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Summary of the Seventh Session of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services: 29 April – 4 May 2019

The seventh session of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES-7) was held from 29 April – 4 May 2019 in Paris, France. It was preceded by the IPBES-7 Stakeholder Day on 28 April 2019. Close to 800 participants attended the meeting, representing IPBES member and non-member governments, UN agencies and convention secretariats, intergovernmental and non-governmental organizations, indigenous peoples and local communities (IPLCs), and stakeholder groups.

Highlights of the meeting include:

- approval of the summary for policy makers (SPM) and acceptance of the chapters of the Global Assessment on Biodiversity and Ecosystem Services, the first intergovernmental global assessment of this kind and the first comprehensive assessment since the Millennium Ecosystem Assessment (MA) released in 2005;
- adoption of the IPBES's Rolling Work Programme up to 2030, including new assessments on: the nexus between biodiversity and water, food, and health; the determinants of transformative change; the impact and dependence of business on biodiversity; and a technical report on biodiversity and climate change intended to be prepared jointly with the Intergovernmental Panel on Climate Change (IPCC); and
- adoption of a response to the External Review of the Platform.

Delegates celebrated the finalization of the Global Assessment by giving standing ovations to the Contributing Lead Authors' team and the Secretariat's Technical Support Unit (TSU). They lauded the "enormous work" that had gone into the assessment and the "unprecedented scope and quality of the report." Delegates described the assessment as a key milestone for IPBES as well as for international discussions on biodiversity. Others noted that IPBES has delivered on the most important objective of its first work programme by providing the most comprehensive assessment of global biodiversity to date. Many also highlighted its importance as input to the development of the post-2020 biodiversity framework. Delegates gave standing ovation to outgoing IPBES Chair Robert Watson for his outstanding contribution.

More than 150 leading experts from 50 countries collaborated to produce the Global Assessment, while additional contributors raised the number of experts to 400, from a wide array of natural

and social sciences. The work lasted more than three years, drawing from 15,000 references, including scientific papers, government information, and additional relevant documents. In addition to scientific knowledge, the Global Assessment systematically included indigenous and local knowledge (ILK) to integrate all forms of knowledge.

The final report offers an overview of biodiversity and ecosystem trends and closely examines them in relation to key goals of the international environmental agenda, including the Sustainable Development Goals (SDGs), the Aichi Biodiversity Targets, and the Paris Agreement on climate change. It builds on previous IPBES Assessments, including the regional ones, the Pollinators' Assessment, and the Land Degradation and Restoration Assessment.

A Brief History of IPBES

The Intergovernmental Platform on Biodiversity and Ecosystem Services is an independent, intergovernmental body, established in 2012, to provide evidence-based, objective, and policy-relevant information to decision makers regarding the planet's biodiversity, ecosystems, and the benefits they provide to people. The Platform's work is divided into four functions:

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- developing assessments on specific themes or methodological issues at global and regional scales;
- providing policy support through the development of tools and methodologies, and facilitating their use;
- building the capacity and knowledge of member states; and
- ensuring impact through an effective communication and outreach strategy.

The Platform's main governing body is the IPBES Plenary composed of representatives of member states. Non-member states, UN organizations, non-governmental organizations (NGOs), and other organizations can attend as observers. The work of the Plenary is supported by the Bureau overseeing the Platform's administrative functions, and the Multidisciplinary Expert Panel (MEP) overseeing the Platform's scientific and technical functions. As of April 2019, the Platform has 132 member states.

Stakeholder Days have been organized prior to every session of the IPBES Plenary to continue to provide a forum for stakeholder engagement after the establishment of IPBES as an intergovernmental forum. Stakeholder Days bring together stakeholders from scientific, indigenous and local communities, and civil society organizations to receive updates about the work and intersessional activities of IPBES, exchange views regarding the issues on the agenda, and coordinate general statements and positions on specific issues.

Key Turning Points

IPBES was established in 2012 as a result of a consultative process initiated in response to the MA, the first state-of-the-art scientific appraisal of the conditions and trends in the world's ecosystems and the services they provide, which was conducted from 2001 to 2005. In January 2005, the Paris Conference on Biodiversity, Science and Governance proposed to initiate consultations to assess the need, scope, and possible form of an international mechanism of scientific expertise on biodiversity as part of the MA follow-up process.

IMoSEB Process: Supported by the Government of France, the consultative process on an International Mechanism of Scientific Expertise on Biodiversity (IMoSEB) was conducted through an International Steering Committee and a series of regional consultations from 2005 to 2007. At its final meeting in November 2007, the Steering Committee invited donors and governments to provide support for the further consideration of the establishment of a science-policy interface. It also invited the Executive Director of the UN Environment Programme (UNEP) and others to convene a meeting to consider establishing such an interface.

Following this invitation, stakeholders also agreed that the follow-up to the IMoSEB process and the MA follow-up process initiated under UNEP in 2007 should merge. A joint meeting took place in March 2008 to develop a common approach. In the same year, the ninth Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) welcomed the decision of the UNEP Executive Director to convene an *Ad Hoc* Intergovernmental and Multi-Stakeholder Meeting on an IPBES and requested the CBD *Ad Hoc* Working Group on Review of Implementation to consider the meeting's outcomes.

Ad Hoc Intergovernmental Multi-Stakeholder Process: From 2008 to 2010, the establishment of a science-policy interface was further discussed in a series of *Ad hoc* Intergovernmental Multi-Stakeholder Meetings. The first

meeting (November 2008, Putrajaya, Malaysia) recommended that UNEP undertake a preliminary gap analysis on existing interfaces. Based on this analysis, the second meeting (October 2009, Nairobi, Kenya) developed options to strengthen the science-policy interface, and functions and possible governance structures of an IPBES. At the third meeting (June 2010, Busan, Republic of Korea), delegates adopted the Busan Outcome, which recommended inviting the UN General Assembly (UNGA) to take appropriate action for establishing an IPBES. The sixty-fifth session of the UNGA (December 2010) requested UNEP to fully operationalize the platform and convene a plenary meeting to determine the modalities and institutional arrangements of the platform at the earliest opportunity. The 26th session of the UNEP Governing Council/Global Ministerial Environment Forum (February 2011, Nairobi, Kenya) also called for convening a plenary session for an IPBES.

Plenary for an IPBES: The modalities and institutional arrangements of IPBES were negotiated at two sessions of an intergovernmental "Plenary for an IPBES," established as an interim body. At the first session (October 2011, Nairobi, Kenya), delegates considered the platform's functions and operating principles, work programme, and legal issues relating to its establishment and operationalization. At the second session (April 2012, Panama City, Panama), delegates considered functions and structures of bodies that might be established under the platform, rules of procedure, and the platform's work programme. Delegates selected Bonn, Germany, as the physical location of the IPBES Secretariat and adopted a resolution formally establishing IPBES.

Antalya Consensus: The first two sessions of the IPBES Plenary (January 2013, Bonn, Germany, and December 2013, Antalya, Turkey) focused on developing the Platform's structure and processes. IPBES-2 adopted the Antalya Consensus, which included decisions on the development of a work programme for 2014-2018. Delegates also adopted a conceptual framework considering different knowledge systems, and rules and procedures for the Platform on, *inter alia*, the preparation of the Platform's assessments and other deliverables.

First Work Programme: The first IPBES work programme (2014-2018) was adopted at the Platform's third Plenary session (January 2015, Bonn, Germany) together with the stakeholder engagement strategy, a communication and outreach strategy, and the Platform's rules of procedure. With these decisions, IPBES became fully operational and able to initiate its first assessments.

The following assessments were produced during the first work programme:

- Thematic Assessment on Pollinators, Pollination, and Food Production (IPBES-4, February 2016, Kuala Lumpur, Malaysia);
- Methodological Assessment on Scenarios and Models of Biodiversity and Ecosystem Services (IPBES-4);
- Regional Assessment of Biodiversity and Ecosystem Services for Africa (IPBES-6, March 2018, Medellín, Colombia);
- Regional Assessment of Biodiversity and Ecosystem Services for Asia and the Pacific (IPBES-6);
- Regional Assessment of Biodiversity and Ecosystem Services for the Americas (IPBES-6);
- Regional Assessment of Biodiversity and Ecosystem Services for Central Europe and Asia (IPBES-6); and
- Assessment on Land Degradation and Restoration (IPBES-6).

Other outputs produced by the Platform during the first work programme included:

- the IPBES Capacity-building Rolling Plan;
- a Guide to the Production of Assessments;
- a Catalogue of Policy Support Tools and Methodologies, Experts and Partners; and
- a Communication and Outreach Strategy.

IPBES-5: The fifth session of the IPBES Plenary (6-10 March 2017, Bonn, Germany) adopted decisions on, *inter alia*: capacity building; policy support tools and methodologies; the development of a second work programme; ILK; the scoping report for a thematic assessment on the sustainable use of wild species; review of the Platform; and the budget. The meeting was dominated by discussions around the budget and related concerns on whether three pending assessments in the Platform's first work programme could be initiated and, if so, in what order, and whether funds would be sufficient to initiate all three. Delegates decided to prioritize the completion of ongoing assessments and to postpone initiation of new assessments to IPBES-6.

IPBES-6: At its sixth session (17-24 March 2018, Medellín, Colombia) IPBES approved four regional assessments and an assessment on Land Degradation and Restoration. The meeting also adopted: a decision on implementation of the first work programme, including the initiation of work on two new assessments in 2018 on the sustainable use of wild species, and on tools and methodologies regarding multiple values of biodiversity to human societies; the initiation of an assessment on invasive alien species in 2019; and a decision on the development of a strategic framework up to 2030 and elements of a rolling work programme.

IPBES-7 Report

The seventh Plenary of IPBES opened on Monday, 29 April 2019. It was preceded by the IPBES Stakeholder Day on Sunday, 28 April, which provided an opportunity for non-governmental stakeholders to present their activities to support IPBES and discuss their engagement in the Plenary.

The IPBES Stakeholder Day included sessions on:

- sharing information about IPBES and its assessment processes, including to develop the Global Assessment;
- processes, mechanisms, initiatives, and networks available for stakeholder engagement;
- stakeholder capacities, interests, and needs for support;
- activities and initiatives implemented by stakeholders to support IPBES, including through national platforms, business engagement, research, country-level assessments, and stronger efforts to include IPLCs; and
- development of and enhanced stakeholder engagement on the Platform's second work programme.

Opening Plenary

Following a youth dance performance titled "Steps for a Change," Audrey Azoulay, Director-General, United Nations Educational, Scientific and Cultural Organization (UNESCO), welcomed delegates and stressed international alliances between science and youth, disseminating messages more broadly to civil society, and addressing challenges of economic development. IPBES Executive Secretary Anne Larigauderie said the Global Assessment will not only highlight the importance of biodiversity conservation for attaining the SDGs, but also address the intangible contribution of biodiversity to our identity and cultural

heritage. Speaking on behalf of Jean-Yves Le Drian, French Minister for Europe and Foreign Affairs, Laurent Stéfanini, Permanent Delegate of France to UNESCO, recalled that in 2005 then President Jacques Chirac called for creating an intergovernmental expert platform on biodiversity. He emphasized France's commitment to mobilize collective support for the development of an ambitious post-2020 biodiversity framework.

In their opening statements, regional groups stressed, among other things:

- capacity building and knowledge generation;
- financial resources and an ambitious fundraising strategy;
- an ambitious demand-driven second work programme, aligned with the 2030 Agenda for Sustainable Development and the post-2020 biodiversity framework; and
- recognizing the link between biodiversity and climate change.

The International Indigenous Forum on Biodiversity and Ecosystem Services (IIFBES) asked to ensure fair and effective participation of indigenous peoples in the early scoping phases of upcoming assessments. The Open-Ended Network of IPBES Stakeholders (ONet) prioritized assessing causes of biodiversity loss and determinants of transformative change.

Executive Secretary Larigauderie reported on the implementation of the first work programme (IPBES/7/2 and IPBES/7/INF/2,5,11, and 14-16), highlighting work on capacity-building activities, integration of ILK, indicators and data, achievements regarding scenarios and modeling, and policy support tools and methodologies. The Co-Chairs of the assessments on sustainable use of wild species and on multiple values of nature and its benefits updated delegates on progress.

Global Assessment on Biodiversity and Ecosystem Services

On Monday, the Global Assessment Co-Chairs underlined efforts to include ILK, and support for synchronizing policy and practices at all levels. Global Assessment Co-Chair Sandra Díaz (Argentina) presented the major messages of the SPM (IPBES/7/3).

Noting that none of the Aichi Targets touch on indirect drivers of biodiversity loss and that most SDG targets show negative trends, she stated that "deep interdependence with nature may appear obvious, but it seems to be ignored at the policy level." Delegates highlighted the need to:

- find a greater balance between referring to nature's contributions to people (NCP) and ecosystem services;
- consider the sustainable use of biodiversity, and fair and equitable sharing of benefits in the context of transformative change;
- communicate the main figures on biodiversity trends; and
- provide more information on direct and indirect drivers of biodiversity loss.

The item was discussed in a working group chaired by IPBES Chair Robert Watson throughout the week. Discussions addressed the SPM key messages and the background material, and were structured under four main topics, following the SPM structure:

- relationships between nature and humans;
- current status and trends in nature, NCP, and drivers of change;
- goals for conserving and sustainably using nature; and
- scenarios that lead to a sustainable future.

On Tuesday, delegates considered the key messages of the draft SPM, starting with **relationships between nature and humans**. They commented on the importance of an easily understood, clear target for biodiversity conservation and the need for an overview

of knowledge gaps and research needs. On the content of the SPM, comments from delegates focused on: emphasizing the role of businesses and financial institutions; and recognizing the status of crop wild relatives.

Delegates addressed the role of food production and discussed possible synergies, such as agricultural practices that enhance carbon sequestration. They further discussed: baselines to qualify whether a certain environmental decline could be characterized as “rapid” or “severe”; statistical models regarding indicators and their use; and whether specific areas with different trends than the global average should be included, thus portraying spatial heterogeneity.

Delegates further deliberated including specific references to scientific topics and concepts, *inter alia*:

- the exact forest area and tree cover loss;
- the impact of invasive alien species on native biodiversity in areas of high endemism;
- whether using the term “genetic diversity” limits the scope of diversity loss to the genetic level;
- the best way to portray that a decreasing number of varieties of plants and animals are being utilized;
- formal protection regarding crop wild relatives and *in situ* conservation; and
- ways to show that reductions in agricultural and crop wild relative diversity negatively impacts ecosystems by reducing resilience to stressors like climate change, pests, and pathogens.

Participants delved into a discussion on rapid biological evolution caused by anthropogenic drivers, especially for short-lived organisms, trying to clarify the notion, including whether it has negative or positive consequences, or both.

On Wednesday, the group addressed **direct and indirect drivers of change in nature**. Delegates discussed the direct drivers with the largest global impact and focused on prominent indirect drivers, noting the need to use agreed terminology on “human population dynamics and trends,” and ways to reflect the effects of consumption and production patterns. They further deliberated on whether to explicitly refer to: potential positive or negative effects of technological innovation and trade; and regional differentiation regarding the rate of change.

In the discussion on key messages on climate change as a driver, delegates focused on finding language that would be meaningful and useful to national policy makers. The group agreed on text that emphasizes human-induced climate change, the connection between climate change and biodiversity loss, and that climate change exacerbates other drivers of biodiversity loss.

Delegates then addressed the growth in human population and the global economy, which together drive pressures on nature. They delved into lengthy debates on the extent to which unequal access to material goods can be associated with inequity and may lead to social conflict. They considered referring to unequally distributed long-term “impacts” rather than “costs” and to the level of development rather than the income level. They further deliberated on referring to gender exclusion regarding access to NCP and on the effect of armed conflicts on ecosystems.

Delegates further discussed economic incentives that often bring forth environmental harm, focusing on:

- ways to incorporate the consideration of multiple values of ecosystem functions and NCP into economic incentives;
- whether to refer to “environmentally harmful subsidies”;

- whether to refer to high market prices, public subsidies, market distortions, economic incentives related to unsustainable practices, gaps in regulation and unregulated markets, or incentives including subsidies harmful to biodiversity; and
- necessary policy reforms.

Regarding nature managed by IPLCs, delegates deliberated at length on the extent of land that indigenous peoples manage or have tenure rights over. Different opinions surfaced on the relevant categorization and available data, with suggestions including “lands traditionally owned, used, or occupied” by indigenous peoples.

Regarding **goals for conserving and sustainably using nature**, participants briefly discussed the probability of achieving the Aichi Biodiversity Targets and exchanged views over the spatial coverage of protected areas, and whether they are ecologically representative and effectively or equitably managed. They also addressed current negative trends in biodiversity that undermine progress towards the SDGs as well as important positive synergies between preserving nature and achieving SDG-related targets. They deliberated on significant negative effects from global changes in climate and biodiversity to areas where indigenous peoples and many of the world’s poorest communities live. In that respect, they exchanged views on evidence showing the ability of IPLCs to manage and conserve wild and domesticated biodiversity in face of these challenges.

On Thursday, delegates addressed **scenarios that lead to a sustainable future**. They deliberated at length how to reflect that indigenous peoples have different rights than local communities and that such rights are recognized in international law but must be implemented through national law in most countries.

On simultaneously achieving food security and nature conservation, members debated extensively over references to specific agricultural production systems, agricultural practices that support this goal, and whether to broaden the scope to include all NCP.

A lengthy discussion took place on land-based activities that are shown to contribute to climate change mitigation. Delegates exchanged opinions on:

- the merits and downsides of afforestation;
- whether to include ecological reforestation and whether reforestation with “indigenous” or “native” species is always possible; and
- reference to large-scale deployment of bioenergy plantations and afforestation of non-forest ecosystems, in line with the last IPCC report, and their effects on biodiversity.

Participants also addressed urban areas focusing on:

- increased use of green infrastructure and ecosystem-based approaches to advance sustainable urban development while reinforcing climate mitigation and adaptation;
- solutions, including retrofitting with green and blue infrastructure, urban agriculture, green spaces, and vegetation cover in existing urban and peri-urban areas; and
- the potential for complementarity between green infrastructure in urban and surrounding rural areas and large-scale “grey” infrastructure.

On Friday, delegates exchanged opinions on all information and data contained in the **background section** that supports the SPM and discussed all figures and tables.

On Saturday, IPBES Chair Robert Watson underscored the 20,000 comments that were received on the background documentation and the SPM prior to IPBES-7, and the

2,000 comments received on the last version of the SPM, applauding the “incredible work” of all those who contributed to the co-production of the Global Assessment. Plenary then approved the SPM, the background section, tables, and figures (IPBES/7/L.4 and L.4/Add.1-Add.3) and accepted the chapters.

Luthando Dziba (South Africa), on behalf of the MEP, thanked all experts “for the great sacrifice and amount of work that went into producing such an outstanding report” and all governments and participants for their contribution and compromises in this collective exercise. He stressed that the report’s approval and the IPBES’s work programme up to 2030 “build a strong foundation and set the Platform on a new trajectory.”

The Global Assessment Co-Chairs delivered short comments. Josef Settele (Germany) underscored the excellent atmosphere of collaboration between the Co-Chairs and authors. Sandra Díaz (Argentina) stressed that this historic report proves that “some things that look highly unlikely can sometimes happen with the work of people sharing a common ambition,” adding that it offers “inspiration for a better future for life on Earth, including all of us.” Eduardo Brondizio (Brazil/US) emphasized work done during the course of the week to produce “an even better assessment,” thanking the wider biodiversity community for “making this possible.”

Final Outcome: In decision IPBES/7/L.5, the Plenary approves the SPM of the Global Assessment on Biodiversity and Ecosystem Services (IPBES/7/L.4 and L.4/Add.1-3) and accepts the chapters of the assessment, including their executive summaries (IPBES/7/INF/1).

The SPM contains four sections of key messages.

Relationships between nature and humans: The main message of the section is that nature and its vital contributions to people, which together embody biodiversity, and ecosystem functions and services, are deteriorating worldwide. It stresses that both nature and NCP are vital for human existence and good quality of life, but, while nature provides more food, energy, and materials than ever before, this increasingly comes at the expense of its ability to continue providing such contributions in the future and frequently undermines other contributions, which may range from water quality regulation to sense of place. The report states that the biosphere, upon which humanity depends, is being altered in an unparalleled degree across all spatial scale, and biodiversity is declining faster than at any other time in human history.

Main messages under this section include:

- Most of NCP are not fully replaceable, and some are irreplaceable.
- NCP are often distributed unequally across space and time and among different segments of society.
- Since 1970, trends in agricultural production, fish harvest, bioenergy production, and harvest of materials have increased, but 14 of the 18 assessed categories of NCP, mostly regulating and non-material contributions, have declined.
- Nature across most of the globe has now been significantly altered by multiple human drivers and biodiversity is in rapid decline.
- Human actions threaten more species with global extinction now than ever before.
- Loss of diversity, including genetic diversity, poses a serious risk to global food security by undermining the resilience of many agricultural systems.

- Biological communities are becoming more similar to each other in both managed and unmanaged systems within and across regions.
- Human-induced changes are creating conditions for fast biological evolution that can create uncertainty about the sustainability of species, ecosystem functions, and the delivery of NCP.

Current status and trends in nature, NCP, and drivers of change:

This section highlights that the rate of global change in nature during the past 50 years is unprecedented in human history. It underscores five direct drivers that have the largest global impact, which, in order of descending importance, are:

- changes in land and sea use;
- direct exploitation of organisms;
- climate change;
- pollution; and
- invasion of alien species.

These direct drivers result from a variety of indirect drivers that constitute the underlying causes of biodiversity loss and are underpinned by societal values and behaviors that include production and consumption patterns, human population dynamics and trends, trade, technological innovations, and governance.

Key messages under this section include:

- For terrestrial and freshwater ecosystems, land-use change has had the largest relative negative impact on nature since 1970, followed by the direct exploitation of organisms, while in marine ecosystems, this order is reversed.
- Climate change is a direct driver that is increasingly exacerbating the impact of other drivers.
- Many types of pollution, as well as invasive alien species, are increasing.
- In the past 50 years, the human population has doubled, the global economy has grown nearly four-fold, and global trade has grown ten-fold, together driving up the demands for energy and materials.
- Economic incentives generally have favored expanding economic activity, and often environmental harm, over conservation or restoration.
- A quarter of the global land area is traditionally owned, managed, used, or occupied by indigenous peoples and is under increasing pressure. Nature is generally declining less rapidly in indigenous peoples’ land than in other lands, but is nevertheless declining, as is the knowledge of how to manage it.

Goals for conserving and sustainably using nature: This section underscores that such goals cannot be met by current trajectories and can only be achieved through transformative changes across economic, social, political, and technological factors. Past and ongoing declines in biodiversity and NCP mean that goals such the Aichi Biodiversity Targets and the 2030 Agenda will not be met under current trajectories. These declines will also undermine the Paris Agreement on climate change and the 2050 Vision for Biodiversity. Negative trends are projected to continue or worsen in many future scenarios depending upon indirect drivers, such as rapid human population growth, unsustainable production and consumption, and associated technological development.

Key messages in this section include:

- Despite progress, most of the Aichi Biodiversity Targets for 2020 will be missed.

- Current negative trends in biodiversity and ecosystems will undermine progress towards 80% of the assessed targets of SDGs related to poverty, hunger, health, water, cities, climate, oceans, and land (SDGs 1, 2, 3, 6, 11, 13, 14, and 15).
- Areas of the world projected to experience significant negative effects are also home to large concentrations of indigenous peoples and many of the world's poorest communities.
- Except in scenarios that include transformative change, negative trends in nature, ecosystem functions and in many of NCP are projected to continue to 2050 and beyond.
- Climate change is projected to become increasingly important as a direct driver of changes in nature and NCP in the coming decades.

Scenarios that lead to a sustainable future: This section stresses that nature can be conserved, restored, and used sustainably, while simultaneously meeting other global societal goals, through transformative change. It emphasizes that societal goals can be achieved sustainably through effectively enlisting individual and collective action for transformative change. By its very nature, this change can expect opposition from those with interests vested in maintaining the status quo.

Key messages in this section include:

- The global environment can be safeguarded through enhanced international cooperation and linking locally relevant measures.
- Five main interventions (“levers”) can generate transformative change by tackling the underlying indirect drivers of nature deterioration: incentives and capacity building; cross-sectoral cooperation; pre-emptive action; decision-making in the context of resilience and uncertainty; and environmental law and implementation.
- Transformations towards sustainability are more likely when efforts are directed towards: visions of a good life; total consumption and waste; values and action; inequalities; justice and inclusion in conservation; externalities and telecouplings; technology, innovation, and investment; and education, knowledge generation and sharing.
- The character and trajectories of transformation will vary across contexts, among others, in developing and developed countries. Related risks can be reduced through governance approaches that are integrative, inclusive, informed, and adaptive.
- Recognizing the knowledge, innovations, practices, institutions, and values of IPLCs and their inclusion and participation in environmental governance often enhances their quality of life as well as nature conservation, restoration, and sustainable use.
- Feeding humanity and enhancing the conservation and sustainable use of nature are complementary and closely interdependent goals that can be advanced through sustainable agriculture, aquaculture and livestock systems, the safeguarding of native species, varieties, breeds, and habitats, and ecological restoration.
- Sustaining and conserving fisheries and marine species and ecosystems can be achieved through a coordinated mix of interventions.
- Land-based climate change mitigation activities can be effective and support conservation goals, but, the large-scale deployment of bioenergy plantations and afforestation of non-forest ecosystems can come with negative side effects for biodiversity and ecosystem functions.

- Nature-based solutions can be cost-effective for meeting the SDGs in cities, which are crucial for global sustainability.
- Evolution of global financial and economic systems to build a global sustainable economy, steering away from the current limited paradigm of economic growth.

Background: The background document to the SPM (IPBES/7/L.4/Add.1) provides additional information on the key topics under consideration following the same structure. It further includes a table with approaches for sustainability, and possible actions and pathways for achieving them, noting that the table is not exhaustive, but rather illustrative, using examples from the assessment report. The background document contains two appendices. Appendix I contains definitions and the IPBES conceptual framework, which is a highly simplified model of the complex interactions between the natural world and human societies. Appendix II communicates the way the degree of confidence was calculated for the report’s main findings.

Main figures to be included in the background document to the SPM are contained in IPBES/7/L.4/Add.2.

- Figure 1 contains the global trends in nature’s capacity to sustain contributions to good quality of life from 1970 to the present, which show a decline for 14 of the 18 analyzed categories of NCP.
- Figure 2 includes examples of global declines in nature, emphasizing reductions in biodiversity that have been and are being caused by direct and indirect drivers of change.
- Figure 3 offers an illustration of the proportion of assessed species that are threatened with extinction and overall trends showing rapid deterioration, with extinction rates increasing sharply in the past century.
- Figure 4 addressed the contributions of IPLCs to the enhancement and maintenance of wild and domesticated biodiversity and landscapes.
- Figure 5 discusses development pathways since 1970 for selected key indicators of human-environment interactions, which show a large increase in the scale of global economic growth and its impacts on nature, with strong contrasts across developed, developing, and least developed countries.
- Figure 6 presents a summary of progress towards the Aichi Targets.
- Figure 7 contains a summary of recent status of, and trends in, aspects of nature and NCP that support progress towards achieving selected targets of the SDGs.
- Figure 8 highlights projections of impacts of land use and climate change on biodiversity and nature’s material and regulating contributions to people between 2015 and 2050.
- Figure 9 presents transformative change in global sustainability pathways.

Document IPBES/7/L.4/Add.3 provides an overview of existing knowledge gaps to be included in the SPM. Identified areas of knowledge gaps are:

- data, inventories, and monitoring on nature and drivers of change;
- gaps on biomes and units of analysis;
- taxonomic gaps;
- NCP-related gaps;
- links between nature, NCP, and drivers with respect to targets and goals;
- integrated scenarios and modelling studies;
- potential policy approaches; and
- IPLCs.

Financial and Budgetary Arrangements

This item (IPBES/7/4) was introduced on Monday and discussed in a contact group throughout the week.

IPBES Executive Secretary Larigauderie highlighted a 25% increase in contributions for 2018 compared to 2017.

Plenary adopted the budget on Saturday.

- Final Outcome:** In its draft decision (IPBES/7/L.6), Plenary:
- invites pledges and contributions to the Platform's trust fund, as well as in-kind contributions, from governments, UN bodies, the Global Environment Facility, other intergovernmental organizations, stakeholders, and others in a position to do so, including regional economic integration organizations, the private sector, and foundations, to support the work of the Platform;
 - requests the Secretariat to report to IPBES-8 on expenditures for 2018-2020 and on activities related to fundraising;
 - adopts the revised budgets for 2019 and 2020, amounting to USD 8,269,605 and USD 7,146,360, respectively;
 - adopts the provisional budget for 2021, amounting to USD 8,721,810;
 - requests the Secretariat to prepare draft guidelines regulating contributions to IPBES from the private sector and non-governmental stakeholders, and present those guidelines for approval by IPBES-8; and
 - decides that, for private sector and non-governmental stakeholders, neither logos nor names of donors will be mentioned in IPBES reports.

Review of the Platform

The external review of IPBES, aimed at ensuring IPBES fulfills its mandate as a science-policy interface, was discussed on Monday and Tuesday. The final decision was adopted in plenary on Wednesday morning.

Marina Rosales Benites (Peru) and Peter Bridgewater (Australia), Co-Chairs of the External Review Panel, introduced the Review's key recommendations (IPBES/7/5, IPBES/7/INF/18-20), namely that IPBES should:

- define a vision and mission;
- adopt an adaptive strategy;
- strengthen policy aspects of its work;
- maintain independence;
- develop a more collaborative approach to stakeholders; and
- achieve financial sustainability.

On Tuesday, a Working Group on the Review, co-chaired by Senka Barudanovic (Bosnia and Herzegovina), and Fundisile Goodman Mketeni (South Africa), convened to prepare a draft decision.

External Review Panel Co-Chair Bridgewater drew attention to:

- the legal status and perception of IPBES as a UN organization;
- the overlapping functions of the MEP and Bureau;
- the SPMs often being too generic for policy makers to apply;
- the difficulty of reaching local policy makers, citizens, the private sector, and practitioners; and
- defining pathways for IPBES to influence policy more systematically and strategically.

On requesting the MEP and Bureau to develop a draft vision, mission, and strategy, much of the discussion focused on whether this is just a communication issue, and a perceived mismatch between the mandates of the MEP, Bureau, and Secretariat,

and the requests addressed to them. Delegates underscored the importance of clarifying the bodies' mandates in the lead up to the future work programme.

They further addressed: the need for mid-term and final reviews of the work programme up to 2030, considering lessons learned from the current review process; how recommendations from the Review will be addressed as part of the work programme; and streamlining IPBES's governance architecture.

Final Outcome: In its draft decision (IPBES/7/L.2), Plenary:

- takes note of the activities undertaken to implement the recommendations from the report;
- requests the Bureau, MEP, and Secretariat to take the recommendations into account in the implementation of IPBES's work programme up to 2030 and to identify solutions and/or issues for the Plenary to consider at IPBES-8; and
- encourages members to use the findings and recommendations contained in the report to inform their decisions and other interactions with the Platform, and in supporting the work programme's implementation.

Future Work Programme

On Monday afternoon, in plenary, IPBES Executive Secretary Larigauderie delineated milestones in the development of the second work programme (IPBES/7/6 and 6/Add.1 and 2 and INF/5 and 21). Luthando Dziba, MEP Co-Chair, gave an overview of priority topics included in the draft. This item was considered in a working group co-chaired by Ana Maria Hernandez Salgar (Colombia) and Ivar Andreas Baste, (Norway) on Wednesday, Thursday, and Friday.

On Wednesday, discussions opened with general comments on the draft work programme. Cautioning against the risk of "losing momentum," many members underscored the need to agree on the new work programme at IPBES-7, especially noting the need to initiate work on transformative change. As priorities, many also emphasized the assessment on the nexus between biodiversity and water, food, and health, as well as the technical report on interlinkages between biodiversity and climate change to be prepared with the IPCC. Several members further noted that a report on business impact and dependence on biodiversity will be key for further engaging the private sector.

One delegation said IPBES should focus on completing the three remaining assessments of the first work programme, pointing to budget and human resource constraints. Delegates also emphasized the need for the Platform to remain flexible and responsive to emerging needs, and to inform the post-2020 biodiversity process and align with the 2030 Agenda timeline. Several members supported giving more prominence in the work programme to the request put forward by a number of multilateral environmental agreements to focus on the issue of connectivity. Despite general support for the rolling nature of the work programme, views differed on how to reconcile this with the need to define a timeline for deliverables and to ensure predictability in terms of budgetary implications and signaling to the research community.

On Thursday, many delegations noted that, with the exception of the deliverables for the objective of "assessing knowledge," the other deliverables set out in the draft work programme are too broad, and should be more tailored to the identified priority topics. One delegation proposed requesting the task forces to develop more concrete deliverables for consideration by IPBES-8. Members then agreed to remove most references to "deliverables"

and consider the elements in the draft work programme as objectives. Co-Chair Baste called attention to a proposal being discussed in the budget group to postpone IPBES-8 until January 2021, which, if decided, would have implications for the elaboration of the work programme.

On future assessments, one delegate proposed adding global or regional assessments and another suggested adding an assessment on connectivity. Disagreement ensued on the practicality of adding more assessments and thus filling the agenda for the foreseeable future, creating budgetary concerns, and restricting flexibility to respond to needs arising from the post-2020 biodiversity framework. On the way forward, suggestions included: retaining the list of priority assessments, and adding a second list of issues that should be considered at a later stage; and incorporating connectivity as a cross-cutting issue to be considered across assessments.

On the role of national focal points, delegates noted their role goes beyond the issue of communication and engagement, for example by providing feedback on the scoping for assessments, and agreed that they are key to enhancing national capacities.

On the objective “reviewing effectiveness,” delegates outlined that this should include a periodic review of effectiveness of IPBES, review of the Platform’s conceptual framework and functions, and a review that enables communicating lessons learned from outgoing to incoming assessment contributors. On the objective “communicating and engaging,” delegates discussed how to strengthen the engagement of governments and stakeholders, respectively. Regarding which stakeholders to strengthen, delegates added “self-organized stakeholder networks of IPBES,” with a footnote referencing IIFBES and ONet. On deliverables continuing from the first work programme, delegates emphasized the need for better integration among the Platform’s four functions, echoing recommendations from the External Review of the Platform.

On Friday, Working Group Co-Chair Hernandez Salgar opened the session noting that, on the previous evening, delegates had converged on approving two scoping processes: one on the nexus between biodiversity and water, food, and health; and one on transformative change. One delegation disagreed, reiterating budgetary and human resource concerns, time constraints, and the desire to retain flexibility, and proposing to either delay ongoing assessments or the scoping for new ones. Others argued that postponing IPBES-8 would free up time, financial, and human resources for substantive work on the scoping for the assessments.

Additional interventions highlighted potential synergies from holding parallel scoping processes, notably to avoid duplication. Regarding the timeline for the scoping for the business assessment, delegates strongly disagreed over whether it should be considered by IPBES-8 or IPBES-9. Some emphasized that it would send a “bad signal” to wait to give guidance to business, while also asking the sector to “act now” and make commitments to the post-2020 biodiversity framework. One delegate noted discussions in the budget group on making additional funding available to support the Secretariat, others said “this is not just a budget question,” with another delegation pointing to human resource constraints both in terms of contributing experts and IPBES Plenary, and other delegations stressing the need for balance between the Platform’s functions.

Lengthy debate emerged on how to engage the IPCC in developing a joint technical publication on biodiversity and climate change. After informal consultations, delegates eventually

agreed to request the IPBES Secretariat to explore possible joint activities, including such a report, with the IPCC Secretariat, and to report back on those discussions at IPBES-8. Emphasizing the rolling nature of the work programme, they also decided to launch additional calls for requests on issues to be considered under the work programme up to 2030, and that such inputs should be submitted no later than six months prior to a Plenary session. Delegates further agreed that other aspects considered by deliverables under the topic of “understanding the importance of biodiversity in achieving the 2030 Agenda” may include the role of connectivity in ensuring integrity and resilience in socio-ecological systems.

On Saturday in Plenary, delegates agreed on initiating the scoping for the business report at IPBES-8 and, depending on the outcome of the scoping, have the assessment start after IPBES-9. They agreed to reflect this in the timeline for the assessments.

Final Outcome: In the rolling work programme up to 2030 annexed to decision IPBES/7/L.5, Plenary, *inter alia*, delineates:

- three topics arising from the prioritization of the responses to the call for requests on issues to be considered under the work programme up to 2030, namely: understanding the importance of biodiversity in achieving the 2030 Agenda; understanding the underlying causes of biodiversity loss and determinants of transformative change and options for achieving the 2050 Vision for Biodiversity; and measuring business impact and dependence on biodiversity and NCP;
- six objectives: assessing knowledge; building capacity; strengthening the knowledge foundations; supporting policy; communicating and engaging; and improving the effectiveness of the Platform;
- an indicative timeline of initial assessments; and
- institutional arrangements for its implementation.

In the decision, Plenary further:

- adopts the annexed rolling work programme of the Platform for the period up to 2030;
- decides to launch a call for further requests and inputs in time for consideration by IPBES-10;
- approves the following two scoping processes for consideration by IPBES-8: a thematic assessment of the interlinkages among biodiversity, water, food, and health; and a thematic assessment of the underlying causes of biodiversity loss and the determinants of transformative change and options for achieving the 2050 Vision for Biodiversity;
- requests the MEP, Bureau, and Secretariat to facilitate discussion between the two scoping processes with a view to maximizing synergies between the assessments and avoiding duplication of scope;
- decides, as part of these two scoping processes, to consider how the Platform’s functions of capacity building, strengthening knowledge foundations, and supporting policy and the respective task forces, can be used to strengthen the preparation, delivery, and policy uptake of the assessments in an integrated manner;
- approves a scoping process for a methodological assessment of the impact and dependence of business on biodiversity and NCP, for consideration by IPBES-9, and decides to consider conducting the assessment over a period of two years following a fast-track approach;
- agrees to the preparation of a technical paper on biodiversity and climate change, and requests the IPBES Secretariat to explore, with the IPCC Secretariat, possible joint activities,

- including the possibility of jointly preparing the technical paper, and to report on the discussions to IPBES-8;
- decides to reconsider at IPBES-9, the requests, inputs, and suggestions received in time for consideration at that session, including for a second global assessment of biodiversity and ecosystem services, and for an assessment on ecological connectivity;
 - establishes two new task forces, one on policy tools and methodologies, and one on scenarios and models; and requests these and the existing task forces on capacity building, knowledge and data, and ILK, to develop specific deliverables for each of the priority topics set out in the rolling work programme for consideration by IPBES-8; and
 - requests the Bureau and MEP to prepare draft terms of reference for a midterm review of the Platform for consideration by IPBES-9.

A second annex to the decision contains terms of reference for the task forces.

Closing Plenary

The closing plenary session convened at 11:00 am on Saturday morning. Delegates approved the SPM and accepted the chapters of the Global Assessment without further amendments. They applauded the Chapter Lead Authors, experts, and the TSU involved in preparing the assessment. Plenary then adopted IPBES's Rolling Work Programme up to 2030 and the budget. Delegates elected Anna María Hernández (Colombia) as new IPBES Chair and accepted Morocco's offer to host IPBES-8 in early 2021 (IPBES/7/L.3).

As new alternate MEP members, delegates elected: Dorothy Wanja Nyangi (Kenya) for Africa, and Adriana Flores-Díaz (Mexico) for Latin America and the Caribbean, and, as potential future alternates for Latin America and the Caribbean, Marina Rosales Benites de Franco (Peru), James Arlington Finlay (Grenada), and Andrés Guhl (Colombia). Plenary elected to the Bureau: Sebsebe Demiseew Woodmatas (Ethiopia), Youngbae Duh (Republic of Korea), Rashad Allahverdiyev (Azerbaijan), and T. Douglas Beard (US) as regional vice chairs; and Prudence Tangham Galega (Cameroon), Vinod Bihari Mathur (India), Hamid Custovic (Bosnia and Herzegovina), Floyd Homer (Trinidad and Tobago), and Julia Marton-Lefèvre (France) as officers.

Delegates adopted the meeting's draft report (IPBES/7/L.1), with Turkey requesting reflection of their reservation to the precautionary approach.

CBD Executive Secretary Cristiana Pașca Palmer said biodiversity loss is destroying the “bedrock” of ecosystem services with dramatic economic and social consequences. She outlined forthcoming international biodiversity meetings towards the development of the post-2020 biodiversity framework, noting they present an unprecedented opportunity to find a way forward.

IPBES Executive Secretary Anne Larigauderie called the Global Assessment “a landmark report,” stressing that current trends do not allow much optimism, and highlighting that biodiversity is also a development, economic, and security issue. She called on participants to work together to make most of the current momentum for biodiversity.

In closing statements, Africa underscored the need to ensure balanced implementation of all IPBES functions and called for facilitating and monitoring the uptake of the Global Assessment’s

outcomes. Asia and Pacific stressed the need for successful implementation of the adopted work programme.

The Eastern European Region highlighted capacity building under the new work programme and called for greater participation of scientists from the region and efforts to conduct national ecosystem assessments. Latin America and the Caribbean highlighted the technical paper on biodiversity and climate change. Western Europe and Others said that IPBES's members should use the Global Assessment to trigger decisions at all levels. The US said that IPBES's efforts will serve and protect generations to come.

UNESCO, for the biodiversity-related conventions, underscored the importance of stronger alignment of IPBES with the biodiversity conventions, which in turn, should work to address synergies. The UN Convention to Combat Desertification (UNCCD) said understanding conservation and connectivity are “crucial.” The IIFBES stated that IPBES is strengthened by inclusion of IPLCs in all programmes. ONet asked members to integrate outcomes into national agendas, into discussions at the UN General Assembly, and into the Rio Conventions.

In his farewell speech, outgoing IPBES Chair Watson reminisced on his long history of involvement in environmental assessments, calling chairing IPBES his “most rewarding job.” He stated the Global Assessment gives the private sector and civil society the evidence they need for evidence-based policy making.

He gavelled IPBES-7 to a close at 2:58 pm.

A Brief Analysis of IPBES-7

“Historic,” “unprecedented,” “achievement!”
“Devastating,” “urgent,” “threat!”

The words that delegates used to describe, on the one hand, the decision to approve the summary for policy makers (SPM) of the Global Assessment on Biodiversity and Ecosystem Services, and, on the other hand, the Assessment’s key messages could not be more different. Delegates celebrated the Global Assessment as the culmination of the Platform’s first work programme and its most important deliverable to date. At the same time, many were sobered by the challenge to communicate the Assessment’s dire findings on the state of nature on planet Earth and the consequences current trends will have on people.

This brief analysis will review the main findings of the Global Assessment on Biodiversity and Ecosystem Services and explore the role of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) in efforts to develop the post-2020 biodiversity framework and create global momentum for action under the framework and beyond.

The State of Biodiversity

The Global Assessment is the first intergovernmental assessment of the state of nature and the first comprehensive assessment since the Millennium Ecosystem Assessment was released in 2005. It provides a wide range of findings on the relationship between humans and nature, the state of biodiversity and current and future trends, as well as actions that can be taken to reverse these trends. Its main messages can be summarized as follows. Nature is in trouble because of our actions and so are we, the human species, because we depend on nature. Nature provides the support system from which humans produce or extract food, water, energy, and material resources. These support systems are in decline and in most areas the rate of decline is accelerating, compromising nature’s ability to provide resources

for our future prosperity and survival. International goals such as the Convention on Biological Diversity's (CBD) Aichi Biodiversity Targets, the Sustainable Development Goals (SDGs) or the CBD's 2050 vision of "Living in harmony with Nature" can only be achieved through transformative change. It is still possible to foster the necessary transformative change to conserve nature alongside achieving other societal goals, but we must act immediately.

Beyond these core messages, the SPM provides more detailed findings on the relationship between nature and human wellbeing, the drivers of biodiversity decline, the consequences of this decline, and actions that can be taken to conserve nature while achieving other societal goals. IPBES Executive Secretary Anne Larigauderie, outgoing IPBES Chair Robert Watson, and other speakers highlighted two fundamental messages throughout the week:

- without halting biodiversity loss, it will be impossible to achieve the SDGs, in particular those on poverty (SDG 1), hunger (SDG 2), health (SDG 3), clean water (SDG 6), economic growth (SDG 8), and improved equality (SDG 10); and
- biodiversity loss and climate change are closely related and should therefore be addressed in a more integrated way at all levels.

These findings are backed up by a 1,750-page report based on 15,000 sources, that was written and peer reviewed according to the highest scientific standards, involving more than 400 experts. The assessment is groundbreaking both in terms of its scope as well as its degree of scientific rigor. While many of the key messages are not necessarily new for those involved in the conservation and sustainable use of biodiversity, the report puts these findings on a solid scientific foundation. As several delegates echoed in their opening and closing statements, it is no longer possible to say "we did not know" about the state of biodiversity or the role humans have in driving its decline, nor can we continue to ignore "the moral imperative to conserve nature for future generations." The report further tries to integrate all forms of available knowledge, acknowledging and incorporating indigenous and local knowledge in addition to narrowly defined scientific evidence.

With this knowledge in hand, what can IPBES do now to strengthen the impact of the Global Assessment as the CBD and other biodiversity-related processes begin to consider its findings?

Making the Global Assessment Matter

As many noted, the Global Assessment clearly exposes that we are falling significantly short of achieving most of the Aichi Biodiversity Targets by 2020. The Aichi Targets themselves were adopted by the CBD in 2010 as a reaction to the realization that instead of making progress towards the CBD's original goal to halt biodiversity loss, rates of biodiversity loss were in fact accelerating. The Global Assessment shows that more fundamental change is necessary.

Aware of these trends, CBD members decided in 2018 to initiate a "comprehensive and participatory process" to develop a post-2020 biodiversity framework aiming to create global momentum for action. In its decision, the CBD urges all societal groups to actively engage in the process and to explore measures to for action. It also notes that the Platform's assessments, including the Global Assessment, are a key information source to

draw on. IPBES can foster the use of the assessment in the post-2020 process and related engagement strategies.

In her speech to the IPBES Plenary, CBD Executive Secretary Cristiana Pasça Palmer described the next opportunities for the CBD and IPBES to build momentum at the international level. In July 2019, the Ninth Trondheim Conference on Biodiversity will meet under the theme "Making Biodiversity Matter" to facilitate "shared understandings of key knowledge areas" on biodiversity, based on the Global Assessment, among other inputs. In January 2020, the World Economic Forum will provide an opportunity to mobilize the business community towards action on biodiversity. In June 2020, the IUCN World Conservation Congress will aim to provide "concerted and viable actions" for the post-2020 biodiversity framework. Pasça Palmer also noted plans to convene a Nature Summit at the level of Heads of States in connection with the 2020 session of the UN General Assembly, suggesting that "the stars have never aligned like this before" to tackle the root causes of the biodiversity crisis.

Taking advantage of the timing, IPBES Executive Secretary Anne Larigauderie and outgoing IPBES Chair Bob Watson went to the G7 Environment Ministers meeting in Metz, France, the day following the closure of IPBES-7 to present the Global Assessment and meet with French President Emmanuel Macron. Delegates suggested that these meetings offer immediate opportunities for IPBES to have an impact. Similarly, several expressed hope that by directly engaging with other processes, IPBES can support the development of the post-2020 biodiversity framework, including, as an overarching message, the need for transformative change.

Making IPBES Matter Beyond the SPM

What further contributions can IPBES make in the run up to the post-2020 biodiversity framework? In addition to developing assessments, IPBES has a mandate to build capacity, evaluate policy tools, and actively engage in promoting the findings of its assessments through communications and outreach activities.

While the SPM is the primary vehicle to communicate the Global Assessment's outcome to policy makers, there are numerous other communities that would benefit from tailored products that provide relevant key messages in a digestible format. On reaching out to one of those groups, the media, the Global Assessment is set to break new ground. The Secretariat reported unprecedented interest in the public release of the Global Assessment following IPBES-7 by major international print, online, and TV media outlets. Throughout the meeting, articles previewing the Assessment's findings and background stories on biodiversity loss were published around the world, preparing the ground for widespread awareness raising to facilitate uptake.

While acknowledging the increasing attention, participants also pointed to the need to engage new audiences. The Open-ended Network of IPBES Stakeholders, for example, requested that IPBES develop summaries for educators to engage educational institutions in raising awareness and searching for solutions. However, delegates were unsure whether this goes beyond IPBES's purview. As members of the MEP and the Bureau explained, while IPBES's mandate does go beyond assessing knowledge, and includes capacity building, communication, and work on policy tools, it would not be advisable for IPBES to move too far away from its role as a science-policy interface. Others could step in to assist IPBES in engaging new audiences. A key message of the assessment is for governments,

organizations, and people around the world to consider their options for addressing biodiversity loss and develop their own tools for engagement.

Within the realm of knowledge development, the Platform's options to deliver additional inputs to the development of the post-2020 biodiversity process are also limited. The decision to postpone IPBES-8 to early 2021 means that no additional assessments can be released before CBD COP 15. The only exception may be the technical report on biodiversity and climate change. Proposed as a joint study between IPBES and the Intergovernmental Panel on Climate Change (IPCC), this report could be developed faster than the usual assessment reports. Meeting only a week after IPBES, IPCC members could agree to collaborate on a publication that would summarize existing knowledge on the many linkages between biodiversity and climate change to support a post-2020 biodiversity framework that fully incorporates these linkages.

Beyond 2020, the new rolling work programme provides several opportunities to substantiate elements of a post-2020 framework. The planned assessment on the nexus between biodiversity and water, food, and health, for example would further develop an integrated perspective on nature and other goals, such as the SDGs. Moving forward, the planned assessment on drivers of transformative change could contribute to a more concrete discussion on the action required to stop and reverse biodiversity loss. Some nevertheless expressed doubts whether IPBES is best positioned to conduct this assessment.

Towards Transformative Change

These concerns could be an indication for a broader challenge that IPBES will face on the way forward. While the assessment on the determinants of transformative change is a logical follow-up to the findings of the Global Assessment, some believe that it may push IPBES outside of its comfort zone. One delegate mentioned that transformative change requires stronger integration of the social sciences, which have so far played a lesser role in IPBES's work.

Along the same lines, a participant underscored an additional major challenge, evoking one of the key messages of the assessment: "By its very nature, this transformative change can expect opposition from those with vested interests in the status quo," noting that this is a question beyond science.

A final challenge is how to communicate the very meaning of transformative change. Commonly defined as "a philosophical, practical and strategic process to affect revolutionary change within society," it is not clear for many delegates what this means in the context of the relationship between humans and nature.

For Chair Watson, however the matter was clear. Reacting to an inquiry from a delegate, he said "It's quite simple: Transformative change means we must change the way we change."

Upcoming Meetings

49th Session of the IPCC: The IPCC's 49th session will meet to, among other things, consider the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. **dates:** 8-12 May 2019 **location:** Kyoto, Japan **contact:** IPCC Secretariat **phone:** +41-22-730-8208/54/84 **fax:** +41-22-730-8025/13 **email:** IPCC-Sec@wmo.int **www:** <https://www.ipcc.ch/meeting-doc/ipcc-49/>

World Conference on Forests and Public Health: This conference convenes scientists to present research on the significance of the role of forests and green spaces in improving health and well-being, and on designing green infrastructure that benefits physical activities both in urban space and in forests and nature. **dates:** 8-11 May 2019 **location:** Athens, Greece **contact:** Christos Gallis, President of the Organizing and Scientific Committee **email:** fph2019@artion.com.gr **www:** <https://fph2019.org/>

International Day for Biological Diversity 2019: The 2019 International Day for Biological Diversity is under the theme "Our Biodiversity, Our Food, Our Health." **date:** 22 May 2019 **location:** worldwide **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/idb/2019/>

CITES COP18: The 18th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) will be rescheduled due to security issues. **dates:** TBC 2019 **location:** TBC **contact:** CITES Secretariat **phone:** +41-22-917-81-39/40 **fax:** +41-22-797-34-17 **email:** info@cites.org **www:** <https://cites.org/>

27th Meeting of the COP to the Inter-American Institute for Global Change Research: The IAI is a regional intergovernmental institution that promotes scientific research and capacity building to inform decision makers on the continent and beyond. IAI has 19 parties in the Americas, who meet annually to monitor and direct the IAI's activities. **dates:** 5-6 June 2019 **location:** Brasilia, Brazil **contact:** Inter-American Institute for Global Change Research **phone:** +59-8-2606-0126 **email:** iai@dir.iai.int **www:** <http://www.iai.int/en/meetings/detail/27a-reunion-de-la-conferencia-de-las-partes-del-iai>

Third Meeting of the Parties of the Agreement on the Conservation of Gorillas and Their Habitats (Gorilla MOP3): The third Meeting of the Parties to the Gorilla Agreement will convene to strategize the future direction for the implementation of the Gorilla Agreement; formulate a new Programme of Work; review implementation; and discuss institutional arrangements. **dates:** 18-20 June 2019 **location:** Entebbe, Uganda **contact:** UNEP/CMS Secretariat **phone:** +49-228-815-2401 **fax:** +49-228-815-2449 **email:** secretariat@cms.int **www:** <https://www.cms.int/gorilla>

Ninth Trondheim Conference on Biodiversity: The meeting will be an opportunity for stakeholders to discuss the latest and best available knowledge relevant to biodiversity and ecosystem functions and services, and to consider the implications of this knowledge for the development of the post-2020 global biodiversity framework. **dates:** 2-5 July 2019 **location:** Trondheim, Norway **contact:** Norwegian Environment Agency **phone:** +47-984-75-911 **email:** trondheimconference@miljodir.no **www:** <https://trondheimconference.org/>

High-level Political Forum on Sustainable Development (HLPF) 2019: HLPF 2019 will convene under the auspices of ECOSOC under the theme of "Empowering people and ensuring inclusiveness and equality." The set of SDGs to be reviewed in depth are SDG 4 (education), 8 (sustainable economic growth), 10 (inequality), 13 (climate change), 16 (peace, justice, and inclusive institutions) and 17 (partnerships). Forty-eight countries will present their voluntary national reviews. **dates:** 9-18 July 2019 **location:** UN Headquarters, New York **contact:**

UN Division for Sustainable Development Goals **email:** <https://sustainabledevelopment.un.org/contact/> **www:** <https://sustainabledevelopment.un.org/hlpf/2019/>

BBNJ Intergovernmental Conference (IGC-3): This session will continue to negotiate a legally binding instrument related to the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. **dates:** 19-30 August 2019 **location:** UN Headquarters, New York **contact:** UN Division for Ocean Affairs and the Law of the Sea **phone:** +1-212-963-3962 **fax:** +1-212-963-5847 **email:** doalos@un.org **www:** <https://www.un.org/bbnj/>

First meeting of the Open-ended Working Group on the Post-2020 Global Biodiversity Framework: CBD COP14 adopted the preparatory process for the development of the post-2020 biodiversity framework (decision 14/34) and established an open-ended intersessional working group to support the preparation of the post-2020 biodiversity framework to support the process. **dates:** 27-30 August 2019 **location:** Nairobi, Kenya **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/conferences/post2020/wg2020-01/documents>

UNCCD COP 14: The 14th meeting of the Conference of the Parties to the UN Convention to Combat Desertification is expected to review the progress made to control and reverse further loss of productive land from desertification, land degradation, and drought. **dates:** 2-13 September 2019 **location:** New Delhi, India **contact:** UNCCD Secretariat **phone:** +49-228-815-2800 **fax:** +49-228-815-2898/99 **email:** secretariat@unccd.int **www:** <https://www.unccd.int/>

WGJ 11: The eleventh meeting of the *Ad Hoc* Open-ended Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity will examine the role of traditional knowledge, customary sustainable use, and the contribution of the collective actions of indigenous peoples and local communities to the post-2020 biodiversity framework. **dates:** 20-22 November 2019 **location:** Montreal, Canada **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/meetings/>

SBSTTA 23: The twenty-third meeting of the CBD Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) will review possible elements for the post-2020 biodiversity framework, including any implications arising from the IPBES Global Assessment, the draft of the fifth edition of the Global Biodiversity Outlook, as well as other relevant information and sources of knowledge. **dates:** 25-29 November 2019 **location:** Montreal, Canada **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/meetings/>

Convention on Migratory Species COP13: COP13 of the Convention on the Conservation of Migratory Species of Wild Animals will convene to review implementation of the Convention. **dates:** 15-22 February 2020 **location:** Gandhinagar, India **contact:** CMS Secretariat **phone:** +49-228-815-2401 **fax:** +49-228-815-2449 **email:** cms.secretariat@cms.int **www:** <http://www.cms.int>

SBSTTA 24: The twenty-fourth meeting of the CBD SBSTTA will review possible elements for the post-2020 framework and prepare for CBD COP 15, Cartagena COP/MOP 10, and Nagoya COP/MOP 4. **dates:** 18-23 May 2020 **location:** Montreal,

Canada contact: CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/meetings>

SBI 3: The third meeting of the CBD Subsidiary Body on Information (SBI 3) will consider a draft of the post-2020 framework, including related means to support and review implementation, and develop a recommendation for CBD COP 15, Cartagena COP/MOP 10, and Nagoya COP/MOP 4. **dates:** 25-29 May 2020 **location:** Montreal, Canada **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** [https://www.cbd.int/](https://www.cbd.int)

World Conservation Congress: Held once every four years, the IUCN World Conservation Congress brings together several thousand leaders and decision-makers from government, civil society, indigenous peoples, business, and academia, with the goal of conserving the environment and harnessing the solutions nature offers to global challenges. **dates:** 11-19 June 2020 **location:** Marseilles, France **contact:** IUCN **email:** congress@iucn.org **www:** <https://www.iucncongress2020.org/>

CBD COP 15, Cartagena Protocol COP/MOP 10, and Nagoya Protocol COP/MOP 4: The 15th meeting of the

Conference of the Parties to the Convention on Biological Diversity (CBD COP 15), the 10th Meeting of the Parties (COP/MOP 10) to the Cartagena Protocol on Biosafety and the 4th Meeting of the Parties (COP/MOP 4) to the Nagoya Protocol on Access and Benefit-sharing are expected to address a series of issues related to implementation of the Convention and its Protocols, and adopt the post 2020 global biodiversity framework. **dates:** October 2020, exact dates to be confirmed **location:** Kunming, China **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** [https://www.cbd.int/](https://www.cbd.int)

IPBES-8: The eighth session of the IPBES Plenary will address matters related to the implementation of the work programme for the Platform up to 2030. **dates:** January/February 2021 (TBC) **location:** Morocco (TBC) **contact:** IPBES Secretariat **phone:** +49-228-815-0570 **email:** secretariat@ipbes.net **www:** <https://www.ipbes.net/>

For additional meetings, see: <http://sdg.iisd.org/>

Glossary

CBD	Convention on Biological Diversity
COP	Conference of the Parties
ILK	Indigenous and local knowledge
IIFBES	International Indigenous Forum on Biodiversity and Ecosystem Services
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPLCs	Indigenous peoples and local communities
MA	Millennium Ecosystem Assessment
MEP	Multidisciplinary Expert Panel
NCP	Nature's contributions to people
ONet	Open-ended Network of IPBES Stakeholders
SDGs	Sustainable Development Goals
SPM	Summary for Policy Makers
TSU	Technical Support Unit
UNEP	UN Environment Programme
UNESCO	UN Educational, Scientific and Cultural Organization