

2019 IPBES Biodiversity and Ecosystem Services report

Summary brief for business

[The Global Assessment report on Biodiversity and Ecosystem Services published in August 2019](#) by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), is the first assessment of this magnitude in almost 15 years. It highlights the status and trends of the natural world, the social implication of these trends, their direct and indirect causes, and actions that can be taken to ensure a better future for all.

Nature is currently supplying more materials than ever before, but this has come at the high cost of unprecedented

global declines in the extent and integrity of ecosystems. Such changes reduce vital benefits that people and businesses receive from nature and threaten medium-term business continuity and the quality of life for people and communities around the world.

The report shows the need for urgent action to restore and protect nature, pointing at human interference as the main driver for nature alteration around the globe. Without action now, the world will not achieve the Sustainable Development Goals (SDGs) and the

Paris Agreement. The report will be a key input for the Convention on Biological Diversity (CBD) COP15, to be held from 15-28 October in Kunming, China.

This business summary highlights the main points from the report relevant to business and puts it in the context of other landmark reports, such as the World Economic Forum's New Nature Economy report series and the upcoming Dasgupta Economics of Biodiversity review, led by the UK's Treasury.

WANT TO LEARN MORE?

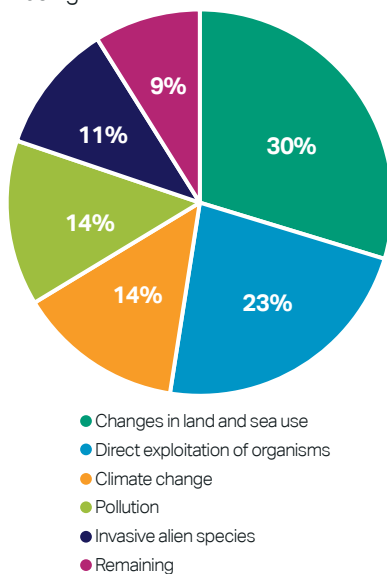
WBCSD will be present at the CBD Open Ended Working Groups (OEWG) organized in 2020 ahead of COP15 - Second OEWG from 24-29 February at the Food and Agricultural Organization HQ in Rome, Italy, Third OEWG from 27-31 July (dates tentative) in Cali, Colombia. If you want to learn more about our engagement in this process, please send an email to Susanne Kat for more information: kat@wbcsd.org.

Join WBCSD's new Nature Action project to directly engage in, and act on the fast-moving nature agenda. Work will focus on three areas: giving our members guidance on science-based targets development on nature and methodologies for nature-based solutions; building alignment, solutions and collective action in three big systems: food, land and ocean use, infrastructure and built environment, and energy and extractives; and finance innovation to shift investment decision-making.

Engage with [Business for Nature](#) (BfN), a global coalition bringing together influential organizations and forward-thinking businesses, that has developed [policy recommendations](#) after extensive consultation with partner organizations and companies, and which were launched by CEOs at the World Economic Forum Annual Meeting in Davos on 21 January 2020.

Headlines you need to know from the report

- In the past 50 years, the human population has doubled, the global economy has grown nearly fourfold and global trade has grown tenfold, together driving up the demand for energy, natural resources and materials. While economic growth and consumption have increased, this comes at the expense of nature's ability to provide such contributions in the future.
- The report identified the five direct drivers of change in nature, with the largest relative global impacts so far being:



Threats not clearly aligned to any of these five main drivers (e.g. fire, human disturbance, tourism) account for the remaining 9%.

- Agricultural expansion is the most widespread form of land-use change, with over one third of the terrestrial land surface being used for cropping or animal husbandry.
- The value of agricultural crop production (USD \$2.6 trillion in 2016) has increased approximately threefold since 1970 and raw timber harvest has increased by 45%, with the forestry industry providing about 13.2 million jobs. However, soil organic carbon and pollinator diversity have declined, indicating that gains in material contributions are not sustainable. These declines pose huge risks:
 1. Land degradation has reduced productivity in 23% of the global terrestrial area;
 2. Between USD \$235-577 billion in annual global crop output is at risk due to pollinator loss;
 3. Loss of coastal habitats and coral reefs reduces coastal protection, increasing flood risks and hurricanes to life and property for the 100-300 million people living within coastal 100-year flood zones.

- It is likely that most of the [Aichi Biodiversity Targets for 2020](#) will be missed and current resource mobilization is not sufficient to achieve these targets. Current negative trends in biodiversity and ecosystems will undermine progress towards 80% (35 out of 44) of the SDGs related to poverty, hunger, health, water, cities, climate, oceans and land (SDGs 1, 2, 3, 6, 11, 13, 14, and 15).
- About 25% of species are threatened, suggesting that around 1 million species already face extinction, many within a decade.
- Nature across most of the globe has now been significantly altered by multiple human drivers. 75% of land surface is significantly altered, 66% of the ocean area is experiencing increasing cumulative impacts, and over 85% of wetland area has been lost.
- Globally, local varieties and breeds of domesticated plants and animals are disappearing. This loss of diversity, including genetic diversity, poses a serious risk to global food security by undermining the resilience of many agricultural systems to threats such as pests, pathogens and climate change.

Knowledge gaps

Climate change has been studied far more extensively than the other drivers researched in the report resulting in a strong bias in scenarios towards climate change impacts on nature, limiting a comprehensive vision of biodiversity responses to global changes. Notably missing are quantitative syntheses of:

- Status and trends of micro-fauna and micro-flora (parasites, insects, fungus, microorganisms), especially in soil and freshwater environments;
- Human effects on ecosystem processes involving interactions among species, e.g. pollination, soil fertilization, pest control and fruit and seed dispersal;
- Vital ecosystem functions, such as how human-impacts affect traits and genetic composition, ecosystem structure, and community composition.

Creating the enabling environment for change

Economic incentives have generally favored expanding economic activity, and often environmental harm, over conservation or restoration. Incorporating the consideration of the multiple values of ecosystem functions and of nature's contribution to people into economic incentives has, in the economy, been shown to deliver better ecological, economic and social outcomes. There are often trade-offs in the production and use of nature's contributions, but there are synergies that we can explore, such

as sustainable forest management and agroforestry or regenerative agriculture practices that enhance soil quality, thereby improving productivity and other ecosystem functions and services.

Nature-based solutions with safeguards are estimated to provide 37% of climate change mitigation until 2030 needed to meet the goal of keeping climate warming below 2°C, when designed to ensure co-benefits for biodiversity. But currently we lack the finance and

policies needed to enable nature to deliver them. The Nature Conservancy estimates that only 3% of climate finance is used in this way, and only a handful of regions and countries have policies in place that direct private sector finance to natural climate solutions at scale.

In 2020, the CBD COP15, and important events leading up to it, will give a unique opportunity to reset the scales and for a Post-2020 Framework to be adopted that restores and protects nature.

What can business do?

To contribute to reversing biodiversity loss, business must tackle both its direct impact on ecosystems and its contribution to climate change. Utilizing the threat classification from the IUCN "Red List" we can assess and prioritize biodiversity threats on and from business based on the importance to biodiversity loss, business relation to the threat and the potential to disrupt business activities.

This leads to a focus on three big systems: food, land and ocean use; infrastructure and built environment; and energy and extractives, which will also be the focus areas for the WBCSD Nature Action project we are launching in 2020.

Land-based climate change mitigation activities can be effective and support conservation goals. However, the

large-scale deployment of bioenergy plantations and afforestation of non-forest ecosystems can come with negative side effects for biodiversity and ecosystem functions. Investing in nature-based solutions will become imperative to advancing both the climate agenda and the nature agenda.

Science-based target network

Leading conservation, science and business organizations, co-convened by WWF and WBCSD, have proposed an apex nature target of "Zero net loss of nature from 2020, net positive by 2030, and full recovery by 2050" which constitutes an ambitious response to the challenges set by this IPBES report. Efforts are underway through the Global Commons Alliance (GCA) and other initiatives to establish science-based targets to protect, conserve and restore nature for companies and cities. The GCA's Science-Based Target Network recently designed a prototype of "Science-Based Targets (SBTs) for nature", guided by a target-setting framework for nature. The SBT for nature can encompass all aspects of

nature including terrestrial, freshwater and ocean systems. The framework contains four key components:

1. Avoid: zero loss of biodiversity in areas of key biodiversity value;
2. Reduce; reduce an actor's impacts in line with science in key impact-sheds;
3. Restore/regenerate: compensate at least for residual impacts through regenerative actions (that rebuild function and services) and restoration (that rebuilds ecosystems/species populations);
4. Transform: align business models/city plans with transformative change (on an equitable basis).

This prototype also envisages several potential approaches for allocating responsibility to companies and cities in terms of the amount of restoration or regeneration required within the above framework. The models of allocation share the common element of first mapping the company/city impact. The allocation framework can be applied to terrestrial, marine and freshwater biodiversity. Proxy guidance will be developed by mid-year 2020 for both transformation (considering change within companies and cities and the ways that each can stimulate greater change through activities such as education, culture, political engagement), and regenerative and/or restorative actions.

Working together to deliver solutions

Additional resources

WBCSD is working with members on solution areas to create and mobilize a collective voice of business and create solutions to deliver against these challenges through the new Nature Action project, the [Climate & Energy Program](#) and the [Food & Nature Program](#), which includes the projects of [Climate Smart Agriculture](#), [FReSH](#), [Natural Climate Solutions](#) (in partnership with the Climate & Energy Program), the [Soft Commodities Forum](#), the sector projects [Forest Solutions Group](#) and [Global Agribusiness Alliance](#), and the [We Value Nature training in partnership with the Redefining Value Program](#).

Participate in multi-stakeholder initiatives and business coalitions like [Business for Nature](#), [the Natural Climate Solutions Alliance](#), and multi-stakeholder initiatives like the [Food and Land Use Coalition \(FOLU\)](#) and the [Food System Dialogues](#).

Download the full IPBES Biodiversity and Ecosystem Services report [here](#).

The first report of the World Economic Forum New Nature Economy Series was launched on 19 January 2020. Please find our business summary [here](#). The second report will focus on business opportunities and will be launched ahead of the IUCN Congress in June 2020.

Our Nature Action project work will be aligned with the findings of this report, for which we will be seeking case study examples of specific actions member companies are already taking.

WBCSD has published business summaries of other important reports over the last year. Please see the UN's [IPCC special report on Land](#), with the business summary [here](#); the [EAT-Lancet Commission on Food, Planet, Health](#) with the business summary [here](#); and the [WBCSD CEO Guide to Food System Transformation](#).

About the World Business Council for Sustainable Development (WBCSD)

WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. We help make our member companies more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies.

Our member companies come from all business sectors and all major economies, representing a combined revenue of more than USD \$8.5 trillion and 19 million employees. Our global network of almost 70 national business councils gives our members unparalleled reach across the globe. Since 1995, WBCSD has been uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues.

Together, we are the leading voice of business for sustainability: united by our vision of a world where more than 9 billion people are all living well and within the boundaries of our planet, by 2050.

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