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# **REPORT ON PROGRESS IN IMPLEMENTING THE WORK PROGRAMME OF THE INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM ON BIODIVERSITY AND ECOSYSTEM SERVICES**

#### Note by the Executive Secretary

1. The Executive Secretary is making available herewith a progress report on the implementation of the work programme of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). The note has been prepared by the secretariat of IPBES and is being made available in the form and language in which it was provided to the Secretariat.

#### I. BACKGROUND

2. In decision XII/25, the Conference of the Parties to the Convention on Biological Diversity welcomed the adoption of the work programme of IPBES for 2014-2018. In the same decision, the Conference of the Parties requested the Executive Secretary, in consultation with the Chair and Bureau of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), to continue to collaborate with IPBES, where relevant, strengthening synergies and avoiding duplication of work, to review the progress on elements of the work programme of IPBES that are relevant to the Strategic Plan for Biodiversity 2011-2020, and to report to SBSTTA on progress (para. 5(a)). The Conference of the Parties also requested the Executive Secretary to make available, through the clearing-house mechanism, information on progress in the implementation of the work programme of IPBES for the period 2014-2018, including the global assessment on biodiversity and ecosystem services, and to bring this information to the attention of SBSTTA, as appropriate (para. 5(d)).

3. The Conference of the Parties initiated the preparation of the fifth edition of the *Global Biodiversity Outlook* through its decision XIII/29. In this decision, it also welcomed the decision of IPBES to undertake a global assessment on biodiversity and ecosystem services and re-emphasized the importance of this global assessment for analysing progress towards the implementation of the Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets. In the same decision, the Conference of the Parties decided that the fifth edition of the *Global Biodiversity Outlook* should draw on, among other things the thematic, regional and global assessments of IPBES and any relevant scenario analysis and modelling of biodiversity and ecosystem services undertaken as part of these assessments. In the same decision, the Conference of the Parties requested the Executive Secretary of the Convention to prepare a joint communication strategy with the secretariats of IPBES and biodiversity-related conventions on the fifth edition of the *Global Biodiversity Outlook* and related reports and products and relevant deliverables of IPBES, and invited the secretariats of IPBES and of the other biodiversity-related conventions to collaborate on this matter.

<sup>\* &</sup>lt;u>CBD/SBSTTA/23/1</u>.

4. In decision <u>14/34</u>, the Conference of the Parties requested SBSTTA at its twenty-third and twentyfourth meetings to contribute to the development of the post-2020 global biodiversity framework and in support of the work of the open-ended intersessional working group (para. 16). Further, the preparatory process for the development of the post-2020 global biodiversity framework adopted by decision 14/34 requires that the process be knowledge-based and that it includes provision for analytical work prepared in accordance with recommendation SBSTTA-XXI/1 and decision 14/35. Among the key information sources identified in the preparatory process are also the assessments prepared by IPBES, as well as the fifth edition of the *Global Biodiversity Outlook*.

5. In decision 14/1, the Conference of the Parties requested the Executive Secretary to use and analyse the review of scientific information and the outcomes of all products of IPBES in the preparation of the post-2020 global biodiversity framework, and to provide the results to SBSTTA at a meeting held prior to the fifteenth meeting of the Conference of the Parties.

#### REPORT ON PROGRESS IN IMPLEMENTING THE WORK PROGRAMME OF THE INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM ON BIODIVERSITY AND ECOSYSTEM SERVICES

1. The first work programme of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), came to an end in May 2019. This first work programme had, between 2014 and 2019, established IPBES as the science-policy platform on biodiversity and ecosystem services. IPBES has, among others, successfully delivered its first set of eight scientifically credible assessment reports, driven the elaboration of new concepts such as on multiple values, or of new approaches, such as on working with indigenous and local knowledge, and has catalysed new scientific work such as on scenarios and models.

2. The seventh session of the IPBES Plenary was held from 29 April to 4 May 2019 in Paris. The report on the session is set out in document <u>IPBES/7/10</u>.

3. At that session, the IPBES Plenary approved the summary for policymakers of the Global Assessment of Biodiversity and Ecosystem Services and accepted the chapters of the assessment, including their executive summaries (decision IPBES-7/1, section II, para.1). The summary for policymakers is set out in document IPBES/7/10/Add.1 and available in all six official languages of the United Nations on the IPBES website. A laid-out version of the summary for policymakers in English will be launched in the margins of the 23<sup>rd</sup> session of SBSTTA. SBSTTA will consider the assessment report with regard to the relevance of the findings for the work of the Convention in the context of the preparation of the post-2020 global biodiversity framework and the fifth edition of the Global Biodiversity Outlook under item 3 of the provisional agenda for its 23<sup>rd</sup> meeting.

4. At its seventh session, the IPBES Plenary also adopted the rolling work programme of IPBES for the period up to 2030 set out in annex I to decision <u>IPBES-7/1</u>. The rolling work programme up to 2030 initially focuses on three topics arising from the prioritization of the responses to the first call for requests, inputs and suggestions. Those three topics, which are all aligned with the overall objective of IPBES and its policy framework, are:

(a) Understanding the importance of biodiversity in achieving the 2030 Agenda for Sustainable Development;

(b) Understanding the underlying causes of biodiversity loss and determinants of transformative change and options for achieving the 2050 Vision for Biodiversity; and

(c) Measuring business impact and dependence on biodiversity and nature's contributions to people.

5. The rolling work programme up to 2030 includes six objectives, with one objective related to each of the four functions of IPBES (assessing knowledge, building capacity, strengthening the knowledge foundations and supporting policy), one to communications and engagement of Governments and stakeholders and one to the review of the effectiveness of IPBES. The objectives are supported by deliverables addressing the three initial priority topics, as well as the overall objective of IPBES.

6. Three deliverables initiated by the Plenary in its decision IPBES-6/1, continue from the first work programme of IPBES: the thematic assessment of the sustainable use of wild species, the methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services, and the thematic assessment of invasive alien species. The assessment of the sustainable use of wild species and the assessment on values will be prepared for consideration by the Plenary at its ninth session; the assessment of invasive alien species, for consideration by the Plenary at its tenth session. A table with indicative timelines for these assessments are set out in annex I.

7. Under objective 1, assessing knowledge, the Plenary included new deliverables for each one of the three priority topics:

(a) A thematic assessment of the interlinkages among biodiversity, water, food and health (nexus assessment). This assessment will use a nexus approach to examine interlinkages between biodiversity and the above-mentioned issues, such as agricultural productivity, nutrition, pest control, water quality, infectious diseases, mental and physical health and climate mitigation and adaptation, with a view to providing policy-relevant and useful information to users and managers regarding the development of policies and actions in relevant sectors;

(b) A technical paper on the interlinkage between biodiversity and climate change. The technical paper will address potential synergies such as nature-based solutions and trade-offs between efforts that aim to conserve, restore and sustainably use biodiversity and efforts that support climate change adaptation and mitigation. It will draw on the material contained in the assessment reports of the Intergovernmental Panel on Climate Change and IPBES;

(c) 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 (transformative change assessment). This assessment is aimed at understanding and identifying factors in human society at both the individual and collective levels, including behavioural, social, cultural, economic, institutional, technical and technological dimensions, that can be leveraged to bring about transformative change for the conservation, restoration and wise use of biodiversity, while taking into account broader social and economic goals in the context of sustainable development. It explores the drivers of and motives behind broad societal changes and transitions to inform the design of relevant policies, communication and engagement campaigns and other actions;

(d) A methodological assessment of the impact and dependence of business on biodiversity and nature's contributions to people (business and biodiversity assessment). This methodological assessment is aimed at categorizing how businesses depend on, and impact, biodiversity and nature's contributions to people and identifying criteria and indicators for measuring that dependence and impact, taking into consideration how such metrics can be integrated into other aspects of sustainability.

8. The Plenary approved scoping processes for the nexus, transformative change and business and biodiversity assessments. It will consider the scoping reports for the nexus and transformative change assessments at its eighth session (tentatively scheduled for February 2021) and the scoping report for the business and biodiversity assessment at its ninth session (tentatively scheduled for the first quarter of 2022). A table with indicative timelines for the scoping processes as well as the initial scoping notes, which had been provided to the Plenary at its seventh session and which will form a basis for the scoping exercises, are set out in annex II. Consultations with IPCC on a joint workshop on biodiversity and climate change in the first half of 2020 are underway.

9. In decision IPBES-7/1, the Plenary also extended the mandate of the IPBES task forces on capacitybuilding, knowledge and data, and indigenous and local knowledge, and established task forces on policy tools and methodologies and scenarios and models. Following a call for nomination of experts, the task forces have been constituted in July 2019 and information on membership made available on the IPBES website. The Plenary requested the task forces to develop specific deliverables for each of the priority topics of the rolling work programme up to 2030 for consideration by the Plenary at its eighth session.

10. A further update on progress will be provided to SBSTTA at its twenty-fourth meeting.

#### ANNEX I: INDICATIVE TIMELINE FOR ONGOING IPBES ASSESSMENTS: THE ASSESSMENT OF THE SUSTAINABLE USE OF WILD SPECIES, THE ASSESSMENT ON VALUES AND THE ASSESSMENT OF INVASIVE ALIEN SPECIES

Please note: This timeline is tentative and the specific dates subject to confirmation. Please subscribe to the IPBES mailing list at <u>https://ipbes.net/user/register</u> in order to receive IPBES notifications with updated information.

Date	Values assessment	Sustainable use of wild species assessment	Invasive alien species assessment
2020		·	
September - October			Review of the first order draft of the chapters of the assessment
November- December			Second author meeting
December - February 2021	Review of the second order draft of the chapters of the assessment and the first order draft of the summary for policymakers	Review of the second order draft of the chapters of the assessment and the first order draft of the summary for policymakers	
2021		1	
March	Third author meeting + SPM writing workshop	Third author meeting + SPM writing workshop	
October - November			Review of the second order draft of the chapters of the assessment and the first order draft of the summary for policymakers
2022		-	
February	Final Government Review of the SPM	Final Government Review of the SPM	
Early-mid 2022	Consideration of the assessment report by the Plenary at IPBES 9	Consideration of the assessment report by the Plenary at IPBES 9	
Early 2022			Third Author Meeting
2023			
Early-mid 2023			Consideration of the assessment report by the Plenary at IPBES 10

#### ANNEX II: INDICATIVE TIMELINE AND INITIAL SCOPING NOTES FOR ONGOING SCOPING PROCESSES OF IPBES ASSESSMENTS: NEXUS ASSESSMENT, TRANSFORMATIVE CHANGE ASSESSMENT AND BUSINESS AND BIODIVERSITY ASSESSMENT

Please note: This timeline is tentative and the specific dates subject to confirmation. Please subscribe to the IPBES mailing list at <u>https://ipbes.net/user/register</u> in order to receive IPBES notifications with updated information.

Date	Process/action			
	Nexus assessment	Transformative change assessment	Business indicators assessment	
2019				
5 August – 15 October	Call for nomination of scoping experts			
30 September – 2 October	Online conference to seek input to the scoping process			
9-11 October		Online conference to seek input to the scoping process		
November - December	Preparation of outcome documents on the online conferences			
2020				
20-24 January	Selection of scoping experts and consideration of the outcomes of the online conferences by MEP and Bureau during their 14 <sup>th</sup> meetings			
24-27 March	Scoping meeting, Bonn			
21-24 April		Scoping meeting, Bonn		
June – July	External review of draft scoping reports			
October 2020 – January 2021			Call for nominations of scoping experts	
November			Online conference to seek input to the scoping process	
2021				
February 2021	Consideration of the scoping reports by the Plenary at IPBES 8		Selection of scoping experts	

# I. Initial scoping report for deliverable 1 (a): Assessing the interlinkages among biodiversity, water, food and health (nexus assessment)

Note: This initial scoping report, which was developed to inform the Plenary at its seventh session, will be considered as a basis for the development of the scoping report, in the context of the new IPBES rolling work programme up to 2030 adopted by the Plenary in decision IPBES-7/1.

1. There are strong interlinkages among the globally agreed goals of food and water security, health for all, protecting biodiversity on land and in the oceans and combating climate change, among others. In fact, the Sustainable Development Goals are regarded as "integrated and indivisible", balancing the economic, social and environmental dimensions of sustainable development. Similarly, the objectives of the Rio Conventions (Convention on

Biological Diversity, United Nations Framework Convention on Climate Change and United Nations Convention to Combat Desertification) are seen as interlinked.

2. Interlinkages take various forms, including synergies, co-benefits and trade-offs. For example, while biodiversity and nature's contributions to people are fundamental to supporting food production, providing clean water and ensuring good health, the way we produce our food has an impact on biodiversity and water quality, as well as climate change. The food system is also a major determinant of health, as is the way we manage ecosystems more broadly. Moreover, biodiversity loss and climate change each affect our ability to produce nutritious food, supply clean water and ensure healthy lives for all. Thus, there is a web of dependence, impact and common drivers of change.

3. The challenge is to achieve good health for all with food and water security, including through the enhanced use of biodiversity, without adversely impacting biodiversity, water quality or climate and in the context of global change, including climate change.

4. The assessment will cover:

(a) The interlinkages among the health of people, crops, livestock, soil, wildlife and the environment in general (including through the One Health approach and related concepts);

(b) The interlinkages between food production and biodiversity (within and outside production systems), including with respect to the control of pests and diseases, pollination<sup>1</sup> and nutrient cycling;

(c) The interlinkages among fertilizers, crop nutrition and productivity, water quality, biodiversity (in terrestrial, freshwater and marine systems) and greenhouse gas emissions;

(d) The interlinkages among dietary diversity, health and the diversity of crops, livestock and other components of biodiversity in agricultural ecosystems;

(e) The significance of marine biodiversity for human health, including for food security, and the consequences of multiple stressors on marine ecosystems (including pathogens, chemicals, climate change and habitat degradation);

(f) The linkages between the composition and diversity of the human microbiome and biodiversity in the environment, and implications for the planning, design, development and management of human settlements;

(g) The contribution of biodiversity and the natural environment in promoting mental and physical health, particularly in urban areas;

(h) The relationships among biodiversity, ecosystem degradation and infectious disease emergence, including the effects of ecological community structure and composition, habitat disturbance and human-wildlife contact, and the implications for land use and ecosystem management;

(i) The ways in which projected changes in climate will affect biodiversity and projected biodiversity losses will affect climate;<sup>2</sup>

(j) Interlinkages between climate mitigation and adaptation strategies, including ecosystem-based approaches (reduced ecosystem loss and degradation, ecosystem restoration and sustainable management of land, soils, livestock and crops), and how other

<sup>&</sup>lt;sup>1</sup> Drawing on the IPBES assessment of pollinators, pollination and food production.

<sup>&</sup>lt;sup>2</sup> Drawing on the joint technical paper on biodiversity and climate change (deliverable 1 (b)).

proposed climate mitigation strategies (including land-based strategies such as large-scale afforestation and bio-energy) could affect biodiversity;<sup>28</sup>

(k) The ways in which projected changes in climate and biodiversity loss will affect agricultural production, water resources and human health.<sup>28</sup>

5. The issues listed above will be examined, inter alia, through a nexus approach (i.e., considering interactions among the issues, goals and sectors).

6. The assessment will require interdisciplinary and transdisciplinary work that draws on the natural and social sciences and indigenous and local knowledge and will engage experts across multiple disciplines and holders of indigenous and local knowledge. It will examine relevant frameworks and approaches such as the ecosystem, One Health and landscape approaches.

7. While the assessment will be global in scope, regional differences and similarities will also be assessed.

8. The assessment will focus on producing the information needed to achieve the policy objectives of the Sustainable Development Goals, the Paris Agreement and the post-2020 biodiversity framework. It will be most directly relevant to Sustainable Development Goals 2 (zero hunger, i.e., issues of food security), 3 (good health and well-being), 6 (clean water, i.e., issues of water security), 13 (climate action), 14 (life below water) and 15 (life on land).

9. The assessment will also be relevant to Sustainable Development Goals 1 (poverty in its broadest definition), 4 (education, i.e., issues such as awareness-building), 5 (gender equality, i.e., issues such as the role of women in farming), 8 (decent work and economic growth, i.e., issues such as the implications for livelihoods), 10 (reduced inequalities, i.e., issues such as the distributional implications of climate change, loss of biodiversity, food and water security and access to health infrastructure), 11 (sustainable cities and communities, i.e., green spaces), 12 (sustainable consumption and production, i.e., issues such as the implications of lack of access to food and clean water for local and regional peace) and 17 (partnerships for the goals, i.e., issues such as polycentric governance and cross-sectoral policies).

10. The assessment will build on and complement previous and ongoing work by IPBES (pollination assessment, land degradation and restoration assessment and the regional and global assessments of biodiversity and ecosystem services), IPCC (Fifth Assessment Report, special reports on the impacts of global warming of 1.5°C and on climate change and land) and other international bodies (e.g., The State of the World's Biodiversity for Food and Agriculture and related reports on genetic resources from the Food and Agriculture Organization of the United Nations, the International Assessment of Agricultural Knowledge, Science and Technology for Development, relevant reports of The Economics of Ecosystems and Biodiversity (TEEB), the Rockefeller Foundation–Lancet Commission on Planetary Health, the International Panel of Experts on Sustainable Food Systems). The detailed scoping process would determine what has been and is being assessed, to ensure that the proposed assessment will add value and to identify the issues on which the Plenary would want the assessment to focus.

11. The assessment, while challenging, is deemed feasible by the Multidisciplinary Expert Panel and the Bureau. New scenarios will be required, as they were for the IPCC special report on the impacts of global warming of  $1.5^{\circ}$ C.

## **II.** Initial scoping note for deliverable 1 (c): Assessing the underlying causes of biodiversity loss and the determinants of transformative change (transformative change assessment)

Note: This initial scoping report, which was developed to inform the Plenary at its seventh session, will be considered as a basis for the development of the scoping report, in the context of the new IPBES rolling work programme up to 2030 adopted by the Plenary in decision IPBES-7/1.

1. Previous assessments have concluded that plausible pathways exist for achieving the 2050 vision for biodiversity<sup>3</sup> in conjunction with key human development goals. These pathways are coherent with known constraints on economics, resource use and human development goals. However, they require fundamental changes in development paradigms, entailing changes in society, including much more efficient use of land, water, energy and materials, rethinking of consumption habits and major transformations of food systems. The need for transformative change<sup>4</sup> for the achievement of the Sustainable Development Goals is recognized in the 2030 Agenda for Sustainable Development.

2. This assessment is aimed at understanding and identifying factors in human society, at both the individual and collective levels, that can be leveraged to bring about such transformative change in favour of biodiversity while taking into account broader social and economic imperatives in the context of sustainable development. This includes behavioural, social, cultural, economic, institutional, technical and technological dimensions, corresponding to the indirect drivers of change in biodiversity, which sit at the centre of the IPBES conceptual framework. Gaining a better understanding of how these drivers can be transformed would inform the development of policies and actions to trigger a shift towards sustainability and good quality of life at many levels, from individuals through communities and businesses to society at large.

3. The assessment will explore the drivers of and motives behind broad societal changes and transitions to inform the design of relevant policies, communication and engagement campaigns and other actions. It will examine, inter alia:

(a) Values (relational, utilitarian, etc.) and how they influence behaviour;

(b) Notions of good quality of life, worldviews and cultures, models of interaction between people and nature and social narratives;

(c) The role of social norms and regulations, and of economic incentives and other institutions in leveraging behavioural change in individuals, businesses, communities and societies;

(d) The role of technologies and technology assessment;

(e) The role of collective action;

(f) Complex systems and transitions theory (the role of niche innovations, established regimes, path dependence and lock-in, non-linear interactions and feedbacks and emergent properties);

(g) Obstacles to achieving transformative change, including unequal power relations, lack of transparency, vested interests, unequal distribution of the costs and benefits of actions, tendencies for short-term decision-making, the psychology of losses and gains, the logic of market-driven processes, the lack of policy coherence and inertia;

 $<sup>^{3}</sup>$  Decision X/2 of the Conference of the Parties to the Convention on Biological Diversity, annex, section II, Strategic Plan for Biodiversity 2010–2020.

<sup>&</sup>lt;sup>4</sup> Transformative change (or transformational change; the terms are used interchangeably) refers to a fundamental, system-wide change that includes consideration of technological, economic and social factors, including in terms of paradigms, goals or values.

(h) Equity and the need for "just transitions";

(i) Lessons from previous transitions (e.g., attitudes to smoking, energy transition, urban development).

4. The assessment will require interdisciplinary and transdisciplinary work drawing on the natural and social sciences, the humanities and indigenous and local knowledge. It will require experts in institutions, behavioural economics, political economy, psychology, systems thinking and technology assessment, among other disciplines, as well as indigenous and local knowledge experts and experts on indigenous and local knowledge.<sup>5</sup>

5. While the assessment will be global in scope, regional differences and similarities will also be assessed.

6. In addition to supporting the 2050 vision for biodiversity, the assessment will address multiple Sustainable Development Goals, in particular Sustainable Development Goals 8 (decent work and economic growth, i.e., issues related to decoupling economic growth from environmental degradation), 11 (sustainable cities and communities), 12 (sustainable consumption and production patterns, i.e., issues of consumption and waste), 14 (life below water), 15 (life on land) and 17 (partnerships for the goals, especially aspects concerning technology, finance and trade).

7. The assessment will build on the findings of previous and ongoing IPBES regional and thematic assessments. It will especially gain from results and thinking developed in IPBES work related to policy support, diverse conceptualization of values, indigenous and local knowledge and scenarios and models.

## III. Initial scoping note on deliverable 1 (d): Assessing the impact and dependence of business on biodiversity and nature's contributions to people (methodological assessment)

Note: This initial scoping report, which was developed to inform the Plenary at its seventh session, will be considered as a basis for the development of the scoping report, in the context of the new IPBES rolling work programme up to 2030 adopted by the Plenary in decision IPBES-7/1.

1. Key economic sectors, such a forestry, agriculture and fisheries, tourism, energy and mining, infrastructure and manufacturing and processing, depend on biodiversity and nature's contributions to people in various ways and to varying extents. These sectors also have a range of positive and negative impacts on biodiversity and nature's contributions to people. Appropriate tools for measuring dependence and impact are crucial to enabling businesses to assess and monitor their dependence and impact with a view to reducing adverse impacts and related material and reputational risks, and to developing the business case for long-term sustainability. They are also important for promoting public accountability, informing regulatory agencies and guiding financial investments.

2. Engagement of businesses in efforts to conserve and sustainably use biodiversity and related nature's contributions to people is essential to achieving the Sustainable Development Goals and realizing the 2050 vision for biodiversity and the targets of the post-2020 global biodiversity framework. Many companies (private and public), industry associations and investors wish to reduce the adverse impacts on biodiversity and nature's contributions to people associated with their activities, but require reliable and relevant definitions, criteria, indicators and other tools to do so. Initiatives have emerged to support reporting on environmental performance and much progress has been made in certain areas

<sup>&</sup>lt;sup>5</sup> As defined in the approach to recognizing and working with indigenous and local knowledge in IPBES set out in annex II to decision IPBES-5/1.

related to greenhouse gas emissions, water use, other material flows and land use (including avoidance of direct impacts in certain protected areas and other areas of high conservation value). There are numerous gaps, however, including with respect to assessing the broader impact on biodiversity, the cumulative impact and the indirect impact that occurs through supply chains, trade or substitution effects (telecoupling), as well as dependence on biodiversity and nature's contributions to people more generally.<sup>6</sup>

3. Consistency in reporting impact is a prerequisite for comparisons over time, as well as for comparisons among various actors and activities. Validated, standardized criteria, metrics and indicators also facilitate efficient, transparent and just environmental governance, through, for instance, target-setting and regulations that stimulate ecologically friendly innovations and the decoupling of environmental pressures from growth in output. Consistency might also be useful for detecting leverage points in production and extraction, as well as for detecting where the greatest environmental gains can be achieved in a system perspective.

4. The assessment will focus on identifying:

(a) Categories of business dependence on biodiversity and nature's contributions to people, the materiality of that dependence and implications for risk management;

(b) Categories of business impact on biodiversity and nature's contributions to people, both direct (land-use change and other habitat changes, including through fragmentation, water degradation and extraction, overexploitation, pollution, greenhouse gas emissions and increased risk of invasive alien species) and indirect (e.g., through trade, indirect land-use change or other substitution effects and other aspects of telecoupling, including those mediated through supply chains), the materiality of the impact and implications for risk management;

(c) Criteria and indicators for measuring business dependence on biodiversity and nature's contributions to people;

(d) Criteria and indicators for measuring the impact of business activities on biodiversity and nature's contributions to people;

(e) Ways to integrate criteria and indicators for measuring business dependence and impact into other aspects of sustainability;

(f) Approaches to monitoring and reporting by individual entities and reporting initiatives.

5. The assessment will examine the challenges related to levels of aggregation of various types of businesses and scalability and comparability between regions and across sectors.

6. The assessment will include a review of academic literature and of relevant reports prepared by existing reporting initiatives and public and private entities, including selected companies and industry associations.

7. The assessment will be global in scope and will address issues related to the world's major productive sectors. Regional adaptions and applications will also be considered.

8. The assessment is directly relevant to the work of the Convention on Biological Diversity and to a number of initiatives and organizations dealing with productive sectors, including United Nations initiatives such as the United Nations Global Compact, the One Planet Network, the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, various initiatives undertaken by the Food and Agriculture Organization

<sup>&</sup>lt;sup>6</sup> A recent review is provided in document CBD/SBI/2/4/Add.2.

of the United Nations, the United Nations Forum on Forests, the World Tourism Organization, as well as networks and initiatives of civil society and the private sector, such as Proteus (a collaboration between leading extractives companies and the World Conservation Monitoring Centre) and the Globally Responsible Leadership Initiative.

9. The assessment will provide scientific evidence directly relevant to multiple Sustainable Development Goals but is specifically closely related to Sustainable Development Goals 9 (build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation), 12 (ensure sustainable consumption and production patterns, i.e., issues of production and efficient use of natural resources), 14 (life below water) and 15 (life on land).

10. The proposed assessment demands a highly interdisciplinary team of experts, as both biophysical aspects related to various sectors with different impacts and ways of managing and accounting will be considered. Key expertise is needed in accounting, ecology, soil science, agriculture, forestry, tourism, mining, engineering, business management and organization.

11. The assessment will be carried out as a fast-track assessment over a two-year period.