

## Annotated list of key assessments

Parties to the Convention on Biological Diversity have indicated that development of the post-2020 global biodiversity framework should be based on the best available evidence, drawing on existing work and experience. In this context, the Trondheim Conference will provide a space to discuss on status and trends in biodiversity and ecosystem services, and key drivers of change.

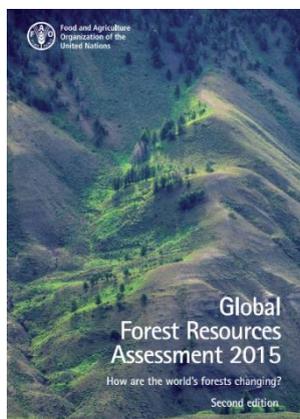
The purpose of this document is to provide some general information on some of the key assessments that have been recently completed and which will be discussed during the Conference as well as some which are underway. The document has been developed as a background document for participants at the ninth Trondheim Conference on Biodiversity, and it is for information only.

### Global Environment Outlook 6 (GEO-6)<sup>1</sup>



The Global Environment Outlook is the UN Environment's flagship environmental assessment. GEO-6, published in 2019, builds on the findings of previous reports – it outlines the current state of the environment, illustrates possible future environmental trends and analyses the effectiveness of policies. The report highlights the interlinkages between a healthy environment, economic development and human wellbeing, and how these are impacted by environmental decline. It presents the main drivers of environmental change, and opportunities to mitigate these, through actions by decision-makers to build a sustainable future.

### Global Forest Resources Assessment 2015<sup>2</sup>



The second edition of the Global Forest Resources Assessment (FRA), by the Food and Agriculture Organization of the United Nations (FAO), reports on the current trends in the World's forests, as well as changes over the last 25 years. A range of data are collected – these are submitted at the country level through Country Reports, and using earth observation data to analyse global forest trends. The data are used to statistical profiles and indicators, which contribute to towards reporting of forest-related indicators of the Sustainable Development Goals adopted by the United Nations General Assembly in 2015. A standardised reporting methodology ensures that national statistics can be reliably aggregated at national and global levels. The FRA strengthens countries' reporting capacities to international agreements.

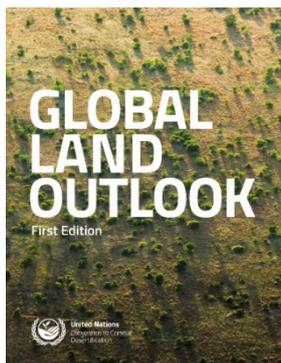
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<sup>1</sup> See full report

<https://content.yudu.com/web/2y3n2/0A2y3n3/GEO6/html/index.html?refUrl=https%253A%252F%252Fwww.unenvironment.org%252Fresources%252Fglobal-environment-outlook-6>. See summary for policymakers  
[https://wedocs.unep.org/bitstream/handle/20.500.11822/27652/GEO6SPM\\_EN.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/27652/GEO6SPM_EN.pdf?sequence=1&isAllowed=y)

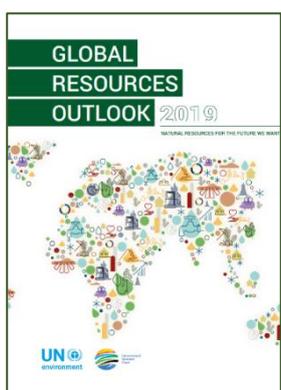
<sup>2</sup> See full report <http://www.fao.org/3/a-i4793e.pdf>

### Global Land Outlook (GLO)<sup>3</sup>



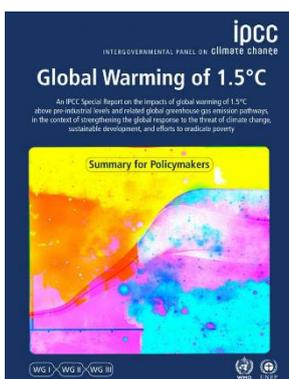
The first edition of the Global Land Outlook, was led by the Secretariat of the United Nations Convention to Combat Desertification (UNCCD), in association with a number of partners. The publication reviews the role of land in the provision of services to humans, and to livelihoods and wellbeing. As well as its role in mitigating impacts of climate change and biodiversity loss. The Report discusses the main drivers of land use change, and the wider impacts this has. The Report presents suggestions for the way forward, to secure sustainable environmental, economic and social development.

### Global Resources Outlook<sup>4</sup>



This Report, published in 2019 by the International Resource Panel, presents trends, patterns and impacts in the way societies and economies extract, use, and dispose of natural resources. It highlights the upward trends of economic development, and the associated patterns of unsustainable industrialisation. The unequal distribution of benefits of resource use, has global and long lasting impacts on the environment, human well-being, livelihoods. The Report provides recommendations, based on scientific research, to support the sustainable management of natural resources that allows economic prosperity and human well-being, while not damaging the environment.

### Global Warming of 1.5°C. An 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<sup>5</sup>



This IPCC Special Report, published in 2018, examines the impacts of global warming of 1.5 °C above pre-industrial levels, and related global greenhouse gas emission pathways. It investigates a number of different topics including the impacts of climate change on human wellbeing, exploring how cost-effective mitigation pathways can be used to limit warming, and the implications of this on wider sustainable development objectives. It assesses new scientific evidence on the impacts on natural and human systems, and the transformative systemic change required by energy, urban and industrial system to reduce this.

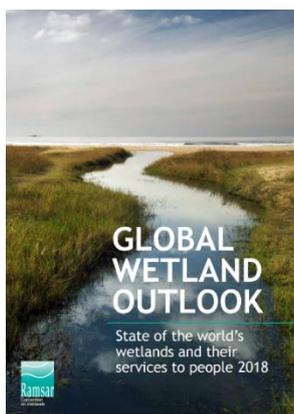
### Global Wetland Outlook: State of the World's Wetlands and their Services to People 2018<sup>6</sup>

<sup>3</sup> Full report <https://knowledge.unccd.int/publication/full-report>

<sup>4</sup> Full report <https://www.resourcepanel.org/file/1172/download?token=muaePxQQ> Summary for policymakers <https://www.resourcepanel.org/file/1161/download?token=gbnLydMn>

<sup>5</sup> Full report <https://www.ipcc.ch/sr15/> Summary for policymakers <https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/>

<sup>6</sup> Full report <https://www.global-wetland-outlook.ramsar.org/outlook>



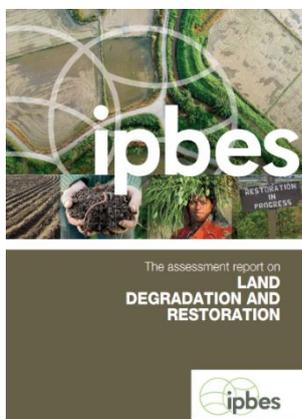
The Report, welcomed in 2018 by Contracting Parties to the Ramsar Convention, evaluates current status and trends of wetlands, the drivers and impacts of change, and mitigation measures required to preserve their ecological integrity. The value and contributions of wetlands to human livelihood and wellbeing are often overlooked, and effective management is required. Wetland management to prevent loss and degradation. The Report provides a series of recommendations at international and national levels, to safeguard their survival. This includes strengthening wetland policy, providing guidance for sustainable use of Ramsar Sites, improving wetland monitoring and ensuring all local and indigenous knowledge is captured in decision-making.

## IPBES Global Assessment Report on Biodiversity and Ecosystem Services<sup>7</sup>



The IPBES Global Assessment Report on Biodiversity and Ecosystem Services, launched in May 2019, was the first intergovernmental report of its kind. It assesses changes over the past five decades, and explores the intertwining relationship between environmental change, economic development and human wellbeing. It also draws on indigenous and local knowledge, particularly exploring issues relevant to indigenous peoples and local communities. The Report was based on a comprehensive review of around 15,000 scientific and government sources, and was compiled by 145 expert authors from 50 countries, with many other contributing authors.

## IPBES Assessment Report on Land Degradation and Restoration<sup>8</sup>



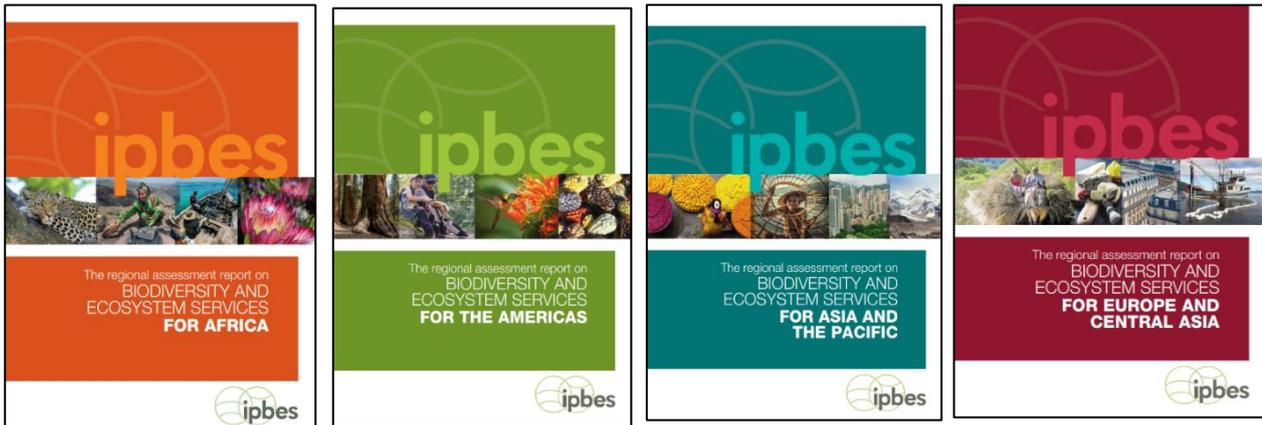
The IPBES Assessment Report on Land Degradation and Restoration, published in 2018, provides a critical analysis of the drivers, status, and trends of terrestrial ecosystems. The Report highlights how land degradation has a huge impact on biodiversity and ecosystem services, which humans rely heavily on. The Report examines impacts from all terrestrial regions and biomes, and shows that land degradation drivers and processes can vary in severity and specificity within and between regions and countries. The report identifies a range of governance options, policies and management practices that can help support stakeholders mitigate the negative environmental, social and economic consequences of land degradation and to rehabilitate and restore degraded land.

<sup>7</sup> Summary for policymakers <https://www.ipbes.net/news/ipbes-global-assessment-summary-policymakers-pdf>

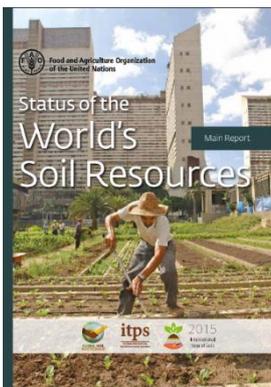
<sup>8</sup> Full report [https://www.ipbes.net/system/tdf/2018\\_ldr\\_full\\_report\\_book\\_v4\\_pages.pdf?file=1&type=node&id=29395](https://www.ipbes.net/system/tdf/2018_ldr_full_report_book_v4_pages.pdf?file=1&type=node&id=29395) Summary for policymakers [https://www.ipbes.net/system/tdf/spm\\_3bi\\_ldr\\_digital.pdf?file=1&type=node&id=28335](https://www.ipbes.net/system/tdf/spm_3bi_ldr_digital.pdf?file=1&type=node&id=28335)

## IPBES Regional Assessment Reports

Four IPBES Regional Assessment Reports – for Africa<sup>9</sup>, Americas<sup>10</sup>, Asia-Pacific<sup>11</sup>, and Europe and Central Asia<sup>12</sup> – were launched in 2018. These Reports evaluate the status, trends and relationships between biodiversity, ecosystem functions and ecosystem services at the regional and sub-regional level. The Reports also explore the effectiveness of the global response, 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 Reports aim to build the science-policy interface, to allow effective policy and decision-making.



## Status of the World's Soil Resources<sup>13</sup>



The Report was published in 2015, by the Intergovernmental Technical Panel on Soils (ITPS), the main scientific advisory body to the Global Soil Partnership (GSP), hosted by the Food and Agriculture Organization of the United Nations (FAO). The Report was the first major global assessment on soils and soil-related issues. It reports on the status of the world's soil resources and the status of degradation. It discusses the impact of poor soil quality on food production and security, and further implications of poverty and hunger. It suggests measures for sustainable soil management, and alignment with reporting for soil-related Sustainable Development Goals.

<sup>9</sup> Full report [https://www.ipbes.net/system/tdf/africa\\_assessment\\_report\\_20181219\\_0.pdf?file=1&type=node&id=29243](https://www.ipbes.net/system/tdf/africa_assessment_report_20181219_0.pdf?file=1&type=node&id=29243).

Summary for policymakers [https://www.ipbes.net/system/tdf/spm\\_africa\\_2018\\_digital.pdf?file=1&type=node&id=28397](https://www.ipbes.net/system/tdf/spm_africa_2018_digital.pdf?file=1&type=node&id=28397)

<sup>10</sup> Full report [https://www.ipbes.net/system/tdf/2018\\_americas\\_full\\_report\\_book\\_v5\\_pages\\_0.pdf?file=1&type=node&id=29404](https://www.ipbes.net/system/tdf/2018_americas_full_report_book_v5_pages_0.pdf?file=1&type=node&id=29404).

Summary for policymakers [https://www.ipbes.net/system/tdf/spm\\_americas\\_2018\\_digital.pdf?file=1&type=node&id=28393](https://www.ipbes.net/system/tdf/spm_americas_2018_digital.pdf?file=1&type=node&id=28393)

<sup>11</sup> Full report [https://www.ipbes.net/system/tdf/2018\\_asia\\_pacific\\_full\\_report\\_book\\_v3\\_pages.pdf?file=1&type=node&id=29507](https://www.ipbes.net/system/tdf/2018_asia_pacific_full_report_book_v3_pages.pdf?file=1&type=node&id=29507).

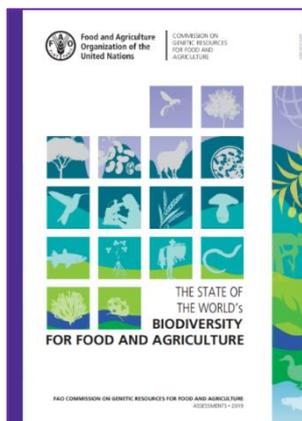
Summary for policymakers [https://www.ipbes.net/system/tdf/spm\\_asia-pacific\\_2018\\_digital.pdf?file=1&type=node&id=28394](https://www.ipbes.net/system/tdf/spm_asia-pacific_2018_digital.pdf?file=1&type=node&id=28394)

<sup>12</sup> Full report [https://www.ipbes.net/system/tdf/2018\\_eca\\_full\\_report\\_book\\_v5\\_pages\\_0.pdf?file=1&type=node&id=2918](https://www.ipbes.net/system/tdf/2018_eca_full_report_book_v5_pages_0.pdf?file=1&type=node&id=2918)

Summary for policymakers [https://www.ipbes.net/system/tdf/spm\\_2b\\_eca\\_digital\\_0.pdf?file=1&type=node&id=28318](https://www.ipbes.net/system/tdf/spm_2b_eca_digital_0.pdf?file=1&type=node&id=28318)

<sup>13</sup> Full report <http://www.fao.org/3/i5199e/i5199E.pdf> Technical Summary <http://www.fao.org/3/a-i5126e.pdf>

## The State of the World's Biodiversity for Food and Agriculture<sup>14</sup>



This Report launched by the Food and Agriculture Organization of the United Nations and developed under the guidance of the Commission on Genetic Resources for Food and Agriculture, was published in 2019. It explores the global impact of biodiversity for food and agriculture on sustainability, economic development and conservation. The report covers a range of topics including drivers, status and trends; sustainable management practices, especially in agro-industry; and future needs and challenges in implementation. The Report highlights that biodiversity is key to the provision of food and agricultural practices, but trends are currently in decline. Effective legal, policy and institutional frameworks are required to improve biodiversity, and ensure sustainable food security and human wellbeing.

## The State of the World Fisheries and Aquaculture 2018<sup>15</sup>



The Report was published in 2018 by the Food and Agriculture Organization of the United Nations (FAO). It reports on major trends in global fisheries and aquaculture, the status of fish stocks, fish production, and employment rates in the sector. It highlights the challenges faced: human derived - including overharvesting and pollution, and environmental – including impacts of climate change and biodiversity. It explores emerging issues in the sector, and the role of technology in achieving sustainability.

## World Ocean Assessment<sup>16</sup>



The World Ocean Assessment, published in 2016 by the United Nations, is the first global integrated marine assessment. It reviews the state of the marine environment, at both the global and supra-regional levels. It provides an integrated view of environmental, economic and social issues in relation to the marine environment. The Report provides discussion on 10 main themes highlighted as important to the oceans – including the impacts of climate change, overexploitation, food security and agriculture. It provides an important scientific resource for decision-makers involved in ocean issues, including governments, intergovernmental processes, and all policy-makers. The assessment helps to implement the 2030 Agenda for Sustainable Development – especially its ocean related goals. The UN General Assembly launched in 2015 the second cycle of the

Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects.<sup>17</sup>

<sup>14</sup> Full report <http://www.fao.org/3/CA3129EN/CA3129EN.pdf>

<sup>15</sup> Full report <http://www.fao.org/3/I9540EN/i9540en.pdf>

<sup>16</sup> Full report [www.un.org/Depts/los/woa](http://www.un.org/Depts/los/woa) Summary [https://www.un.org/Depts/los/global\\_reporting/WOA\\_RPROC/Summary.pdf](https://www.un.org/Depts/los/global_reporting/WOA_RPROC/Summary.pdf)

<sup>17</sup> Progress update <https://www.un.org/regularprocess/content/regular-process-0>

## Key assessments under development

### IPCC Special Report on the ocean and cryosphere in a changing climate<sup>18</sup>

This IPCC Special Report, to be finalised in September 2019, will assess literature relevant to climate change and the oceans and the cryosphere. It will be broken down into a number of themes, including high mountain areas; Polar regions; sea level rise and implications for low lying islands, coasts and communities; marine ecosystems; dependent communities; extremes, abrupt changes and managing risks.

### IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security and greenhouse gas fluxes in terrestrial ecosystems<sup>19</sup>

This IPCC Special Report, to be finalised in September 2019, will assess literature relevant to land-climate interactions; desertification; land degradation; food security; interlinkages between desertification, land degradation, food security and greenhouse gas fluxes: synergies, trade-offs and integrated response options; risk management and decision making in relation to sustainable development.

### Global Biodiversity Outlook, fifth edition<sup>20</sup>

It will provide a report on the implementation of the Strategic Plan for Biodiversity 2011-2020, an analysis of the progress towards reaching the Aichi Biodiversity Targets and their contribution to the Sustainable Development Goals. It will draw upon national reports from Parties, IPBES thematic, regional and global assessments, information from other biodiversity-related conventions, using indicator information provided by the Biodiversity Indicators Partnership and indigenous and local knowledge.

### IPBES thematic assessment on the sustainable use of wild species<sup>21</sup>

The assessment currently underway will evaluate sustainable practices of wild species, and the factors and tools used in their conservation. It will examine the relationship between the wild species, and their habitats and ecology. It will examine trends in use of wild species, and challenges threatening their existence. It will explore the drivers of these trends, and the role of policy in promoting sustainable use.

### IPBES thematic assessment on invasive alien species and their control<sup>22</sup>

This assessment, currently on-going, will evaluate the threat of invasive alien species to biodiversity, ecosystem services and livelihoods. It will assess global trends of invasive alien species at different spatial scales and will integrate different knowledge and values.

### IPBES methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services<sup>23</sup>

The assessment will assess the diverse conceptualization of values of nature and its benefits, including biodiversity and ecosystem services; the diverse valuation methodologies and approaches; the different approaches that acknowledge, bridge and integrate the diverse values and valuation methodologies for policy and decision-making support; and knowledge and data gaps and uncertainties.

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<sup>18</sup> See progress update at <https://www.ipcc.ch/report/srocc/>

<sup>19</sup> See progress update at <https://www.ipcc.ch/report/srcl/>

<sup>20</sup> CBD COP Decision 14/35 <https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-35-en.pdf>

<sup>21</sup> Scoping report, Annex IV to decision IPBES-5/1 [https://www.ipbes.net/system/tdf/ipbes-5-15\\_en.pdf?file=1&type=node&id=15537](https://www.ipbes.net/system/tdf/ipbes-5-15_en.pdf?file=1&type=node&id=15537)

<sup>22</sup> Scoping report, Annex III to decision IPBES-4/1 [https://www.ipbes.net/system/tdf/downloads/pdf/ipbes\\_4\\_19\\_en.pdf?file=1&type=node&id=13306](https://www.ipbes.net/system/tdf/downloads/pdf/ipbes_4_19_en.pdf?file=1&type=node&id=13306)

<sup>23</sup> Scoping report, Annex VI to decision IPBES-4/1 [https://www.ipbes.net/system/tdf/downloads/pdf/ipbes\\_4\\_19\\_en.pdf?file=1&type=node&id=13306](https://www.ipbes.net/system/tdf/downloads/pdf/ipbes_4_19_en.pdf?file=1&type=node&id=13306)