentage of biosphere reserves that have a positive conservation outcome and effective management
- Extent of indigenous peoples and local communities' lands that have some form of recognition
- Species Protection Index
- Number of countries implementing national legislation, policies or other measures regarding free, prior and informed consent related to conservation
- Red List of Ecosystems
- Proportion of terrestrial, freshwater and marine ecological regions which are conserved by protected areas or other effective area-based conservation measures

F. Relevant resources that can assist implementation

Assessments

- [World Database on Protected Areas](#)
- [Global Database on Protected Areas Management Effectiveness](#)
- [Global report on protected areas and related individual country dossiers \(2021\)](#)

- [Creating a nature-positive future: the contribution of protected areas and other effective area-based conservation measures](#)

Tools and guidance

- [Programme of work on protected areas \(2004\)](#)
- [Programme of Work on Marine and Coastal Biodiversity \(1998\); Programme of Work on Agricultural Biodiversity \(2000\); Programme of Work on Dry and Subhumid Lands Biodiversity \(2000\); Programme of Work on Inland Waters Biodiversity \(2004\); Programme of Work on Forest Biodiversity \(2002\); Programme of Work on Mountain Biodiversity \(2004\); Programme of Work on Island Biodiversity \(2006\); Programme of Work on Traditional Knowledge \(2000\); Global Taxonomy Initiative \(2002\); Guidelines on Biodiversity and Tourism Development \(2004\); Global Strategy for Plant Conservation](#)
- [CBD Technical Series No. 97. \(2021\) Making money local: can protected areas deliver both economic benefits and conservation objectives?](#)
- [IUCN-WCPA Task Force on OECMs \(2019\) Recognising and reporting other effective area-based conservation measures by IUCN WCPA Task Force on OECMs](#)
- [Decision 14/8. \(2018\) Protected areas and other effective area-based conservation measures OECM definition and Criteria of Selection ; annex I; The voluntary guidance includes suggested steps for enhancing and supporting integration into landscapes, seascapes and sectors as well as enhancing and supporting the mainstreaming of protected areas and other effective area-based conservation measures across sectors; annex III; Includes guiding principles and common characteristics, criteria of identification and additional considerations including management approached and the role of OECMs in achieving Aichi Biodiversity Target 11.](#)
- [Decision 13/11, annex II: Voluntary Specific Workplan on Biodiversity in Cold-water Areas within the Jurisdictional Scope of the Convention \(2016\)](#)
- [Decision 13/12, annex II: Voluntary practical options for further enhancing scientific methodologies and approaches, including collaborative arrangements, on the description of areas meeting the criteria for ecologically or biologically significant marine areas \(2016\)](#)
- [UNEP/CBD/SBSTTA/20/INF/21: Training manual on the incorporation of traditional knowledge into the description and identification of EBSAs \(2016\)](#)
- [UNEP/CBD/SBSTTA/16/INF/9: Training manual for the description of ecologically or biologically significant areas \(EBSAs\) in open-ocean waters and deep-sea habitats \(2012\)](#)
- [UNEP/CBD/SBSTTA/16/INF/10: Identifying specific elements for integrating the traditional, scientific, technical and technological knowledge of indigenous and local communities, and social and cultural criteria and other aspects for the application of scientific criteria for identification of ecologically or biologically significant areas \(EBSAs\) as well as the establishment and management of marine protected areas \(2012\)](#)
- [CBD Technical Series No. 44. \(2010\). Making protected areas relevant: a guide to integrating protected areas into wider landscapes, seascapes and sectors](#)
- [Decision 9/20, annex II: Scientific Guidance for Selecting Areas to Establish a Representative Network of Marine Protected Areas, including in Open Ocean Waters and](#)

[Deep-Sea Habitats; annex III: Four Initial Steps to be Considered in the Development of Representative Networks of Marine Protected Areas \(2008\)](#)

- [UNEP/CBD/SBSTTA/14/INF/4: Report of the Expert Workshop on Scientific and Technical Guidance on the Use of Biogeographic classification Systems and Identification of Marine Areas beyond National Jurisdiction in Need of Protection \(2010\)](#)
- [CBD Technical Series No. 37. \(2008\). Synthesis and Review of the Best Available Scientific Studies on Priority Areas for Biodiversity Conservation in Marine Areas beyond the Limits of National Jurisdiction](#)
- [UNEP/CBD/COP/9/INF/44: Report: Global Open Oceans and Deep Seabed \(GOODS\) Biogeographic Classification \(2008\)](#)
- [CBD Technical Series No. 19. \(2005\). The International Legal Regime of the High Seas and the Seabed Beyond the Limits Of National Jurisdiction and Options for Cooperation for the Establishment of Marine Protected Areas \(MPAs\) in Marine Areas Beyond the Limits of National Jurisdiction](#)

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Target 4

Halt species extinction, protect genetic diversity, and manage human-wildlife conflicts: Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.

A. Why is this target important?

Though some extinctions are the result of natural processes, human actions have greatly increased current extinction rates and risk. The global species extinction rate is at least tens to hundreds of times higher than the average over the past 10 million years, and the rate is increasing. About 1 million species are currently threatened with extinction. The global increase in extinction and extinction risk is also contributing to the decline of genetic diversity. Genetic diversity is critical for the long-term stability, adaptability and resilience of biodiversity, both at the species and ecosystem levels, and it supports the continued provision of nature's contributions to people. Various species-specific management interventions will be needed to ensure the conservation of species.

B. Explanation of the target and its elements

This target has three distinct but related components:

- (a) management actions need to be taken to halt human-induced extinctions by 2030 and to reduce extinction risk, in particular for threatened species.
- (b) management actions need to be taken to maintain and restore genetic diversity, among all species.,
- (c) action needs to be taken to manage human-wildlife interactions to minimize human-wildlife conflict.

To address these three components, this target identifies several elements that need to be taken into account:

- **Management actions** – Management actions focused on the recovery of threatened species could include species reintroductions, species recovery actions (such as vaccinations, supplementary feeding, provision of breeding sites, planting and protection of seedlings) and ex situ conservation where needed. Management actions for the conservation of genetic resources within species, including for crops and livestock and their wild relatives, include ex situ conservation and in situ conservation. For domesticated species the latter includes on-farm conservation.
- **Halt human-induced extinction and reduce extinction risk** – A fully recovered species is one that is viable and that fulfills its ecological roles in the ecosystems throughout its native range. Further, conservation refers to the protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of

their natural environments, in order to safeguard the natural conditions for their long-term permanence.

- **Known threatened species** – This target relates specifically to known threatened species. Different approaches are used to assess the threat status of species, and many countries have their own lists of threatened species. Globally, IUCN's Red List of Threatened Species lists more than 42,100 species as being threatened.
- **Maintain and restore genetic diversity** – The genetic diversity of wild species provides the variation essential to maintain ecosystem stability and ensure benefits to people, and supports species survival and adaptation, linking explicitly to ecosystems and species.
- **Wild and domestic species** – Actions should be taken to maintain the genetic diversity of both wild and domestic species.
- **Manage human-wildlife interactions and conflict** – Some types of human-wildlife interactions can be positive or neutral for people and biodiversity. However, some interactions can lead to conflicts, including over resources and space, resulting in adverse effects on human life, health, well-being and/or livelihoods. As a result of those actions and threats, humans may damage or eliminate wildlife, either intentionally or unintentionally. Many types of human-wildlife conflicts can be mitigated or avoided through appropriate planning, management and compensation measures.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 4 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target will directly support the attainment of Goal A of the Kunming-Montreal Global Biodiversity Framework. This target complements targets [1](#), [2](#), [3](#), [5](#), [6](#), [7](#) and [8](#).
- Target 4 addresses issues previously addressed in [Aichi Biodiversity targets 12](#) and [13](#).
- Elements of Target 4 are also addressed in the targets of the Sustainable Development Goals, including targets [2.5](#) and [15.5](#)

D. Guiding questions for national target-setting

- What species are currently threatened or at risk of extinction in your country? Which species are near threatened? Where are threatened species located in your country? Which species are likely to go extinct without urgent action?
- What are the main threats to the threatened species? Which can be addressed through management actions, and which require broader approaches?
- What are the opportunities for and constraints to preventing species from becoming extinct? What are the potential ecological, economic and social costs and benefits of preventing the extinction of certain species?
- What are the sources of human-wildlife conflict in the country? How are these currently being addressed? How effective have these measures been? Who are the actors affected? How can they be involved, and their needs addressed? What are the trade-offs to consider?

- What additional resources (financial, human and technical) will be required to take action on this target? How can additional resources be raised? What are possible sources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- [A.3 Red list Index](#)
- [A.4 The proportion of populations within species with an effective population size > 500](#)

Component indicators:

- Living Planet Index
- Number of plant and animal genetic resources secured in medium- or long-term conservation facilities
- Trends in effective and sustainable management of human-wildlife conflict and coexistence
- Green Status of Species Index
- Conservation status of species listed in the CITES Appendices has stabilized or improved

Complementary indicators:

- Species threat abatement and restoration metric
- Changing status of evolutionary distinct and globally endangered species (EDGE Index)
- Percentage of threatened species that are improving in status
- Number of CMS daughter agreements
- Proportion of local breeds classified as being at risk of extinction
- Red List Index (wild relatives of domesticated animals)
- Rate of invasive alien species establishment

F. Relevant resources that can assist implementation

Assessments:

- [IUCN Red List of Threatened Species](#)
- [IPBES Global Assessment Report on Biodiversity and Ecosystem Services \(2019\)](#)

Tools and guidance:

- [Collaborative Partnership on Sustainable Wildlife Management \(CPW\)](#)
- [Sustainable Ocean Initiative Training Module: Environmental Impact Assessment \(EIA\) in support of marine biodiversity and the sustainability of marine resources](#)

- [Global Species Action Plan \(2023\)](#)
- [Updated Plan of Action 2018–2030 for the International Initiative on the Conservation and Sustainable Use of Pollinators \(2018\)](#)
- [Implications of the IPBES assessment on pollinators, pollination and food production for the work of the Convention \(2016\)](#)
- [Global Strategy for Plant Conservation \(2012\)](#)
- [UNEP/CBD/COP/11/23, part I: Voluntary guidelines for the consideration of biodiversity in environmental impact assessments \(EIAs\) in marine and coastal areas \(2012\)](#)
- [CBD Technical Series No. 20. \(2005\). Patterns of Species Richness in the High Seas](#)
- [Global Taxonomy Initiative \(2002\)](#)
- [Programme of Work Agricultural Biodiversity \(2000\)](#)

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Target 5

Ensure sustainable, safe and legal harvesting and trade of wild species: Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spill-over, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.

A. Why is this target important?

The direct exploitation of wild populations of species is the largest direct driver of biodiversity loss in marine ecosystems and the second largest in terrestrial and freshwater ecosystems. Actions to address the legality, sustainability and safety of the use of wild species of fauna and flora need to take place at the point of harvest, landing, during transportation and trade, and at point of final consumption – the latter affecting overall demand – are key to preventing biodiversity loss.

B. Explanation of the target and its elements

This target has the following scope:

- **Use, harvesting and trade** – Use refers to all the various ways in which wild species are used by people, including for food and non-food purposes, such as for clothing, medicinal, cultural, scientific, recreational and work-related uses, as well as for selling or trading. Harvesting involves the gathering, catching or hunting of wild species for human uses. Trade includes the selling or exchange of live or dead wild species and/or products derived from them.
- **Wild species** – This target focuses on wild species. Wild species are populations of species that have not been domesticated and can survive independently of human intervention. They can be found in any environment.

This target has the following aims:

- **Sustainable** – Implies the harvesting, trade and use of organisms at a rate within the bounds of their capacity for renewal.
- **Safe** – The harvesting, trade and use of wild species should be undertaken in such a way that it is safe for people, other species and ecosystems. For example, specific considerations may be needed to ensure that any risks associated with the spread of invasive alien species, the spread of disease and pathogen spillover are appropriately accounted for.
- **Legal** – Implies that the harvesting, trade and use should respect all relevant international, national and local laws as appropriate.

These aims are further qualified as follows:

- **Impacts on non-target species and ecosystems** – In addition to the direct pressures on species, some harvesting, trade and use can have unintentional impacts on other species, such as through bycatch and/or damage to habitat. These impacts, though unintentional, can nonetheless have major ramifications on species and ecosystem health and must be minimized.

- **Ecosystem approach** – The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Application of the ecosystem approach helps to reach a balance of the three objectives of the Convention. It is based on the application of appropriate scientific methodologies focused on levels of biological organization that encompass the essential processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of ecosystems. The ecosystem approach is the primary framework for action under the Convention on Biological Diversity.
- **Customary sustainable use by indigenous peoples and local communities** – Actions to implement this target should take into account indigenous and local systems for the control, use and management of natural resources, and they should not restrict such customary sustainable use. Customary use of biological resources includes spiritual, cultural, economic and subsistence functions.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 5 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target will directly contribute to goals A and B of the Kunming-Montreal Global Biodiversity Framework. Progress will also contribute to targets [4](#), [6](#), [9](#), [11](#). Conversely, progress towards targets [14](#), [15](#), [16](#), [18](#), [21](#) and [22](#) will support the attainment of this target.
- Target 5 addresses issues previously addressed, in part, in [Aichi Biodiversity Target 6](#)
- Elements of Target 5 are also addressed in the targets of the Sustainable Development Goals, including targets [12.2](#), [14.4](#), [14.7](#), [15.2](#), [15.7](#) and [15.C](#).
- Target 5 is also relevant to work being undertaken under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) species classification, Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat.

D. Guiding questions for national target-setting

- Which wild species are currently harvested, traded or used in your country? How sustainable, safe and legal is this harvest, trade and use?
- What impacts, if any, is the use, harvesting and trade of wild species having on non-targeted species and ecosystems? How could these impacts be mitigated?
- What are the potential ecological, economic, and social opportunities and constraints in managing the use, harvesting and trade of wild species? Who are the stakeholders that may be affected? How can they be involved, and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional funds be raised? What are possible funding sources?

E. Indicators

The monitoring framework for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- [5.1 Proportion of fish stocks within biologically sustainable levels](#)

Component indicators:

- Red List Index for used species
- Living Planet Index for used species
- Sustainable use of wild species

Complementary indicators:

- Sustainable watershed and inland fisheries index
- Red List Index (for internationally traded species and for migratory species)
- Marine Stewardship Council Fish catch
- Total catch of cetaceans under International Convention for the Regulation of Whaling
- Bycatch of vulnerable and non-target species
- Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing
- Proportion of legal and illegal wildlife trade consisting of species threatened with extinction
- Illegal trade by CITES species classification
- Number of countries incorporating trade in their national biodiversity policy
- Proportion of terrestrial, freshwater and marine ecological regions that are conserved by protected areas or other effective area-based conservation measures
- Implementation of measures designed to minimize the impacts of fisheries and hunting on migratory species and their habitats
- Number of MSC Chain of Custody Certification holders by distribution country

Trends of trade and commercialization in biodiversity-based products that is sustainable and legal (in line with BioTrade Principles and/or CITES requirements)

F. Relevant resources that can assist implementation

Assessments

- [IPBES Global Assessment Report on Biodiversity and Ecosystem Services \(2019\)](#)

- [WHO-CBD \(2015\). Connecting Global Priorities: Biodiversity and Human Health: a State of Knowledge Review.](#)

Tools and guidance

- [WHO-CBD Interagency Liaison Group on Biodiversity and Health](#)
- [FAO Code of Conduct for Responsible Fisheries \(CCRF\)](#)
- [Collaborative Partnership on Sustainable Wildlife Management \(CPW\)](#)
- [Nature4Health Alliance \(N4H\)](#)
- [Global Strategy for Plant Conservation](#)
- [Global Taxonomy Initiative](#)
- [Sustainable Ocean Initiative Training Module: Strategic Environmental Assessment \(SEA\): A strategic thinking framework for achieving sustainable development](#)
- [The Quadripartite Alliance on One Health \(2023\)](#)
- [The trade and biodiversity product classification \(2023\)](#)
- [Global Species Action Plan \(2023\)](#)
- [One Health Joint Plan of Action \(2022–2026\)](#)
- [Collaborative Partnership on Sustainable Wildlife Management \(CPW\) \(2020\). The COVID-19 challenge: Zoonotic diseases and wildlife](#)
- [Biotrade principles and criteria \(2020\)](#)
- [Online Survey on Sustainable Wildlife Management \(2019\)](#)
- [Report on the Wildlife Forum \(2019\)](#)
- [CBD decision 14/7 \(Annex\) \(2018\). Voluntary Guidance for a Sustainable Wild Meat Sector \(Context: Wild Meat, Food Security, and Livelihoods\).](#)
- [Decision 13/11, annex II: Voluntary Specific Workplan on Biodiversity in Cold-water Areas within the Jurisdictional Scope of the Convention \(2016\)](#)
- [FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries \(2015\)](#)
- [Plan of Action on Customary Sustainable Use of Biological Diversity \(CBD COP-12, 2014\)](#)
- [Decision 12/23, annex: Priority Actions to Achieve Aichi Biodiversity Target 10 for Coral Reefs and Closely Associated Ecosystems \(2014\)](#)
- [UNEP/CBD/COP/11/23, part I and II: Voluntary guidelines for the consideration of biodiversity in environmental impact assessments \(EIAs\) in marine and coastal areas; Draft guidance on biodiversity-inclusive strategic environmental assessment in marine and coastal areas \(2012\)](#)
- [Decision 10/29: Marine and coastal biodiversity \(2010\)](#)
- [Decision 8/22: Marine and coastal biological diversity: enhancing the implementation of integrated marine and coastal area management \(2006\)](#)

- [Addis Ababa Principles on Sustainable Use of Biodiversity \(2004\)](#)

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Target 6

Reduce the introduction of invasive alien species by 50% and minimize their impact: Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent, by 2030, eradicating or controlling invasive alien species especially in priority sites, such as islands.

A. Why is this target important?

Invasive alien species are one of the main direct drivers of biodiversity loss. In some ecosystems, such as islands, invasive alien species are the leading cause of biodiversity decline. Invasive alien species affect biodiversity by competing with native species for resources, by direct predation or by introducing pathogens. They also modify the composition and structure of ecosystems, reducing the services they provide. In addition to their environmental impacts, invasive alien species pose a threat to food security, human health and economic activities. Globalization and an associated increase in human-mediated activities, such as international transport, trade and tourism, have made the movement of species beyond natural bio-geographical barriers easier and quicker, by creating new introduction pathways. Due to the wide and crosscutting impacts of IAS, including environmental, economic, health, social and cultural impacts, it is necessary to strengthen collaboration across sectors and government agencies at all levels and areas to ensure that this threat is managed effectively.

B. Explanation of the target and its elements

This target focuses on eliminating, minimizing, reducing or mitigating the impacts of invasive alien species in two main ways: (a) by identifying and managing pathways to preventing their introduction and establishment and (b) by eradicating or controlling invasive alien species that have been introduced and established. To accomplish this, the target identifies a set of elements that need to be considered:

- **Invasive alien species** – Invasive alien species are alien species (introduced outside their natural ranges) that threaten biological diversity and ecosystem integrity. Species in all taxonomic groups and from all types of ecosystems have the potential to become invasive. While a small percentage of alien species become invasive, their negative impacts can be severe. These often go beyond environmental changes and affect economic activities, food security, health or social and cultural values. This target calls for these impacts to be eliminated, minimized, reduced or mitigated.
- **Pathways are identified and managed** – Pathways, are the means by which alien species are introduced to new environments. Depending on the ecosystem, there are likely to be a number of different pathways for the introduction of alien species. Pathways can be intentional (through different human-related activities) or accidental, such as escapes, contaminants or hitchhikers. Major pathways will vary between countries and will need to be identified in order to be effectively managed.
- **Preventing introduction and establishment** – Preventing the introduction of an invasive alien species is more cost effective than eradicating it once it has become established. Conducting a risk analysis prior to the introduction of an alien species as well as enhancing border controls and quarantine, early warning mechanisms, rapid response measures and

management plans are the types of actions that could be taken to help prevent the establishment of alien species.

- **Prioritization** – In most countries, there are likely to be several invasive alien species, multiple pathways of introduction and several sites that require protection. Given the limited resources that exist to address this threat and the timeframe for the implementation of the Framework, Parties will need to prioritize the pathways, sites and invasive alien species they wish to address.
- **Eradicating or controlling** – Once an invasive alien species has been identified and prioritized, and priority sites defined, countries will need to determine management actions. Whether an invasive alien species is eradicated or controlled will depend on a number of factors, including the species being considered, the ecosystem it is affecting, and the magnitude of its impacts. This requires a case-by-case process, taking into account different methodologies (modern innovative tools as well as traditional approaches). In most cases a combination of methods will likely be required, and the most effective control or eradication method will depend on the type of invasive alien species and the ecosystem in which it is found.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 6 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target will help to reach Goal A of the Kunming-Montreal Global Biodiversity Framework. In addition, progress towards this target will help to address [Target 4](#) and, depending on the sites and pathways prioritized, could also help to reach targets [2](#), [3](#), [10](#), and [12](#). Conversely progress towards targets [1,14](#), [17](#), [19](#), [20](#), [21](#), [22](#) and [23](#) could help in reaching this target.
- Target 6 addresses issues previously addressed under [Aichi Biodiversity Target 9](#)
- Elements of Target 6 are also addressed in the targets of the Sustainable Development Goals, including [Target 15.8](#)

D. Guiding questions for national target-setting

- Which invasive alien species are currently in the country? What ecosystems are they affecting and how? Which species are having the greatest impact? Are they affecting human health, food production and/or the economy?
- What are the main pathways for the introduction of invasive alien species in the country? What border control and quarantine measures are in place?
- What measures are in place to assess and monitor the risks of introduction? How effective have these been? How could their effectiveness be improved? What lessons have been learned from their implementation?
- What measures are in place in your country to prevent, manage, control and eradicate invasive alien species the introduction of invasive alien species? How effective have these been? How could their effectiveness be improved? What lessons have been learned from their implementation?

- What coordination and collaboration mechanisms are in place to address invasive alien species? How effective have these been? How could their effectiveness be improved?
- What are the opportunities and constraints for preventing the introduction of, controlling or eradicating invasive alien species and managing their pathways? What programmes or initiatives could be further built on?
- What are the potential ecological, economic and social opportunities and constraints in taking action towards this target? Who are the actors that may be affected? How can they be involved and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to address this target? How can additional resources be raised? What are possible sources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- 6.1 Rate of invasive alien species establishment

Component indicators:

- Rate of invasive species impact and rate of impact
- Rate of invasive alien species spread
- Number of invasive alien species introduction events

Complementary indicators:

- Number of invasive alien species on national lists as per the Global Register of Introduced and Invasive Species
- Trends in abundance, temporal occurrence and spatial distribution of non-indigenous species, particularly invasive, non-indigenous species, notably in risk areas (in relation to the main vectors and pathways of spreading of such species)
- Red List Index (impacts of invasive alien species)

F. Relevant resources that can assist implementation

Assessments

- [IPBES thematic assessment of invasive alien species and their control](#) (2023)
- [IPBES Global Assessment Report on Biodiversity and Ecosystem Services](#) (2019)

Tools and guidance

- [CBD Cross-Cutting Theme on Invasive Alien Species](#)
- [IUCN Invasive Species Initiative](#)

- [Global Invasive Species Database](#)
- [Global Register of Introduced and Invasive Species \(GRIIS\)](#)
- [CABI Compendium Invasive Species](#)
- [CABI Invasive Species Discovery Tool](#)
- [CABI Horizon Scanning Tool](#)
- [Environmental Impact Classification for Alien Taxa \(EICAT\)](#)
- [Global Species Action Plan \(2023\)](#)
- [Biofouling Management for Recreational Boating. Recommendations to Prevent the Introduction and Spread of Invasive Aquatic Species \(2022\)](#)
- [Guide to Developing National Status Assessments of Biofouling Management to Minimize the Introduction of Invasive Aquatic Species \(2022\)](#)
- [Guide to Developing National Rapid Economic Assessments of Biofouling Management to Minimize the Introduction of Invasive Aquatic Species \(2022\) - Document and Database](#)
- [Guide to Developing National Biofouling Strategies on Biofouling Management to Minimize the Introduction of Invasive Aquatic Species \(2022\)](#)
- [Guidance for interpretation of the CBD categories of pathways for the introduction of invasive alien species \(2021\)](#)
- [CBD Technical Series No.91 \(2019\). The application of biological control for the management of Established Invasive Alien Species causing environmental impacts](#)
- [Decision 14/11 Annex: Supplementary voluntary guidance for avoiding unintentional introductions of invasive alien species associated with trade in live organisms \(2018\)](#)
- [Decision XIII/13, Annex: Summary of technical considerations for the use of biological control agents to manage invasive alien species \(2016\)](#)
- [Decision XII/16, Annex: Guidance on devising and implementing measures to address the risks associated with the introduction of alien species as pets, aquarium and terrarium species, and as live bait and live food \(2014\)](#)
- [Guidance on pathways of introduction of invasive species, their prioritization and management \(UNEP/CBD/SBSTTA/19/9/Add.1\) \(2014\)](#)
- [Pathways of introduction of invasive species, their prioritization and management \(2014\)](#)
- [CBD Technical Series No. 48 \(2010\). Pets, aquarium and terrarium species: Best practices for addressing risks to biodiversity](#)
- [Decision VI/23: Guiding principles for the prevention, introduction and mitigation of impacts of alien species that threaten ecosystems, habitats, or species \(2002\)](#)
- [CBD Technical Series No. 1 \(2001\). Assessment and Management of Alien Species that Threaten Ecosystems, Habitats and Species](#)
- [CBD Technical Series No.2 \(2001\). Review of the efficiency and efficacy of existing legal instruments applicable to invasive alien species](#)

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Target 7

Reduce pollution to levels that are not harmful to biodiversity: Reduce pollution risks and the negative impact of pollution from all sources, by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: reducing excess nutrients lost to the environment by at least half including through more efficient nutrient cycling and use; reducing the overall risk from pesticides and highly hazardous chemicals by at least half including through integrated pest management, based on science, taking into account food security and livelihoods; and also preventing, reducing, and working towards eliminating plastic pollution.

A. Why is this target important?

Pollution is one of the main direct drivers of biodiversity loss. Pollution can take various forms. However globally, pollution from nutrients, such as nitrogen and phosphorus, pesticides and highly hazardous chemicals and plastics has been found to have particularly harmful impacts on biodiversity and ecosystem functions and services.

B. Explanation of the target and its elements

The overall objective of this target is to reduce the risks and negative impacts from all types of pollution by 2030. The target has further components addressing specific pollution types that are known to have particularly harmful impacts on biodiversity globally, namely (1) excess nutrients (2) pesticides and highly hazardous chemicals and (3) plastic pollution. In the case of excess nutrients, and the risks from pesticides and highly hazardous chemicals, the target specifies a quantitative element; reduction by half. The target further identifies a number of elements that need to be taken into account when taking action towards this target:

- **Reduce pollution risks and negative impact of pollution** – The target focuses on the risks and impacts of pollution rather than absolute amounts of pollutants, in terms of the different toxicity and/or hazards posed by different types pollutants. For example, some types of pesticides can be used in large quantities with relatively small impacts on the environment, while for others even limited use can have particularly detrimental impacts. A focus on risks and impacts rather than absolute amounts of pollution accounts for this distinction.
- **From all sources** – Pollution refers to contaminants that are introduced to the environment, resulting in instability or harm. Pollution can take numerous forms as a variety of chemical compounds, types of light and sound, and products can cause environmental damage depending on their properties and concentrations. All sources of pollution should be considered when taking action towards this target.
- **Levels that are not harmful to biodiversity and ecosystem functions and services** – The target further specifies that the risks and negative impacts of pollution should be brought to levels that are not harmful to biodiversity and ecosystem functions and services. Therefore, the target does not require that all pollutants be eliminated but does require that they are reduced to a point where they do not have a negative effect on biodiversity. The point at which pollution can be considered harmful depends on the type of pollutant considered as well as the biodiversity it is affecting. Different metrics may be needed for different types of pollution.

- **Considering cumulative effects** – Some types of pollution can accumulate in the environment or species (bioaccumulation) over time. Similarly, some types of pollution can interact in synergistic ways, augmenting their overall negative impacts. These compounding impacts of pollution need to be accounted for when taking action towards this target.
- **Reducing excess nutrients lost to the environment** – Excess nutrients, especially nitrogen and phosphorus, is a globally significant type of pollution with impacts on biodiversity. For example as nitrogen and phosphorus are often limiting nutrients in ecosystems, when they are present in excessive quantities they can result in rapid plant growth or algal blooms in marine ecosystems, which can alter ecosystem composition and function. Common causes of excessive nutrients are sewage and agricultural runoff, including from the historic and ongoing application of fertilizers. The target specifically calls for excess nutrients lost to the environment to be reduced by half.
- **Risks from pesticides and highly hazardous chemicals** – Pesticides are any substance, or mixture of substances, of chemical or biological ingredients intended for repelling, destroying or controlling unwanted live organisms that are harmful to human, crops, or animal health or to the environment, or that can cause damage to human activities. There are different definitions of highly hazardous chemicals but generally they are chemicals that pose a significant acute or chronic risk to the environment or people. This target calls for the risks posed by pesticides and such chemicals to be reduced by half.
- **Integrated pest management** – Integrated pest management is an ecosystem approach to crop production and protection that combines different management strategies and practices to grow healthy crops and minimize the use of pesticides.
- **Taking into account food security and livelihoods** – Nutrients and pesticides are important inputs in many agricultural systems. Any actions to reduce the impacts of pollution from these sources should consider possible impacts on food security and livelihoods. Actions towards this target should be a part of wider sustainable agriculture and food systems transitions; include safeguards to achieve food security; and should not compete with priorities of farmers and those who rely on agri-food systems for their livelihoods, including small-holders, and indigenous peoples and local communities.
- **Preventing, reducing, and working towards eliminating plastic pollution** – Plastic pollution is accumulating across terrestrial, freshwater and marine ecosystems, with microplastics entering food chains and circulating in the atmosphere. It is increasingly regarded as an important type of pollution with significant impacts on biodiversity

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 7 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target will help to reach Goal A of the Kunming-Montreal Global Biodiversity Framework. It will also help to reach targets [4](#) and [10](#). Conversely, progress towards targets [1](#), [11](#), [14](#), [16](#), [18](#), [19](#), [20](#), [21](#), [22](#) and [23](#) will help to reach this target.
- Target 7 addresses issues previously considered under [Aichi Biodiversity Target 8](#).

- Elements of Target 7 are also addressed in the targets of the Sustainable Development Goals, including targets [3.9](#), [6.3](#), [11.6](#), [12.4](#), [12.5](#) and [14.1](#).
- Target 7 also links to other international processes addressing pollution, including the World Health Organization, the Minamata Convention on Mercury, the Basel, Rotterdam and Stockholm Conventions and the ongoing discussions under Intergovernmental Negotiating Committee on Plastic Pollution.

D. Guiding questions for national target-setting

- Which ecosystems are being affected by pollution? Which pollutants are they being affected by? How are they affecting biodiversity and ecosystem functioning?
- What are the main sources of pollution in the country? What are the point sources of pollution? What are the non-point sources?
- Which pollution control measures are already in place in the country? How effective have these been? How could their effectiveness be improved?
- What are the main channels or opportunities for reducing pollution risks? What type of actions could be used? What programmes or initiatives could be further built on?
- What are the potential ecological, economic, and social opportunities and constraints in taking actions towards this target? Who are the actors that may be affected? How can they be involved, and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional resources be raised? What are possible sources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- [7.1 Index of coastal eutrophication potential](#)
- [7.2 Pesticide environment concentration](#)

Component indicators

- Fertilizer use
- Proportion of domestic and industrial wastewater flow safely treated
- Floating plastic debris density (by micro and macro plastics)
- Red List Index (impact of pollution)

Complementary indicators

- Trends in loss of reactive nitrogen to the environment
- Trends in nitrogen deposition

- Municipal solid waste collected and managed
- Hazardous waste generation
- Trends in the amount of litter in the water column, including microplastics and on the seafloor
- Index of coastal eutrophication
- Plastic debris density
- Red List of Ecosystems
- Underwater noise pollution
- Name, amount/volume/concentration of highly hazardous pesticides by type (per land/marine area)
- Pesticide use per area of cropland

F. Relevant resources that can assist implementation

Assessments

- [Secretariats of the Basel, Rotterdam, Stockholm Conventions \(BRS\), and the Minamata Convention on Mercury \(2021\) Interlinkages between the Chemicals and Waste Multilateral Environmental Agreements and Biodiversity: Key Insights](#)

Tools and guidance

- [CBD Programme of Work on Inland Waters](#)
- [CBD Programme of Work on Agricultural Biodiversity](#)
- [CBD Programme of Work on Marine and Coastal Biodiversity](#)
- [Sustainable Ocean Initiative Training Module: Environmental Impact Assessment \(EIA\) in support of marine biodiversity and the sustainability of marine resources](#)
- [CBD Technical Series No. 99: Review of the Impacts of Anthropogenic Underwater Noise on Marine Biodiversity and Approaches to Manage and Mitigate them \(2022\)](#)
- [Interlinkages between the Chemicals and Waste Multilateral Environmental Agreements and Biodiversity: Key Insights \(2021\)](#)
- [CBD Technical Series No. 83: Marine Debris: Understanding, Preventing and Mitigating the Significant Adverse Impacts on Marine and Coastal Biodiversity \(2016\)](#)
- [CBD decision 13/10 \(Annex\) \(2016\). Voluntary Practical Guidance on Preventing and Mitigating the Impacts of Marine Debris on Marine and Coastal Biodiversity and Habitats](#)
- [CBD decision XIII/11 \(2016\). Voluntary specific workplan on biodiversity in cold-water areas within the jurisdictional scope of the Convention](#)
- [UNEP/CBD/SBSTTA/20/INF/8: Scientific synthesis of the impacts of underwater noise on marine and coastal biodiversity and habitats \(2016\)](#)

- [CBD Decision 12/23: Marine and coastal biodiversity: Impacts on marine and coastal biodiversity of anthropogenic underwater noise and ocean acidification, \[...\] \(2014\)](#)
- [UNEP/CBD/SBSTTA/INF/7*: Report of the expert workshop to prepare practical guidance on preventing and mitigating the significant adverse impacts of marine debris on marine and coastal biodiversity and habitats \(2014\)](#)
- [CBD Technical Series No. 67: Impacts of Marine Debris on Biodiversity: Current Status and Potential Solutions \(2012\)](#)
- [UNEP/CBD/COP/11/23, part I: Voluntary guidelines for the consideration of biodiversity in environmental impact assessments \(EIAs\) in marine and coastal areas \(2012\)](#)
- [UNEP/CBD/SBSTTA/16/16, annex II: Impacts of anthropogenic underwater noise on marine and coastal biodiversity \(2012\)](#)
- [UNEP/CBD/SBSTTA/16/16, annex IV: Key messages extracted from GEF-STAP advisory document on marine debris: Defining a global environmental challenge, regarding the impacts of marine debris on marine and coastal biodiversity \(2012\)](#)

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Target 8

Minimize the impacts of climate change on biodiversity and build resilience: Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.

A. Why is this target important?

Climate change is one of the main direct drivers of biodiversity loss. In addition to climate change, rising atmospheric carbon dioxide concentrations have also resulted in ocean acidification. Various mitigation, adaptation and disaster risk reduction measures, including nature-based solutions and/or ecosystem-based approaches, have the potential to increase the resilience of ecosystems and human livelihoods to the impacts of climate change, including reducing emissions from deforestation and other land-use changes, and by enhancing carbon sinks. These approaches can also deliver numerous social, economic and environmental co-benefits.

B. Explanation of the target and its elements

This target focuses on (a) minimizing the impacts of climate change and ocean acidification on biodiversity, (b) the contribution of biodiversity, through nature-based solutions or ecosystem based approaches, to climate mitigation and adaptation and disaster risk reduction and (c) minimizing negative and fostering positive impacts of climate action on biodiversity. This target contains a number of specific elements:

- **Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience** - This requires action to reduce greenhouse gas emissions, which may include nature-based solutions and ecosystem based approaches (see below) as well as considerations such as the siting of protected and conserved areas and species recovery programmes to take into account climate change.
- **Nature-based solutions** – Refer to actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits including on mitigation, adaptation and disaster risk reduction.
- **Ecosystem-based approaches** – Refer to the use of biodiversity and ecosystem services as part of an overall strategy to help address the adverse effects of climate change. Ecosystem-based mitigation refers to the use of ecosystems for their carbon storage and sequestration service to aid climate change mitigation. Ecosystem-based adaptation aims to maintain and increase the resilience and reduce the vulnerability of ecosystems and people in the face of the adverse effects of climate change. Such approaches can include sustainable management, conservation and restoration of ecosystems, as part of an overall adaptation strategy that takes into account the multiple social, economic and cultural co-benefits for local communities. Ecosystem-based disaster risk reduction is the sustainable management, conservation and restoration of ecosystems to reduce disaster risk, with the aim of achieving sustainable and resilient development.

- **Minimizing negative and fostering positive impacts of climate action on biodiversity** – While efforts and activities to address climate change could have the potential to generate significant positive impacts on biodiversity and those dependent on it, they could also unintentionally result in negative impacts if they are not appropriately designed and implemented. Taking into consideration biodiversity when designing, implementing and monitoring climate change adaptation and mitigation activities, , can deliver not only multiple benefits, but also contribute to avoiding negative impacts of the activities on biodiversity and ecosystems.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 8 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards Target 8 will help to reach goals A and B of the Kunming-Montreal Global Biodiversity Framework. Progress towards this target could also help to reach targets [2](#), [3](#), [4](#), [10](#), [11](#), and [12](#). Conversely, progress towards targets [1](#), [10](#), [14](#), [19](#), [20](#), [21](#), [22](#) and [23](#) would facilitate progress towards this target.
- Target 8 addresses issues previously addressed in [Aichi Biodiversity Target 10](#).
- Elements of Target 8 are also addressed in the targets of the Sustainable Development Goals, including targets [13.1](#), [13.2](#) and [14.3](#).
- Target 8 is also relevant to work being undertaken under the Paris Agreement under the UNFCCC, as well as the Sendai Framework for Disaster Risk Reduction.

D. Guiding questions for national target-setting

- Which ecosystems in the country are vulnerable to climate change or ocean acidification? Which areas are particularly important for biodiversity, ecosystem services and human well-being?
- What measures are currently being taken to minimize the impact of climate change and ocean acidification on biodiversity? How do these account for mitigation, adaption and disaster risk reduction, including through nature-based solutions and/or ecosystem-based approaches? How do these minimize negative and promote positive impacts for biodiversity? How effective have these been? How could their effectiveness be improved?
- Who are the actors that may be affected by actions taken to reach this target? How can they be involved and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional resources be raised? What are possible sources for these resources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Component indicators:

- Total climate regulation services provided by ecosystems by ecosystem type (System of Environmental Economic Accounts)
- Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 that include biodiversity
- National greenhouse inventories from land use and land use change
- Bioclimatic Ecosystem Resilience Index (BERI)

Complementary indicators

- Above-ground biomass stock in forests (tonnes/ha)
- National greenhouse inventories from land use and land use change
- Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies
- Number of least developed countries and small island developing States with nationally determined contributions, long-term strategies, national adaptation plans, strategies as reported in adaptation communications and national communications
- Index of coastal eutrophication

Carbon stocks and annual net GHG emissions, by land-use category, split by natural and non-natural land cover

F. Relevant resources that can assist implementation

Assessments

- [Sixth Assessment Report \(AR6\) of the Intergovernmental Panel on Climate Change \(IPCC\) \(2021-2023\)](#)
- [IPBES-IPCC Co-Sponsored Workshop on Biodiversity and Climate Change \(2021\)](#)
- [IPCC special report on the ocean and cryosphere in a changing climate \(SROCC\) \(2019\)](#)
- [IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems \(SRCCL\) \(2019\)](#)
- [IPBES global assessment report on biodiversity and ecosystem services \(2019\)](#)
- [IPBES assessment report on land degradation and restoration \(2018\)](#)
- [IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty \(SR1.5\) \(2018\)](#)

Tools and guidance

- [Voluntary guidelines related to Traditional Knowledge and IPLCs \(e.g., Akwe:Kon guidelines, Tkarihwaí:ri code of ethical conduct, Rutzolijirisaxik and Mo'otz Kuxta Voluntary Guidelines\)](#)
- [CBD Technical Series No. 93: Voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction and supplementary information \(2019\)](#)
- [Decision XIII/11 - Voluntary specific workplan on biodiversity in cold-water areas within the jurisdictional scope of the Convention \(2016\)](#)
- [CBD Technical Series 84: Update on Climate Geoengineering in Relation to the Convention on Biological Diversity: Potential Impacts and Regulatory Framework \(2016\)](#)
- [CBD Technical Series 85: Synthesis Report on Experiences with Ecosystem-Based Approaches to Climate Change Adaptation and Disaster Risk Reduction \(2016\)](#)
- [CBD Technical Series 86: Managing ecosystems in the context of climate change mitigation: A review of current knowledge and recommendations to support ecosystem-based mitigation actions that look beyond terrestrial forests \(2016\)](#)
- [Guidance on enhancing positive and minimizing impacts on biodiversity of climate change adaptation activities \(UNEP/CBD/SBSTTA/20/INF/1\) \(2016\)](#)
- [Decision 13/11, annex I: Key messages from the scientific compilation and synthesis on biodiversity and ocean acidification in cold-water areas and annex II: Voluntary Specific Workplan on Biodiversity in Cold-water Areas within the Jurisdictional Scope of the Convention \(2016\)](#)
- [CBD Technical Series No. 75: An Updated Synthesis of the Impacts of Ocean Acidification on Marine Biodiversity \(2014\)](#)
- [Decision XII/23 - Priority Actions to Achieve Aichi Biodiversity Target 10 for Coral Reefs and Closely Associated Ecosystems \(2014\)](#)
- [CBD Technical Series 75: An Updated Synthesis of the Impacts of Ocean Acidification on Marine Biodiversity \(2014\)](#)
- [CBD Technical Series 66: Geoengineering in Relation to the Convention on Biological Diversity: Technical and Regulatory Matters \(2012\)](#)
- [CBD Decision 11/15: Review of the programme of work on island biodiversity \(2012\)](#)
- [UNEP/CBD/SBSTTA/16/16, annex I: Progress made in the implementation of the specific workplan on coral bleaching \(2012\)](#)
- [CBD Technical Series 59: REDD-plus and Biodiversity \(2011\)](#)
- [CBD Decision 10/29: Marine and coastal biodiversity \(2010\)](#)
- [CBD Technical Series No. 41: Connecting Biodiversity and Climate Change Mitigation and Adaptation: Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change \(2009\)](#)
- [CBD Technical Series 43: A Synthesis of the Biodiversity/Resilience/Stability Relationship in Forest Ecosystems \(2009\)](#)

- [CBD Technical Series 45: Scientific Synthesis of the Impacts of Ocean Fertilization on Marine Biodiversity \(2009\)](#)
- [CBD Technical Series 46: Scientific Synthesis of the Impacts of Ocean Acidification on Marine Biodiversity \(2009\)](#)
- [CBD Decision 7/5, appendix I: Specific Workplan on Coral Bleaching \(2004\)](#)

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Target 9

Manage wild species sustainably to benefit people: Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.

A. Why is this target important?

Biodiversity is the source of many goods and services on which people depend. The maintenance, in quantity and quality, of the benefits provided by biodiversity offers an important incentive for the conservation and sustainable use of biodiversity. It will not be possible to reach the 2050 Vision if the benefits provided by biodiversity, particularly those related to nutrition, food security, livelihoods, health and well-being, are not ensured.

B. Explanation of the target and its elements

The main focus of this target is ensuring that the management and use of wild species is sustainable for the benefit of people. The target further contains a number of elements that need to be considered:

- **Social, economic and environmental benefits** – Wild terrestrial, freshwater and marine species contribute to human well-being in multiple ways, including by providing nutrition, food security, medicines and livelihoods. The use and management of wild species needs to consider the various social, economic and environmental benefits provided by wild species to people. The target further specifies that particular attention should be given to those people living in vulnerable situations and for whom wild species are particularly important to their well-being as they may be engaged in biodiversity-based economic activities, or rely on biodiversity based products and services.
- **Customary sustainable use by indigenous peoples and local communities** – Actions to implement this target should take into account indigenous and local systems for the control, use and management of natural resources and seek to protect and encourage these. Customary use of biological resources includes spiritual, cultural, economic and subsistence functions.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 9 should take into account all of the considerations for implementation identified in [Section C of the Kunming-Montreal Global Biodiversity Framework](#).
- This target is closely related to [Target 5](#). Progress towards Target 9 will contribute to the attainment of goals A and B of the Kunming-Montreal Global Biodiversity Framework. It will also help to reach targets [4](#), [5](#), and [11](#). Conversely progress towards targets [5](#), [14](#), [16](#), [18](#), [19](#), [20](#), [21](#), [22](#) and [23](#) will help to reach this target.
- Target 9 addresses issues previously addressed under [Aichi Biodiversity Target 6](#).
- Elements of Target 9 are also addressed in the targets of the Sustainable Development Goals, including targets [12.2](#), [14.7](#) and [15.7](#).

D. Guiding questions for national target-setting

- What measures are in place to ensure the sustainable use and management of wild species? How effective have these been? How could their effectiveness be improved? How are the social, economic and environmental benefits provided by wild species accounted for in these processes? Which groups are particularly dependent on these benefits, and how are their needs accounted for? How is customary sustainable use by indigenous peoples and local communities protected and encouraged?
- Which wild species are not currently being used or managed sustainably? Why is this the case?
- What are the opportunities and constraints to enhancing sustainable use and management? What are the potential ecological, economic, and social costs and benefits of enhancing sustainable management? Who are the actors that may be affected? How can they be involved and their needs addressed?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional resources be raised? What are the possible sources for these resources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- [9.1 Benefits from the sustainable use of wild species](#)
- 9.2 Percentage of the population in traditional occupations

Component indicators:

- Number of people using wild resources for energy, food or culture (including firewood collection, hunting and fishing, gathering, medicinal use, craft making)

- Red List Index (species used for food and medicine)
- Living Planet Index for used species

Complementary indicators:

- Proportion of fish stocks within biologically sustainable levels
- Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing
- Number of MSC Chain of Custody Certification holders by distribution country
- Spawning stock biomass (related to commercially exploited species)
- Number of plant and animal genetic resources for food and agriculture secured in medium- or long-term conservation facilities
- Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size

F. Relevant resources that can assist implementation

Assessments

- [FAO \(2022\) The State of World Fisheries and Aquaculture 2022](#)

Tools and guidance

- [CBD Programme of Work on Marine and Coastal Biodiversity](#)
- [CBD Cross-cutting Theme on Article 8\(j\)](#)
- [CBD Cross-cutting Theme on Biodiversity and Health](#)
- [CBD Programme of Work on Forests](#)
- [CBD Programme of Work on Drylands](#)
- [CBD Cross-cutting Theme on Sustainable Wildlife Management](#)
- [Sustainable Ocean Initiative \(SOI\)](#)
- [Sustainable Ocean Initiative Training Module: Strategic Environmental Assessment \(SEA\): A strategic thinking framework for achieving sustainable development](#)
- [Gender Plan of Action \(2023-2030\)](#)
- [Global Species Action Plan \(2023\)](#)
- [CBD-UNEP \(2022\): Best practices in Gender and Biodiversity: Pathways for multiple benefits](#)
- [Developing and measuring a gender-responsive post-2020 biodiversity framework: information on gender considerations within the draft post-2020 monitoring framework \(2021\)](#)
- [CBD Technical Series No. 87: Assessing Progress towards Aichi Biodiversity Target 6 on Sustainable Marine Fisheries \(2020\)](#)

- [Sustainable Wildlife Management Beyond 2020 \(2019\)](#)
- [Towards a sustainable, participatory and inclusive wild meat sector \(2019\)](#)
- [Decision 14/7, Annex: Voluntary guidance for a sustainable wild meat sector context: wild meat, food security, and livelihoods \(2018\)](#)
- [CPW Factsheet: Sustainable Wildlife Management and Wild Meat \(2014\)](#)
[CBD Plan of Action on Customary Sustainable Use of Biological Diversity \(2014\)](#)
- [CBD Technical Series 60: Livelihood Alternatives for the Unsustainable Use of Bushmeat \(2011\)](#)
- [CBD Technical Series No. 61: Biological and Cultural Diversity in Coastal Communities: Exploring the Potential of Satoumi for Implementing the Ecosystem Approach in the Japanese Archipelago \(2011\)](#)
- [CBD Technical Series 49: Guidelines for Mainstreaming Gender into National Biodiversity Strategies and Action Plans \(2010\)](#)
- [CBD Technical Series No. 44: Guide to Integrating Protected Areas into Wider Landscapes, Seascapes and Sectoral Plans and Strategies \(2010\)](#)
- [CBD Technical Series 33: Conservation and Use of Wildlife-Based Resources: The Bushmeat Crisis \(2008\)](#)
- [CBD Technical Series No. 27: Guidance for valuing the benefits derived from wetland ecosystem services \(2006\)](#)
- [CBD Technical Series No. 14: Integrated Marine and Coastal Area Management \(IMCAM\) Approaches for Implementing the Convention on Biological Diversity \(2004\)](#)
- [Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity \(2004\)](#)

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Target 10

Enhance biodiversity and sustainability in agriculture, aquaculture, fisheries, and forestry: Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches contributing to the resilience and long-term efficiency and productivity of these production systems and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.

A. Why is this target important?

Agriculture, aquaculture, fisheries and forestry are globally important production systems that have varying impacts on ecosystems and biodiversity. The variety and variability of animals, plants and microorganisms used in these systems is an important aspect of biodiversity. Further, in many countries, activities associated with these production systems are important elements of human well-being and economic activity. However, the increasing demand for food, fibre and fuel is leading to increasing losses of biodiversity and ecosystem services, making sustainable management in these systems an urgent requirement. On the other hand, sustainable management not only contributes to biodiversity conservation but can also deliver benefits to production systems in terms of ecosystem services such as soil fertility, erosion control, enhanced pollination and reduced pest outbreaks, as well as contributing to the well-being and sustainable livelihoods of people engaged in agriculture, aquaculture, fisheries and forestry activities.

B. Explanation of the target and its elements

The main focus of this target is to ensure that the areas used for agriculture, aquaculture, fisheries and forestry are managed sustainably. To accomplish this, the target sets out a number of elements that need to be taken into account:

- **Managed sustainably, in particular through the sustainable use of biodiversity** – The sustainable use of biodiversity is defined under Article 2 of the Convention as the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.
- **Biodiversity-friendly practices** – Biodiversity-friendly practices are those that help to increase the positive effects and reduce the negative effects of production practices on biodiversity. They largely overlap with practices that make enhanced use of biodiversity on farm to support the productivity and resilience of agriculture. They can take different forms depending on the production systems being considered. For example, sustainable agricultural production may include increases in productivity based on the sustainable management of ecosystem services and functions, diversification of agriculture, agroecological approaches and organic farming, the enhanced use of a diverse range of well-adapted crops and livestock, and their varieties and breeds, and of associated biodiversity in agricultural systems, including pollinators, pest-control organisms and soil organisms that promote nutrient cycling, thereby reducing the need for or replacing chemical inputs. Biodiversity-friendly practices are an important aspect of maintaining the resilience, or the ability of productive systems to recover from stress or disturbance. They can also help to address the conservation and restoration of biodiversity.

- **Nature's contributions to people** – Nature's contributions to people (a concept similar to and inclusive of ecosystem functions and services) refers to all the contributions from biodiversity to people's well-being or quality of life. The sustainable management of agriculture, aquaculture, fisheries and forestry is an essential element in ensuring the continued availability of nature's contributions to people and in particular food security.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 10 should take into account all of the considerations for the implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- This target will contribute to the attainment of goals A and B of the Kunming-Montreal Global Biodiversity Framework. Further progress towards this target will facilitate the attainment of targets [2](#), [4](#), [6](#), [7](#), [8](#), [9](#), [11](#) and [16](#). Conversely, the attainment of this target will be facilitated by actions to reach targets [1](#), [14](#), [17](#), [19](#), [20](#), [21](#), [22](#) and [23](#).
- Target 10 addresses issues previously covered by [Aichi Biodiversity targets 6 and 7](#)
- Elements of Target 10 are also addressed in the targets of the Sustainable Development Goals, including targets [2.3](#), [2.4](#), [12.1](#), [12.2](#), [14.7](#) and [15.2](#).

D. Guiding questions for national target-setting

- Where are the main areas in the country used for agriculture, aquaculture, fisheries and forestry? Which areas are particularly important for biodiversity? Which areas are particularly important for economic reasons?
- What measures are in place to ensure the sustainable management of agriculture, aquaculture, fisheries and forestry? How do these measures promote the use of biodiversity-friendly practices? How effective have these measures been? How could their effectiveness be improved? Which areas are not currently covered by any type of sustainable management?
- What are the opportunities and constraints to enhancing sustainable management? What are the potential ecological, economic, and social costs and benefits of enhancing sustainable management?
- What biodiversity-related problems could be addressed through sustainable management? How could sustainable management be used to address the main threats to biodiversity?
- Who are the actors that may be affected? How can they be involved and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional resources be raised? What are the possible sources for these resources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- [10.1 Proportion of agricultural area under productive and sustainable agriculture](#)
- [10.2 Progress towards sustainable forest management](#)

Component indicators:

- Area of forest under sustainable management: total forest management certification by Forest Stewardship Council and Programme for the Endorsement of Forest Certification
- Average income of small-scale food producers, by sex and indigenous status

Complementary indicators:

- Agrobiodiversity Index
- Changes in soil organic carbon stocks
- Red List Index (wild relatives of domesticated animals)
- Red List Index (pollinating species)
- Proportion of local breeds classified as being at risk of extinction
- Proportion of land that is degraded over total land area

F. Relevant resources that can assist implementation

Assessments

- [FAO \(2022\) The State of Food and Agriculture](#)
- [FAO \(2022\) The State of World Fisheries and Aquaculture 2022](#)
- [FAO \(2020\). The State of the World's Forests](#)
- [FAO \(2020\) Global Forest Resources Assessment \(FRA\)](#)
- [IPBES global assessment report on biodiversity and ecosystem services \(2019\)](#)

Tools and guidance

- [CBD Programme of Work on Agricultural Biodiversity](#)
- [CBD Programme of Work on Inland Waters](#)
- [CBD Programme of Work on Marine and Coastal Biodiversity](#)
- [CBD Cross-cutting Theme on Article 8\(j\)](#)
- [CBD Plan of Action on Customary Sustainable Use of Biological Diversity \(COP12\)](#)
- [CBD Cross-cutting Theme on Biodiversity and Health](#)
- [CBD Programme of Work on Forests](#)
- [CBD Programme of Work on Drylands](#)
- [CBD Cross-cutting Theme on Sustainable Wildlife Management](#)
- [FAO International Treaty on Plant Genetic Resources for Food and Agriculture](#)

- [FAO Towards sustainable crop pollination services: Measures at field, farm and landscape scales](#)
- [FAO Tool for Agroecology Performance Evaluation \(TAPE\)](#)
- [FAO The 10 elements of agroecology: Guiding the transition to sustainable food and agricultural systems](#)
- [FAO Voluntary Guidelines for Sustainable Soil Management \(VGSSM\)](#)
- [FAO Framework for Action on Biodiversity for Food and Agriculture](#)
- [FAO Sustainable Forest Management \(SFM\) Toolbox](#)
- [FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries](#)
- [International Plant Protection Convention \(IPPC\)](#)
- [FAO, SER, IUCN CEM \(2023\). Standards of practice to guide ecosystem restoration: A contribution to the United Nations Decade on Ecosystem Restoration](#)
- [Decision 15/28, Annex: Updated Plan of action \(2020–2030\) for the Soil Biodiversity Initiative \(2022\)](#)
- [CIFOR Forest Tenure Pathways to Gender Equality: A practitioner’s guide \(2021\)](#)
- [CBD Technical Series No. 87: Assessing Progress towards Aichi Biodiversity Target 6 on Sustainable Marine Fisheries \(2020\)](#)
- [CBD Technical Series No. 93: Voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction and supplementary information \(2019\)](#)
- [SER International Standards for the Practice of Ecological Restoration \(2019\)](#)
- [Updated Plan of Action 2018-2030 for the Pollinators Initiative \(Decision 14/6, Annex I\) \(2018\)](#)
- [Implications of the IPBES assessment on pollinators, pollination and food production for the work of the Convention \(Decision 13/15\) para 7 \(2016\)](#)
- [Decision XIII/3: Strategic actions to enhance the implementation of the Strategic Plan for Biodiversity 2011-2020 and the achievement of the Aichi Biodiversity Targets, including with respect to mainstreaming and the integration of biodiversity within and across sectors \(2016\)](#)
- [CBD decision XIII/5 \(2016\): Short-term Action Plan on Ecosystem Restoration](#)
- [CBD Technical Series No. 79: How sectors can contribute to sustainable use and conservation of biodiversity \(2014\)](#)
- [Decision XII/5 \(Annex\): Chennai guidance for the integration of biodiversity and poverty eradication \(2014\)](#)
- [CBD decision XII/3 \(Annex III\): voluntary guidelines on safeguards in biodiversity financing mechanisms \(2014\)](#)

- [CBD Technical Series No. 61: Biological and Cultural Diversity in Coastal Communities: Exploring the Potential of Satoumi for Implementing the Ecosystem Approach in the Japanese Archipelago \(2011\)](#)
- [CBD Technical Series No. 60 \(2011\): Livelihood alternatives for the unsustainable use of bushmeat](#)
- [CBD Technical Series 59: REDD-plus and Biodiversity \(2011\)](#)
- [CBD decision X/22 \(2010\): Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodelines on Safeguards in Biodiversity Financing Mechanisms](#)
- [Decision X/29: Marine and coastal biodiversity \(2010\)](#)
- [CBD decision XII/23 \(2014\). Marine and coastal biodiversity: Impacts on marine and coastal biodiversity of anthropogenic underwater noise and ocean acidification, priority actions to achieve Aichi Biodiversity Target 10 for coral reefs and closely associated ecosystems, and marine spatial planning and training initiatives](#)
- [CBD decision XII/5 \(Annex\) \(2014\): Chennai guidance for the integration of biodiversity and poverty eradication](#)
- [CBD Technical Series No. 43: Forest Resilience, Biodiversity, and Climate Change. A synthesis of the biodiversity/resilience/stability relationship in forest ecosystems \(2009\)](#)
- [CBD decision VIII/28 \(2006\): Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment](#)
- [Initiative on Biodiversity for Food and Nutrition \(2006\)](#)
- [Initiative for conservation and sustainable use of soil biodiversity \(2006\)](#)
- [CBD decision VII/11 \(2004\): Ecosystem Approach and related guidance](#)
- [CBD Decision VII/5, appendix 5: Research and monitoring priorities associated with programme element 4: mariculture \(2004\)](#)
- [CBD Technical Series No. 12: Solutions for sustainable mariculture - avoiding the adverse effects of mariculture on biological diversity \(2004\)](#)
- [International Initiative for the Conservation and Sustainable Use of Pollinators \(2002\)](#)
- [UNEP/CBD/SBSTTA/8/9/Add.2, sections II and III: Summary report of the Ad Hoc Technical Expert Group on Mariculture \(2002\)](#)
- [CIFOR Criteria and Indicators \(C&I\) Toolbox to assess management in particular production forests where people live and work in and around the forests \(1999\)](#)

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Target 11

Restore, maintain and enhance nature's contributions to people: Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.

A. Why is this target important?

Nature's contributions to people, a concept similar to and inclusive of ecosystem services, refers to all the contributions from biodiversity to people's well-being or quality of life. These contributions take various forms, including material contributions, regulating services and other non-material contributions including spiritually and culturally. As a result of the ongoing decline of biodiversity, nature's contributions to people are also in decline, with serious implications for human well-being and social cohesion. The restoration, maintenance and enhancement of nature's contributions to people provides an important rationale for the conservation and sustainable use of biodiversity.

B. Explanation of the target and its elements

This target calls for the range of nature's contributions to people to be restored, maintained or enhanced by 2030 and places specific emphasis on the regulation of air, water and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters. To accomplish this the target identifies nature-based solutions and/or ecosystem-based approaches as a specific approach to reaching this objective.

- **Nature-based solutions and/or ecosystem-based approaches** - Nature-based solutions can be defined as actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits. Ecosystem-based approaches can be defined as the use of biodiversity and ecosystem services, particularly, as part of an overall strategy to help mitigate and adapt to the adverse effects of climate change.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 11 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target will support the attainment of goals A and B of the Kunming-Montreal Global Biodiversity Framework. Progress towards this target will be facilitated through the actions taken to reach the other targets of the Global Biodiversity Framework, in particular those targets addressing the direct drivers of biodiversity, namely targets help to reach targets [2](#), [3](#), [5](#), [6](#), [7](#), [8](#), [9](#), [10](#) and [12](#).
- Elements of Target 11 were previously addressed under [Aichi Biodiversity Target 14](#).

- Elements of Target 11 are also addressed in the targets of the Sustainable Development Goals, including targets [1.5](#) and [15.4](#)

D. Guiding questions for national target-setting

- How are the contributions of biodiversity recognized in existing national policies, strategies and plans? How can the role of biodiversity be (further) recognised, supported and/or enhanced? What policy tools are in use or need to be considered?
- What are the opportunities for and constraints to restoring, maintaining and enhancing nature's contributions to people? Consider potential ecological, economic, and social costs and benefits in specific ecosystems.
- Who are the actors that may be affected by efforts to restore, maintain and enhance nature's contributions to people? How can they be involved and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to reach this target? How can additional resources be raised? What are possible sources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- [B.1 Services provided by ecosystems*](#)

Component indicators

- Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
- Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services
- Annual mean levels of fine particulate matter (e.g., PM2.5 and PM10) in cities
- Proportion of bodies of water with good ambient water quality
- Level of water stress

Complementary indicators:

- Air emission accounts
- Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management
- Proportion of population using safely managed drinking water services
- Mortality rate attributed to household and ambient air pollution (SDG indicator 3.9.1)

F. Relevant resources that can assist implementation

Assessments

- [Sixth Assessment Report \(AR6\) of the Intergovernmental Panel on Climate Change \(IPCC\) \(2021-2023\)](#)
- [IPBES \(2022\): Methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services \(2022\)](#)
- [FAO \(2022\) The State of Food and Agriculture](#)
- [FAO \(2022\) The State of World Fisheries and Aquaculture 2022](#)
- [IPBES-IPCC Co-Sponsored Workshop on Biodiversity and Climate Change \(2021\)](#)
- [FAO \(2020\). The State of the World's Forests](#)
- [FAO \(2020\) Global Forest Resources Assessment \(FRA\)](#)
- [IPCC special report on the ocean and cryosphere in a changing climate \(SROCC\) \(2019\)](#)
- [IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems \(SRCCL\) \(2019\)](#)
- [IPBES global assessment report on biodiversity and ecosystem services \(2019\)](#)
- [IPBES assessment report on land degradation and restoration \(2018\)](#)
- [IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty \(SR1.5\) \(2018\)](#)
- [Connecting Global Priorities: Biodiversity and Human Health: A State of Knowledge Review \(2015\)](#)

Tools and guidance

- [CBD Biodiversity and Health](#)
- [CBD Biodiversity and Poverty Reduction](#)
- [CBD Biodiversity and Water](#)
- [CBD Biodiversity and Food](#)
- [FAO Sustainable Forest Management \(SFM\) Toolbox](#)
- [FAO Framework for Action on Biodiversity for Food and Agriculture \(2022\)](#)
- [Joint Programme of Work on the Links between Biological and Cultural Diversity \(2022\)](#)
- [One Health Joint Plan of Action \(2022–2026\)](#)
- [FAO Towards sustainable crop pollination services: Measures at field, farm and landscape scales \(2020\)](#)

- [CBD Technical Series No. 93: Voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction and supplementary information \(2019\)](#)
- [FAO Tool for Agroecology Performance Evaluation \(2019\)](#)
- [FAO The 10 elements of agroecology: Guiding the transition to sustainable food and agricultural systems \(2018\)](#)
- [CBD Technical Series 85: Synthesis Report on Experiences with Ecosystem-Based Approaches to Climate Change Adaptation and Disaster Risk Reduction \(2016\)](#)
- [CBD Technical Series 86: Managing ecosystems in the context of climate change mitigation: A review of current knowledge and recommendations to support ecosystem-based mitigation actions that look beyond terrestrial forests \(2016\)](#)
- [FAO Voluntary Guidelines for Sustainable Soil Management \(VGSSM\) \(2016\)](#)
- [FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries \(2015\)](#)
- [CBD Technical Series No. 73. Best policy guidance for the integration of biodiversity and ecosystem services in standards \(2012\)](#)
- [Tkarihwaí:ri Code of Ethical Conduct to Ensure Respect for the Cultural and Intellectual Heritage \(2011\)](#)
- [CBD decision X/33 \(2010\): Biodiversity and climate change \(contains detailed guidance on assessing impacts, reducing impacts, ecosystem-based adaptation, ecosystem-based mitigation, reducing impacts of climate measures, and valuation and incentive measures\)](#)
- [CBD Technical Series No. 41: Connecting Biodiversity and Climate Change Mitigation and Adaptation: Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change \(2009\)](#)
- [CBD Technical Series No. 42: Review of the Literature on the Links between Biodiversity and Climate Change: Impacts, Adaptation and Mitigation \(2009\)](#)
- [Users' Manual on the CBD Guidelines on Biodiversity and Tourism Development \(2007\)](#)
- [Decision VII/14. Guidelines on Biodiversity and Tourism Development \(2004\)](#)
- [CBD decision V/6 \(2000\): Ecosystem Approach](#)

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Target 12

Enhance green spaces and urban planning for human well-being and biodiversity: Significantly increase the area and quality and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature and contributing to inclusive and sustainable urbanization and the provision of ecosystem functions and services.

A. Why is this target important?

Green and blue spaces have a range of positive effects on human physical and mental well-being. Ensuring the availability and accessibility of such areas is particularly important given that the increasing trend towards urbanization risks separating people further from nature, with potential negative effects on human health and reduced understanding of biodiversity, and the ecosystem services it provides. Further, green and blue spaces can provide important habitat for species, improve habitat connectivity, provide ecosystem services and help mediate extreme events, if managed with such objectives in mind. The target focuses on the importance of biodiversity-inclusive urban planning and making space for nature within built landscapes to improve the health and quality of life for citizens and to reduce the environmental footprint of cities and infrastructure. It also recognizes the dependency of urban communities on well-functioning ecosystems and the importance of spatial planning to reduce the negative impacts on biodiversity of urban expansion, roads and other infrastructure.

B. Explanation of the target and its elements

The target aims to ensure biodiversity-inclusive urban planning, inter alia to increase the green and blue spaces within cities and other densely populated areas, in order to contribute to human well-being and the conservation of biodiversity in urban areas\ To accomplish this, the target sets out a number of elements:

- **Green and blue spaces** – These are areas of vegetation, inland and coastal waters, generally in or near to urban areas and other densely populated areas. The target specifically calls for the area, quality, connectivity, accessibility and benefits from such areas to be increased for the purposes of enhancing native biodiversity, ecological connectivity and integrity, and improve human health and well-being and connection to nature. This could be accomplished in various ways, including by creating new green and blue spaces, better managing existing areas for biodiversity and health outcomes, and ensuring that such areas are accessible to people.
- **Biodiversity-inclusive urban planning** – Urban planning is a technical and political process for managing the use of urban spaces. The target specifically calls for such processes to be biodiversity inclusive.
- **Mainstreaming** – The target calls for the mainstreaming of biodiversity in the context of green and blue spaces and biodiversity-inclusive urban planning. Biodiversity mainstreaming is generally understood as ensuring that biodiversity, and the services it provides, are appropriately and adequately factored into policies and practices that rely and have an impact on it.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 12 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- This target will contribute to the attainment of goals A and B of the Kunming-Montreal Global Biodiversity Framework. Progress towards this target will also help to reach targets [2](#), [3](#), [4](#), [8](#) and [11](#). Conversely, progress towards this target will be supported by actions to reach targets [1](#), [14](#), [19](#), [20](#), [21](#), [22](#) and [23](#).
- Elements of Target 12 are also addressed in the targets of the Sustainable Development Goals, including targets [11.7](#) and [11.b](#).

D. Guiding questions for national target-setting

- How is urban planning managed in your country? What processes are in place to plan and manage green and blue spaces? How can these be made more biodiversity-inclusive?
- Who are the main actors involved, and what are their roles and responsibilities? What planning decisions are (being) devolved to sub-national (state/province, city, municipal) governments? What implications does this have for action towards this target?
- What are the opportunities for and constraints to increasing the area, quality, connectivity of, access to, and benefits from green and blue spaces? What are the potential ecological, economic, and social benefits and costs of taking action?
- Who are the actors that may be affected? How can they be involved and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional funds be raised? What are possible funding sources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- [12.1 Average share of the built-up area of cities that is green/blue space for public use for all](#)

Component indicators:

- Recreation and cultural ecosystem services provided

F. Relevant resources that can assist implementation

Assessments

- [Cities and Biodiversity Outlook: Action and Policy - A Global Assessment of the Links between Urbanization, Biodiversity, and Ecosystem Services](#) (2012)

Tools and guidance

- [Long-Term Strategic Approach to Mainstreaming \(LTAM\)](#)
- [Local Governments for Sustainability \(ICLEI\)](#)
- [UN-Habitat Supporting Local Action for Biodiversity: The Role of National Governments](#)
- [Global Platform for Sustainable Cities: Urban Nature and Biodiversity for Cities](#)
- [CBD Technical Series No. 98: Handbook on the Singapore Index on Cities' Biodiversity \(also known as the City Biodiversity Index\) \(2021\)](#)
- [Urban green space interventions and health: A review of impacts and effectiveness \(2017\)](#)
- [Urban Green Spaces and Health: A Review of Evidence \(2016\)](#)
- [CBD decision XII/9 \(2014\): Engagement with subnational and local governments](#)
- [CBD decision XI/8 \(2012\): Engagement of other stakeholders, major groups and subnational authorities](#)
- [CBD decision X/22 \(2010\): Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity](#)
- [CBD decision IX/28 \(2008\): Promoting engagement of cities and local authorities](#)

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Target 13

Increase the sharing of benefits from genetic resources, digital sequence information and traditional knowledge: Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030 facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.

A. Why is this target important?

The sharing of benefits that arise from the utilization of genetic resources and associated traditional knowledge is one of the three objectives of the Convention and a key pillar for the success of its implementation. It builds an equity dimension among countries providing and using biodiversity with the dual objective of providing incentives for conservation and sustainable use of biodiversity and mobilizing new resources redirected towards biodiversity. Access and benefit-sharing is included in several international instruments. Under the Convention, the framework for the implementation of its third objective is provided in Article 15. In addition, [Article 8\(j\)](#) contains provision to encourage the equitable sharing of the benefits arising from the utilization of knowledge, innovations and practices of indigenous peoples and local communities embodying traditional lifestyles relevant for conservation and sustainable use of biological diversity. The adoption of the Nagoya Protocol on Access and Benefit Sharing (ABS) created greater legal certainty, clarity and transparency for both users and providers of genetic resources and associated traditional knowledge. At COP 15 in December 2022, Parties agreed to develop a solution for the sharing of benefits arising from the use of digital sequence information (DSI) on genetic resources and established a way forward to advance the consideration of this issue under the Convention.

The International Treaty on Plant Genetic Resources for Food and Agriculture, in force since June 2004, has established the Multilateral System of Access and Benefit-sharing, which facilitates exchanges of plant genetic resources for the purposes of agricultural research and breeding to contribute to sustainable agriculture and food security, by providing a transparent and reliable framework for the exchange of crop genetic resources.

B. Explanation of the target and its elements

This target has two main components. First, putting in place legal, policy and administrative measures on ABS, and secondly, putting in place capacity-building measures for ABS:

- **Legal, policy and administrative measures** – Parties to the different ABS-related international instruments need to take legal, policy and administrative measures to implement them. This includes the need to put the necessary institutional structures in place and to take the necessary steps to comply with their international treaty obligations at the national level and to have a fully functional ABS system. This may include, for instance, administrative measures for the issuance of permits or the functioning of the checkpoints, as applicable. This component has quantitative (having measures in place) and a qualitative (the measures being effective) subcomponents. These measures need to help achieve a significant increase in benefit-sharing. To do that, measures need to ensure the sharing of benefits in a fair and equitable manner and facilitate appropriate access to genetic resources.

- **Capacity-building measures** – There is a need to build capacity on ABS at all levels. This includes capacity-building measures for ABS for genetic resources, DSI and associated traditional knowledge. Needs and challenges to achieve the issues addressed by this target have been identified on several occasions (e.g., documents on capacity building, decision NP-3/1 on assessment and review).

These components are further qualified as follows:

- **In accordance with applicable international access and benefit-sharing instruments** – Applicable international access and benefit-sharing instruments which are relevant, or could be relevant in the future include the Nagoya Protocol on Access and Benefit Sharing, the International Treaty on Plant Genetic Resources for Food and Agriculture, the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction . Further the target leaves room for considering new international ABS instruments as they may be developed. For example, relevant international instruments could be developed under the World Health Organization or the World Intellectual Property Organization in the future.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 13 should take into account all of the considerations for implementation identified [in section C of the Kunming-Montreal Global Biodiversity Framework](#).
- This target will directly support the attainment of Goal C of the Kunming-Montreal Global Biodiversity Framework. It will also help to reach targets [15](#) and [19](#). Indirectly, and depending on the action taken, this target could help to address targets [4](#) and [9](#) by providing a further incentive to prevent the extinction of species and safeguard genetic diversity. Conversely, progress towards targets [14](#), [19](#), [20](#), [21](#), [22](#) and [23](#) would help to reach Target 13.
- Elements addressed by Target 13 were previously addressed under [Aichi Biodiversity Target 16](#). However, Aichi Biodiversity Target 16 was focused on the ratification and implementation of the Nagoya Protocol and was therefore narrower in terms of the ABS instruments covered and the type of measures to be taken.
- Elements of Target 13 are also addressed in the targets of the Sustainable Development Goals, target [15.6](#)

D. Guiding questions for national target-setting

- What international ABS treaties is your country a Party to? Is the country complying with all the obligations under these treaties? Are there other international treaties that the country should consider ratifying (for example the Nagoya Protocol or the International Treaty on Plant Genetic Resources for Food and Agriculture)?
- What legal, policy and administrative measures to ensure the fair and equitable sharing of benefits are in place in the country? Are these measures effective (are benefits being shared)? If not, what are the underlying reasons? In what way could their effectiveness be improved?

- What is the country's current level of capacity for ABS for genetic resources, DSI and associated traditional knowledge? What capacity-building needs exist and in which way could they be addressed? What can your country do to support the capacity-building of others?
- What are the opportunities and constraints experienced in developing and implementing effective legal, policy, administrative and capacity-building measures for ABS? What are the potential ecological, economic, cultural, and social benefits and costs of taking action? Who are the actors that may be affected? What can be done to get them involved and ensure that their needs are addressed? What are the trade-offs to consider?
- What additional resources (financial, human technical and technological) will be required to reach the national target? What can be done to raise additional resources? What are possible sources for these resources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- [C.1 Indicator on monetary benefits received](#)
- [C.2 Indicator on non-monetary benefits](#)

Component indicators:

- Number of permits or their equivalents for genetic resources (including those related to traditional knowledge) by type of permit.

Complementary indicators:

- Total number of transfers of crop material from the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) received in a country
- Total number of permits, or their equivalent, granted for access to genetic resources
- Total number of internationally recognized certificates of compliance published in the ABS Clearing-House
- Number of countries that require prior informed consent that have published legislative, administrative or policy measures on access and benefit-sharing in the ABS Clearing-House
- Number of countries that require prior informed consent that have published information on ABS procedures in the ABS Clearing-House
- Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits
- Estimated percentage of monetary and non-monetary benefits directed towards conservation and sustainable use of biodiversity

F. Relevant resources that can assist implementation

Assessments

- [Annual reports and monitoring framework for SDG 15.6](#)
- [Biannual reports on implementation and operations of the Multilateral System on Access and Benefit-sharing of the International Treaty on PGRFA \(2022\)](#)
- [First Assessment and Review of the effectiveness of the Nagoya Protocol \(decision NP-3/1\) \(2018\)](#)

Tools and guidance

- [Access and Benefit-sharing Clearing-House \(ABSCH\)](#)
- [ABS Factsheets](#)
- [ABS Videos](#)
- [E-learning modules](#)
- [ITPGRFA: Educational Module on the Multilateral System on Access and Benefit-sharing](#)
- [First national report format and guidelines \(decision NP-4/3 to be implemented and submitted in the ABS Clearing-House\) \(2022\)](#)
- [Long-term strategic framework for capacity-building and development adopted by COP in the context of the Global Biodiversity Framework \(decision 15/8\) \(2022\)](#)
- [ITPGRFA Capacity-building strategy \(2022\)](#)
- [ABS Policy Briefs \(2012\)](#)
- [CEPA Toolkit - Including considerations for access and benefit-sharing \(2018\)](#)
- [Mutually supportive implementation of the Nagoya Protocol and the Plant Treaty: Scenarios for consideration by national focal points of the Plant Treaty and Nagoya Protocol \(2018\)](#)
- [Decision-making tool for national implementation of the Plant Treaty's multilateral system of access and benefit-sharing \(2018\)](#)
- [Implementation of the Nagoya Protocol in the context of human and animal health, and food safety: Questions and Answers \(2018\)](#)
- [Strategic communications for for ABS: A Conceptual Guide and Toolkit for Practitioners \(2018\)](#)
- [Interim national report analyzer \(2017\)](#)
- [Policy Paper: How ABS and the Nagoya Protocol contribute to the Sustainable Development Agenda \(2016\)](#)
- [Appendix I and II of the Strategic Framework for Capacity-Building and Development to support effective implementation of the Nagoya Protocol on ABS \(decision NP-1/8\) \(2014\)](#)
- [Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing \(2012\)](#)

- [Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization \(2002\)](#)

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Target 14

Integrate biodiversity in decision-making at every level: Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, fiscal and financial flows with the goals and targets of this framework.

A. Why is this target important?

Article 6 (b) of the Convention calls upon Parties, in accordance with their particular conditions and capabilities, to integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies. Such “biodiversity mainstreaming” seeks to ensure that the multiple biodiversity values are duly taken into account in decision- and policy-making of private and public actors, across governments, economic sectors and society more broadly. As many (if not most) activities that rely on biodiversity or have an impact on biodiversity are outside of the remit of biodiversity policies, implementing this target is critical for implementing the objectives of the Convention. Nevertheless, the multiple values of biodiversity are not widely reflected in decision-making. Integrating and reflecting the contribution of biodiversity and the ecosystem services it provides in relevant strategies, policies, programmes, and reporting systems is an important element in ensuring that the diverse values of biodiversity and the opportunities derived from its conservation and sustainable use are recognized and reflected in decision-making.

B. Explanation of the target and its elements

The aim of this target is to ensure that the values of biodiversity are fully reflected or mainstreamed in all relevant decision-making frameworks so that it is given proper attention in decision-making, leading to alignment of all activities, and of all financial flows, with the goals and targets of the framework. The target has several specific elements:

- **Multiple values** – Biodiversity underpins a wide range of services that support economies, food production systems, secure living conditions and human health. In addition, biodiversity is central to many cultures, spiritual beliefs and worldviews and has intrinsic value. As such, biodiversity has multiple values, some of which can be quantified in monetary terms and others that are more abstract.
- **Policies, regulations, processes, strategies, assessments and national accounting** – Various decision-making frameworks guide activities at global, national and local scales and in the private and public sector. However, these frameworks often do not appropriately account for biodiversity or its values, and therefore these are not always appropriately reflected in relevant processes, including regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting.
- **All of government and sectors** – Action to fully integrate biodiversity and its multiple values should be taken across all levels of government and across sectors, thus reflecting the fact that many decision-making frameworks, processes and policies that are relevant for biodiversity take place at different levels of public and private decision-making. The target further specifies that a specific focus should be given to those sectors that have significant

impacts on biodiversity and that public and private fiscal and financial flows should be gradually aligned with the Kunming-Montreal Global Biodiversity Framework

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 14 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- This Target supports the attainment of goals B and D of the Kunming-Montreal Global Biodiversity Framework. Progress towards this target would also help to reach all targets of the Framework by ensuring that biodiversity and its multiple values are reflected in decision-making across all levels of society. However, it would have particularly important impacts on targets [15](#), [16](#) and [18](#)
- Elements of this target were previously addressed by [Aichi Biodiversity Target 2](#).
- Elements of Target 14 are also addressed in the targets of the Sustainable Development Goals, including [Target 15.9](#).

D. Guiding questions for national target-setting

- What are the key national planning instruments and processes in place? How is biodiversity and its multiple values being reflected in these? What are the opportunities and constraints for doing so?
- What gaps, in terms of instruments, legislation and processes, exist in reflecting the values of biodiversity in decision-making processes? How could these gaps be addressed?
- How are the business and financial sectors being encouraged to reflect biodiversity and its multiple values in decision-making processes? How effective has this been? How could it be strengthened? What are the gaps/needs that exist?
- What sectors are having significant impacts on biodiversity? How is biodiversity reflected in any associated decision-making processes? How effective has this been? How could it be strengthened? What are the gaps/needs that exist?
- What are the potential ecological, economic, and social benefits and costs of integrating biodiversity and its multiple values into relevant decision-making processes? Who are the actors that may be affected? How can they be involved, and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to reach this target? How can additional resources be raised? What are possible sources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Component indicators:

- Number of countries with implementation of the System of Environmental Economic Accounting

Complementary indicators

- Human Appropriation of Net Primary Production (HANPP)
- CO₂ emission per unit of value added
- Change in water-use efficiency over time

F. Relevant resources that can assist implementation

Assessments

- [IPBES \(2022\): Methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services](#)
- [UK Treasury \(ed.\) \(2021\): The Economics of Biodiversity. The Dasgupta Review](#)
- [OECD \(2018\). Mainstreaming Biodiversity for Sustainable Development](#)
- [CBD \(2017\). Global state of the application of biodiversity-inclusive impact assessment. CBD/SBSTTA/21/INF/13](#)

Tools and guidance

- [United Nations System of Environmental Economic Accounting \(SEEA\)](#)
- [Sustainable Ocean Initiative Training Module: Environmental Impact Assessment \(EIA\) in support of marine biodiversity and the sustainability of marine resources](#)
- [ENCORE](#)
- [GRID-Geneva](#)
- [Green Public Procurement Toolkit \(2023\)](#)
- [Integrated Biodiversity Assessment Tool \(IBAT\) \(2023\)](#)
- [CBD decision 15/7 \(2022\): Resource mobilization](#)
- [CBD Decision 15/17 \(2022\): Further work on the Long-term Strategic Approach to Biodiversity Mainstreaming](#)
- [CBD decision 15/12 \(Annex\) \(2022\): Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity \(2023–2030\)](#)
- [Green Public Procurement: An Overview of Green Reforms in Country Procurement Systems \(2021\)](#)
- [UNEP Sustainable Public Procurement Guidelines \(2021\)](#)
- [UN Biodiversity Lab \(2021\)](#)

- [CBD decision 14/3 \(2018\): Mainstreaming of biodiversity in the energy and mining, infrastructure, manufacturing and processing sectors](#)
- [CBD Decision 14/16\(2018\) Methodological Guidance Concerning the Contributions of Indigenous Peoples and Local Communities](#)
- [Mainstreaming biodiversity for sustainable development \(2018\)](#)
- [CBD decision XIII/3 \(2016\): Strategic actions to enhance the implementation of the Strategic Plan for Biodiversity 2011-2020 and the achievement of the Aichi Biodiversity Targets, including with respect to mainstreaming and the integration of biodiversity within and across sectors](#)
- [OECD Recommendation on public procurement \(2015\)](#)
- [Ten steps to biodiversity mainstreaming \(2013\)](#)
- [UNEP/CBD/COP/11/23, part I: Voluntary guidelines for the consideration of biodiversity in environmental impact assessments \(EIAs\) in marine and coastal areas, and part II: Draft guidance on biodiversity-inclusive strategic environmental assessment in marine and coastal areas \(2012\)](#)
- [The Biodiversity Finance Initiative \(BIOFIN\) \(2012\)](#)

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Target 15

Businesses assess, disclose and reduce biodiversity-related risks and negative impacts.

Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions:

(a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains and portfolios;

(b) Provide information needed to consumers to promote sustainable consumption patterns;

(c) Report on compliance with access and benefit-sharing regulations and measures, as applicable;

in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.

A. Why is this target important?

All businesses are dependent in some way on biodiversity, however these dependencies are not always acknowledged or accounted for. By assessing and monitoring their impacts on biodiversity, businesses can better understand their relationship with biodiversity and assess the impacts of their activities on it and the risks posed by biodiversity loss to their operations and supply chains. Once these relationships, impacts and risks have been assessed and disclosed, it becomes easier to take concrete steps to address them. Governments have a particularly important role to play in this respect as they can put in place the legal, administrative or policy measures that can facilitate these assessments to take place in a consistent and equitable manner.

B. Explanation of the target and its elements

This target aims to progressively reduce the negative impacts and increase the positive impacts of business on biodiversity and to encourage more sustainable patterns of production. To accomplish this, countries should put in place measures to encourage and enable business and financial institutions to identify and disclose their dependencies and impacts on biodiversity, and to report on these and other information, and to require this in the case of large and transnational companies and institutions:

- **Legal, administrative or policy measures** – The target calls on Parties to develop a set of measures to encourage and enable businesses and financial institutions to undertake a set of actions to progressively reduce negative impacts on biodiversity and increase their positive impacts. Specifically, the target calls for legal, administrative or policy measures to encourage businesses to regularly monitor, assess and transparently disclose their risks, dependencies and impacts on biodiversity, to provide relevant information to consumers and to report on compliance with access and benefit-sharing regulations and measures where applicable.
- **Large and transnational companies and financial institutions** – While this target applies to measures for all types of business it places a particular emphasis on large and transnational companies and financial institutions. These types of companies and institutions, owing to

their size and areas of operation, supply and value chains and portfolios often have large net impacts on biodiversity. As such improvements in their monitoring, assessment and disclosure processes have significant potential to generate positive outcomes for biodiversity, particularly as issues associated with supply chains and portfolios are often overlooked in sustainability reports.

- **Regularly monitor, assess and transparently disclose their risks, dependencies and impacts** – All businesses are dependent on biodiversity in some way. Many business practices have impacts on biodiversity. This element of the target calls for business to regularly assess and disclose these dependencies, impacts and risks. In the case of large and transnational companies and financial institutions, such assessments and disclosures should be made a requirement.
- **Provide information to consumers** – Making information available to consumers on the impacts of business practices on biodiversity can empower people to make more informed decisions about their consumption patterns. This can in turn help to drive the demand for products with fewer impacts.
- **Report on compliance with access and benefit-sharing** – Some businesses make use of genetic resources in their business operations. Where this is the case, these businesses need to ensure that their operations comply with any relevant access and benefit-sharing instruments. Putting in place measures for reporting on this issue is one way of encouraging compliance.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 15 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target will contribute to the attainment of all goals of the Kunming-Montreal Global Biodiversity Framework. Progress towards this target will also support the attainment of targets [4](#), [5](#), [6](#), [7](#), [9](#), [10](#), [13](#), [14](#), and [16](#). Conversely, progress towards targets [18](#), [19](#), [20](#), [21](#), [22](#) and [23](#) will help support attainment of this target.
- This target addresses issues previously addressed under [Aichi Biodiversity Target 4](#).
- Elements of Target 15 are also addressed in the targets of the Sustainable Development Goals, including targets [9.4](#) and [12.6](#).

D. Guiding questions for national target-setting

- What legal, administrative or policy measures are in place in the country to encourage the monitoring, assessment and disclosure of business risks, dependencies and impacts on biodiversity? Are there requirements for large as well as transnational companies and financial institutions? Do **these account** for supply chains and portfolios? How effective have these been? How could their effectiveness be improved?
- What legal, administrative or policy measures are in place in the country to encourage businesses to provide information to consumers to promote sustainable consumption patterns? How effective have these been? How could their effectiveness be improved?

- What legal, administrative or policy measures are in place in the country to encourage compliance with access and benefit-sharing regulations and measures? How effective have these been? How could their effectiveness be improved?
- What are the opportunities and constraints in putting in place legal, administrative or policy measures on these issues? What are the potential ecological, economic, and social benefits and costs?
- Who are the actors that may be affected by these legal, administrative or policy measures? How can they be involved and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional resources be raised? What are possible sources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- [15.1 Number of companies reporting on disclosures of risks, dependencies and impacts on biodiversity](#)

Component indicators

- Indicator based on Task Force for Nature-related Financial Disclosures

Complementary indicators

- Species threat abatement and restoration metric
- Number of companies publishing sustainability reports

F. Relevant resources that can assist implementation

Assessments

- [Assessment of biodiversity measurement approaches for businesses and financial institutions \(2022\)](#)
- [EU Corporate Sustainability Reporting Directive \(CSRD\) \(2022\)](#)
- [Status of corporate biodiversity measurement, reporting and disclosure within the current and future global policy context \(CBD/SBI/3/INF/27\) \(2021\)](#)

Tools and guidance

- [Recommendations for a standard on corporate biodiversity measurement and valuation](#)
- [TNFD Nature-Related Risk & Opportunity Management and Disclosure Framework](#)
- [Biological Diversity Protocol](#)

- [Business for Nature's recommendations to governments on how to implement Target 15 of the Global Biodiversity Framework \(2023\)](#)
- [Corporate Sustainability Reporting Directive \(CSRD\) \(2022\)](#)
- [Implementing Decree for Article 29 of French Energy Climate Law \(2021\)](#)
- [Integrating Biodiversity into Natural Capital Assessments: A series of Biodiversity Guidance to accompany the Natural Capital Protocol \(2020\)](#)
- [Guidance for reporting by businesses on their actions related to biodiversity \(CBD/SBI/2/4/Add.2\) \(2017\)](#)
- [GLOBIO \(2016\)](#)
- [Sustainable Commodity Supply Chains: A Tool to Support Achievement of Aichi Biodiversity Target 4 \(2015\)](#)
- [CBD Technical Series No. 63 \(2011\): Review of the biodiversity requirements of standards and certification schemes](#)

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Target 16

Enable sustainable consumption choices to reduce waste and overconsumption: Ensure that people are encouraged and enabled to make sustainable consumption choices including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030, reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.

A. Why is this target important?

Unsustainable consumption is an underlying driver of biodiversity loss. Halting and ultimately reversing biodiversity loss will require a shift towards more sustainable consumption patterns. This means consuming resources and producing waste at a level within planetary boundaries. Governments have a central role to play in making information available and accessible to consumers who, in turn, can make better and more informed consumption choices.

B. Explanation of the target and its elements

This target calls for measures to be put in place to encourage people to make more sustainable consumption choices so that overconsumption and waste generation are significantly reduced. The target identifies the following elements to accomplish this:

- **Sustainable consumption choices** – In order for consumers to make more sustainable choices they need to be enabled and encouraged to do so. To this end the target calls for supportive policy, legislative or regulatory frameworks to be put in place and for education and access to relevant and accurate information and for alternatives to be improved.
- **Global footprint of consumption** – Overconsumption is a major underlying cause of biodiversity loss. Humanity's use of biological resources continues to exceed the Earth's capacity to regenerate them. This global footprint of consumption must be reduced for the 2050 Vision to be reached. However, it is essential that this reduction occurs in an equitable manner. Currently some areas of the world are having a disproportionately large impact on the global footprint of consumption while others are consuming resources at far lower rates. Similarly, in some regions, consumption, particularly of food, will need to increase significantly to ensure that other societal objectives, such as eliminating poverty and hunger, can be reached. Ensuring that consumption patterns remain within biological limits in an equitable way is essential to living in harmony with Mother Earth.
- **Halving global food waste** – Globally large amounts of food are produced but then wasted with various, environmental, social and economic impacts. This target specifically calls for food waste to be reduced by half. Reducing food waste can provide multiple benefits to reach societal objectives associated with biodiversity, climate change, the elimination of hunger and poverty.
- **Waste generation** – The products that people consume generate waste through the processes used to manufacture them as well as when they, or parts of them, are discarded. This issue can be addressed by finding and promoting efficiencies in production processes, by encouraging lower levels of consumption and putting in place measures to encourage the re-use and recycling of waste materials.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 16 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target will help to reach goals A and B of the Kunming-Montreal Global Biodiversity Framework. Progress towards this target will also help to reach targets [4](#), [5](#), [6](#), [7](#), [8](#), [9](#), [10](#) and [11](#). Conversely progress towards targets [14](#), [15](#), [18](#), [19](#), [20](#), [21](#), [22](#) and [23](#) will facilitate progress towards this target.
- Elements of this target were previously addressed in [Aichi Biodiversity targets 1 and 4](#)
- Elements of Target 16 are also addressed in the targets of the Sustainable Development Goals, including targets [4.7](#), [8.4](#), [9.4](#), [12.1](#), [12.2](#), [12.3](#), [12.5](#), [12.8](#) and [12.a](#)
- Elements of this target are addressed in UNEA resolution 5/14 to develop an international legally binding instrument on plastic pollution
- Target 16 also links to processes under the 10-Year Framework of Programmes on Sustainable Consumption and Production, a global commitment by the 193 United Nations Member states to accelerate a shift to sustainable consumption and production.

D. Guiding questions for national target-setting

- What measures are in place to encourage sustainable consumption and production? How do these address food waste and waste generation? How effective have these been? How could their effectiveness be improved?
- What are the opportunities for and constraints to taking steps to achieve or implement plans for sustainable consumption? What are the potential ecological, economic, and social costs and benefits of addressing unsustainable consumption and production?
- Who are the actors that may be affected? How can they be involved, and their needs addressed? What are the trade-offs to consider? Are there actors who could also act as champions for more sustainable consumption?
- What additional resources (financial, human and technical) will be required? How can additional resources be raised? What are the possible sources for these resources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Component indicators:

- Food waste index
- Material footprint per capita
- Global environmental impacts of consumption
- Ecological footprint

Complementary indicators:

- Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessments
- Recycling rate
- Life cycle impact assessment (LCIA), e.g., Lifecycle Impact Assessment Method based on Endpoint Modelling (LIME)
- Levels of poverty in developing communities

F. Relevant resources that can assist implementation

Assessments

- [United Nations Environment Programme \(2021\). Food Waste Index Report 2021](#)
- [IPBES Global Assessment Report on Biodiversity and Ecosystem Services \(2019\)](#)

Tools and guidance

- [UN SDGs Sustainable consumption and production: facts and figures](#)
- [One Planet Network Communication guide for linking consumption with biodiversity \(2022\)](#)
- [One Planet Network Integrating biodiversity into sustainable production and consumption activities: The way forward for business policy brief \(2022\)](#)
- [Integrating biodiversity into sustainable production and consumption activities - the way forward to policy makers \(2022\)](#)
- [UNESCO Biodiversity Learning Kit, vol. 1 \(2017\)](#)
- [Sustainable Consumption and Production: a Handbook for Policymakers \(2015\)](#)
- [FAO Food wastage footprint: impacts on natural resources \(2013\)](#)

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Target 17

Strengthen biosafety and distribute the benefits of biotechnology: Establish, strengthen capacity for, and implement in all countries biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.

A. Why is this target important?

Biosafety measures are indispensable for ensuring that living modified organisms resulting from biotechnology are handled and used with the necessary safety precautions. Living modified organisms resulting from biotechnologies provide opportunities, but their use and release requires regulation, management and control of potential associated risks. New biotechnological developments are providing ever more promising opportunities, however the concerns over these technologies and the living modified organisms resulting from them are also increasing.

Participation in biotechnological research by those Parties, especially developing country Parties, providing the genetic resources for such research would help empower them to address their own research needs. In addition, equitable access by Parties, in particular developing country Parties, to the results and benefits of biotechnologies based on genetic resources provided by these Parties would enable countries to benefit from technological advances based on genetic resources, providing a powerful incentive for conservation.

B. Explanation of the target and its elements

This target has two main components. The first relates to biosafety measures and the second addresses participation in biotechnology research and the distribution of benefits from biotechnology:

- **Strengthening of biosafety measures and capacities for their implementation** – Biosafety measures are taken to regulate, manage and control the risks associated with the use and release of living modified organisms deriving from biotechnology. These measures aim to contribute to the sustainable use and conservation of biological diversity.
- **Equitable access to results and benefits** – Biotechnology can generate a range of potential benefits. This component of the target promotes the participation of Parties, in particular developing countries, in biotechnological research using genetic resources provided by these Parties. This component of the target also promotes that Parties, in particular developing countries, are provided with equitable access to the results and benefits arising from biotechnologies based on genetic resources provided by those Parties.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 17 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target would help to reach goals A, B, C and D of the Kunming-Montreal Global Biodiversity Framework. Similarly, progress towards this target would

help to reach targets [4](#), [6](#), [7](#), [8](#), [10](#) and [13](#). Conversely, progress towards targets [14](#), [15](#), [18](#), [19](#), [20](#), [21](#), [22](#) and [23](#) would help to reach this target.

D. Guiding questions for national target-setting

- Have necessary biosafety measures been taken in accordance with Article 8(g) of the Convention? If so, how effective have these been? How could their effectiveness be improved?
- Have measures been taken to promote participation in biotechnological research and for providing equitable access to benefits and results from biotechnologies? If so, how effective have these been? How could their effectiveness be improved?
- What are the opportunities for and constraints to taking implementing measures for biosafety, promoting participation in biotechnological research and providing equitable access to benefits and results from biotechnologies? What are the potential ecological, economic, and social costs and benefits of doing so? Who are the actors that may be affected? How can they be involved and their needs addressed? What are the trade-offs to consider?
- What additional resources (financial, human and technical) will be required? How can additional resources be raised? What are the possible sources for these resources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Complementary indicators:

The monitoring framework for the Kunming-Montreal Global Biodiversity Framework identifies the following complementary indicator(s) for this target:

- Number of countries that have the necessary biosafety legal and administrative measures in place
- Number of countries that implement their biosafety measures
- Number of countries that have the necessary measures and means for detection and identification of products of biotechnology
- Number of countries that carry out scientifically sound risk assessments to support biosafety decision-making
- Number of countries that establish and implement risk management measures
- Percentage of Parties to the Cartagena Protocol on Biosafety implementing the relevant provisions of the Protocol
- Number of countries with legal and technical measures for restoration and compensation
- Percentage of Parties to the Nagoya – Kuala Lumpur Supplementary Protocol
- Percentage of countries with systems in place for restoration and compensation of damage to conservation and sustainable use of biological diversity

- Number of countries that establish and implement risk management measures
- Number of countries with mechanisms to facilitate the sharing of and access to information on potential adverse impacts of biotechnology on biodiversity and human health

F. Relevant resources that can assist implementation

Assessments

- [*Assessment and review of the Cartagena Protocol on Biosafety*](#) - The assessment and review process under the Cartagena Protocol is based on information derived primarily from national reports under the Cartagena Protocol and from the Biosafety Clearing-House. The assessment and review process provides information on the extent to which Parties to the Protocol have biosafety measures in place and also on areas where capacity-building is needed. The assessment and review analysis focuses on information provided by Parties to the Protocol, so it largely excludes the 23 Parties to the Convention that are not Parties to the Protocol, among which are important producer countries. The assessment under the Cartagena Protocol does not provide information on biotechnology research and access to benefits and results from biotechnologies. The conclusions of the fourth assessment and review of the Protocol are contained in [decision CP-10/7](#).

Tools and guidance

- [*Biosafety Clearing-House*](#) - The Biosafety Clearing-House is an online platform for exchanging information on living modified organisms and is a key tool for facilitating the implementation of the Cartagena Protocol on Biosafety. It includes national information published by countries (primarily Parties to the Protocol) as well as virtual library of biosafety resources, information on different living modified organisms as well as laboratories for their detection.
- [Safety Assessment of Transgenic Organisms in the Environment, Volume 10: OECD Consensus Document on Environmental Considerations for the Release of Transgenic Plants \(2023\)](#)
- [Biosafety Technical Series 05: Training Manual on the Detection and Identification of Living Modified Organisms in the Context of the Cartagena Protocol on Biosafety \(2022\)](#)
- Guidance on the Assessment of Socio-Economic Considerations in the Context of Article 26 of the Cartagena Protocol on Biosafety (2018): [Annex to CBD/CP/MOP/9/10](#) and [Annex II and III of CBD/CP/MOP/10/11](#)
- [Voluntary Guidance on Risk Assessment of Living Modified Organisms and Monitoring in the Context of Risk Assessment \(2016\)](#)

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Target 18

Reduce harmful incentives by at least \$500 billion per year, and scale up positive incentives for biodiversity: Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least 500 billion United States dollars per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.

A. Why is this target important?

Incentives, including subsidies, harmful to biodiversity are an important underlying driver of biodiversity loss. Substantial and widespread changes to subsidies and other incentives that are harmful to biodiversity are required to ensure sustainability. Eliminating, phasing out or reforming harmful incentives is a critical and necessary step that would also generate net socioeconomic benefits. The creation or further development of positive incentives for the conservation and sustainable use of biodiversity would also help reach the 2050 Vision for biodiversity by providing financial resources or other motives to encourage actors to undertake actions that would benefit biodiversity.

Article 11 of the Convention calls, on Parties to adopt, as far as possible and as appropriate, economically and socially sound measures that act as incentives for the conservation and sustainable use of biodiversity. The COP has recognized since its fifth meeting that implementing Article 11 needs to include action on those measures that generate incentives harmful for biodiversity; estimates indicate that harmful subsidies generate significant damage to biodiversity and that the amounts spent on these are substantially higher than those spent on positive incentive measures. Target 18 is therefore key to correct this unbalance and progressively align the incentives of economic agents with the objectives of the Convention.

B. Explanation of the target and its elements

This target has two main components. The first is the elimination, phasing out or reform of incentives, including subsidies, that are harmful to biodiversity. The second is the scaling up of positive incentives for the conservation and sustainable use of biodiversity. The target further identifies several elements to accomplish this:

- **Identify** – In most countries there will be various incentives, including subsidies, in place with varied impacts on biodiversity. Further, the harmful effects of some incentive measures may or may not be readily apparent and detectable. As such, the first element of this target calls for the identification of incentives that are harmful to biodiversity by 2025. However, this identification step should not preclude immediate action on the elimination, phasing out or reform of harmful incentives where possible.
- **Eliminate, phase out or reform** – The target calls for the substantial and progressive elimination, phasing out or reforming of harmful subsidies reaching \$500 billion per year by 2030. Both the elimination or phasing out of harmful incentives requires Parties to end support for such incentives. For some types of incentives, it may be possible to eliminate them outright. However, for most incentives a more scaled or gradual approach may be required as different sectors or groups in society have come to depend on them. In some cases, it may not be possible to eliminate or phase out harmful incentives as they are deemed

important for other societal objectives. In these cases, incentives harmful to biodiversity should be reformed so that their negative impacts are reduced as much as possible.

- **Incentives, including subsidies, harmful for biodiversity** – Harmful incentives generally emanate from policies or programmes that induce unsustainable behaviour harmful to biodiversity, often as unanticipated and unintended side effects of policies or programmes designed to achieve other objectives. Types of possibly harmful incentives include production subsidies and consumer subsidies, while policies and laws governing resource use, such as land tenure systems and environmental resource management, can also have harmful effects.
- **In a proportionate, just, fair, effective and equitable way** – Different countries have different amounts and types of incentives, including subsidies, that are harmful to biodiversity. Some of these harmful incentives may be deemed necessary in order to reach other societal objectives. The reduction, elimination or phasing out of incentives should take these points into account.
- **Most harmful incentives** – The target prioritizes acting on those incentives with the most harmful effects. Past studies have shown that these are not necessarily the ones with the highest financial outlays.
- **Scale up positive incentives** – Positive incentives are economic, legal or institutional measures designed to encourage activities beneficial to biodiversity. Positive incentives can include such things as public or grant-aided land purchases or conservation easements.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 18 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target would help to reach goals A, B and D of the Kunming-Montreal Global Biodiversity Framework and would also help to make progress towards targets [5](#), [7](#), [9](#), [10](#), [16](#) and [19](#). Conversely, progress towards targets [14](#), [15](#), [20](#), [21](#), [22](#) and [23](#) would support progress towards this target.
- This target addresses issues previously addressed under [Aichi Biodiversity Target 3](#).
- Elements of Target 8 are also addressed in the targets of the Sustainable Development Goals, including targets [12.c](#) and [14.6](#).

D. Guiding questions for national target-setting

- What incentives, including subsidies, harmful to biodiversity exist in the country? How are they affecting biodiversity? Which are particularly harmful?
- What are the opportunities and constraints to eliminating, reforming or phasing out harmful incentives? What are the potential ecological, economic, and social costs and benefits of addressing harmful incentives?
- What biodiversity-related problems could be addressed with the help of biodiversity-positive incentives? How could incentives be used to address the main threats to biodiversity? How could incentives encourage actions in support of biodiversity?

- Who are the stakeholders that may be affected? How can they be involved and their needs addressed? What are the trade-offs to consider? Are there stakeholders who could also act as champions for the removal, phase out, or reform of harmful incentives?
- What additional resources (financial, human and technical) will be required to reach the national target that is set? How can additional resources be raised? What are the possible sources for these resources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline Indicators:

- [18.1 Positive incentives in place to promote biodiversity conservation and sustainable use](#)
- 18.2 Value of subsidies and other incentives harmful to biodiversity that have been eliminated, phased out or reformed

Component indicators

- Value of subsidies and other incentives harmful to biodiversity, that are redirected, repurposed or eliminated

Complementary indicators

- Number of countries with biodiversity-relevant taxes
- Number of countries with biodiversity-relevant charges and fees
- Number of countries with biodiversity-relevant tradable permit schemes
- Trends in potentially environmentally harmful elements of government support to agriculture (producer support estimate)
- Trends in the number and value of government fossil fuel support measures
- Amount of fossil-fuel subsidies per unit of GDP (production and consumption)

F. Relevant resources that can assist implementation

Assessments

- [OECD \(2022\): Identifying and assessing subsidies and other incentives harmful to biodiversity: A comparative review of existing national-level assessments and insights for good practice. OECD environment working papers 206](#)
- [OECD \(2021\): Tracking Economic Instruments and Finance for Biodiversity](#)
- [Resource Mobilization: Progress in achieving the milestones for the full implementation of Aichi Biodiversity Target 3 \(CBD/SBI/2/INF/15\) \(2018\)](#)
- [The Sunken Billions Revisited. Progress and Challenges in Global Marine Fisheries \(2009\)](#)

Tools and guidance

- [WTO Agreement on Fisheries Subsidies \(2022\)](#)
- [CBD decision XII/3 \(2014\): Resource Mobilization](#)
- [Resource Mobilization: Modalities for the full operationalization of Aichi Biodiversity Target 3 \(CBD/COP/12/INF/20\) \(2014\)](#)

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Target 19

Mobilize \$200 billion per year for biodiversity from all sources, including \$30 billion through international finance: Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, by 2030 mobilizing at least 200 billion United States dollars per year, including by:

- (a) Increasing total biodiversity related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, to at least US\$ 20 billion per year by 2025, and to at least US\$ 30 billion per year by 2030;
- (b) Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances;
- (c) Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments;
- (d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, benefit-sharing mechanisms, with environmental and social safeguards;
- (e) Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises;
- (f) Enhancing the role of collective actions, including by indigenous peoples and local communities, Mother Earth centric actions^[1] and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity;
- (g) Enhancing the effectiveness, efficiency and transparency of resource provision and use.

[1] Mother Earth-centric actions: Ecocentric and rights-based approach enabling the implementation of actions towards harmonic and complementary relationships between peoples and nature, promoting the continuity of all living beings and their communities and ensuring the non-commodification of environmental functions of Mother Earth.

A. Why is this target important?

The Kunming-Montreal Global Biodiversity Framework will be implemented primarily through activities at the national and subnational levels, with supporting actions at the regional and global levels. However, the capacity for implementing the Convention in terms of human, technical and financial resources is limited in many countries, especially in developing countries. Together with other means of implementation, the mobilization of adequate financial resources is critical for achieving the goals and targets of the Framework.

B. Explanation of the target and its elements

The main focus of this target is increasing the amount of financial resources for the implementation of national biodiversity strategies and actions to \$200 per year by 2030. To accomplish this, the target sets a number of distinct elements:

- **From all sources** – The resources mobilized for implementing national biodiversity strategies and action plans should come from all sources. This includes domestic, international, public and private sources.
- **Timely and easily accessible manner** – Bearing in mind the time frame covered by the Kunming-Montreal Global Biodiversity Framework, the resources to support its implementation need to be made available in a time and manner that they can effectively be used by Parties. This element of the target links to the final element of the target calling for the effectiveness, efficiency and transparency of resource provision and use to be enhanced;
- **International financial resources** – The target specifies that international financial resources provided by developed countries, and countries that voluntarily assume obligations of developed country Parties, and to developing countries, should be increased. By 2025 these funds should reach \$20 billion per year, and by 2030 they should reach \$30 billion per year. Official development assistance is identified in the target as one means of accomplishing this. The target further specifies the need to pay particular attention to the needs of the least developed countries and small island developing States, as well as countries with economies in transition,
- **Domestic resource mobilization** – The target calls for domestic resource mobilization to increase significantly and specifies that this increase can be facilitated through the preparation and implementation of national biodiversity finance plans or similar instruments
- **Private sector finance** – The target identifies different mechanisms through which the private sector could contribute to the implementation of national biodiversity strategies and actions. These include blended finance, developing funding strategies, impact funds and other instruments that encourage private sector involvement.
- **Innovative finance schemes** – The target identifies innovative finance schemes, such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, as a means of mobilization resources for implementation. This element also notes that such schemes should have environmental and social safeguards.
- **Synergies with climate finance** – Biodiversity loss and climate change and linked societal challenges. The resources mobilized to address these challenges are potentially synergistic and offer opportunities for efficiencies which should be considered in the actions to reach this target.
- **Collective action** – Collective action refers to actions taken by groups of people towards a common goal or objective. Many groups, including indigenous peoples and local communities, act for biodiversity. While these actions do not necessarily generate resources, they do have value, which should be accounted for as part of this target. This also applies to Mother Earth- centric actions and other non-market-based approaches to biodiversity.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 19 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- This target directly relates to Goal D of the Kunming-Montreal Global Biodiversity Framework. It will also indirectly support the attainment of the other goals of the framework by ensuring that the necessary resources are available for implementation. This target will also indirectly support the attainment of all targets in the framework. Conversely, progress towards this target would be supported by actions to reach targets [14](#), [15](#) and [18](#).
- Elements of this target were previously addressed by [Aichi Biodiversity Target 20](#).
- Elements of Target 8 are also addressed in the targets of the Sustainable Development Goals, including targets [1.a](#), [10.b](#), [15.6](#), [15.b](#) and [17.3](#).

D. Guiding questions for national target-setting

- What financial resources is your country providing to developing countries through internal financial resource flows? How much of this is provided as official development assistance? How could this be increased?
- What is the current amount of biodiversity financing available in the country? What percentage of this funding comes from national budgets? What percentage comes from other sources?
- What financial resources are being provided by private sources in your country? How can these be leveraged?
- What are the main sources of biodiversity financing in the country? What are possible additional funding sources?
- What financial resources will be required to implement your country's national biodiversity strategy and action plan? How can additional funds be raised? Who are the stakeholders that may be involved?
- Does your country have a national finance plan for biodiversity or a similar instrument?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicator(s) for this target:

Headline indicators:

- [D.1 International public funding, including official development assistance for conservation and sustainable use of biodiversity and ecosystems](#)
- [D.2 Domestic public funding of conservation and sustainable use of biodiversity and ecosystems](#)

- [D.3 Private funding \(domestic and international\) of conservation and sustainable use of biodiversity and ecosystems](#)

Complementary indicators:

- Amount of funding provided through the Global Environment Facility and allocated to the biodiversity focal area
- Foreign direct investment, official development assistance and South-South cooperation as a proportion of total domestic budget
- Amount and composition of biodiversity-related finance reported to the OECD Creditor reporting system
- Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries
- Dollar value of all resources made available to strengthen statistical capacity in developing countries
- Amount of biodiversity-related philanthropic funding
- Proportion of total research budget allocated to research in the field of marine technology
- Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies
- Number of countries (and number of instruments) with payments for ecosystem services programmes

F. Relevant resources that can assist implementation

Assessments

- [OECD \(2022\). "Biodiversity and development finance: Main trends, 2011-20", OECD Development Co-operation Working Papers, No. 110, OECD Publishing, Paris.](#)
- [Reports of the CBD panel on resource mobilization established by COP 14 \(2020\)](#)
- [OECD \(2020\). A Comprehensive Overview of Global Biodiversity Finance](#)
- [The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability \(2020\): Financing Nature. Closing the global biodiversity financing gap](#)

Tools and guidance

- [UNDP Biofin Initiative](#)
- [CBD Decision 14/15. Safeguards in biodiversity financing mechanisms \(2018\)](#)
- [CBD Decision 14/16. Methodological guidance concerning the contributions of indigenous peoples and local communities \(2018\)](#)
- [CBD Decision XII/3 Voluntary guidelines on safeguards in biodiversity financing mechanisms \(2014\)](#)

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Target 20

Strengthen capacity-building, technology transfer, and scientific and technical cooperation for biodiversity: Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the framework.

A. Why is this target important?

To achieve the goals and targets of the Kunming-Montreal Global Biodiversity Framework, Parties and other actors need to have commensurate expertise (including both technical and functional capacities), knowledge, tools, technologies and institutional capacity to effectively prioritize, plan, mobilize resources, and implement and monitor relevant strategies, programmes and activities at the national level. Capacity development, technical and scientific cooperation, technology transfer and innovation are crucial for enhancing the abilities, resilience and effectiveness of individuals, institutions and systems at various levels for improved biodiversity-related decision-making, action and outcomes.

B. Explanation of the target and its elements

The ultimate aim of this target is to ensure that Parties and other relevant actors have the necessary enabling conditions, capacity, know-how, technologies and other tools for implementation, commensurate with the ambition of the goals and targets of the Framework. To this end, the target identifies the following elements:

- **Capacity-building and development** – Fostering an effective enabling environment and strengthening the ability of individuals and institutions to contribute successfully to realizing the mission of halting and reversing biodiversity loss is essential to putting nature on a path to recovery for the benefit of people and planet in an efficient and effective manner. This can be achieved through (1) improving the knowledge, skills, competencies and attitudes of individuals (including policymakers, planners, practitioners, and the public); (2) strengthening the organizational capacity of Parties, including through enhancing biodiversity governance, cross-sectoral coordination and collaboration, multi-stakeholder engagement, partnership development, network development and knowledge management; and (3) strengthening the enabling environment, including through enhancing policy and regulatory frameworks, mobilizing and leveraging resources, and enhancing political support.
- **Access to and transfer of technologies** – Numerous technologies have the potential to assist in addressing the ongoing loss of biodiversity. However, access to and transfer of those technologies, as well as the skills to use and benefit from them, are limited in many developing countries. This needs to be improved as part of the implementation strategy to reach the 2050 Vision. Examples of relevant technologies include (1) technologies for spatial planning and managing biodiversity, including geospatial technology, remote sensing and geographic information systems; (2) technologies for monitoring biodiversity, such as DNA technologies, camera traps and acoustic recording devices, smartphone apps for use in citizen science, drones, invasive alien species trackers, satellite technologies; (3) decision support

technologies, such as early warning systems, digital technologies for the aggregation of complex data and data visualisation; and (4) indigenous and traditional technologies, innovations and practices of indigenous peoples and local communities used with their free, prior and informed consent.

- **Development of and access to innovation** – The development of new, transformative and innovative solutions for biodiversity needs to be fostered and access to those solutions improved. Parties and actors in the innovation ecosystem should direct research and development investments into addressing biodiversity challenges. Harnessing emerging technologies, such as artificial intelligence, as well as the innovations and practices of indigenous peoples and local communities with their free, prior and informed consent may offer new opportunities to improve the conservation, sustainable use and valorization of biodiversity and the fair and equitable sharing of benefiting arising from the utilization of genetic resources.
- **Technical and scientific cooperation** – Parties and partners have a wealth of scientific and technical expertise and traditional knowledge and technologies which if leveraged through cooperation, offer opportunities for the co-creation and/or exchange of knowledge, data, expertise, resources, technologies and technical know-how. Such cooperation can occur through South-South, North-South and triangular cooperation, joint technology development ventures, joint scientific research, and strengthening of scientific research and monitoring capacities through human resources development, institution building, joint training of personnel and exchange of experts.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 20 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target directly contributes to all goals and targets of the Framework.
- Elements of Target 20 were previously addressed in [Aichi Biodiversity Target 19](#).
- Elements of Target 20 are also addressed in the targets of the Sustainable Development Goals, including targets [17.6, 17.7, 17.9, 17.16 and 17.18](#).

D. Guiding questions for national target-setting

- Has the country undertaken a recent national capacity self-assessment with regard to biodiversity conservation and sustainable use?
- What are the top priority capacity needs and gaps, at the individual, institutional and enabling environment levels, for national implementation?
- What kind of technologies for different sectors does the country need to develop, access, transfer and diffuse to achieve its national targets and also contribute to the global goals and targets?
- Does the country have a capacity-development plan for biodiversity or a specific component on capacity in the national biodiversity strategy and action plan?

- What are the opportunities and constraints in improving technology transfer and technical and scientific cooperation? Who are the stakeholders that may be affected? How can they be involved and their needs addressed?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional resources be raised? What are possible sources for these resources?

E. Indicators

Indicators for this target have not yet been identified.

F. Relevant resources that can assist implementation

Tools and guidance

- [Capacity-building and development resources](#)
- [NBSAP Forum](#)
- [SDG Knowledge Platform](#)
- [Sustainable Ocean Initiative Training Module: Addressing Capacity Needs for Integrated Coastal Management](#)
- [Sustainable Ocean Initiative Training Module: Developing National and Local Capacity to Achieve the Aichi Biodiversity Targets and Enhance Marine and Coastal Governance](#)
- [Sustainable Ocean Initiative Training Module: Key Elements for Designing and Developing Training](#)
- [CBD Decision 15/8. Long-term strategic framework for capacity-building and development \(2022\)](#)

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Target 21

Ensure that knowledge is available and accessible to guide biodiversity action: Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent[1], in accordance with national legislation.

[1] Free, prior and informed consent refers to the tripartite terminology of “prior and informed consent” or “free, prior and informed consent” or “approval and involvement.

A. Why is this target important?

All countries need data, information and knowledge to identify threats to biodiversity, and determine needs and priorities, plan and take evidence-based decisions and actions, set benchmarks and monitor and report on progress for the conservation and sustainable use of biodiversity and the fair and equitable benefits arising from the utilization of genetic resources. Accessible biodiversity-related data, information and knowledge are critical for creating baselines, regularly assessing progress and taking necessary action. This issue is cross-cutting, with implications for all the goals and targets of the Kunming-Montreal Global Biodiversity Framework.

B. Explanation of the target and its elements

The main objective of this target is to ensure that the best available biodiversity data, information and knowledge are readily available to decision-makers and other relevant actors to support informed biodiversity policy, planning and decision-making processes, as well as for monitoring, reviewing and reporting progress in implementation. The target contains several elements that provide further specificity on how this should be accomplished and to what ends:

- **Improved accessibility to relevant biodiversity data, information and knowledge**
– Decision- makers, practitioners and the general public should be able to access relevant data, information and knowledge in an easy, efficient and timely manner and in appropriate formats. Improved accessibility can be achieved in different ways, including through increasing the level of standardisation and interoperability among existing data, tools and platforms, digitization of existing information, and putting in place policies, such as for open-access and open data, to facilitate and support easier access.
- **Communication, awareness-raising, education** – Biodiversity data, information and knowledge are essential elements for effective communication, awareness and education measures. Understanding, awareness and appreciation of the diverse values of biodiversity underpin the willingness of individuals to make the necessary changes and actions and to enhance the “political will” of governments and other actors to take action.
- **Knowledge management** – Knowledge management refers to processes for creating, discovering, collecting, organising, curating, storing, sharing and using relevant knowledge, information and data. Efforts to increase capacities in this regard are needed. These could include efforts to improving institutional capacity, facilitating accessibility to

and training in the use of relevant digital technologies, and institutionalisation of data, information and knowledge management.

- **Monitoring** – Effective monitoring, including the use of indicators, depends on the availability of good quality data, information and knowledge. There is a need to establish or strengthen existing national biodiversity information systems and biodiversity observatory centres and networks that could support both national and international biodiversity monitoring needs and commitments.
- **Research** – Greater support for research and innovation will be required to generate the data, information and knowledge necessary to achieve most targets. This includes research in effort to address biodiversity knowledge gaps and major imbalances in the geographic and taxonomic focus of biodiversity studies and monitoring. There is a need to undertake analysis of the information gaps and establish research projects and guidelines to generate missing information and to increase the amount and quality of biodiversity information available for biodiversity planning, decision-making, monitoring and reporting.
- **Knowledge, innovations, practices and technologies of indigenous peoples and local communities** – Many indigenous peoples and local communities are holders of unique traditional biodiversity knowledge. Similarly, many have developed innovations, practices and technologies relevant to the conservation and sustainable use of biodiversity. This knowledge and these innovations, practices and technologies should only be accessed with the free, prior and informed consent of indigenous peoples and local communities, in accordance with national legislation.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 21 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- This target is relevant to the attainment of all goals and targets of the Kunming-Montreal Global Biodiversity Framework.
- Target 21 addresses issues previously addressed under [Aichi Biodiversity Targets 18 and 19](#).
- Elements of Target 21 are also addressed in the targets of the Sustainable Development Goals, including [Targets 14.a, 17.6, 17.7 and 17.18](#).

D. Guiding questions for national target-setting

- What biodiversity data, information and knowledge are available in your country? Who has the data, information and knowledge? What are the major gaps? What data, information and knowledge would be crucial to have?
- What programmes are in place to generate data, information and knowledge on biodiversity in the country? How effective have these been? How could their effectiveness be improved?
- What mechanisms are in place in the country to manage and share biodiversity data, information and knowledge? How do these mechanisms address traditional knowledge, innovations, practices and technologies? How effective have these been? How could

information and data be shared more effectively? What have been the limitations in sharing information and data?

- How is biodiversity data, information and knowledge being used for communication, awareness-raising and education purposes? How effective has this been? How could effectiveness be improved?
- How effectively is biodiversity data, information and knowledge being used by decision makers, practitioners and the public to guide the governance and participatory management of the conservation and sustainable use of biodiversity conservation? How could effectiveness be improved?
- What are the main constraints to accessing available biodiversity data, information and knowledge? What actions could be taken to improve accessibility?
- What actions have been taken to access and use relevant technologies for knowledge generation, discovery, collection, organization, integration, visualisation, sharing and use? What further actions could be taken to strengthen national capacities in this regard?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional resources be raised? What are possible sources for these resources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Headline indicators:

- 21.1 Indicator on biodiversity information for the monitoring the global biodiversity framework

Component indicators:

- Species Status Index
- Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessments

Complementary indicators:

- Growth in number of records and species in the Living Planet Index database
- Growth in species occurrence records accessible through the Global Biodiversity Information Facility
- Growth in marine species occurrence records accessible through OBIS
- Proportion of known species assessed through The IUCN Red List of Threatened Species
- Number of assessments on The IUCN Red List of Threatened Species

- World Association of Zoos and Aquariums (WAZA) bio-literacy survey (Biodiversity literacy in global zoo and aquarium visitors)
- Species Status Information Index

F. Relevant resources that can assist implementation

Tools and guidance

- [Conventions Clearing House Mechanism Portal](#)
- [Biosafety Clearing House](#)
- [Access and Benefit sharing Clearing House](#)
- [National CHMs](#)
- [Biodiversity e-Learning platforms](#)
- [Biobridge Initiative Platform \(matchmaking\) platform](#)
- [Forest Ecosystem Restoration Initiative \(FERI\)](#)
- [Sustainable Ocean Initiative](#)
- [Peace and Biodiversity Dialogue Initiative](#)
- [CBD Decision Tracking Tool](#)
- [The Rutzolijirisaxik Voluntary Guidelines for the Repatriation of Traditional Knowledge Relevant for the Conservation and Sustainable Use of Biological Diversity \(Decision 14/12\) \(2018\)](#)
- [The Mo'otz Kuxtal Voluntary Guidelines for the development of mechanisms, legislation or other appropriate initiatives to ensure the “prior and informed consent”, “free, prior and informed consent” or “approval and involvement”, depending on national circumstances, of indigenous peoples and local communities for accessing their knowledge, innovations and practices, for fair and equitable sharing of benefits arising from the use of their knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity, and for reporting and preventing unlawful appropriation of traditional knowledge \(Decision XIII/18\) \(2016\)](#)
- [The Tkarihwaié:ri Code of Ethical Conduct to Ensure Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities \(Decision X/42\) \(2010\)](#)

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Target 22

Ensure participation in decision-making and access to justice and information related to biodiversity for all: Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.

A. Why is this target important?

Indigenous peoples and local communities have a cultural and holistic understanding of nature based on their traditional knowledge, practices and innovation. This information and understanding of biodiversity in turn play a crucial role in the conservation and sustainable use of biodiversity. The insights of indigenous and local communities on local ecosystems play a fundamental role in developing conservation initiatives that integrate cultural values and traditional governance systems, including sustainable use such as resource management techniques, traditional hunting and fishing, and elective harvesting. Further, their lands encompass diverse ecosystems, ranging from forests and wetlands to mountains and coastal areas with high concentrations of biodiversity and often promote sustainable land use, including agroforestry, rotational farming and community-based conservation management systems. Involving indigenous peoples and local communities in biodiversity conservation and the recognition of their perspectives and expertise can contribute to the development of context-specific and effective conservation strategies.

The target also recognizes the importance of meaningful participation of women and girls, as well as the inclusion of children, youth and persons with disabilities, in promoting social equity and empowering these groups to actively contribute to biodiversity conservation. It also highlights the need to protect environmental human rights defenders as they are at the forefront of protecting biodiversity by monitoring and exposing environmental violations, promoting sustainable practices and advocating for a human rights-based approach to conservation efforts.

B. Explanation of the target and its elements

Target 22 aims at ensuring the full, equitable, and inclusive representation and participation of indigenous peoples and local communities in decision-making processes related to biodiversity as well as to foster inclusive, participatory and rights-based approaches to biodiversity conservation. This target identifies several elements to accomplish this:

- **Participation of indigenous peoples and local communities** – This part of the target refers to the need to ensure the active involvement and engagement of indigenous peoples and local communities in decision-making processes. It acknowledges their right to participate in decisions affecting their way of life, customs and resources.
- **Access to justice and information** – Strengthened access to judicial systems and information on environmental matters is a key element of ensuring the full, equitable, and inclusive representation and participation of indigenous peoples and local communities and protecting environmental human rights defenders. This part of the target call for measures to be put in place to ensure transparency, accountability, and participation in decision-making processes.

- **Rights of indigenous peoples and local communities over their cultures, lands, territories, resources and traditional knowledge** – This part of the target pertains to recognizing and upholding the rights of indigenous peoples and local communities as outlined in other international frameworks, such as the United Nations Declaration on the Rights of Indigenous Peoples and human rights law, including respecting their right to own, use, develop and control their lands, territories, and resources.
- **Rights of women and girls, children and youth, and persons with disabilities** – Individuals living in vulnerable situations often do not enjoy rights or access to biodiversity and resources. In many places this includes women and girls, children and youth, and persons with disabilities. This target calls for measures to ensure that individuals belonging to these groups enjoys the same rights and access as others.
- **Full protection of environmental human rights defenders** – This part of the target refers to measures that can be taken to safeguard individuals or groups who work to protect the environment, advocate for environmental justice, and defend the rights of indigenous peoples and local communities. Key aspects of protecting environmental human rights defenders could include but are not limited to: preventing violence and intimidation by providing legal protection, effective remedies and secure exercise of their rights free from reprisals and retaliation, and raising awareness about the important role of environmental human rights defenders.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 22 should take into account the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards Target 22 will directly support the attainment of all goals and targets. However, progress towards this target is particularly relevant for the achievement of targets [1](#), [3](#), [5](#), [9](#), [13](#), [21](#) and [23](#). Conversely, progress towards targets [21](#) and [23](#) will support progress towards this target.
- Target 22 addresses issues that were also addressed by [Aichi Biodiversity Target 18](#).
- Elements of Target 22 are also addressed in the targets of the Sustainable Development Goals, including targets [1.4](#), [5.5](#), [5.a](#), [10.2](#), [10.3](#), [16.3](#), [16.7](#), and [16.10](#).

D. Guiding questions for national target-setting

- What processes or mechanisms are in place or should be put in place to ensure the participation of indigenous peoples and local communities in decision-making processes?
- What legislative, regulatory and policy measures can be put in place to protect the rights of indigenous peoples and local communities over their lands, territories, and resources?
- What mechanisms should be put in place with a view to recognizing indigenous and traditional territories in area-based conservation?
- How could gender equality and participation of women and girls in biodiversity-related decision-making processes be promoted? How could the participation of children and youth be ensured? How could the participation of persons with disabilities be ensured?

- What measures are in place to ensure the full protection of environmental human rights defenders? How do the existing mechanisms address and respond to threats and attacks against human rights defenders? How could their effectiveness be improved?
- What mechanisms can be adopted to ensure timely and accurate information and access to justice for environmental human rights defenders?

E. Indicators

The [monitoring framework](#) for the Montreal-Kunming Global Biodiversity Framework identifies the following indicators for this target:

Component indicators:

- Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure.

Complimentary indicators:

- Percentage of positions in national and local institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary, compared to national distributions, by sex, age, persons with disabilities and population groups.
- Number of countries with systems to track and make public allocations for gender equality and women's empowerment.
- Proportion of total agricultural population with ownership or secure tenure rights over agricultural land, by sex; and (b) share of women among owners or rights bearers of agricultural land, by type of tenure
- Number of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control.
- Number of protected areas that have completed a site-level assessment of governance and equity (SAGE)
- Trends in number of environmental human rights defenders killed annually, disaggregated by country, gender; number of indigenous environmental human rights defenders killed.
- Land tenure in the traditional territories of indigenous peoples and local communities by sex and type of tenure Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group.

In addition to the indicators identified in Decision 15/6, four indicators for traditional knowledge were adopted in decisions XIII/28, and 15/22:

- Trends in linguistic diversity and numbers of speakers of indigenous languages;
- Trends in land-use change and land tenure in the traditional territories of indigenous peoples and local communities.
- Trends in the practice of traditional occupations; and

- Trends in degree to which traditional knowledge and practices are respected, through the participation of indigenous peoples and local communities and safeguards in national implementation of the Strategic Plan.

F. Relevant resources that can assist implementation

Guidance and tools

- [UN Permanent Forum on Indigenous Issues studies](#)
- [Expert Mechanism on the Rights of Indigenous Peoples provides studies on indigenous peoples' rights](#)
- [Special Rapporteur on the Rights of Indigenous Peoples produces annual thematic reports](#)
- [Plan of Action on Customary Sustainable Use](#)
- [Sustainable Ocean Initiative Training Module: Stakeholder Involvement and Communication](#)
- [Sustainable Ocean Initiative Training Module: Strategic Approaches to Stakeholder Involvement](#)
- [Joint Programme of Work on the Links between Biological and Cultural Diversity \(2022\)](#)
- [Mo'otz Kuxtal Voluntary Guidelines for the development of mechanisms, legislation or other appropriate initiatives to ensure the FPIC \(2019\)](#)
- [Rutzolijirisaxik Voluntary Guidelines for Traditional Knowledge Repatriation \(2018\)](#)
- [Glossary of relevant key terms and concepts within the context of Article 8\(j\) and related provisions \(2018\)](#)
- [UNEP/CBD/SBSTTA/20/INF/21: Training manual on the incorporation of traditional knowledge into the description and identification of EBSAs \(2016\)](#)
- [UNEP/CBD/SBSTTA/16/INF/10: Identifying specific elements for integrating the traditional, scientific, technical and technological knowledge of indigenous and local communities, and social and cultural criteria and other aspects for the application of scientific criteria for identification of ecologically or biologically significant areas \(EBSAs\) as well as the establishment and management of marine protected areas \(2012\)](#)
- [Tkarihwaí:ri Code of Ethical Conduct to Ensure Respect for the Cultural and Intellectual Heritage \(2011\)](#)
- [The Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessments \(2004\)](#)

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Target 23

Ensure gender equality and a gender-responsive approach for biodiversity action: Ensure gender equality in the implementation of the framework through a gender-responsive approach where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.

A. Why is this target important?

Gender roles in many countries influence the conservation and sustainable use of biodiversity by impacting the ability of women to participate in decision-making and by affecting their access to and control of land, biological resources and other productive assets. Considering gender dimensions in biodiversity-related decision-making can lead to positive outcomes for biodiversity and gender equality. Women often play a vital role in managing natural resources and promoting sustainable agriculture, forestry and fisheries. When women have access to resources, land, education, healthcare and economic opportunities on par with men, they are better able to participate in decision-making processes and advocate for environmental protection.

B. Explanation of the target and its elements

The focus of this target is on ensuring gender equality in the implementation of the Framework through a gender-responsive approach. Gender responsive is the process of ensuring that programmes, policies and institutions take into account the different needs and experiences of people based on their gender identity. It aims to create a society that is responsive to the diverse needs and realities of people, including those who may face discrimination or disadvantage because of their gender. The target further identifies elements to help accomplish this:

- **Equal opportunity, capacity and rights** – Equality refers to the idea that everyone, regardless of their gender, should have the same rights, opportunities and access to resources, including land and natural resources. Discrimination and biases that may prevent individuals from achieving their full potential due to their gender need to be eliminated.
- **Participation and leadership at all levels of action** – Women are often not provided with the same opportunities to participate in decision-making as men or to serve in leadership roles. Analysis has shown that opportunities for effective action on biodiversity are missed due to insufficient involvement of women in these ways. Women's participation and representation in decision-making processes related to biodiversity conservation and sustainable use must be promoted. This includes ensuring that women are represented in policy-making bodies, community meetings and other decision-making forums.
- **Equal rights and access to land and natural resources** – Women are often the primary stewards of biodiversity, and when women have secure land tenure, they are more likely to engage in sustainable land use practices that conserve biodiversity and protect ecosystems. Women who own and control land are also better able to provide for their families, secure their livelihoods and invest in their communities, leading to improved health and education outcomes. This may require changes to laws and policies and cultural norms, including those related to rules around land registration and ownership, and practices.

C. Links to other elements of the Kunming-Montreal Global Biodiversity Framework, and other frameworks and processes

- Actions to reach Target 23 should take into account all of the considerations for implementation identified in [section C of the Kunming-Montreal Global Biodiversity Framework](#).
- Progress towards this target will contribute to the attainment of goals A and B of the Kunming-Montreal Global Biodiversity Framework. Progress towards this target would also contribute to the attainment of all targets and in particular targets [9](#), [10](#) and [11](#).
- Elements of this target were previously addressed in [Aichi Biodiversity Target 14](#).
- Elements of Target 8 are also addressed in the targets of the Sustainable Development Goals, including targets [5.1](#), [5.5](#) and [5.c](#)

D. Guiding questions for national target-setting

- What processes or mechanisms are in place to ensure gender equality and a gender-responsive approach to biodiversity? How do these address access to land and resources? How do they affect decision-making processes? How effective have these been? What additional processes or mechanisms may be needed?
- What are the opportunities for and constraints to improving gender equality? Who are the actors that may be affected? How can they be involved and their needs addressed?
- What mechanisms are in place to ensure that women and girls have access to land and resources? How can these be improved or strengthened?
- What additional resources (financial, human and technical) will be required to reach the national target? How can additional resources be raised? What are possible sources for these resources?

E. Indicators

The [monitoring framework](#) for the Kunming-Montreal Global Biodiversity Framework identifies the following indicators for this target:

Component indicators:

- Proportion of seats held by women in (a) national parliaments and (b) local governments
- Indicator on national implementation of the gender plan of action
- Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure

Complementary indicators:

- Percentage of positions in national and local institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary, compared to national distributions, by sex, age, persons with disabilities and population groups

- Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights bearers of agricultural land, by type of tenure
- Number of countries with systems to track and make public allocations for gender equality and women's empowerment
- Number of protected areas that have completed a site-level assessment of governance and equity (SAGE)
- Percentage of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group
- Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control

F. Relevant resources that can assist implementation

Assessments

- [FAO \(2023\). The status of women in agrifood systems](#)
- [Developing and measuring a gender-responsive post-2020 biodiversity framework: Information on gender considerations within the draft post-2020 monitoring framework \(CBD/WG2020/3/INF/10\) \(2021\)](#)

Tools and guidance

- [FAO country gender assessments](#)
- [Addressing gender issues and actions in biodiversity objectives](#)
- [Best practices in gender and biodiversity \(2022\)](#)
- [Gender Plan of Action \(Decision 15/11\) \(2022\)](#)
- [Advancing women's rights, gender equality and the future of biodiversity in the post-2020 global biodiversity framework \(2021\)](#)
- [FAO. Developing gender-sensitive value chains \(2020\)](#)
- [Gender mainstreaming and biodiversity conservation \(2018\)](#)
- [FAO. SDG Indicator 5.a.2 - Ensuring women's legal rights to land ownership and/or control \(2018\)](#)
- [FAO. Governing land for women and men \(2017\)](#)
- [CBD Technical Series No. 49: Guidelines for Mainstreaming Gender into National Biodiversity Strategies and Action Plans \(2010\)](#)

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