



BRIEF

The Summary for Policymakers of the IPBES regional assessment of biodiversity and ecosystem services for the Americas

1. What is IPBES?

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an independent, intergovernmental body established in 2012, under the auspices of UNEP, FAO, UNESCO and UNDP. Its main mandate is to synthesize the state-of-the-art knowledge on biodiversity, ecosystems and their contributions to people, as well as the tools and methods to protect and sustainably use these vital natural assets.

IPBES has four working areas:

- **Assessments:** IPBES prepares global and regional reports on the state of knowledge on biodiversity and ecosystem services, as well as on specific biodiversity topics
- **Policy Tools and Methodologies:** IPBES identifies tools and methodologies to use the results of assessments in policymaking.
- **Capacity Building:** IPBES identifies capacities and competencies required to work with IPBES, and to use its products.
- **Knowledge Generation:** IPBES identifies knowledge gaps and fosters closing them; IPBES itself does not conduct research.

2. What are the regional assessments of IPBES?

In January 2015, the third IPBES plenary session approved the launch of four regional assessments of biodiversity and ecosystem services in terrestrial, freshwater, coastal and marine ecosystems. The regional assessments are for Africa, the Americas, Asia Pacific, and for Europe and Central Asia¹. The overall scope of the regional assessments is to assess

- the status and trends regarding biodiversity, ecosystem functions and ecosystem services and their interlinkages,
- the impact of biodiversity, ecosystem functions and ecosystem services and threats to them on good quality of life, and
- the effectiveness of responses, including the Strategic Plan for Biodiversity 2011–2020 and its Aichi Biodiversity Targets, the Sustainable Development Goals, and the National Biodiversity Strategies and Action Plans developed under the Convention on Biological Diversity.

The overall objective of the regional assessments is to strengthen the science-policy interface on biodiversity and ecosystem services at the regional and subregional level (IPBES 2018a).

¹ <https://www.ipbes.net/deliverables/2b-regional-assessments>



3. What is the Americas regional assessment?

The objective of the IPBES regional assessment on biodiversity and ecosystem services for the Americas² is to synthesize the state of knowledge on biodiversity and nature’s contributions to people, as well as future threats to biodiversity and ecosystem services and their benefits for a good quality of life in the Americas and its subregions.

The assessment takes into account the geographic differences and the multiple types of social and economic inequality and distinctive biophysical conditions of the American continent. The purpose is to make policy-relevant knowledge accessible and useful, using a multidisciplinary and multi-knowledge systems approach, and addressing the science-policy interface in order to improve governance towards sustainable uses of biodiversity and ecosystem functions and services.

The assessment also identifies the specific needs of each of the America’s subregions regarding support tools at different scales, knowledge gaps and capacity-building needs, including the development of capacity for future sustainable uses of biodiversity.

The Americas regional assessment covers four subregions, encompassing the following countries:

Subregions	Countries and territories
North America	Canada and United States of America, Greenland
Mesoamerica	Belize, Costa Rica, El Salvador, Guatemala, Honduras, México, Nicaragua and Panamá
South America	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela
Caribbean	Antigua And Barbuda, Bahamas, Barbados, Cuba, Dominica, Dominican Republican, Grenada, Haiti Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines and Trinidad

The Americas regional assessment – as all the other assessments – comprises of two documents: a technical report (so-called “chapters”) and a Summary for Policy Makers (SPM). The IPBES Member States negotiated the SPM at the Platform’s sixth plenary meeting (IPBES-6) in March 2018 in Medellin, Colombia.

² <https://www.ipbes.net/deliverables/2b-americas>



4. What are the thematic core questions, key processes and target audiences of the Americas regional assessment?

The Americas assessment thematic core questions:

- How do biodiversity and ecosystem functions and services contribute to the economy, livelihoods, food security, and good quality of life in the regions, and their interlinkages?
- What are the status and trends of biodiversity, ecosystem functions that ultimately affect their contribution to the economy, livelihoods and well-being in the region?
- What are the pressures driving the change in the status and trends of biodiversity, ecosystem functions, ecosystem services and good quality of life in the region?
- What are the actual and potential impacts of various policies and interventions on the contribution of biodiversity, ecosystem functions and ecosystem services to the sustainability of the economy, livelihoods, food security and good quality of life in the region?

The assessment pays attention to key processes, including urbanization and de-ruralization, natural resource exploitation, pollution, climate change, loss and degradation of natural habitats (terrestrial, freshwater, coastal and marine) in the subregions, and their impact on biodiversity, as well as the benefits of biodiversity and ecosystem services and functions for people and their quality of life.

Finally, the assessment seeks to understand policy options for policymakers and UN programmes and multilateral environmental agreements. Broader audiences include the scientific community, indigenous and local knowledge holders and experts, business and industry, practitioners or implementers, community-based organizations, intergovernmental and non-governmental organizations, funding agencies and the media.

5. Structure and key messages of the SPM

Based on the 660 pages chapters of the Americas regional assessment, the SPM summarizes the most important information from the chapters, grouped into five sections and covering the following topics³:

- A: Nature's contributions to people and quality of life
- B: Trends in biodiversity and nature's contributions to people affecting quality of life
- C: Drivers of trends in biodiversity and nature's contributions to people
- D: Future trends in biodiversity and nature's contributions to people and global goals, targets and aspirations
- E: Management and policy options

³ The IPBES assessments use four "confidence terms" in order to categorize the experts' level of confidence in their findings consistently: "well established" (robust evidence and high level of agreement), "unresolved" (robust evidence but low level of agreement), "established but incomplete" (low quantity and quality evidence but general level of agreement), and "inconclusive" (low quantity and quality of evidence and low level of agreement).



The following tables covers the SPM's key messages including related figures and tables, as well as correlated sections of the technical report {curly brackets}.

<p>A. Nature's contributions to people and quality of life</p>
<p>The Americas are endowed with much greater capacity for nature to contribute to people's quality of life than the global average (well established). {2.5, 2.6, Table 2.24, Figure 2.36}</p>
<p>The economic value of terrestrial nature's contributions to people in the Americas is estimated to be at least \$24.3 trillion per year, equivalent to the region's gross domestic product. {2.5.1, Table 2.22}</p> <ul style="list-style-type: none"> ➤ Figure SPM.6 Estimated economic values of ecosystem services in the Americas
<p>The disproportionate and unsustainable use of "biocapacity" in the Americas has increased steadily in recent decades (<i>well established</i>). {2.1.1, 2.2.10, 2.6, 4.4.1, 4.3.2, 5.4.11, Figure 2.19, Table 2.24, Table 2.25}</p> <ul style="list-style-type: none"> ➤ Figure SPM.4a Ecological reserve, measured as "biocapacity" minus ecological footprint, can be either positive or negative ➤ Figure SPM.4b Total ecological footprint per subregion in the Americas between 1992 to 2012 ➤ Figure SPM.3 Total forest cover trends by subregions
<p>Differences in economic development attained within and among countries of the Americas and variation in countries' ecological footprint associated with their pursuit of development pose challenges to an equitable and sustainable use of nature (<i>well established</i>). {2.3.2, 2.3.5, 2.5, 3.2.3, 3.3.5, 3.4, 4.3, 4.3.2, 4.4.1, 4.4.2, 5.5}</p> <ul style="list-style-type: none"> ➤ Figure SPM.4a Ecological reserve, measured as "biocapacity" minus ecological footprint, can be either positive or negative ➤ Figure SPM.4b Total ecological footprint per subregion in the Americas between 1992 to 2012 ➤ Figure SPM.5 Trends in the provision of nature's contributions to people (NCP) for each unit of analysis.
<p>In the Americas, increases in the uses of nature have resulted in the region being the largest global exporter of food and one of the largest traders in bioenergy (<i>well established</i>) {1.1, 2.2.1, 2.3.1, 2.3.5, 2.4, 2.5, 2.6, 2.7, 3.2.1, 3.3.3, 3.3.5, 4.4.5}. In addition to export of food commodities, the Americas have a large commerce of timber and fibre from plants and animals (<i>well established</i>). {2.2.2, 4.3.4, 4.4.5}</p> <ul style="list-style-type: none"> ➤ Figure SPM.3 Total forest cover trends by subregions
<p>The water security challenges for over half the population of the Americas arise from unevenly distributed supply and access and decreasing water quality (<i>well established</i>). {1.3.2, 2.2.10, 2.2.11, 2.3.2, 4.3, 4.4.1, 4.4.2, 4.4.5, 5.4.10}</p>
<p>Energy produced from hydropower and biological fuel sources, including cultivated biofuel species, has increased in the Americas, contributing to energy security (<i>well established</i>). {2.3.2, 2.3.3, 3.2.3, 4.3.1, 4.4.1, 4.7}</p>



Human health depends directly and indirectly **on nature**. **Biodiversity** is a source of **medicines and other products that contribute to human health** and have high potential for the development of pharmacological products (*well established*) {2.2.4, 2.4}. **Health benefits from biodiversity** and access to nature are well documented (*established but incomplete*). {1.3.2, 2.3.4, 4.4.2}

Trends in livelihoods and good quality of life depend not only **on material** nature's contributions to people **with high economic value** (e.g., food, wood, fibre), but also **on non-material contributions** (e.g., learning and experiences, supporting identities) and **regulating contributions** (e.g., regulation of extreme events, disease, pollination) that are often not accounted for in economic or development planning (*well established*). {1.3.2, 2.2.5, 2.2.6, 2.2.7, 2.2.8, 2.2.9, 2.2.10, 2.2.11, 2.2.12, 2.3.4, 2.5.1, 3.3.4, 4.5, 5.4.8}

Comprehensively evaluating the ways that **a specific nature's contribution to people supports quality of life can be most effective when taking into account the multiple values and value systems** associated with that contribution (*well established*). {2.5.1; Table 2.21}

B. Trends in biodiversity and nature's contributions to people affecting quality of life

The rich **biodiversity** of the Americas **is under pressure** (*well established*). {3.4}

- Figure SPM.7 Pressures driving biodiversity loss in the Americas

The threats to or declines in all the nature-based securities⁴ in the Americas reflect the **ongoing reduction of nature's ability to contribute to human quality of life**. Past rates of loss are high and losses continue, with some **biomes under particular pressure** (*well established*). {3.4}

Wetlands are highly **transformed in large tracts** of the Americas, particularly **by expansion of agriculture** and **ranching, urbanization** and **overall population growth** (*well established*). {2.2.9, 2.2.10, 2.2.11; Figure 2.18; 3.4.1, 4.4.1, 4.4.2, 4.7, 5.4.7}

Marine biodiversity, especially associated with special habitats like coral reefs and mangroves, **has experienced major losses** in recent **decades, resulting in declines in the food, livelihoods and "cultural continuity"** of coastal people (*well established*). {3.4.2, 4.4.2, 4.4.5, 5.4.11}

Alien species are abundant in all major habitats in the Americas, but rates of appearance, where known, and their **impacts** on biodiversity, cultural values, economies and production, **differ among subregions** (*established but incomplete*). {3.2.2, 3.2.3, 3.2.4, 3.5.1, 4.4.4, Table 3.2, Table 3.3, Figure 3.31, Boxes 4.20–4.24}

Overall, the **number of populations or species threatened with loss or extinction is increasing** in the Americas and **the level of threat that they face is also increasing**, but the underlying causes are different among subregions (*well established*). {3.2.3, 3.4.2, 3.5.1, 4.4.5, Figure 3.17, Figure 3.30}

⁴ The definition that follows is for the purpose of this assessment only: Nature (biodiversity and ecosystems) and the contributions it makes available to people (ecosystem functions and services) referred as NCP are essential to achieve a good quality of life in the Americas. Economies and societies depend –to different extents - on NCP to achieve Nature-based securities for food, water and energy, generate income and support livelihoods and health.



On local scales, there are many **cases of restoration initiatives** having improved degraded habitats, with greater biodiversity and a wider range of nature's contributions to people provided as the restoration efforts progress (*established but incomplete*). {4.4.1, 6.4.1.2, Box 4.8, Box 4.9}

C. Drivers of trends in biodiversity and nature's contributions to people

Some indicators of good quality of life are improving at regional and subregional scales, such as **increased gross domestic product** {4.3.2}, **decreased malnutrition** {2.3.1} and **increased sources of energy** {2.3.3}. However, other indicators do not show the same level of improvement such as **decreases in water security** {2.3.2}, **environmental health** {4.4.1}, **human health** {2.3.4}, **sustainable livelihoods** {2.3.5}, **"cultural continuity" and identity** {2.4}, and **access and benefits sharing** of nature {2.5} (*well established*).

- Figure SPM.5 Trends in the provision of nature's contributions to people (NCP) for each unit of analysis

The upward trend in the **size of the ecological footprint** of the Americas reflects **multiple indirect anthropogenic drivers** (underlying factors), including patterns of **economic growth, population and demographic trends, weaknesses in the governance systems and inequity** (*established but incomplete*). {4.3, 4.7, 5.6.3}

- Figure SPM.4a Ecological reserve, measured as "biocapacity" minus ecological footprint, can be either positive or negative
- Figure SPM.4b Total ecological footprint per subregion in the Americas between 1992 to 2012

Economic growth (measured as gross domestic product and gross domestic product per capita), in part based on nature's contributions to people, and production and use of commodities from nature, **have been major drivers of natural resource consumption, water use and a decline in water quality** in the Americas (*established but incomplete*). {4.3}

Habitat conversion, fragmentation and overexploitation/overharvesting are resulting in a loss of biodiversity and ecosystem functions and a loss of or decrease in nature's contributions to people **on local to regional scales in all biomes** (*established but incomplete*). {3.2.3, Figure 3.24, 3.4.1, 3.4.2, 3.5.1, 4.4.1, 4.4.4, 4.4.5}

Unsustainable intensification of agricultural production in many cases **has caused habitat conversion, imbalances in soil nutrients and the introduction of pesticides and other agrochemicals** into ecosystems (*well established*). {1.2.1, 2.2.11, 3.2.1, 4.4.2, 5.4.4, 5.4.5}

Human-induced **climate change has already caused increased mean and extreme temperatures and/or, in some places, mean and extreme precipitation** throughout the Americas, with **adverse impacts on ecosystems** (*well established*). {4.4.3, 5.4}

The **air, water and soil pollution** produced by the production and combustion of fossil fuels and introduction of various pollutants **has adversely affected most terrestrial and marine ecosystems**, both directly, through increased mortality of sensitive plants and animals, and indirectly, through entering food chains (*well established*). {4.4.1, 4.4.2, 4.4.3, 5.4}



Urbanization and the associated spread of **infrastructure** for movement of energy, materials and people **are a rapidly growing driver of loss of biodiversity** and **nature's contributions to people** (*well established*). {3.3.4, 3.4.1, 4.4.1, 4.7, 5.4.8}

In the Americas, **ecosystems and biodiversity are managed under a variety of governance arrangements** and **social, economic** and **environmental contexts**. This makes disentangling the role of governance and institutions and processes of drivers of past trends of nature and nature's contributions to people complex (*established but incomplete*). {4.3.1}

Environmental policies and governance approaches aimed at reducing pressure on nature and nature's contributions to people often **have not been effectively coordinated to achieve their objectives** (*well established*). {4.3, 4.4.1, 5.4.7, 5.6, 6.1.1, 6.2, 6.3, 6.4.2.1, 6.4.2.2, 6.4.3.1}

D. Future trends in biodiversity and nature's contributions to people and global goals, targets and aspirations

Drivers of biodiversity loss and reduced nature's contributions to people **are projected to increase in intensity if existing patterns of consumption** and the **policies** underlying them **continue** (*well established*). {4.6, 4.7, 5.3, 5.4, 5.5, 5.6}

- Box SPM.1 Pathways considered in this report

Since the start of **European settlements**, it is estimated that approximately **30 per cent of the mean species** abundance in the Americas **had been lost by 2010** (*established but incomplete*). {5.5}

- Figure SPM.7 Pressures driving biodiversity loss in the Americas
- Box SPM.1 Pathways considered in this report

Policy interventions at vastly differing scales (from national to local) **can lead to successful outcomes in mitigating negative impacts on biodiversity** (*established but incomplete*). {5.5}

- Figure SPM.7 Pressures driving biodiversity loss in the Americas

It is likely that **few of the Aichi Targets will be met** by the 2020 deadline for most countries in the Americas, in part because of policy choices and trade-offs with negative impacts on aspects of biodiversity. **Continued loss of biodiversity could undermine achievement of some of the SDGs, as well as some international climate-related goals, targets and aspirations** (*established but incomplete*). {6.5}

- Figure SPM.10 Bundles of nature's contributions to people (NCP) that are considered to be a priority for achieving Sustainable Development Goals (SDGs)

E. Management and policy options

A variety of **governance processes** for biodiversity and nature's contributions to people **have been developed**, based on the mixture of cultures represented in the many post-European colonial governments and societies and the diverse indigenous cultures in the Americas (*well established*). {4.3.1, 5.6.2, 5.7, 6.3, 6.5}

- Table SPM.1 Examples of policy options in the Americas: instruments, enabling factors and country-level challenges



The **plurality of values** in the Americas shapes the use, management and conservation of nature and nature's contributions to people. **Addressing this** plurality of value systems, **through participatory governance processes and institutions, can contribute to** the design and implementation of effective **conservation and sustainable use** plans (*established but incomplete*). {1.1, 2.1.2, 2.5, 4.3.1, 6.3}

- Figure SPM.8 The plurality of values and interests shaping governance processes and policy and decision-making in the Americas

Biodiversity conservation and sustainable use and governance processes related to nature's contributions to people are increasingly more inclusive. However, regardless of the degree of participation in governance, **existing social and cultural inequalities** can be **reinforced by unequal power** exercised by different participants within the governance **processes when decisions are being made about nature and the use of nature's contributions to people** (*well established*). {2.4, 2.5, 4.3.1, 5.6.3}

- Table SPM.1 Examples of policy options in the Americas: instruments, enabling factors and country-level challenges

Within governance arrangements, several types of policy instruments are available. **Measures to protect biodiversity** in the Americas, including regulatory mechanisms, incentive mechanisms and rights-based approaches, **have increased and diversified** over the last 30 years (*well established*). {2.2.8, 4.3.1, 6.4}

- Table SPM.1 Examples of policy options in the Americas: instruments, enabling factors and country-level challenges
- Figure SPM.9 Percentage of terrestrial, marine and total protected area coverage in the Americas region and subregions

Ecological restoration is having positive effects at local scales. Restoration has sped up ecosystem recovery significantly in the majority of cases considered, and improved the ability of such areas to provide nature's contributions to people (*established but incomplete*). {4.4.1, 5.3, 5.4, 5.5, 6.4.1.2}

Protected and restored areas are relevant for maintaining options and increasing security in providing **nature's contributions to people in the long-term** and have an **important role in conservation planning**; however, they are likely to comprise a small proportion of total land and sea area (*well established*). {2.2.8, 2.2.13, 2.4, 4.4.4, 6.4.1.1}

- Table SPM.1 Examples of policy options in the Americas: instruments, enabling factors and country-level challenges

Mainstreaming conservation and sustainable use of biodiversity in productive sectors is extremely important for the enhancement of nature's contributions to people (*well established*). {6.2, 6.3.3}

Policymaking is more likely to be effective in achieving conservation and development goals **when it takes into account (i)** trade-offs between both short- and long-term conservation and development goals and their effects on different beneficiaries, **(ii)** transboundary issues and **(iii)** leakage and spillover effects (*established but incomplete*). {5.4}



Effective implementation of public policies and instruments can address **effective biodiversity conservation** and **provision for nature's contributions to people** (*well established*). {2.5.1, 2.7, Table 2.25, 6.3.1, Table 6.1}

- Implementation of public policies is most effective with, inter alia, appropriate combinations of behavioural change {4.3.1, 5.4.7}, improved technologies {4.3.4, 5.4.7, 6.6.4}, effective governance arrangements {5.4.7, 6.3}, education and public awareness programmes {6.3.5, 6.4.1.1, 6.4.1.2}, scientific research {6.6.4}, monitoring and evaluation {6.4.1; Table 6.1; 6.4.2, 6.6.1, 6.7}, adequate finance arrangements {6.4.2.1}, and supporting documentation and capacity-building {6.6.4}.
- Figure SPM.10 Bundles of nature's contributions to people (NCP) that are considered to be a priority for achieving Sustainable Development Goals (SDGs).

6. Further reading

- IPBES website: <http://www.ipbes.net/>
- IPBES on the ValuES website: <http://www.aboutvalues.net/ipbes/>