The Sustainable Development Goals Extended Report 2023

15 LIFE ON LAND

Note: This unedited 'Extended Report' includes all indicator storyline contents as provided by the SDG indicator custodian agencies as of 30 April 2023. For instances where the custodian agency has not submitted a storyline for an indicator, please see the custodian agency focal point information for further information. The 'Extended Report' aims to provide the public with additional information regarding the SDG indicators and is compiled by the Statistics Division (UNSD) of the United Nations Department of Economic and Social Affairs.

Contents

Target 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

Indicator 15.1.1 Forest area as a proportion of total land area

In 2020, forest covered 31.2% of the total land area, resulting from a gradual decline by 100 million hectares over the course of last two decades

The proportion of the world's total land area that is covered by forest has gradually decreased from 31.9 percent in 2000 (4.2 billion hectares) to 31.5 percent in 2010 to 31.2 percent (4.1 billion hectares) in 2020. Net forest area losses amounted to almost 100 million hectares over the past two decades. However, the rate of loss has slowed down slightly in the last ten-year period.

The global trend results from opposing regional dynamics. Asia, Europe and Northern America showed an overall increase in forest area from 2000 to 2020 due to afforestation, landscape restoration efforts and natural expansion of forests. The expansion of forest area, however, slowed down from 2010 to 2020 compared to the 2000-2010 period.

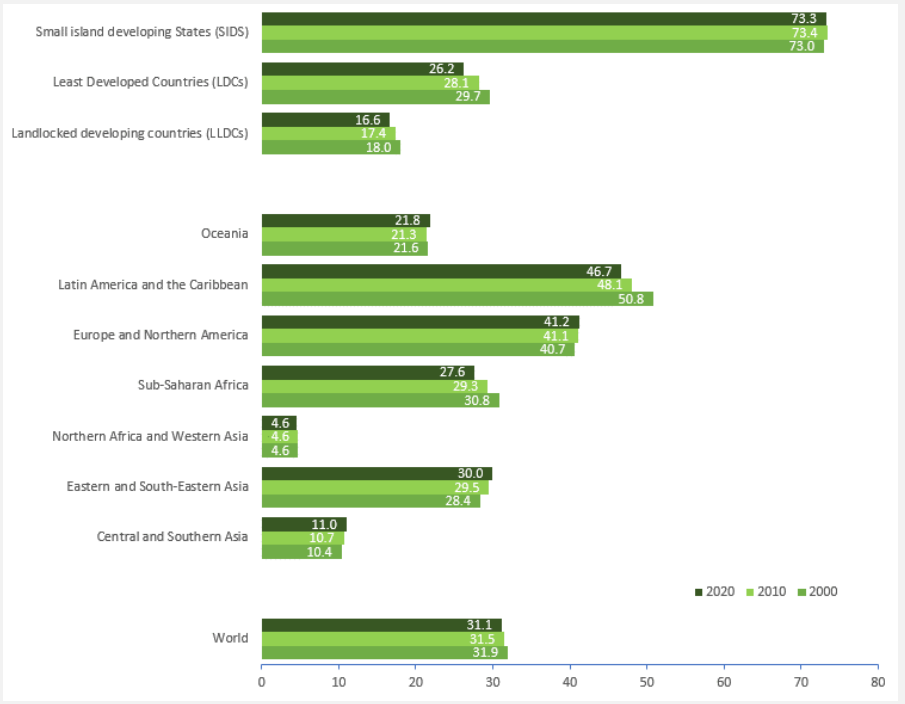
Agricultural expansion is the direct driver of almost 90 percent of global deforestation. Cropland expansion was the most important of the direct drivers (49.6 per cent) followed by the livestock grazing (38.5 per cent). Oil palm alone accounted for 7 percent of global deforestation in 2000–2018.

Large forest area losses occurred over the past twenty years in Latin America, as well as in sub-Saharan Africa. Least developed countries are particularly affected by forest area losses. In Latin America, the deforestation is caused by conversion of forest for livestock grazing. In sub-Saharan Africa, the most common direct driver is cropland expansion.

Although the short and long-term effects of COVID-19 crisis on forest area are still to be measured, the pandemic has had direct impacts on forest cover and forestry due to changes on urban-rural population flow and additional demand for some forest products. Many rural areas in particular in the tropics faced increased pressure from deforestation, illegal logging and poaching.

Maintaining momentum on halting deforestation and forest degradation, and restoring damaged ecosystems is crucial for improving the climate resilience of ecosystems, avoiding biodiversity losses and enhancing rural livelihoods, especially in the tropics and least developed countries.

Forest area as proportion of total land area (percent)



Additional resources, press releases, etc. with links:

- FAO Global Forest Resources Assessment Website: http://www.fao.org/forest-resources-assessment/en/
- FAO. 2022. FRA 2020 Remote Sensing Survey. FAO Forestry Paper, No. 186. Rome. https://doi.org/10.4060/cb9970en
- FAO and UNEP. 2020. The State of the World's Forests 2020. Forests, biodiversity and people. Rome. https://doi.org/10.4060/ca8642en
- FAO. 2022. The State of the World's Forests 2022. Forest pathways for green recovery and building inclusive, resilient and sustainable economies. Rome, FAO. https://doi.org/10.4060/cb9360en
- FAO The impacts of COVID-19 on the forest sector: How to respond? Website: http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1273752/

Storyline authors(s)/contributor(s): Anne Branthomme, FAO; Anssi Pekkarinen, FAO

Custodian agency(ies): FAO

Indicator 15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

Growth in protected area coverage of Key Biodiversity Areas, crucial for achievement of SDGs 14 and 15 as well as the new Kunming-Montreal Global Biodiversity Framework, has slowed over recent years, and remains low in Central, Southern, and Western Asia, Northern Africa, and Oceania.

Protected areas and "other effective area-based conservation measures" are the cornerstone of efforts to safeguard living nature – biodiversity – and contribute to sustainable development and the persistence of all life on Earth.

However, biodiversity and drivers of its loss are distributed highly unevenly around the world, and so to track progress towards nature conservation targets, it is extremely important to measure how well protected area cover areas of particular importance for biodiversity, that is, "Key Biodiversity Areas". Key Biodiversity Areas have been identified in all the world's countries, through application by National Coordination Groups of the "Global Standard for Identification of Key Biodiversity Areas". More than 16,000 Key Biodiversity Areas have been so-identified to date, documented in the World Database of Key Biodiversity Areas. Importantly, a new training course to build national capacity in identification of Key Biodiversity Areas was released in 2022.

Over recent years, mean coverage of Key Biodiversity Areas by protected areas has continued to increase, across marine, terrestrial, freshwater, and mountain environments, but worryingly, growth in coverage is slowing. The adoption of the new Kunming-Montreal Global Biodiversity Framework in December 2022 provides a new political commitment and motivation to increase this rate.

Coverage is also very uneven regionally, with Northern America and Europe having an average of more than half of each of their Key Biodiversity Areas covered by protected areas across most environments (and thus commensurate progress towards SDGs Targets 14.5, 15.1, and 15.4, as well as the new Kunming-Montreal Global Biodiversity Framework Target 3). Meanwhile, Central Asia and Southern Asia, Western Asia and Northern Africa, and Oceania still have rather low coverage, with an average of less than a third of each of their Key Biodiversity Areas covered by protected areas across most environments.

A timely example of a Key Biodiversity Area being targeted for site safeguard is the Ross River KBA, in Canada. The site is identified as a KBA because it holds a range restricted plant – Yukon Goldenweed; it also harbours nationally threatened and declining species such as Caribou and Wolverine. This KBA identification will help support the proposal for a 41,000 sq km Indigenous Protected and Conserved Area by the Ross River Dena First Nation.

Additional resources, press releases, etc. with links:

- A Global Standard for the Identification of Key Biodiversity Areas (IUCN 2016) https://portals.iucn.org/library/node/46259
- World Database of Key Biodiversity Areas (BirdLife International et al. 2023) https://www.keybiodiversityareas.org
- Protected Planet (UNEP-WCMC & IUCN 2023) https://www.protectedplanet.net/en
- Key Biodiversity Areas Training Course https://www.keybiodiversityareas.org/kba-news/key-biodiversity-areas-training-website
- Key Biodiversity Areas Annual Report https://www.keybiodiversityareas.org/kba-news/kba-annual-report_2021
- Key Biodiversity Area National Coordination Groups https://www.keybiodiversityareas.org/working-with-kbas/programme/national-coordination-groups
- Ross River Dena propose Indigenous protected area in Yukon https://www.cbc.ca/news/canada/north/yukon-ross-river-indigenous-protected-area-1.6748453
- Ross River (World Database of Key Biodiversity Areas) https://www.keybiodiversityareas.org/site/factsheet/100107

Storyline authors(s)/contributor(s): Thomas Brooks, IUCN; Stuart Butchart, BirdLife International; Emily Howland, UNEP-WCMC; Andy Plumptre, KBA Secretariat; Tom Scott, BirdLife International

Custodian agency(ies): UNEP-WCMC,UNEP,IUCN

Target 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

Indicator 15.2.1 Progress towards sustainable forest management

The world progresses towards sustainable forest management, but rate of forest loss remains

While the multidimensional measure of sustainable forest management shows global progress in the last decade, it is evident that the world's forests continue to shrink, mainly due to the expansion of agriculture for crop and livestock production, and that progress is uneven from region to region.

In 2022, 444 million hectares of forest were under a certification scheme, a 29 percent increase since 2010, equivalent to around 100 million hectares. This positive trend is mainly noticeable in Europe and Northern America where 65 million hectares were certified in 2010-2022. However, the latest data show that certified forest area decreased by 19 million hectares (a 4 percent) between 2021 and 2022.

The proportion of forest area within protected area increased globally from 17 percent to 18 percent from 2010 to 2020. Central Asia had the highest proportion of forests in protected area in 2020 at 59 percent, with also the highest relative increase from 2010 to 2020 (12 percent). Europe and North America show the lowest proportion with only 6 percent of their forests within protected areas.

Forest area under a management plan increased from 2010 to 2020. Most of forests in Europe and Asia are under a management plan with high increases recorded in particular since 2010 in Central Asia and Eastern Asia. The proportion of forest under management plans remains below one third, although slowly increasing, in Latin America and the Caribbean, Oceania and Sub-Saharan Africa.

The amount of above-ground biomass in forest has slightly increased due to its notable rise in Eastern Asia, Europe and Western Asia. The annual forest change rate remains relatively stable at the global level (around -0.1 percent), indicating that the loss of forest continues, although at a slightly slower rate. Forest expansion was observed in Asia, Europe and Northern America in 2010-2020, while important forest losses were recorded in Africa, South-Eastern Asia, as well as in Latin America and the Caribbean. These losses are mainly driven by the expansion of agriculture. Deforestation and forest degradation remain major challenges, especially in the tropics, least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing states (SIDS), indicating the need for more action to reduce deforestation and implement sustainable forest and land management practices.

Although the short and long-term impacts of COVID-19 on forest are still difficult to measure, the pandemic has likely affected forests and forestry due to changes on urban-rural populational flow and additional demand for some forest products.

Forests are the largest carbon and biodiversity reservoirs on Earth. They are an essential source of foods, goods and services and are vital to the livelihoods of the poorest populations and rural communities. Global and regional efforts to sustain forest ecosystems as well as their social, economic and environmental functions should be pursued with particular emphasis on the tropics and developing countries.

Progress towards sustainable forest management

	Progress between 2000-2010 and 2010-2020 decades	Progress between 2010 and 2020			Progress between 2010 and 2022	Progress between 2021 and 2022
SDG Region	**Annual forest area change rate** [1]	**Above-ground biomass stock in forest (t/ha)**	**Proportion of forest area within legally established protected areas**	**Proportion of forest area under a long-term forest management plan**	**Forest area certified (2010-2022)**	**Forest area certified (2021-2022)**
World	●	●	●	●	●	●
Central and Southern Asia	●	●	●	●	●	●
Central Asia	●	●	●	●		
Southern Asia	●	●	●	●	●	●
Eastern and South-Eastern Asia	●	●	●	●	●	●
Eastern Asia	●	●	●	●	●	●
South-Eastern Asia	●	●	●	●	●	●
Western Asia and Northern Africa	●	●	●	●	●	●
Northern Africa	●	●	●	●	●	
Western Asia	●	●	●	●		●
Sub-Saharan Africa	●	●	●	●	●	●
Northern America and Europe	●	●	●	●	●	●
Europe	●	●	●	●	●	●
Northern America	●	●	●	●	●	●
Latin America and the Caribbean	●	●	●	●	●	●
Oceania	●	●	●	●	●	●
Oceania (exc. Australia and New Zealand)	●	●	●	●	●	●
Australia and New Zealand	●	●	●	●	●	●
Landlocked developing countries (LLDCs)	●	●	●	●	●	●
Least Developed Countries (LDCs)	●	●	●	●	●	●
Small island developing States (SIDS)	●	●	●	●	●	●

● Positive change
● No/small change
● Negative change
No certified area

Note: The annual forest area change rate is calculated using compound interest formula.

Additional resources, press releases, etc. with links:

- FAO Global Forest Resources Assessment Website: http://www.fao.org/forest-resources-assessment/en/
- FAO and UNEP. 2020. The State of the World's Forests 2020. Forests, biodiversity and people. Rome. https://doi.org/10.4060/ca8642en
- FAO. 2022. The State of the World's Forests 2022. Forest pathways for green recovery and building inclusive, resilient and sustainable economies. Rome, FAO. https://doi.org/10.4060/cb9360en
- FAO The impacts of COVID-19 on the forest sector: How to respond? Website: http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1273752/

Storyline authors(s)/contributor(s): Anne Branthomme, FAO; Anssi Pekkarinen, FAO

Custodian agency(ies): FAO

Target 15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

Indicator 15.3.1 Proportion of land that is degraded over total land area

Trends in land degradation continue, affecting the lives of 1.3 billion people

Between 2015 and 2019, the world has been losing at least 100 million hectares of healthy and productive land every year. This amounts to an area twice the size of Greenland lost over four years. These worsening trends impact the lives of 1.3 billion people, who are estimated to be directly exposed to land degradation. From 2000 to 2019, in Eastern Asia, Latin America and the Caribbean, and Central Asia at least 20 percent of the total land area was degraded, while most other regions were over 10 percent. Trends since 2015 show that land in Sub-Saharan Africa, Western Asia, Latin America and the Caribbean and Southern Asia is degrading considerably faster than the global average, with 6 to 8 per cent increases. These are conservative estimates based on just three sub-indicators: changes in land cover, land productivity and organic carbon in soil.

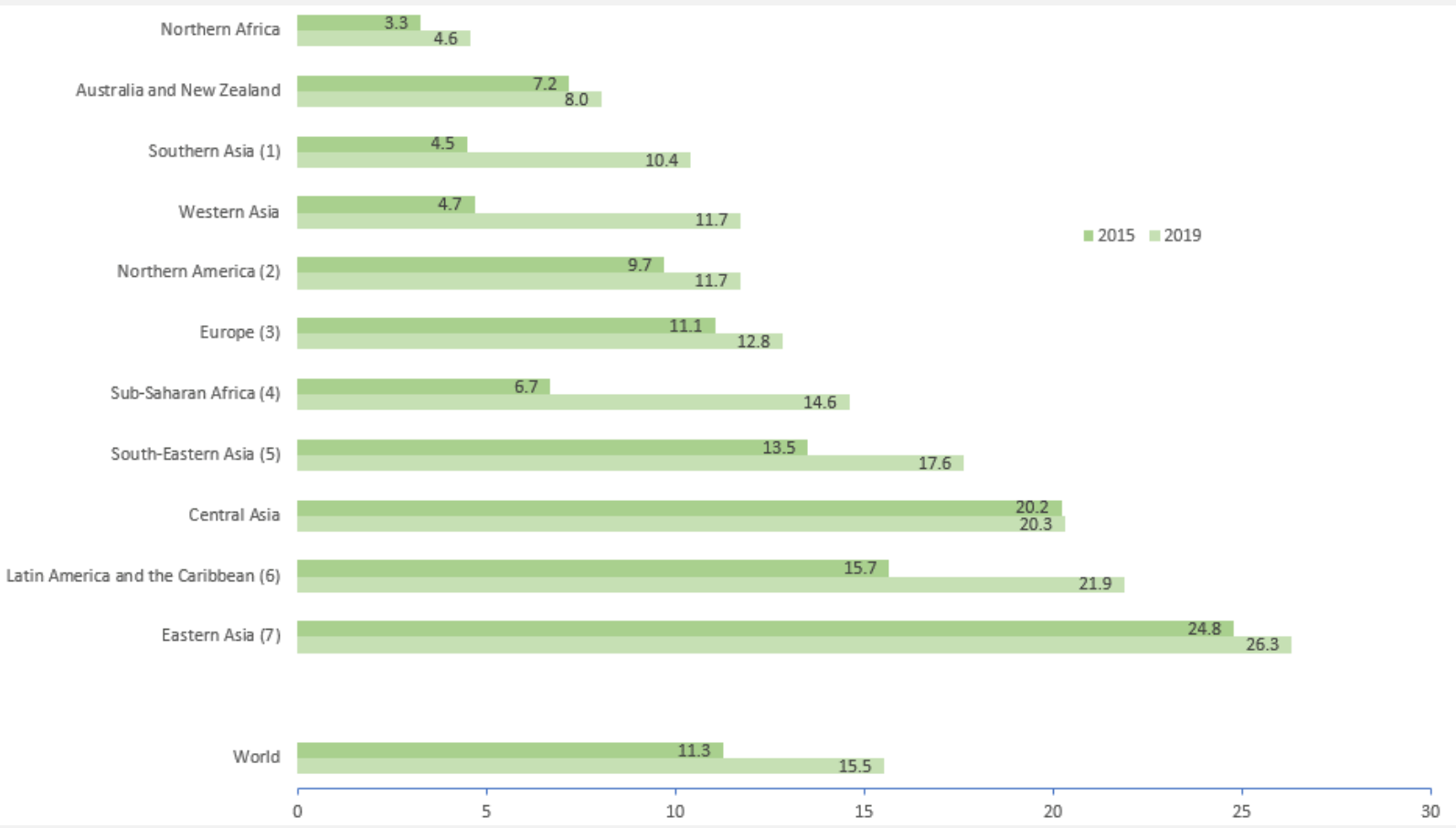
Human activities, such as urban expansion, deforestation and grassland conversion, intensified by climate change, have been identified by countries as the direct drivers of land degradation. Grasslands incurred some of the greatest losses in land productivity, followed by croplands and tree covered areas. Reporting countries indicated that indirect drivers, such as demographic and economic trends, institutional and governance challenges, and gaps in investment and access to technology need to be addressed to enable an effective response to land degradation.

At the mid-point in the implementation of the SDGs, if these alarming trends in land degradation continue, we would need to restore 1.5 billion hectares by 2030 to ensure a land degradation neutral world. However, if we were to avoid new land degradation and accelerate the implementation of the existing commitments to restore 1 billion hectares, the neutrality target would not only be achieved but exceeded by 2030. This would require greater investments in conservation, sustainable management and restoration of land, through integrated land use planning and robust environmental and social safeguards.

Land restoration includes a broad range of sustainable land and water management practices that can be applied to: i) conserve or 'rewild' natural areas, ii) 'up-scale' nature-positive food production in rural landscapes, and iii) 'green' urban areas, infrastructure, and supply chains. The land restoration agenda promotes a multiple benefits strategy that reverses past land degradation and biodiversity loss, while increasing food and water security, improving livelihoods and mitigating and adapting to climate change.

Land restoration is a shared responsibility – everyone has a role to play because everyone has a stake in the health of the land, now and into the future. Governments, businesses, and communities can restore land together by seeking convergence and complementarity. Environmental and development priorities can be responsibly managed to create a healthier mosaic of land uses without compromising the needs and aspirations of current and future generations.

Proportion of Degraded Land, 2015 and 2019 (Percentage)



1 Excluding the Maldives
2 Excluding the United States of America
3 Excluding Belarus, Denmark, Luxembourg, Malta, Monaco, Norway, Russian Federation and Switzerland
4 Excluding Angola and Comoros
5 Excluding Brunei Darussalam and Singapore
6 Excluding Barbados and Grenada
7 Excluding Japan and Republic of Korea

Custodian agency(ies): UNCCD

Target 15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

Indicator 15.4.1 Coverage by protected areas of important sites for mountain biodiversity

Growth in protected area coverage of Key Biodiversity Areas, crucial for achievement of SDGs 14 and 15 as well as the new Kunming-Montreal Global Biodiversity Framework, has slowed over recent years, and remains low in Central, Southern, and Western Asia, Northern Africa, and Oceania.

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Additional resources, press releases, etc. with links:

- A Global Standard for the Identification of Key Biodiversity Areas (IUCN 2016) https://portals.iucn.org/library/node/46259
- World Database of Key Biodiversity Areas (BirdLife International et al. 2023) https://www.keybiodiversityareas.org
- Protected Planet (UNEP-WCMC & IUCN 2023) https://www.protectedplanet.net/en
- Key Biodiversity Areas Training Course https://www.keybiodiversityareas.org/kba-news/key-biodiversity-areas-training-website
- Key Biodiversity Areas Annual Report https://www.keybiodiversityareas.org/kba-news/kba-annual-report_2021
- Key Biodiversity Area National Coordination Groups https://www.keybiodiversityareas.org/working-with-kbas/programme/national-coordination-groups
- Ross River Dena propose Indigenous protected area in Yukon https://www.cbc.ca/news/canada/north/yukon-ross-river-indigenous-protected-area-1.6748453
- Ross River (World Database of Key Biodiversity Areas) https://www.keybiodiversityareas.org/site/factsheet/100107

Storyline authors(s)/contributor(s): Thomas Brooks, IUCN; Stuart Butchart, BirdLife International; Emily Howland, UNEP-WCMC; Andy Plumptre, KBA Secretariat; Tom Scott, BirdLife International

Custodian agency(ies): UNEP-WCMC,UNEP,IUCN

Indicator 15.4.2 (a) Mountain Green Cover Index; and (b) proportion of degraded mountain land

Since 2000, 1.6% of the world's mountain area has been degraded due to detrimental changes in land cover.

Mountain green cover has remained roughly stable at about 78 percent over the 2000-2018 period. Disaggregation of mountainous areas by land cover and geographical region provides additional insights, allowing to visualize how biophysical characteristics and historic and recent land uses shape their landscapes.

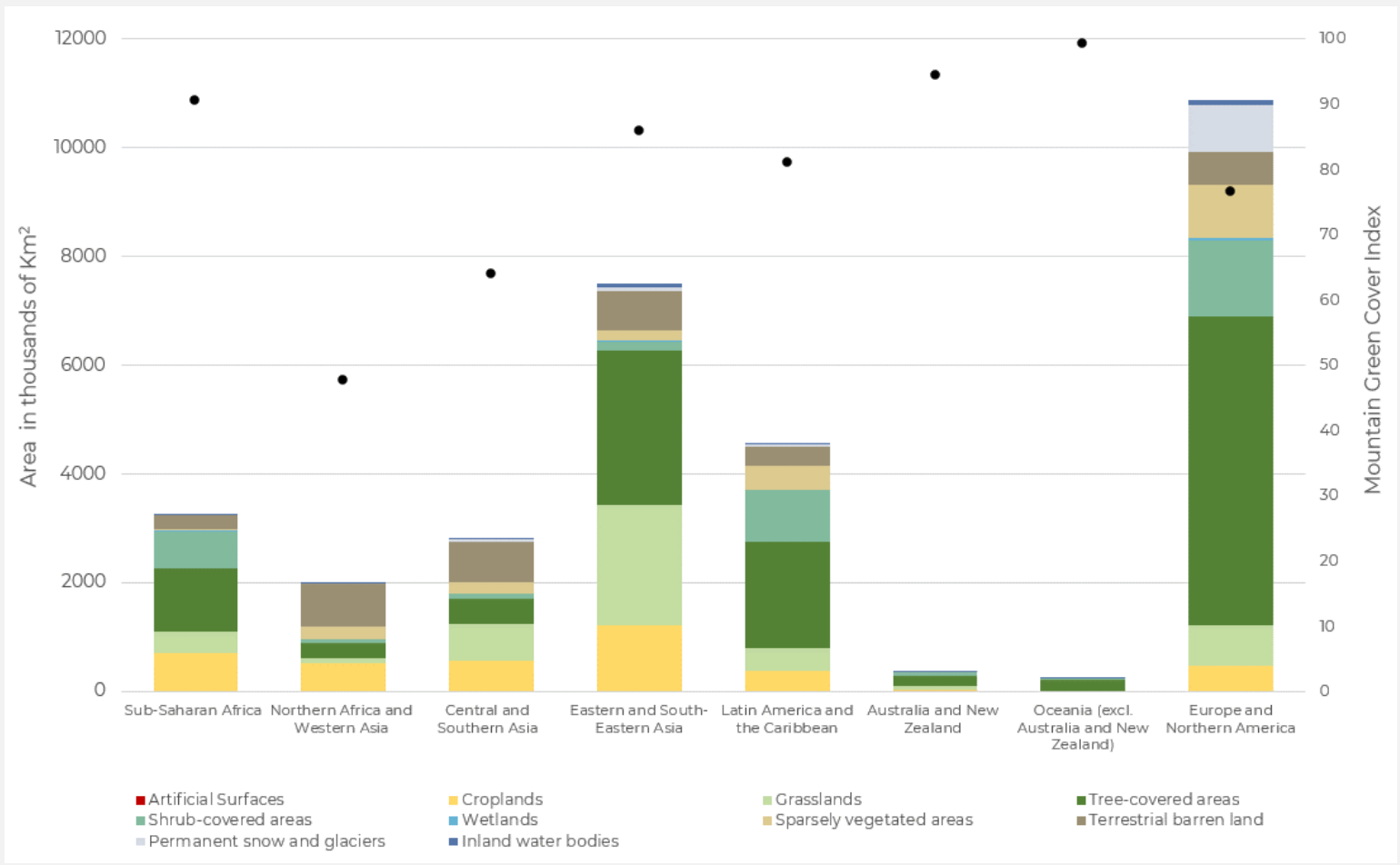
Tree-covered areas are the dominant mountain land cover type globally, particularly in Oceania (90 percent of the total mountain area), Europe and Northern America (52 percent), Latin America and the Caribbean (42 percent), Eastern and Southern Asia (38 percent) and Sub-Saharan Africa (35 percent). There are only two exceptions from this: Northern Africa and Western Asia, where barren land (40 percent) and croplands (25 percent) dominate, and Central and Southern Asia, where barren land (26 percent), grasslands (24 percent) and croplands (20 percent) are the most widespread land cover types.

Detrimental changes in land cover and land use are important contributors to terrestrial biodiversity loss, including in mountain ecosystems. The proportion of degraded mountain land measures this by calculating the amount of mountain area where changes in land cover may indicate a decline or loss of biodiversity, mountain ecosystem functions or services considered desirable in a local or national context

The area where detrimental changes in land cover occurred during the 2000-2018 period represents approximately 1.6 percent of the world's total mountain area. Disaggregated data shows that the mountain belts most affected by detrimental land cover changes were the alpine (1.8 percent) and the montane (1.7 percent) belts, while nival areas were the least affected (0.08 percent). Disaggregation by both SDG regions and bioclimatic belts show that the areas with the higher proportion of degraded mountain land are the alpine areas of Europe and Northern America (2.3 percent), followed by the montane areas of Central and Southern Asia (2.2 percent) and the lower mountain belts of Eastern and Southern Asia (2.1 percent).

Finally, an analysis of the changes in land cover types in the world's mountain areas shows that the area of artificial surfaces more than doubled (106 percent increase) during the 2000-2018 period, particularly below the treeline (montane and remaining mountain areas). Wetland areas below the treeline also experienced an important decrease during the period.

Mountain Green Cover Index (2018)



Additional resources, press releases, etc. with links:

- SDG Indicator 15.4.2 Metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-15-04-02.pdf

Storyline authors(s)/contributor(s): Xavier de Lamo, FAO; Anssi Pekkarinen, FAO

Custodian agency(ies): FAO

Target 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

Indicator 15.5.1 Red List Index

Halting extinctions and reduction of extinction risk was adopted within Goal A of the new Kunming-Montreal Global Biodiversity Framework in December 2022, reflecting SDG Target 15.5, but the Red List Index continues to decline. Overall, the index value has fallen about 10% since 1993, with the most severe declines in Central, Southern, Eastern, and South-eastern Asia.

Species extinction is irreversible, and thus perhaps the most fundamental human impact on nature. Goals for halting extinctions and reducing species extinction risk therefore provide a cornerstone for global environmental governance, for example through SDG Target 15.5 and also Goal A of the Kunming-Montreal Global Biodiversity Framework adopted in December 2022.

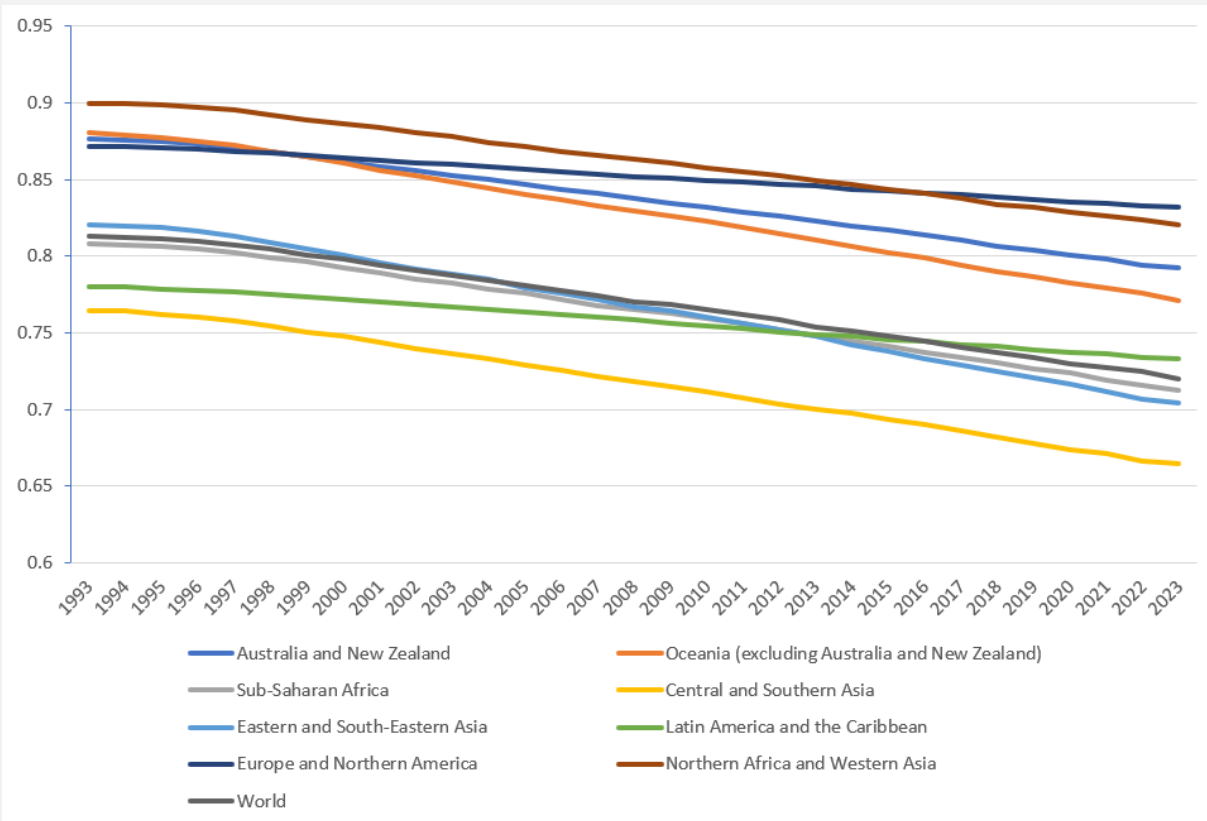
The key tool for allowing monitoring of progress towards these targets is the IUCN Red List of Threatened Species. This is based on application of a standard set of categories and criteria to measure species extinction risk. To date, more than 150,000 species have been assessed for the Red List.

For those taxonomic groups within which all species have been assessed multiple times, a Red List Index can be derived. The RLI is 1 when no species are threatened and 0 when all species are Extinct; its slope reflects the rate of deterioration in aggregate species extinction risk, or, conversely, improvements in species survival probability. To date, the indicator includes data for all mammals, birds, amphibians, corals, and cycads.

As additional taxonomic groups are re-assessed on the Red List over coming years, they will be added into the Red List Index. For example, comprehensive assessment of 10,196 reptile species was completed in 2022, finding that 21% of species are threatened.

The overall global RLI has declined by about 10% over the three decades 1993 to 2023. However, there is quite wide variation between regions. Overall extinction risk is lowest in Europe and Northern America and in Northern Africa and Western Asia. By contrast, extinction risk is most severe in Central and Southern Asia and in Eastern and South-eastern Asia. These same two regions plus Oceania have suffered from the fastest declines.

Red List Index, 1993-2023



Additional resources, press releases, etc. with links:

- IUCN Red List of Threatened Species https://www.iucnredlist.org/
- IUCN Red List Categories & Criteria https://portals.iucn.org/library/node/10315
- Reptile press release https://www.iucn.org/news/species/202204/comprehensive-study-worlds-reptiles-more-one-five-reptile-species-are-threatened-extinction
- A global reptile assessment highlights shared conservation needs of tetrapods https://www.nature.com/articles/s41586-022-04664-7

Storyline authors(s)/contributor(s): Thomas Brooks, IUCN; Stuart Butchart, BirdLife International; Craig Hilton-Taylor, IUCN; Richard Jenkins, IUCN; Simon Tarr, IUCN

Custodian agency(ies): IUCN

Target 15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed

Indicator 15.6.1 Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits

New biodiversity deal draws renewed attention to the fair and equitable sharing of benefits arising from the utilization of genetic resources

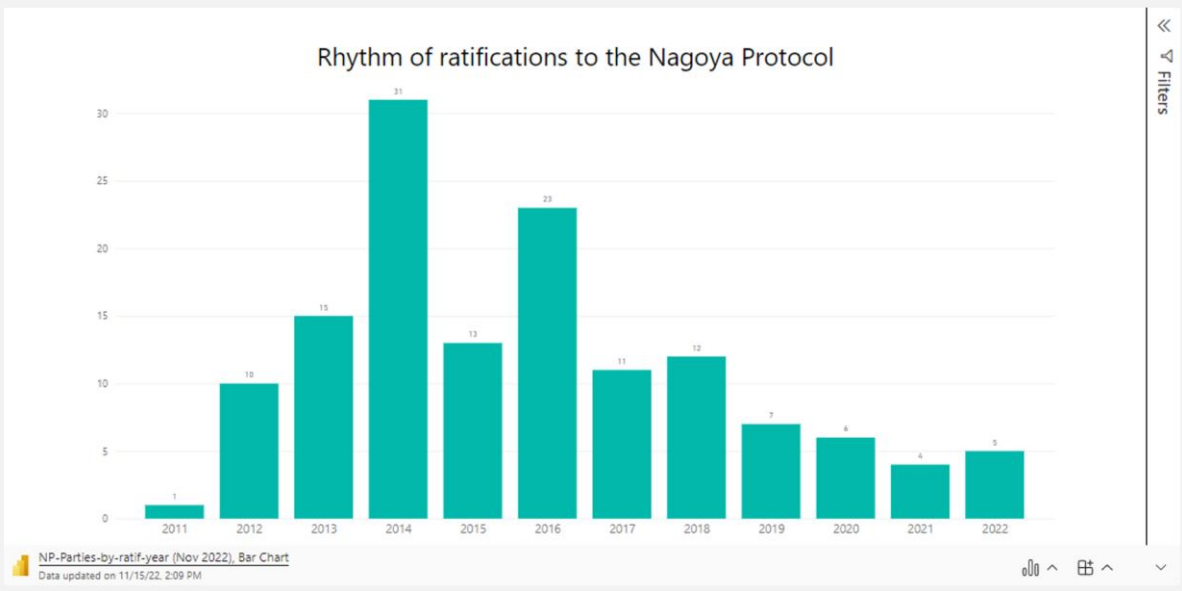
Since the adoption of the 2030 Agenda for Sustainable Development, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity celebrated the 10 years since its adoption, and the number of its Parties nearly doubled. At the end of 2022, 137 countries and the European Union had ratified the Protocol – representing 70% of all Parties to the Convention on Biological Diversity. Five new Parties joined the Protocol in 2022. However, as the Protocol edges towards global ratification, many countries have yet to establish the necessary legislative, administrative or policy measures to ensure the fair and equitable sharing of benefits arising from the use of genetic resources and associated traditional knowledge. At the end of 2022, 68 countries had published at least one measure to the Access and Benefit-sharing Clearing-House (no increase from 2021), and 25 countries had issued 4440 internationally recognized certificates of compliance (an increase of 1,000) as proof that prior informed consent was granted and mutually agreed terms were established for access.

With regard to the International Treaty on Plant Genetic Resources for Food and Agriculture, the number of its Contracting Parties has reached 150, including the European Union, at the end of 2022. Two countries newly joined the Treaty in 2022. By the end of 2022, 88 countries have submitted their national report to inform about their implementation of International Treaty's provisions, including on access and benefit-sharing measures, increased by nine countries during 2022. The number of SMTA has been also increasing, from 55,566 in 2015 to 91,352 in 2022, indicating that more users are benefiting from accessing plant genetic resources for research, breeding and training.

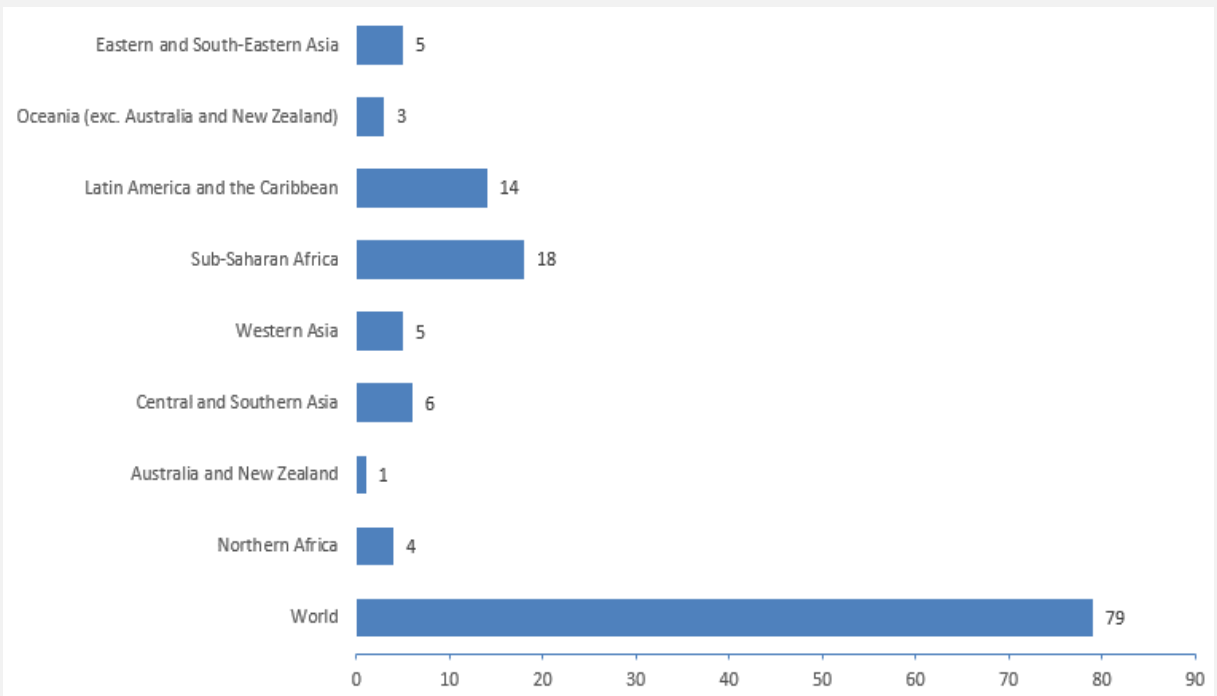
Due to the COVID-19 pandemic, some delays in legislative processes and in the implementation of capacity development activities have been reported and this is likely to have delayed progress towards the target for some countries. High impact has been observed at the level of collaborative activities, such as technical cooperation for better management of genetic resources, while the increased digitalization of capacity building and training materials was a positive development in facilitating knowledge sharing. Meantime, the Fifth Project cycle of the Benefit-sharing Fund (BSF) has been launched since May 2022. BSF is the operational mechanism to share benefits arising from the Multilateral System of the International Treaty and its funding includes user-based income from the Multilateral System, in addition to voluntary contributions.

The adoption of the Kunming-Montreal Global Biodiversity Framework in December 2022, as well as a decision by the Conference of the Parties to the Convention to share fairly and equitably the benefits arising from the use of digital sequence information on genetic resources brings renewed attention and impetus to the implementation of access and benefit-sharing instruments. In the context of the Framework, new indicators for access and benefit-sharing are to be developed by the Ad Hoc Technical Expert Group on Indicators for the Kunming-Montreal Global Biodiversity Framework, including for Goal C and Target 13 which relate to access and benefit-sharing. This provides an important opportunity to further improve data collection and analysis on the benefits shared from utilization of genetic resources, to accelerate global efforts to conserve and sustainably use genetic resources, as well as to enhance the mutually supportive implementation of access and benefit-sharing instruments.

Rhythm of ratifications to the Nagoya Protocol by year



ABS Measures under the ITPGRFA by SDG regional groupings



Additional resources, press releases, etc. with links:

- Historic Tea Payment Made to South African Tribes (14 July 2022): https://www.voanews.com/a/historic-tea-payment-made-to-south-african-tribes-/6660310.html
- The Access and Benefit-sharing Clearing-House: https://absch.cbd.int/
- The Online Reporting System on Compliance of the International Treaty on PGRFA: http://www.fao.org/plant-treaty/areas-of-work/compliance/compliance-reports/en/
- Easy-SMTA of the International Treaty on PGRFA: https://mls.planttreaty.org
- Fifth cycle of the Benefit-sharing Fund: https://www.fao.org/plant-treaty/areas-of-work/benefit-sharing-fund/fifth-cycle/en/

Storyline authors(s)/contributor(s): Julie Roy, Secretariat of the Convention on Biological Diversity; Aya Idemitsu, Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture

Custodian agency(ies): CBD-Secretariat

Target 15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products

Indicator 15.7.1/15.c.1 Proportion of traded wildlife that was poached or illicitly trafficked

Custodian agency(ies): UNODC,CITES

Target 15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

Indicator 15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species

Globally, invasive alien species response is increasing, with nearly all countries now having national legislation related to invasive alien species as focused legislation and / or across relevant sectors. Alignment of national to global targets has increased. A wide variation exists in the allocation of resources within national budgets for these responses.

Invasive alien species are leading to severe losses of biodiversity around the world and according to the IUCN Red List of Threatened Species are one of the major drivers of extinction risk. This is posing serious challenge to sustainability around the world and incurring major economic impacts in the agriculture and health sectors. Invasive alien and pest species cost Africa's agricultural sector an estimated USD $66 billion a year.

In response, governments enact laws including legislations, regulations, decrees, etc relevant to the prevention or control of invasive alien species. In the majority of the cases these are embedded within laws pertaining to key cross-cutting sectors such as animal health (95%), plant health (96%), protected areas (36%), fisheries and aquaculture (58%), and biodiversity and the environment (49%). However, a growing number of countries have enacted laws focused on invasive alien species (26%) and on biosecurity (28%) directly.

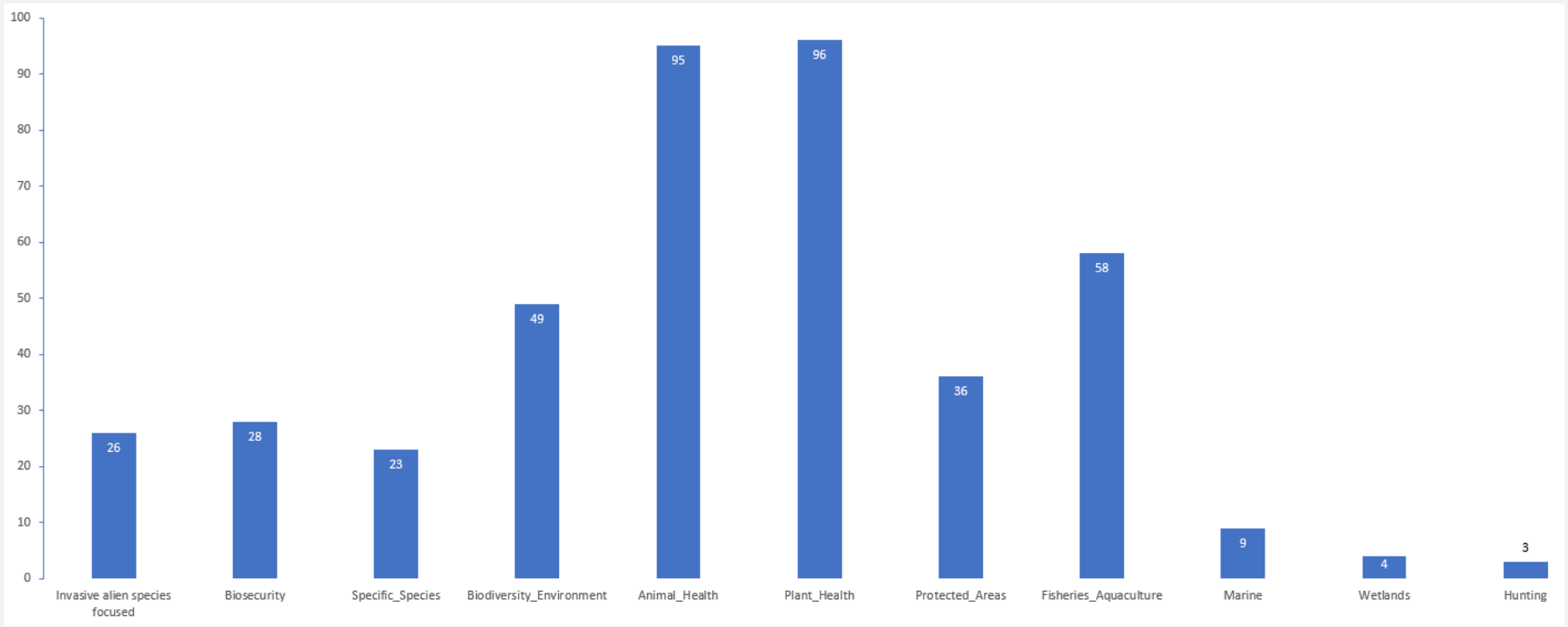
In response to Aichi Target 9 of the Strategic Plan for Biodiversity 2011–2020, countries have aligned their national invasive alien species -related targets, as formalised in their National Biodiversity Strategies and Action Plans, to this global target.

Of the 14 regional groupings, six regions report complete alignment with Target 9 (Australia and New Zealand, Central & Northern America, and Southern, Eastern, & South-eastern Asia); an additional six regions report over 80% alignment (Caribbean, Europe, Northern Africa, Oceania, South America, Sub-Saharan Africa); and the last two regions (Western & Central Asia) report over 60% alignment. The percentage of alignment has increased from 79% in 2020 to 87% in 2022. An additional major development in 2022 was the agreement of a new invasive species target as Target 6 of the Kunming-Montreal Global Biodiversity Framework, which replaces Aichi Target 9.

Adequate resourcing is crucial to enable effective invasive alien species response. Comprehensive evaluation of "adequacy" requires robust budgeting of national invasive species strategies and action plans, which has not yet been completed in many countries. However, some insight into the resourcing of invasive alien species responses is provided by national reporting of the sources of funding allocations. Regional representation of the total of 85 national respondents was highly variable: the three highest being Europe 30%, Sub-Saharan Africa 21%, and Western Asia 12%.

A total of 55% of countries report allocations towards invasive alien species prevention or control from their national budgets, while 24% of countries report that they have accessed global financial mechanisms for this. Only 16% have allocated national budgets as well as accessed funding from global mechanisms for invasive alien species related projects, a majority of which were from the Caribbean, Oceania, and Southern Asia.

Percent of countries adoption of national legislation relevant to invasive alien species



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Custodian agency(ies): IUCN

Target 15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

Indicator 15.9.1 (a) Number of countries that have established national targets in accordance with or similar to Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020 in their national biodiversity strategy and action plans and the progress reported towards these targets; and (b) integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting

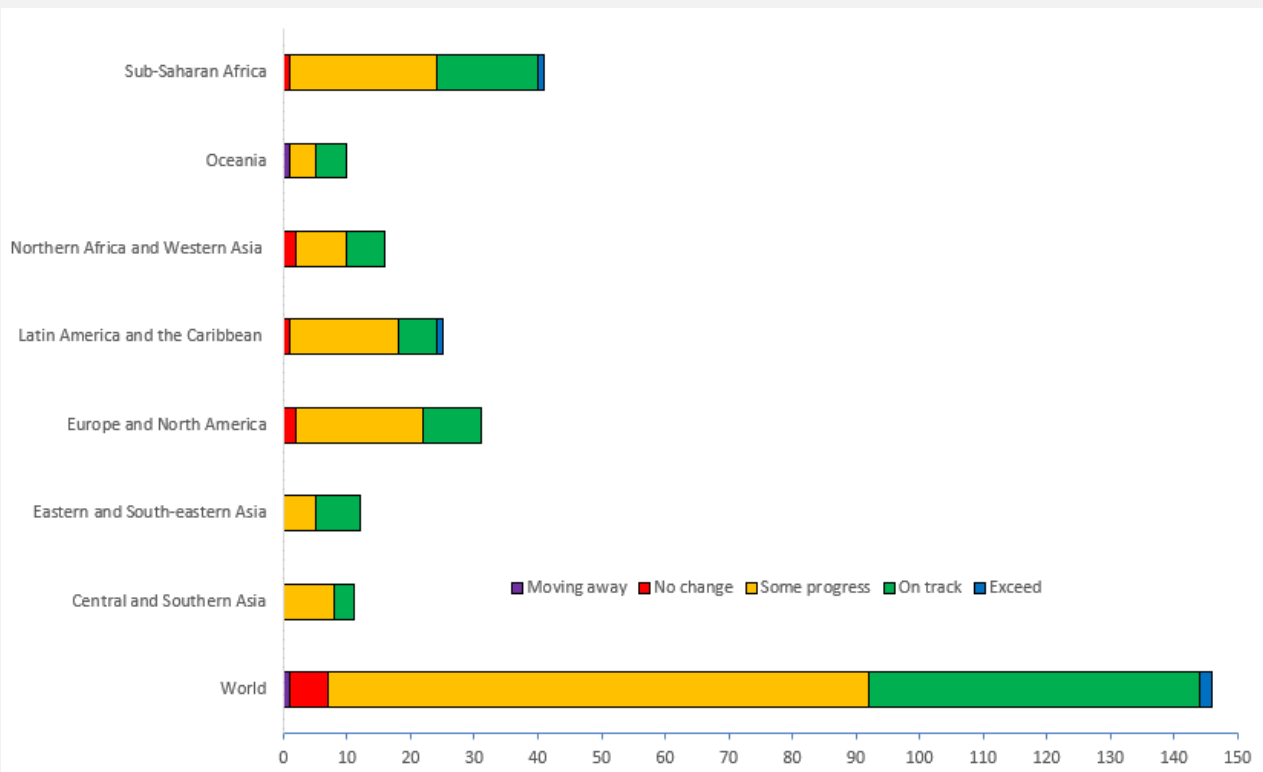
Almost all countries (90%) have set national targets related to integrating biodiversity values into national and local development and poverty reduction strategies; however, only a third of reporting countries are on track to achieve integration of biodiversity values into these policies.

Biodiversity directly or indirectly contributes to the attainment of most of the Sustainable Development Goals. There has been a steady upward trend the number of countries incorporating biodiversity values into national accounting and reporting systems and the majority of countries (90%) have established national targets related to integrating biodiversity values into national and local development and poverty reduction strategies and planning processes (Aichi Biodiversity Target 2[1]. By December 2022, of the countries which have assessed progress towards these national targets, roughly a third were on track to reach (36%) or exceed them (1%); more than half (58%) have made progress towards their targets but not at a rate that will allow them to meet the target; and some countries reported that they are making no progress (4%) towards the target or are moving away from reaching it (1%). Therefore, despite the important progress that has been made, countries are not on track to meet this SDG indicator.

While many countries are on track to integrate biodiversity values into relevant planning processes, the limited progress globally on this issue undermines efforts to reach most of the Sustainable Development Goals, including SDGs 14 and 15. It also indirectly drives further pressure on biodiversity which, among other things, threatens the continued provision of nature's contributions to people and threatens around 1 million species with extinction within the coming decades. It is also a major barrier to undertaking the transformational changes required to bring about a world living in harmony with nature.

In December 2022, the Conference of the Parties to the Convention on Biological Diversity, at its fifteenth meeting, adopted the Kunming-Montreal Global Biodiversity Framework (GBF). The Framework provides a roadmap for achieving the 2050 Vision of living in harmony with nature. It includes 4 outcome-oriented goals to be achieved by 2050, 23 action-oriented targets to be achieved by 2030 and guidance on implementation. An accompanying Monitoring Framework was agreed to enable the tracking of progress towards the goals and targets. Target 14 of the GBF is for 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. This target brings renewed attention to the integration of biodiversity values into decision making processes and creates an opportunity to scale up progress towards SDG Target 15.9.1(a), particularly as Parties to the Convention have been requested to align their national biodiversity strategies and action plans or their national targets with all the goals and targets of the GBF by the sixteenth meeting of the Conference of the Parties that will be held in 2024.

Number of countries, by region and globally, reporting Progress towards integrating biodiversity values into national and local development and poverty reduction strategies and planning processes (by December 2022)



Additional resources, press releases, etc. with links:

- For further information on progress towards Aichi Biodiversity Target 2 see the fifth edition of the Global Biodiversity Outlook - https://www.cbd.int/gbo5.
- For further information on the Kunming-Montreal Global Biodiversity Framework see CBD/COP/DEC/15/4
- For further information on the Monitoring Framework for the Kunming-Montreal Global Biodiversity Framework see CBD/COP/DEC/15/5

Storyline authors(s)/contributor(s): Jillian Campbell, Secretariat of the Convention on Biological Diversity; Kieran Noonan Mooney, Secretariat of the Convention on Biological Diversity

Custodian agency(ies): CBD-Secretariat,UNEP

[1] Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020, adopted under the Convention on Biological Diversity directly contributes to SDG 15. The target is that "by 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems". In adopting the Strategic Plan for Biodiversity 2011-2020, the Conference of the Parties invited Parties to the Convention to set their own targets, taking into account national needs and priorities, while also bearing in mind national contributions to the achievement of the global targets.

Countries work to make nature count in their ledgers

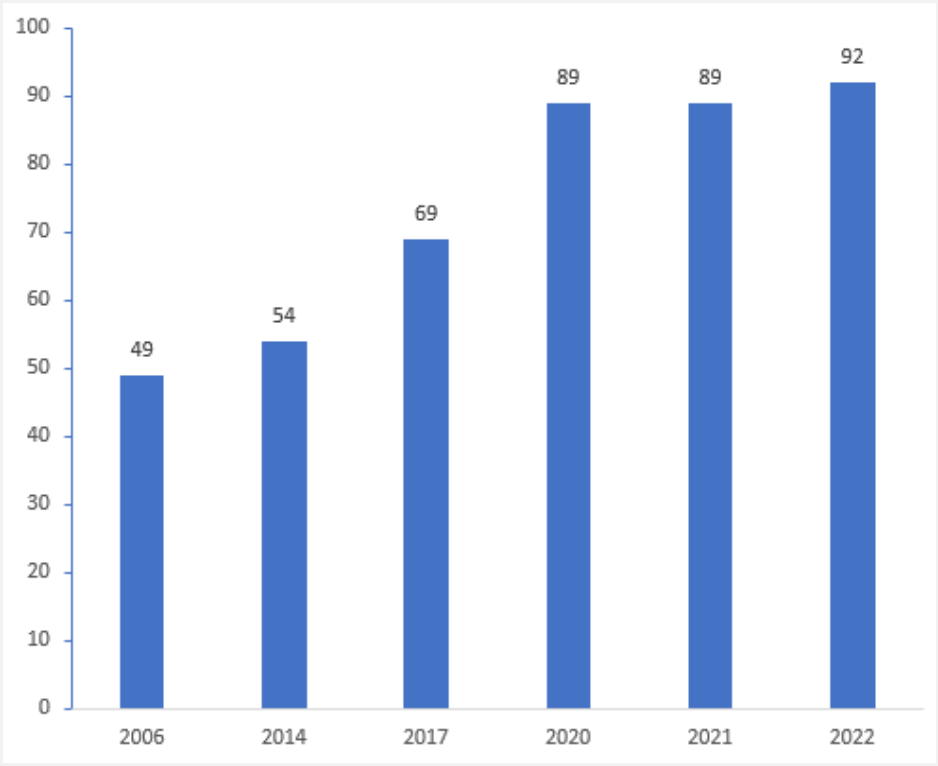
With the twin crises of climate change and biodiversity loss, countries are increasingly looking for statistics on the environment-economy nexus and ways to foster economic growth while protecting the environment, biodiversity and climate. In order to do this, countries have begun to put nature in their ledgers, through natural capital accounting. Natural capital accounting has provided governments with a systematic way to measure natural capital and recognize it as an asset that provides contributions to the economy and society. Many countries implement natural capital accounting through the international statistical standard, the System of Environmental-Economic Accounting (SEEA). While the COVID-19 pandemic caused a brief period of stagnation in global implementation of the SEEA, 2022 once again saw an increase in the number of countries compiling the SEEA. Currently 92 countries compile the SEEA.

While the number of countries implementing the SEEA has increased between 2021 and 2022 (89 to 92), this increase has been relatively modest. Similarly, the proportion of countries that regularly compile and disseminate the accounts has remained relatively stable from 2021 to 2022 (72% of countries in 2022). Thus, the impacts of the pandemic are still being felt. The COVID-19 pandemic put a significant strain on national statistical offices, which typically compile the SEEA, particularly in terms of capacity development, new activities and resources. Unfortunately, not all national statistical offices expect to have the same resources as they did pre-pandemic.

It should be noted that the increase in the number of countries compiling the newly adopted SEEA Ecosystem Accounting showed a larger increase than the overall increase in SEEA implementation. Forty-one countries compile the SEEA Ecosystem Accounting, nearly a 14 per cent increase from the number of countries in 2021. The SEEA Ecosystem Accounting was adopted by the UN Statistical Commission in March 2021 and provides a way for policymakers to understand how our economic activities affect our ecosystems as well as the contributions ecosystems make to our economy and humanity, such as clean air and pollination.

As more and more countries begin to tackle the climate and biodiversity crises, the number of countries implementing the SEEA is also expected to increase. In particular, the adoption of the Kunming-Montreal Global Biodiversity Framework in late 2022 is expected to spur implementation. The landmark framework, which includes four goals and 23 targets to be achieved by 2030, also includes a monitoring framework which utilizes the SEEA methodology for several indicators.

Number of countries implementing the SEEA, 2006-2022



Additional resources, press releases, etc. with links:

- Report of the 2022 Global Assessment on Environmental-Economic Accounting and Supporting Statistics: https://unstats.un.org/UNSDWebsite/statcom/session_54/documents/BG-3h-Global_Assessment_2022-E.pdf
- Implementation Strategy for the SEEA EA: https://unstats.un.org/unsd/statcom/53rd-session/documents/BG-3l-implementation-strategy-for-the-SEEA-ecosystem-accounting-E.pdf
- SEEA website: seea.un.org

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Custodian agency(ies): CBD-Secretariat,UNEP

Target 15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

Target 15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation

Indicator 15.a.1/15.b.1 (a) Official development assistance on conservation and sustainable use of biodiversity; and (b) revenue generated and finance mobilized from biodiversity-relevant economic instruments

ODA in support of biodiversity up in 2021

Between 2020 and 2021, DAC members' ODA in support of biodiversity has increased by 26.2%, from USD 7.7 billion (constant 2021 prices) to USD 9.8 billion in 2021.

The increase in support of biodiversity could be due to momentum from past international commitments, and in particular to efforts pursuing the Convention on Biological Diversity's (CBD) Strategic Plan on Biodiversity and its Aichi target on development finance with an implementation period from 2011 to 2020.

The identification of COVID-19 as a possible zoonotic disease has also underscored the relationship between infectious diseases, destruction of ecosystems, illegal wildlife trade and human encroachment on nature. Thus, the increase in development finance for biodiversity could reflect the recognition of these links as well as of the importance of reversing biodiversity loss.

Biodiversity and climate change are also strongly interlinked, and are recognized as a twin crisis. Indeed, addressing biodiversity loss and climate change together can also provide multiple co-benefits. Given that a significant share of development finance for biodiversity also targets climate change, an increase in ODA for biodiversity could be due to coupling effects from increases in ODA for climate change.

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Custodian agency(ies): OECD,UNEP,World Bank

Target 15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

Indicator 15.7.1/15.c.1 Proportion of traded wildlife that was poached or illicitly trafficked

Custodian agency(ies): UNODC,CITES