SUPPORTING THE GLOBAL BIODIVERSITY AGENDA

a United Nations System Commitment for Action to assist Member States delivering on the post-2020 global biodiversity framework

╶╻╴╻╴┟╡

UNITED NATIONS ENVIRONMENT MANAGEMENT GROUP ENG



© 2020 United Nations

All rights reserved worldwide

Requests to reproduce this publication in whole or in part should be sent to permission@un.org.

Disclaimer

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Mention of a commercial company or product does not imply endorsement by the cooperating partners. The views expressed herein are those of the authors and do not necessarily represent the views, the decision or the stated policy of the United Nations or its officials or Member States, nor does citing of trade names or commercial processes constitute endorsement.

Acknowledgements

Lead authors: François Guerquin and Jorge L. Ventocilla

Editor: Ronald G. Witt

Layout, illustrations and Graphics: Carolyne Daniel, Zoï Environment Network

Main contributors: Fiona Kinniburgh (Bavarian School of Public Policy, Technical University of Munich); Neil Pratt (CBD Secretariat); Arabella Comyn, Hossein Fadaei, Clara Mottura (EMG Secretariat); Aleksandar Rankovic, Damien Barchiche, Lucien Chabason, Alexandra Deprez, Marcel Jouve (IDDRI); Renée Ankarfjard (IFAD); Lorena Jaramillo (UNCTAD); Tim Scott (UNDP); Neville Ash, Jeremy Harrison (UNEP-WCMC).

Special thanks go to all those who contributed to this report, especially to the 51 EMG Member Agencies which through designated focal points to the UN Environment Management Group and to its consultative process made this report possible. The list of all contributers and reviewers is provided in Annex.

We would also like to acknowledge the generous support and contribution from the Ministry of Environment of Finland.



Ministry of the Environment Finland



SUPPORTING GLOBAL BIODIVERSITY AGENDA

a United Nations System Commitment for Action to assist Member States delivering on the post-2020 global biodiversity framework





Table of Contents

2 Disclaimer

2 Acknowledgements

6 Foreword

by the United Nations Secretary-General

7 Statement

by the Executive Heads of the Members of the Environment Management Group

9 Executive Summary

12 Introduction

14 The Role of Biodiversity in Sustainable Development Human dependencies on biodiversity The interlinkages between Biodiversity and the 2030 Agenda

22 Roles and contributions of the UN system during the 2011-2020 Decade for Biodiversity

28 Looking forward: paving the way for a UN agenda for action on biodiversity

- I. Support country abilities to halt biodiversity loss and to sustainably use and enhance biodiversity through policies and programmes
- II. Establish strong coalitions for biodiversity
- III. Mainstream biodiversity in UN internal operations
- IV. Enhance UN-wide coherence and follow-up on biodiversity

36 References

- 38 List of Acronyms
- 40 Annex: Contributors and Reviewers





Foreword by the United Nations Secretary-General

Since early 2020, the world has been upended by a global pandemic indifferent to national borders, ethnicity or social status. COVID-19 has also highlighted the catastrophic consequences that continuous pressure on natural ecosystems can have for human health, livelihoods and economies. The conservation, sustainable use and management of biodiversity and ecosystems is growing more urgent by the day.

The 2019 Global Assessment Report¹ of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) states that around 25 per cent of species in assessed animal and plant groups are threatened, suggesting that some one million species already face extinction, and also warns that current biodiversity loss is increasingly putting human security and well-being at risk.

The goals that have been set for 2030 and beyond for conserving and sustainably using nature and achieving sustainable development will not be achieved under current trajectories.

As governments work towards a post-2020 global biodiversity framework, the United Nations system is fully committed to supporting them. This includes promoting policies, investments and actions that are carbon-neutral and protect nature. To that end, we advocate a focus on nature across the whole United Nations system and developing a common approach to integrating biodiversity and nature-based solutions for sustainable development into the organization's policy and programme planning and delivery.

The United Nations system will support transformative actions to promote maintaining and enhancing biodiversity and ecosystem services in key areas, such as food and agriculture, forest management, ecosystems, biosafety, governance and human rights.² All UN entities will be engaged, including those not traditionally involved in biodiversity work, and an emphasis will be placed on awareness-raising and advocacy.

This report by the United Nations Environment Management Group is an important first step in demonstrating the Organization's commitment to support Member States and stakeholders in making transformative changes. It stresses the need to urgently step up to the challenges of biodiversity loss and ecosystem degradation, which is being exacerbated by climate change, by working together in partnership with Member States, civil society and the private sector, and taking actions that place people, nature and climate at the heart of our sustainable development efforts.

I welcome this report and call on the executive heads of United Nations system entities to support the implementation of its recommendations to stem global biodiversity loss.

António Guterres

¹ https://ipbes.net/global-assessment

² SG's Executive Comittee decision of 25 March 2020.

Statement

by the Executive Heads of the Members of the Environment Management Group

We, the Executive Heads of the members of the Environment Management Group,

Deeply concerned that despite substantial and repeated attention to the high stakes of sustainability, humanity remains on an unsustainable development path;

Noting that the scale and pace of biodiversity loss is increasingly recognized³ as a risk for people, societies and the economy, including for the effective enjoyment of human rights, the eradication of poverty and key sectors such as food production, fresh water and health;

Aware that the cost of inaction in the face of biodiversity loss is estimated to rise to at least US\$ 14 trillion, 7 per cent of global Gross Domestic Product (GDP) by 2050 ⁴, and that biodiversity loss and ecosystem degradation are already disproportionately affecting marginalized populations;

Note with concern that public incentives and subsidies potentially harmful to biodiversity are conservatively estimated to be US\$ 500 billion per year, while current financial flows to support biodiversity are only around US\$ 50-80 billion per year, with current biodiversity-related bilateral official development assistance (ODA) being less than US\$ 10 billion per year. The annual global funding needed to safeguard nature is estimated at US\$ 300-400 billion, which would bring substantial co-benefits beyond biodiversity protection alone, for example in reducing risks related to climate change, health and food security⁶, as well as actively enhancing biosphere carbon stocks and mitigating carbon emissions⁶,⁷;

Recognize the importance of building on synergies across the United Nations system;

Recognize the importance of addressing both the direct and indirect drivers of biodiversity loss and the need for transformative changes in our societies, economies and institutions;

Deeply concerned with the impact of the COVID-19 crisis on the lives of individuals, the prosperity of communities and the economy of nations;

Commit to assist countries in protecting and enhancing biodiversity as part of our commitment to the implementation of the post-2020 global biodiversity framework and the 2030 Agenda for Sustainable Development at all levels within our own mandates and obligations, building on synergies across the UN system and engaging the stakeholders concerned; and

Commit to ensure biodiversity is mainstreamed across our policies, programmes and internal operations at all levels within our own mandates and obligations to ensure a nature-positive UN, builing on our agencies' existing strategies and in order to provide a more coherent UN system response and action to support the implementation by Member States of the post-2020 global biodiversity framework.

³ IPBES, 2019; WEF, 2020; UNEP, 2019; WWF, 2018; CBD, in prep.; WHO and CBD, 2015.

⁴ Alterra, 2008; WEF, 2020a.

⁵ OECD, 2019.

⁶ IUFRO, 2012.

⁷ Max Planck Institute for Biogeochemistry, 2018.



Executive Summary

Biodiversity is fundamental to our existence, our economies, the quality of life for all people and the effective enjoyment of human rights. It provides food and feed, energy, medicines, genetic resources, timber and a variety of other essential materials, as well as regulating our climate and other life-supporting natural systems. Consequently, biodiversity objectives are embedded across the Sustainable Development Goals (SDGs). Fourteen out of the 17 SDGs have biodiversity elements directly critical to the success of their achievement, enhancing the need to better mainstream biodiversity across all sectors of the economy and society.

As human exploitation of natural systems and their resulting degradation advance in many parts of the world, the economic benefits extracted have come with ever-increasing costs, particularly for the poor, at the same time as countries are facing reduced capacities to deal with the effects of climate change, along with the medium-term economic and other impacts of COVID-19. Over half of the world's GDP is moderately to highly dependent on biodiversity⁸, such as through pollination, soil health, water quality and provision of natural resources, with construction, agriculture and food & beverages being the three largest economic sectors most dependent. Biodiversity is the foundation of business supply chains, as well as for sustainable development.

According to the Global Assessment Report on Biodiversity and Ecosystem Services (IPBES, 2019; hereafter Global Assessment Report), nature can be conserved, restored and used sustainably, while other global societal goals are simultaneously met through urgent and concerted efforts fostering transformative change. This also echoes similar calls from the Intergovernmental Panel on Climate Change (IPCC) in its special report on Global Warming of 1.5°C, the European Environment Agency's (EEA) Sustainability transitions: policy and practice, the Convention on Biological Diversity's (CBD) fifth Global Biodiversity Outlook (GBO-5), UNEP's Global Environment Outlook (GEO)-6 and FAO's report on The State of the World's Biodiversity for Food and Agriculture (FAO, 2019).

⁸ WEF, 2020.

Most of the SDG targets related to biodiversity and environmental sustainability are not on track, posing a risk to the overall achievement of the 2030 Agenda. Current negative trends in the status of biodiversity and ecosystem services are undermining progress towards 80 per cent of assessed SDG targets on poverty, hunger, health, water, cities, climate, oceans and land. Lack of achievement in these areas will also have a bearing on achieving SDG-16 on peace, justice and strong institutions.

The implementation of the post-2020 global biodiversity framework will need to address the direct and indirect drivers of biodiversity loss and help to catalyse ecosystem restoration over the decade as a basis for progress towards the SDGs. The entire UN system has a central role to play in these efforts, knowing that biodiversity serves as a safety net for humanity, by buffering us from the worst of climate change, sustaining our health and well-being and maintaining economies. By conserving and sustainably using biodiversity we can harness the power of nature to secure the future health, security and a path out of poverty for billions of people.

This requires that the UN builds political momentum to catalyse a decade of action for people, nature and climate, which may not only be the last chance to achieve the 2030 Agenda for Sustainable Development, but also to prepare a development pathway for the future that recognizes our dependency on nature. A «business-as-usual» course of action is no longer viable if transformative change is to be achieved, particularly during the current global pandemic that threatens the lives and livelihoods of millions of people.

UN entities have already responded in various ways to the biodiversity challenge in their planning and programming. Many global and regional UN entities have relevant programmes and/or projects, including the opportunities provided by the regional commissions and sustainable development fora. Their respective intergovernmental and governing bodies provide guidance and support the integration of biodiversity into national policies and strategies for sustainable development. Engaging and empowering new and existing constituencies across sectors and society will be essential. Progress on enhancing biodiversity for sustainable development will require building on complementary capacities from across the UN system of global entities and regional commissions to unlock new resources and partnerships for biodiversity. Enhancing synergies among multilateral environmental agreements (MEAs) and beyond will also provide much-needed integration and efficiency in implementing the post-2020 global biodiversity framework.

This report highlights the relevance of biodiversity to the work of UN entities and its multiple benefits across the SDGs, human development, health and food security, human rights, and to global efforts to achieve poverty eradication, gender equality, climate resilience, chemicals management, sustainable economies and intergenerational equity, to name but a few issues. As a new decade begins, urgent efforts are required to achieve the 2030 Agenda for Sustainable Development, and all actors will need to work together in a coordinated manner.

This report draws on input from all 51 EMG members, providing information on the relevance of biodiversity to their existing mandates, as well as to their current activities and programmes. The analysis reveals - among other findings - that for direct drivers of biodiversity loss, the most striking gaps lie in mainstreaming in relation to climate change; in collaboration and coalitions in relation to climate change; and in monitoring, assessment and knowledge-sharing in relation to pollution. For indirect drivers, there appear to be gaps in monitoring, assessment and knowledge-sharing in relation to economic and technological issues and in relation to institutional and governance issues; in collaboration and coalitions in relation to institutions and governance issues; and in all six functions in relation to conflicts and epidemics.

Concerned by the negative trends in the status of biodiversity and based on the clear evidence of the need to transform our relationship with nature, this report presents four main areas of action for the UN to fully use and recognize its potential during the 2021-2030 decade:

Support country abilities to halt biodiversity loss and to sustainably use and enhance biodiversity through policies and programmes

The UN can play a key role in the implementation of the post-2020 global biodiversity framework and the SDGs, with a focus on improving enabling conditions, access to relevant data and means of implementation at national level. These recommendations specifically target Resident Coordinators, UN Country Teams and country-level programmes, but also the UN's Sustainable Development Cooperation Framework^a itself, to mainstream biodiversity for sustainable development and integrate biodiversity with other key areas, including human rights, strengthening of governance and the rule of law.

Establish strong coalitions for biodiversity

By building on their complementarities, UN entities have demonstrated that they can deliver significant benefits through collaboration. Existing UN coalitions and coordination mechanisms for biodiversity need to be strengthened, and there remain opportunities to develop new collaboration within and across UN entities and with external partners, to integrate biodiversity in other key agendas and avoid negative impacts on biodiversity at global, regional, national and local levels.

Mainstream biodiversity in UN internal programmes and operations

There is a need for UN agencies to manifest greater biodiversity awareness and create capacity for action for biodiversity conservation and enhancement within the UN system. In line with the UN Sustainability Strategy 2020-2030 and the "Greening the Blue" objective, UN entities should strive to address the drivers of biodiversity loss and embed biodiversity safeguards in procurement, project/programme planning and implementation in order to "avoid adverse impacts on biodiversity from UN facilities, operations and activities"¹⁰.

https://unsdg.un.org/resources/united-nations-sustai-

nable-development-cooperation-framework-guidance

9

As already undertaken by some, a key step is for each agency to assess the contributions to and impacts of biodiversity on their own mandates, and to identify, implement and scale up best practices for the sustainable use, development, conservation and restoration of biodiversity, as part of their programmes and operations. This would pave the way for the development of a UN system-wide exchange of information on and consideration of «best practices» for mainstreaming biodiversity in the UN's programmes and operations.

Enhance UN-wide coherence and followup on biodiversity

A tendency for the world to work in silos challenges the capacity of the UN system to address complex and interconnected issues, such as is the case with biodiversity loss and climate change. A clear example where bridges could be built is the three parallel decades that the UN is celebrating in the period 2021-2030 (the Decade of Ecosystem Restoration¹¹, the Decade of Action to deliver the SDGs¹² and the Decade of Ocean Science for Sustainable Development¹³), as well as in the implementation of the post-2020 global biodiversity framework.

To be effective and efficient in delivering a nature-positive UN, the UN family will need to ensure a coherent approach, including in securing high-level political support across sectors to address biodiversity loss and reinforce the sustainable use of biodiversity. There is also an opportunity for the UN to realign its different activities and programmatic streams to develop a common UN narrative on biodiversity and sustainable development, with improved communications on and advocacy for biodiversity for sustainable development.

¹¹ https://www.decadeonrestoration.org

¹² https://www.un.org/sustainabledevelopment/decade-of-action/

¹⁰https://unemg.org/wp-content/uploads/2019/09/INF_3_Strate-
gy-for-Sustainability-Management-in-the-UN-System.pdftion/
1313https

¹³ https://www.oceandecade.org

Introduction

Biodiversity underlies each of the 17 Sustainable Development Goals (SDGs), from eliminating hunger and reducing inequalities to underpinning sustainable communities and livehoods around the world. With ten years remaining to achieve the SDGs, the available evidence shows a lack of tangible progress and ongoing high rates of biodiversity loss, thus further underlining an urgent need for truly systemic change to «flatten the curve» of biodiversity loss and achieve sustainability.

According to the IPBES 2019 Global Assessment Report, nature can be conserved, restored and used sustainably while other global societal goals are simultaneously met through urgent and concerted efforts fostering transformative change. The IPBES Assessment Report makes it clear that business as usual or incremental improvements in biodiversity governance will not be sufficient and that



transformative change¹⁴ is needed (IPBES, 2019). This also echoes similar calls from the Intergovernmental Panel on Climate Change (IPCC), whose special report «Global Warming of 1.5°C» concluded that systemic changes would be required to meet the 1.5°C goal, and from the European Environment Agency's (EEA) Sustainability transitions: policy and practice¹⁵, the Convention on Biological Diversity's (CBD) fifth Global Biodiversity Outlook (GBO-5), UNEP's Global Environment Outlook (GEO)-6 and FAO's report on The State of the World's Biodiversity for Food and Agriculture (FAO, 2019).

Contracting Parties to the Convention on Biological Diversity (CBD) are in the process of preparing a post-2020 global biodiversity framework that is expected to be adopted at the 15th meeting of the Conference of the Parties (COP) to the CBD and considered by the General Assembly in 2021. At the first meeting of the Open-ended Working Group (WG2020) on the Post-2020 Global Biodiversity Framework, Parties to the CBD invited the EMG¹⁶ to facilitate the contribution of the United Nations system to the development and implementation of the post-2020 global biodiversty framework¹⁷. Following that, the 25th EMG Senior Officials Meeting in September 2019 established an inter-agency consultative process composed of 51 agencies to facilitate such a contribution from the United Nations system.

¹⁴ Transformations towards sustainability are more likely when efforts are directed at the following key leverage points, where efforts yield exceptionally large effects: (1) visions of a good life; (2) total consumption and waste; (3) values and action; (4) inequalities; (5) justice and inclusion in conservation; (6) externalities and telecouplings; (7) technology, innovation and investment; and (8) education and knowledge generation and sharing (IPBES, 2019).

 ¹⁵ EEA, 2019. Sustainability transitions: policy and practice. European Environment Agency Report No 09/2019 Luxembourg: Publications Office of the European Union. ISSN 1977-8449 doi:10.2800/641030.

¹⁶ CBD/WG2020/REC/1/1 paragraph 9.

¹⁷ This report is the second UN System Wide Framework of Strategies on the Environment (SWFS). In November 2016, the EMG launched a survey to gather information on EMG Member Agencies' support and contributions to the implementation of the environmental dimensions of the 2030 Agenda for Sustainable Development. In 2017 the first SWFS Synthesis Report titled 'UN System-wide Collaboration on the Environment: Synthesis Report on UN System-wide Contributions to the Implementation of the Environmental Dimension in the Sustainable Development Goals' was released. It was an important inter-agency milestone as it gauged the strategic alignment of 51 UN Member Agencies to Agenda 2030 and the UN SDGs.

Building on that and in addition to other individual contributions of UN agencies, the consultative process prepared two contributions and submitted them to the CBD's WG2020 on the Post-2020 Global Biodiversity Framework¹⁸. In parallel with that, the consultative process embarked on the preparation of the current report describing the UN system's approach both to engage in and support Member States in the implementation of the post-2020 global biodiversity framework, including a UN system highlevel commitment to engage in its implementation. This report draws on responses from all 51 EMG members to a survey, providing information on the relevance of biodiversity to their existing mandates, as well as to their current activities and programmes.

The results of this survey were complemented by online research by the EMG Secretariat with the support of a small drafting team of the Consultative Process¹⁹ to prepare this report. It addresses key roles that the members of the EMG could play to support UN Member States, as well as how their activities can help to address the direct and indirect drivers of biodiversity loss within their mandates and in alignment with the 2030 Agenda for Sustainable Development.

Alongside the EMG consultative process, the Secretary-General's Executive Committee (EC) on 25 March 2020 called for the UN system to mainstream biodiversity work in key areas, engage in crossagency collaboration, and enhance UN communications and advocacy. The Secretary-General requested full engagement across the UN system at global and regional levels in the process established under the EMG to facilitate UN contributions to the development of the post-2020 global biodiversity framework. He emphasized bringing together the climate and nature narratives and promoting them as one common planetary crisis that is directly linked to the global community's ability to achieve the SDGs, as well as the critical role of the UN during the Decade of Action.

Subsequently, the Chief Executives Board for Coordination (CEB) at their meeting on 14 May 2020 agreed to a stronger focus on nature across the UN system. The meeting tasked the High-Level Committee on Programmes (HLCP) to develop, for the CEB's adoption, a common approach to integrating biodiversity and nature-based solutions for sustainable development into the UN's policy and programme planning and delivery (CEB/2020/1). UNEP will lead the implementation of the CEB decision on nature. The EMG consultative process and this report will provide an essential input to the development of the common approach.

This report highlights the relevance of biodiversity to the work of UN entities and how an increasingly coherent approach will yield multiple benefits across the SDGs, human development, health and food security and human rights, as well as to global efforts to achieve poverty eradication, gender equality, climate resilience, chemicals management, sustainable economies and trans-generational rights, to name but a few issues. As a new decade begins, urgent effort is required to achieve the 2030 Agenda for Sustainable Development, and all actors will need to work together in a coordinated manner. The UN system will be in the forefront of this effort as it steps up its actions, multiplies its relevant activities and adopts transformative change from within.

¹⁸ EMG Overview of UN-system inputs to the post-2020 global biodiversity framework. Update on the UN EMG Consultative Process on Biodiversity at the time of the 2nd OEWG on the post-2020 Global Biodiversity Framework.

¹⁹ Secretariats of CBD, ECLAC, IFAD, IDDRI, UNCTAD, UNDP, UNEP-WCMC and UNIDO.

The Role of Biodiversity in Sustainable Development

Human dependencies on biodiversity

"Biodiversity is the natural life system upon which human societies depend to flourish, so preserving it is essential for our own survival" (IPBES, 2019).

Biodiversity is fundamental to our existence, our economies, the quality of life for all people and the effective enjoyment of human rights. It provides food and feed, energy, medicines, genetic resources, timber and a variety of other essential materials. It also provides economic and social benefits worth billions of dollars to the global economy²⁰, including in agriculture, forests, fisheries and tourism, and regulates our weather, soil productivity, water supplies and climate system. It processes wastes, certain pollutants and cycles critical nutrients. For example, marine and terrestrial ecosystems serve as the sole sink for anthropogenic carbon emissions; that is, the gross carbon sequestration equivalent to 60 per cent of global anthropogenic carbon emissions (IPBES, 2019). Nearly half of the world's population is directly dependent on natural resources for their livelihoods. Nature is also a central component of many belief systems, worldviews and identities, as well as a source of inspiration to humanity²¹.



In 2010, some 2.6 billion people drew their livelihoods either fully or partially from agriculture, 1.6 billion from forests and 250 million from fisheries²². All of these sectors and the welfare of people working in them depend on the sound and sustainable management of natural resources. However, as human exploitation of natural systems and their resulting degradation relentlessly advance in many parts of the globe, the economic benefits extracted have come with ever-increasing costs. The loss of biodiversity and degradation of ecosystems pose a growing danger to human livelihoods, particularly those of the poor, due to diminishing economic productivity, threats to food security and nutrition, and reduced capacities of countries to deal with the effects of climate change, along with unpredictable medium-term economic instability linked to other risks including pandemics such as COVID-19.



- 20 OECD, 2019. Biodiversity: Finance and the Economic and Business Case for Action, report prepared for the G7 Environment Ministers' Meeting, 5-6 May 2019.
- 21 CBD Strategic Plan 2011-2020 & the Aichi Targets at https:// www.cbd.int/doc/strategic-plan/2011-2020/Aichi-Targets-EN.pdf

22 https://www.cbd.int/development/doc/biodiversity-2030-agenda-policy-brief-en.pdf

Box 1. COVID-19: A call for a new relationship with biodiversity

The COVID-19 pandemic has abruptly brought much of the world to a halt, with profound impacts on every aspect of life. Seven human-mediated factors are most likely driving the emergence of such zoonotic diseases: 1) increasing human demand for animal protein; 2) unsustainable agricultural intensification; 3) increased use and exploitation of wildlife; 4) unsustainable utilization of natural resources accelerated by urbanization, land use change and extractive industries; 5) increased travel and transportation; 6) changes in food supply; and 7) climate change²⁸. These same factors also impact on societal responses to zoonotic diseases, as biodiversity is an essential source for biomedical research into treatments for current and future diseases.

Sixty per cent of all known diseases and 75 per cent of new infectious diseases are zoonotic. As human activities take place in previously undisturbed biodiversity-rich areas, there is an increasing risk of wildlife – livestock – human contact and thus of the emergence of novel zoonoses²⁴. This risk increases significantly as a result of illegal trade in wildlife, which has led to many calls for ensuring that all trade in wildlife is legal, sustainable and traceable. A strengthening of the environmental dimensions of a "One Health" approach²⁰ will be essential if we are to reduce the risk of future zoonotic pandemics.

"Strong and global stewardship of nature and biodiversity; and a clear commitment to 'building back better', creating green jobs and facilitating the transition to a carbon-neutral future, are key elements for building resilient societies after the COVID-19 pandemic." Inger Andersen, Executive Director of UNEP

We can decouple our economies from environmental degradation, but we cannot decouple our well-being from healthy ecosystems. The use of natural resources has more than tripled since 1970, resulting in increasingly negative impacts on the environment and human health, particularly for vulnerable groups. Ninety per cent of biodiversity loss and water stress are caused by resource extraction and processing. These same activities contribute to about half of global greenhouse gas emissions (Global Resources Outlook, 2019).

Business as usual is no longer a rational option. A successful recovery from the current global pandemic will be one that brings a new era of social and economic prosperity for all, ensuring the right to a healthy environment for current and future generations and staying within the planetary boundaries. A new relationship with biodiversity and the sustainable use of natural resources will be key to this success. Existing biodiversity-friendly, low-carbon, green and blue growth initiatives and integrated inclusive green economy approaches can catalyse decent, green jobs and enterprises during the recovery, while ensuring that growth stays within planetary boundaries and that we take more sustainable paths to development in the future.²⁶

On the occasion of the World Day on Desertification and Drought, 17 June 2020, the Secretary-General called for "*a new contract for nature…through international action and solidarity, we can scale up land restoration and nature-based solutions for climate action and the benefit of future generations*".

Shaping this new relationship with the natural world will require leadership, informed by reliable and accessible data. The UN can help to ensure that economic and social recovery efforts will embed measures to accelerate biodiversity and climate actions.

²³ https://www.unenvironment.org/resources/report/preventing-future-zoonotic-disease-outbreaks-protecting-environment-animals-and

²⁴ https://wedocs.unep.org/bitstream/handle/20.500.11822/32316/ZP.pdf?sequence=1&isAllowed=y

²⁵ https://www.unenvironment.org/resources/report/preventing-future-zoonotic-disease-outbreaks-protecting-environment-animals-and

²⁶ https://academic.oup.com/oxrep/article/doi/10.1093/oxrep/graa015/5832003

Our fundamental dependencies on biodiversity have been recognized not only in numerous assessments, but also increasingly by business voices. Biodiversity loss is one of the top five risks perceived by CEOs and business stakeholders (WEF, 2020)²⁷. Over half of the world's GDP is moderately to highly dependent on biodiversity (ibid), such as through pollination, soil health, water quality and provision of natural resources, with construction (US\$ 4 trillion), agriculture (US\$ 2.5 trillion) and food & beverages (US\$ 1.4 trillion) being the three largest economic sectors most dependent (WEF/PwC, 2020; see Figure 1 below). Biodiversity is the foundation of business supply chains, as well as for sustainable development.



Figure 1 - Percentage of direct and supply chain Gross Value Added with high, medium and low nature dependency, by industry (Source: WEF/PwC, 2020).

Biodiversity is in serious decline worldwide, with resulting falls in what nature contributes to people (see Figure 2). The IPBES 2019 Global Assessment reported that three-quarters of the land surface and two-thirds of the ocean area have been significantly altered by human actions, and land degradation has reduced the productivity of almost one-quarter of the global land surface. In addition, over the last 50 years, there has been a 82 per cent decline in the global biomass of wild animals, an over 85 per cent reduction in total wetlands area; and while more than 75 per cent of food crop types rely on animal pollination, populations of pollinators are in decline around the world, putting at risk between US\$ 235-577 billion²⁸ of global crop output annually. In addition, since 1870, approximately half of the live coral cover on coral reefs has been lost, and approximately one-third of fish stocks are now being harvested at biologically unsustainable levels (FAO, 2020).

28

²⁷ http://www3.weforum.org/docs/WEF_New_Nature_Economy_ Report_2020.pdf

Calculated in 2015 production values.

	5	0 - ye	ar global	tren	d	Across
Nature's contributions to people	Decrease	e 🔶	No change	⇒	Increase	regions
1. Habitat creation & maintenance	٢	l I			1	Consistent
2. Pollination & dispersal of seeds	٢	l I	1	1 1	1	Consistent
3. Regulation of air quality			1			Variable
4. Regulation of climate	l l	١			1 	Variable
5. Regulation of ocean acidification		l I			l I	Variable
6. Regulation of freshwater quantity						Variable
7. Regulation of freshwater quality						Consistent
8. Regulation of soils						Variable
9. Regulation of hazards & extreme events						Variable
10. Regulation of organisms						Consistent
11. Energy						Variable
12. Food & feed						Variable
13. Materials & assistance		Ś		Ż		Variable
14. Medicinal, biochemical & genetic resources	s 🛡				i i	Consistent
15. Learning & inspiration			1		1	Consistent
16. Physical & psychological experiences					i i	Consistent
17. Supporting identities					1	Consistent
18. Maintenance of options	J				1	Consistent

DIRECTIONAL TREND

Figure 2 - Global 50-year trends in the capacity of nature to sustain contributions to a good quality of life, showing a decline for 14 of the 18 categories of nature's contributions to people (Source: IPBES, 2019).

There are five main direct drivers of biodiversity loss and degradation: changes in the use of land and sea; over-exploitation of biodiversity; climate change; pollution; and invasive alien species (see Figure 3 below). These five drivers of loss have all either grown steadily or accelerated in recent decades, driving change in an interlinked and cumulative way. The five direct drivers result from indirect, underlying causes that are defined or underpinned by societal values and behaviours such as unsustainable production and consumption patterns, human population dynamics, global trade and the use of technology (IPBES, 2019).



Figure 3 - Examples of global declines in nature, emphasizing declines in biodiversity, that have been and are being caused by direct and indirect drivers of change (Source: IPBES, 2019).

Although land use change and overexploitation are currently the most important drivers of biodiversity loss on land and in the ocean respectively (ibid), climate change is a growing threat, with human-induced greenhouse gas emissions continuing to rise, intensifying extreme weather events and the loss of biodiversity, and thereby putting efforts to meet the goals of the Paris Agreement further off course. The adverse impacts of climate change on biodiversity will become even more pronounced in the coming decades, hampering the achievement of sustainable development, with variable relative effects depending on emission scenarios and geographic regions. Such impacts will worsen, in some cases exponentially (WEF, 2020). Even if the Paris Agreement targets are reached, keeping global temperature rise between 1.5°C to 2°C, the geographic distribution of most terrestrial biodiversity is projected to shrink dramatically. The dual Nature-Climate crisis both increases and compounds the risks faced by individuals, groups and people in vulnerable situations.

Box 2. Increasing synergies between action on climate change and biodiversity

The dual climate change and biodiversity crises require an ambitious and coordinated response. Addressing them separately risks compromising the world's ability to successfully halt climate change, while preserving ecosystems and meeting other Sustainable Development Goals. There are at least four major ways in which climate change and biodiversity issues are linked:

- 1. Climate change is one of the main drivers of biodiversity loss. Its impacts on ecosystems are recognized in the 1992 text of the UNFCCC²⁰ (see e.g. Article 1), and have been documented in the scientific literature and highlighted over several IPCC assessments, including in the IPCC's «Global Warming of 1.5°C» Special Report (IPCC, 2019). The IPBES 2019 Global Assessment Report outlines how the role of climate change as a driver for biodiversity loss is set to increase over the coming years. Both reports underline the significant benefit to biodiversity of keeping temperature rise to 1.5°C rather than 2°C.
- 2. Ecosystems, both terrestrial and marine, play a major function in regulating climate, as well as enhancing adaptation and resilience to climate change. Their role as carbon sinks is recognized in the UNFCCC text (ibid; see the Preamble). This has been given stronger emphasis by the Paris Agreement under the UNFCCC and its "GHG neutrality" goal (article 4.1), which requires a greater reliance on carbon sinks, therefore placing ecosystems at the centre of ambitious climate action. In addition to this, nature-based solutions are central to adaptation strategies to climate change.
- 3. Several "solutions" envisioned for climate change can be potentially damaging to biodiversity, in particular solutions relying on carbon-dioxide removal technology using widespread Bioenergy with Carbon Capture and Storage schemes, especially if these are deployed at a large scale (e.g. up to an area of land the size of India, as projected to 2050 in some of the 1.5°C emission reduction pathways in the IPCC's «Global Warming of 1.5°C» Special Report). Some researchers project that half of ideal bioenergy growing areas are situated in biodiversity hot spots (Santangeli et al., 2016). Nature-based solutions to protect, sustainably manage and restore natural and modified ecosystems can provide over onethird of the cost-effective climate mitigation needed between now and 2030 to limit warming to less than 2 °C³⁰.
- 4. Climate change and biodiversity loss share several root causes that are linked to unsustainable modes of production and consumption (e.g. in agri-food systems or energy production; IPBES, 2019). This is also reflected, for instance, in the subsidies identified by the OECD that are harmful to biodiversity, with a massive share concerning subsidies to fossil fuels (OECD, 2019). Moreover, climate change and biodiversity loss interact to create and compound harms to people's lives, livelihoods, well-being and rights.

 $^{29\} https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf$

³⁰ https://www.unenvironment.org/nature-based-solutions-climate

The interlinkages between Biodiversity and the 2030 Agenda

The adoption of the 2030 Agenda for Sustainable Development³¹ was a landmark achievement, articulating a global vision of unprecedented scale and ambition for rights-based sustainable development. Its 17 SDGs



and 169 targets are integrated and indivisible, and balance the three dimensions of sustainable development: economic, social and environmental (see Figures 4 and 5 below).

> **Figure 4** - The graphic above refers to each of the SDG indicators, and shows their relationship (indivisible, dependent, co-beneficial, or independent) with biodiversity. Biodiversity not only underpins the SDGs as a whole, but also directly relates to more than half of the SDG targets and their indicators (UNDP, 2020).



Today, with a decade left to achieve the SDGs, the 2020 SDGs Report[∞] paints a daunting picture, one worsened by the COVID-19 pandemic. The scale of the challenge is clear:

- the world is not on track to end poverty by 2030, with the coronavirus causing the first increase in global poverty in decades;
- 690 million people in the world are hungry almost 9% of the entire population of the planet, while 3 billion people cannot afford a healthy diet (FAO et al., 2020).
- over two billion people worldwide still lack safely managed drinking water, and twice as many lack safely managed sanitation services, while three billion people lack basic handwashing facilities at home (according to 2017 data);
- 31 https://sustainabledevelopment.un.org/post2015/transformingourworld
- 32 https://unstats.un.org/sdgs/report/2020/The-Sustainable-Development-Goals-Report-2020.pdf

- air pollution is highest in least developed countries (IPBES, 2019) and globally has caused 4.2 million premature deaths in 2016;
- investment in fossil fuels continues to be higher than investment in climate mitigation;
- ocean acidification continues to threaten marine environments and ecosystem services;
- around 1 million species are threatened with extinction and two billion hectares of land are degraded, affecting some 3.2 billion people;
- human rights defenders, environmental activists, indigenous peoples, journalists and trade unionists continue to be the target of physical violence, even murderous attacks. From 2015 to 2019, the United Nations recorded at least 1,940 killings and 106 enforced disappearances across 81 countries; and
- the magnitude of the coronavirus health crisis may exert downward pressure on official development assistance (ODA) budgets in the coming period.



Figure 5 – The relationship between the environmental, social and economic dimensions of the SDGs (Source: Azote Images for Stockholm Resilience Centre, Stockholm University).

All of this was the case even before the onset of the current COVID-19 crisis.

Most of the SDG targets related to biodiversity and environmental sustainability are not on track. Fourteen out of the 17 SDGs have biodiversity elements directly critical to the success of their achievement³³. Biodiversity loss therefore poses a risk to the overall achievement of the 2030 Agenda.

Biodiversity objectives, consistent with the Strategic Plan for Biodiversity 2011-2020, its Aichi Biodiversity Targets³⁴ and their 2020 deadlines, are embedded in the SDGs, including but not exclusively in Goals 14 and 15.

Additionally, a wider number of SDG targets also address drivers of biodiversity loss, as well as identify areas to ensure sustainable use of biodiversity and ecosystem services. As the majority of the biodiversity-related SDG targets will not be met by 2020, the gap between trends in biodiversity and the progress needed to achieve the SDGs will widen. Current negative trends in the status of biodiversity and ecosystem services are undermining progress towards 80 per cent (i.e., 35 out of 44) of assessed SDG targets on poverty, hunger, health, water, cities, climate, oceans and land. Lack of achievement in these areas will also have a bearing on achieving SDG 16 on peace, justice and strong institutions. The interconnectedness of the SDGs is clear, and the lack of progress towards the Aichi and associated SDG targets reflects the growing pressure on biodiversity from our economies and models of production, and further reinforces the need for transformative change.

³³ Secretariat of the Convention on Biological Diversity (CBD), no date. Biodiversity and the 2030 agenda for sustainable development - Policy Brief. CBD, FAO, The World Bank, UN Environment and UNDP. Montréal, Canada, 8 pages. Available online at - https://www.cbd.int/development/doc/biodiversity-2030-agenda-technical-note-en.pdf

³⁴ The Convention on Biological Diversity's tenth meeting of the Conference of the Parties, held 18-29 October 2010, in Nagoya, Aichi Prefecture, Japan, adopted a revised and updated Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets, for the 2011-2020 period. See: www.cbd.int/sp and https://www.cbd.int/doc/strategic-plan/2011-2020/Aichi-Targets-EN.pdf

Roles and contributions of the UN system during the 2011-2020 Decade for Biodiversity



The 10th meeting of the Conference of the Parties to the CBD, held in Nagoya, Japan, in 2010, adopted the Strategic Plan for Biodiversity 2011-2020, comprising twenty Aichi Biodiversity Targets that set aspirations for achievement at the global level, and a flexible framework for national target setting and implementation. This Strategic Plan was subsequently broadly endorsed and supported throughout the UN system. The same year, the UN General Assembly declared 2011-2020 the UN Decade on Biodiversity³⁵ as a contribution to the implementation of the Strategic Plan across the entire UN system. The biodiversity-related conventions have contributed to the preparation of the Strategic Plan for Biodiversity 2011-2020 and ensured that their own strategic plan targets were fully aligned or compatible with the Aichi Biodiversity Targets and the SDGs.

UN entities have responded in various ways to the biodiversity agenda in their planning and programming. Examples include: the work of FAO and IFAD in relation to biodiversity, food and agriculture systems³⁶ and nutrition; UNCCD's spatially explicit national targets on conservation, sustainable use and restoration of land resources under land degradation neutrality targets; the work of UNDP recognizing the role of biodiversity in underpinning development and poverty reduction; UNCTAD's work on promoting trade with biodiversity-friendly sourced products and services through the BioTrade Initiative; the important cultural and religious benefits of biodiversity considered by UNESCO; the Statistics Division of UN DESA (UNSD's) work on incorporating natural capital into systems of national accounts; the UN Special Rapporteur on human rights and the environment's work on human rights and biodiversity³⁷;

me

³⁵ UN General Assembly Resolution 65/161.

³⁶ Under agriculture, FAO includes crop and livestock agriculture, forestry, fisheries and aquaculture.

³⁷ https://www.ohchr.org/EN/Issues/Environment/SREnvironment/ Pages/Biodiversity.aspx; https://www.ohchr.org/EN/Issues/Environment/SREnvironment/Pages/HealthyEcosystems.aspx

WHO's work on the relationship between biodiversity and human health, including the joint report on this subject with the CBD (2015); WIPO's programme on genetic resources, traditional knowledge and traditional cultural expressions³³; WIPO Green³⁹ and WIPO Alternative dispute resolution on biodiversity⁴⁰; the alignment of the strategies of biodiversity-related conventions; and the establishment of major partnerships, some examples of which are provided below. Many other global and regional UN entities have relevant programmes and/or projects, including through the opportunities provided by the regional commissions and sustainable development fora.

An analysis of UN agency activities over the last decade leads to the identification of six main functions that UN agencies can play to directly deliver and assist Member States in implementing the post-2020 global biodiversity framework:

- 1. Biodiversity mainstreaming / integrating biodiversity in sectors: among other efforts, this is exemplified by FAO's Strategy on Mainstreaming Biodiversity across Agricultural Sectors (2019)41, and the Action Plan to implement; WIPO's Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC)'s text-based negotiations on disclosure requirements relating to genetic resources and associated traditional knowledge; by UNDP's and the World Bank's activities to strengthen protected areas, combat the illegal trade in wildlife and mainstream biodiversity in agriculture, forestry, tourism and mining; and by the WHO-CBD Joint Programme on Biodiversity and Health.
- 2. Monitoring / assessments / knowledge sharing: a key element of this function is the monitoring of SDG targets and indicators, with UN agencies acting as custodians, but this also includes global and thematic assessments, such as those by FAO and IPBES, and the Global Outlooks (on the Environment by UNEP, on Biodiversity by CBD, on

Land by UNCCD, on forests and fisheries by FAO and on Wetlands by Ramsar Convention). This function includes data collection and compilation as, for example, in UNEP's «World Environment Situation Room»⁴² and the development of agreed statistical frame-works for measuring the interrelationships between ecosystems, the economy and human well-being, such as the System of Environmental-Economic Accounting (SEEA)⁴³.

- 3. Capacity building and strengthening / technical guidance activities range from programmatic and project-level capacity building initiatives, to national or regional technical training, as well as the publication of case studies, normative and technical guidance (e.g. by the Climate Technology Centre & Network), and development of tools and methodologies and support to their use. Examples include the work on the Biodiversity Finance Initiative (BIOFIN) and SEEA, WIPO's guidance in deployment of green technology and work to include intellectual property issues in access and benefit-sharing agreements for genetic resources, and the facilitation of communities of practice such as the Biodiversity and Ecosystem Services Network (BES-Net) and the NBSAP Forum. Going forward, these would be delivered in line with the CBD long-term strategic framework on capacity development that will accompany the post-2020 global biodiversity framework.
- 4. Collaboration / coalitions (partnerships among UN entities or strongly UN-led): UN agencies leverage their influence by working with governments, civil society organizations, research and science organizations and the private sector. Developing such multi-stakeholder alliances offers the possibility to benefit from complementarities in community-based and other projects, as well as in global initiatives such as the National Biodiversity Strategies and Action Plans (NBSAPs) Forum and the UNEP-IUCN Global Fund for Ecosystem-based Adaptation, or joint implementation of the Global Environment Fund (GEF) and other donor projects.

³⁸ https://www.wipo.int/tk/en/

³⁹ https://www3.wipo.int/wipogreen/en/

⁴⁰ https://www.wipo.int/amc/en/center/specific-sectors/biodiversity/

⁴¹ http://www.fao.org/3/ca7722en/ca7722en.pdf

⁴² https://wesr.unep.org

⁴³ The System of Environmental Economic Account - Experimental Ecosystem Accounting (SEEA EEA) in conjunction with the SEEA Central Framework provides an integrated information system to mainstream biodiversity in national accounting and decision-making (see seea.un.org).

- 5. Communication / awareness-raising / education: public education and awareness of biodiversity loss and its impacts is raised through the organization of public events, such as UN Days or Years, and their associated media campaigns; and the preparation of communications material, which can be used in particular for Education for Sustainable Development in the field (e.g. by UNHCR in a refugee camp), through Massive Open Online Courses (MOOCs, as prepared by UNEP, UNDRR, UNITAR, UNSD, WHO and others), and in conventional training programmes (e.g. by UNCTAD, UNESCO, UNU, WIPO and the Ramsar Convention).
- 6. Mainstreaming biodiversity within and across UN programmes and operations: UN agencies can and should demonstrate that they have adequately taken biodiversity into consideration in their facilities, operations, procurement, programmes and projects, to lead by example in preventing harm to biodiversity across their work, and in delivering a «nature-positive» UN. The Model Approach to Environmental and Social Standards for UN Programming⁴⁴ includes a benchmark standard on biodiversity and suggests a common approach for UN entities to address environmental and social standards in programming. Phase 1 of the Strategy for Sustainability Management in the UN System 2020-2030⁴⁵ includes the goal to avoid adverse impacts on biodiversity from United Nations facilities, operations and activities. Indicators for individual entities have also been proposed as part of this Strategy, to be further developed in Phase 2 of the Strategy.

Some UN Agencies have already adopted benchmaks to mainstream biodiversity conservation and sustainable management of living natural resources, such as the World Bank's *Environmental and Social Framework* and IFC's *Environmental and Social Performance Standards*. Performance Standard 6 relating to biodiversity has also become a global benchmark for the private sector and has been widely adopted by financial institutions, governments and corporations on a voluntary basis. EMG members were surveyed through a questionnaire on the relevance of their individual mandates and activities to biodiversity, with responses then grouped according to functions that help to address direct and indirect drivers of biodiversity loss⁴⁶. The results of this survey are available on the EMG website at - https:// unemg.org/overview_emgmembers_biodiversity-mandates_activities_web/, with a summary of the results below in Table 1. This matrix maps the six main functions that are identified above in relation to drivers of biodiversity loss. It shows the UN entities having such a mandate and/or current activities in each cell of the matrix. The green-shaded cells of the matrix are direct drivers of biodiversity loss, and the blue-shaded cells are indirect drivers of biodiversity loss.

The matrix points to the reported **concentration of efforts** of UN entities in certain function/driver realms (that is, matrix cells), which could provide opportunities for better and enhanced communication, data management and/or coordination amongst agencies. It also reveals **certain gaps** where the totality of UN agency activities remains relatively limited, thus offering opportunities for an increase of attention. Further analysis of this information also provides some clues that could lead to new partnerships for biodiversity.

For example, there is a **high clustering of efforts** by UN entities in each of the following realms:

- «Monitoring/Assessment/Knowledge sharing» in relation to three drivers: climate change, natural resource use & exploitation, and demographic & socio-economic issues;
- «Capacity Building and Technical Guidance» in relation to all drivers except for invasive alien species and conflicts & epidemics;
- «Collaboration/Coalitions» in relation to the drivers: natural resources use & exploitation, and demographic & socioeconomic issues; and finally,
- «Communications/Awareness-raising» in relation to all drivers except invasive alien species and conflict & epidemics.

⁴⁴ See https://unemg.org/modelapproach/

⁴⁵ See https://unemg.org/wp-content/uploads/2019/09/INF_3_ Strategy-for-Sustainability-Management-in-the-UN-System.pdf

⁴⁶ Direct drivers are: Land and sea use change; Over-exploitation; Climate change; Pollution; Invasive alien species. Indirect drivers are: demographic & socio-cultural; economic & technological innovation; institutions & governance; conflicts & epidemics (IPBES, 2019).

FUNCTION DRIVER (direct or indirect)	Biodiversity mainstreaming	Monitoring / Assessment / Knowledge sharing	Capacity building and strengthening + Technical guidance	Collaboration / Coalitions	Communications / Awareness- raising / Education	Mainstreaming in Internal operations
Land and sea use change	CBD, CMS, ECE, FAO, UNDP, UNEP, WBG	CBD, CMS, ECE, FAO, UNCCD, UNDESA, UNDP, UNEP, WBG	CBD, CMS, ECE, FAO, IFAD, Ramsar Convention, UNCCD, UNDESA, UNFF, UNDP, UNEP, WBG	CBD, CMS, ECE, FAO, UNCCD, UNDESA, UNDP, UNEP, WBG	CBD, FAO, ICAO, IFAD, UNCCD, UNDESA, UNFF, UNDP, UNEP, WBG	WBG
Climate change	CBD, ITC, Ramsar Convention, UNDP, UNEP, WBG	CBD, IOM, Ramsar Convention, UNC- TAD, UNDESA, UNDP, UNEP, Ozone ⁴⁸ , UPU, WMO, WBG	CBD, ECA, ECE, ECLAC, ESCAP, ESCWA, FAO, IAEA, ICAO, IFAD, IMF, IMO, ITC, UNDESA, UNDRR, UNDP, UNEP, Ozone, UN-Habitat, UNITAR, UN-Women, WIPO, WMO, UNWTO, UNODC, WBG	CBD, FAO, UN- DESA, UNDRR, UNDP, UNEP, Ozone, WBG	CBD, ICAO, IFAD, IMO, IOM, ITC, UNDRR, UNCCD, UNDESA, UNDP, UNEP, Ozone, UN-Women, UPU, UNWTO, WBG	UNOPS, UPU, WBG
Pollution	BRS, CBD, UNDP, UNEP, UNIDO, WBG	CBD, UNDESA, UNEP, Ozone, UPU, WMO, WBG	BRS, CBD, FAO, UNDOS, ECA, ECE, ECLAC, ESCAP, ESCWA, IAEA, ICAO, IFAD, IMF, IMO, ITU, UNDESA, UNDP, UNEP, UNHCR, UNI- DO, UNITAR, WBG	BRS, CBD, ITU, UNDESA, UNDP, UNEP, WBG	BRS, CBD, ICAO, IFAD, IMO, Ramsar Convention, UNDE- SA, UNDP, UNEP, Ozone, UPU, WHO, WBG	UNDOS, UN- HCR, UPU, WBG
Natural re- source use and exploitation	CBD, FAO, ITC, Ramsar Conven- tion, UNCTAD, UNDP, UNEP, UNIDO, WBG	CBD, UNDOS, ECA, ECE, ECLAC, ESCAP, ESCWA, FAO, Ramsar Convention, UNCCD, UNCTAD, UNDESA, UNEP, UNESCO, UNOO- SA, WBG	CBD, CITES, CMS, UNDOS, ECA, ECE, ECLAC, ESCAP, ESCWA, FAO, IAEA, IFAD, IMF, ITC, Ramsar Convention, UNCCD, UNCTAD, UNDESA, UNFF, UNDP, UNEP, UNES- CO, UN-Habitat, UNHCR, UNIDO, UNITAR, UNOOSA, UN-Women, WFP, WIPO, WTO, UNWTO, UNODC, WBG	CBD, FAO, IFAD, UNCCD, UNC- TAD, UNDESA, UNDP, UNEP, UNESCO, WTO, UNODC, WBG	CBD, CITES, CMS, FAO, IFAD, ITC, Ramsar Convention, UNCCD, UNDESA, UNCTAD, UNFF, UNDP, UNEP, UNESCO, UN-Wo- men, WTO, UNWTO, UNODC, WBG	UNDOS, UNHCR, UNOPS, WBG
Invasive alien species	CBD	CBD, UNDOS, UNEP	CBD, FAO, IMO, IPPC, Ram- sar Convention, UNEP, WTO	CBD, CITES, FAO, ICAO, IMO, UN members ⁴⁹ of the Inter-agency Liaison Group on Invasive Alien Species	CBD, CITES, FAO, ICAO, IMO, Ramsar Convention, UNEP	WBG
Demographic and socio - cultural	CBD, FAO, UNCTAD, UNDP, UNEP, WHO, UNDESA, WBG	ECA, ECE, ECLAC, ESCAP, ESCWA, IOM, OHCHR, UNEP, UNESCO, UNFPA, WHO, WBG	FAO, IFAD, UNDRR, OCHA, OHCHR, UNDP, UNEP, UNESCO, UNFPA, UN-Habi- tat, UN-Women, WHO, WIPO, WBG	UNDRR, OCHA, UNDP, UNEP,	CBD, CITES, FAO, IFAD, IOM, UNDRR, OHCHR, Ramsar Convention, UNC- CD, UNDP, UNEP, UNESCO, UNFPA, UN-Women, WHO, UNDESA, WBG	OCHA
Economic and technological	CBD, ECE, FAO, ILO, ITC, UNCTAD, UNDP, UNEP, UNIDO	UNDESA, UNEP, UNOOSA, WMO	CBD, CITES (trade), FAO, ICAO, IFAD, ILO, IMF, UNCTAD, UNDESA, UNDP, UNEP, Ozone, UNOOSA, WIPO, WMO, WTO, UNWTO	CITES, ILO, IMO, UNCTAD, UNDP, UNEP, Ozone, WTO	CITES, FAO, IFAD, IMF, IMO, ITC, UNCTAD, UNDP, UNEP, Ozone, WTO, UNWTO	
Institutions and governance	CBD, ITC, Ramsar Convention, UNCTAD, UNDP, UNFF, UNEP, UNU, WBG	OHCHR, Ramsar, UNCTAD, UNDE- SA, UNDP, UNEP, WBG	CBD, CITES, CMS, ECA, ECE, ECLAC, ESCAP, ESCWA, IFAD, IOM, ITC, OHCHR, UNC- CD, UNCTAD, UNFF, UNDP, UNEP, UNU, WIPO, WBG	CBD, Ramsar Convention, UNC- TAD, UNDP, WBG	CBD, CMS, IOM, ITC, OHCHR, UNC- TAD, UNDP, UNEP, UNU, WBG	
Conflicts and epidemics	WHO	Ramsar Conven- tion, WHO	UNHCR, WHO	OCHA, UNEP, UNHCR, WHO	OCHA, UNEP, WHO	

Table 1. Summary of UN Agency Activities and Mandates in Biodiversity⁴⁷

⁴⁷ This is based on activities and functions as reported by agencies through the survey, and is not comprehensive, while still providing an overall image of priorities and gaps.

⁴⁸ References to "Ozone" in this table refer to the Ozone Treaties, i.e. the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol on Substances that Deplete the Ozone Layer.

⁴⁹ CBD, CITES, FAO, the FAO International Plant Protection Convention (IPPC), ICAO, IMO and the World Trade Organization (WTO).

The strongest clustering of activities/mandates comes under the function «Capacity Building and Technical Guidance» against the direct driver «natural resources use and exploitation»: a total of 33 UN entities are working in this realm. Figure 6 below shows the function and driver pairs having the highest concentrations of current UN agency activities/mandates.

These clusters of activity in addressing drivers of biodiversity loss indicate areas in which there may be a need for greater coordination among UN agencies and other bodies, as well as improved knowledge management and integration of agency efforts in addressing certain drivers of biodiversity loss. Positive results could be achieved, for example, through joint programming, the establishment of an online «activities forum», or virtual discussion group(s). Such mechanisms could lead to, among other benefits, building complementarity between related activities, identifying existing mechanisms that can be used and built upon rather than establishing new ones from scratch, avoidance of overlap between UN agency activities, the pooling of scarce resources and system-wide, unified messaging concerning how to better cope with or respond to particular drivers.

Examined from a different perspective. Table 1 also reveals a number of existing gaps in addressing drivers of biodiversity loss, where few UN agencies surveyed have current activities or relevant mandates. For direct drivers of biodiversity loss, the most striking gaps lie in mainstreaming and in monitoring, assessment & knowledge-sharing both in relation to invasive alien species; and for all six functions in relation to mainstreaming in internal operations. For indirect drivers, there appear to be gaps in monitoring, assessment and knowledge-sharing in relation to economic and technological issues; in collaboration and coalitions in relation to institutions and governance issues; in internal operations in relation to demographic & socio-cultural, economic & technological and institutions & governance; and in all six functions in relation to conflicts and epidemics.



Figure 6 - Current UN agency biodiversity-related activities/mandates - main clusters* and gaps**

* «clusters» are those above a level of 15
** «gaps» are those occurring at 5 and below

While there appears to be room for progress regarding the «Mainstreaming of Biodiversity in Internal Operations», the recent decisions by the EC and CEB should provide impetus for most UN agencies to enhance their actions in this area. Figure 7 below also shows the function and driver pairs where existing gaps in current UN agency activities/mandates are the most pronounced.







Looking forward: paving the way for a UN agenda for action on biodiversity

Several UN-wide initiatives can help build momentum and mobilize action in support of biodiversity. At the start of the 2021-2030 decade, several high-profile events focusing on biodiversity will be convened by and/or within the UN system⁵⁰. These critical global leadership events could and should be complemented by activities of the UN Decade of Ecosystem Restoration, the UN Decade on Family Farming, the UN Decade of Action to deliver the Global Goals and the UN Decade of Ocean Science for Sustainable Development that collectively will outline the future and help build momentum for biodiversity-related actions within the UN system and those of its partners.

The year 2020 precedes the decade in which the world must «flatten the curve» of biodiversity loss, adopt transformative change and put biodiversity and the economy on a path to recovery, which is the precise intention of the post-2020 gloal biodiversity framework being negotiated under the auspices of the CBD. To succeed in this agenda, the UN needs to build political momentum to catalyse a decade of action for people, planet and climate. The decade 2021-2030 is not only the last chance to achieve the 2030 Agenda for Sustainable Development, but is likely to indicate the pathway for the well-being of humanity as well as planetary health during the rest of the 21st century.

Engaging and empowering new and existing constituencies across sectors and society will be essential. Progress in building a new relationship with nature will require building on complementary capacities from across the UN system of global entities and

----- 28 ------

⁵⁰ These include the UN Ocean Conference in Portugal, the UN Summit on Biodiversity convened by the UN General Assembly, the UN Biodiversity Conference (CBD COP-15 and the meetings of the Parties to its Protocols) in China, the UN Climate Conference (UNFCCC COP-26) in Glasgow (Scotland, UK), the UN Food Systems Summit and the UNCTAD 15th Ministerial Conference in Barbados. Due to the COVID-19 pandemic, however, most of these have recently been postponed beyond 2020.

regional commissions to unlock new resources and partnerships for biodiversity. Enhancing synergies among multilateral environmental agreements (MEAs) will also provide integration and efficiency in implementing the post-2020 global biodiversity framework. Finally, strengthening partnerships with civil society organizations and environmental defenders who are on the frontline protecting biodiversity will also be key to achieving biodiversity goals in an effective manner.

To be successful, actions will be needed to address both the direct and indirect drivers of biodiversity loss, encourage sustainable use of biodiversity, and help to catalyse ecosystem restoration over the decade as a basis for progress towards the SDGs. Mainstreaming biodiversity across sectors and the wider implementation of nature-based solutions will be critical. The entire UN system has a central role to play in these efforts, knowing that biodiversity serves as a safety net for humanity by buffering us from the impacts of climate change, sustaining our health and well-being and maintaining economies. Therefore, harnessing the power of nature for sustainable development, as well as for its intrinsic values, is key to securing the future health, security and well-being for vulnerable people now ever-more imperilled by the COVID-19 crisis that threatens to throw millions back into poverty.

Building on the analysis completed for this report, and from the evidence of the need to transform our relationship with biodiversity, the actions required for the UN to fully realize its potential during the 2021-2030 decade can be grouped under four areas:

I. Support country abilities to halt biodiversity loss and to sustainably use and enhance biodiversity through policies and programmes

As relevant and in line with their mandates, UN agencies will support Member States in the implementation of the post-2020 global biodiversity framework and the biodiversity-related elements of the SDGs, with a focus on improving enabling conditions, data, investments and other means of implementation. This will require mainstreaming biodiversity for sustainable development, in particular within the UN's Sustainable Development Cooperation Framework⁵¹, as well as integrating biodiversity with other key areas of strategic planning (e.g. hunger and poverty reduction, food and agriculture, human health and well-being, climate action, sustainable forest management and zero deforestation, ocean ecosystems, infrastructure, trade, energy, finance, national accounting, governance, human rights including indigenous peoples' rights, and justice) to realize multiple benefits as well as address potential trade-offs and avoid negative impacts on nature. Equally important is the need to mainstream national criminal justice and preventive responses into national biodiversity, climate change and sustainable development agendas in line with the SDGs.

More specifically, UN agencies at global and regional scales, UN Resident Coordinators, UN Country Teams and activities supported through country, regional and global policies and programmes can:

- Integrate biodiversity and climate responses into their core offer and mandate in ways that both address the drivers of the crises, including market and governance failures, and put emphasis on "nature-based solutions" for climate mitigation and adaptation⁵² and sustainable development, in coordination with the UN Sustainable Development Group (UNSDG)⁵³.
- Enhance data⁵⁴, capacity and know-how for national planning⁵⁵,⁵⁶ implementation, monitoring⁵⁷ and reporting processes, as well as harnessing science, technology and innovation for biodiversity. This involves not only helping countries to incorporate biodiversity considerations in their planning, but also to support countries to assess biodiversity and ecosystem services, and to monitor and share data to track progress towards national and global targets⁵⁸.

55 https://sdgintegration.undp.org/

⁵¹ https://unsdg.un.org/resources/united-nations-sustainable-development-cooperation-framework-guidance

⁵² https://www.unglobalcompact.org/take-action/events/climate-action-summit-2019/nature-based-solutions

⁵³ https//unsdg.un.org

⁵⁴ https://environmentlive.unep.org/sdgpolicybrief

⁵⁶ https://wedocs.unep.org/bitstream/handle/20.500.11822/25655/ LawBiodiversity_Strategies.pdf?sequence=1&isAllowed=y

⁵⁷ https://www.un-spbf.org/wp-content/uploads/2019/03/Digital-Ecosystem-final.pdf

⁵⁸ https://wesr.unep.org

- Use most updated evidence and analysis to track emerging issues of biodiversity concern⁵⁹ and inform decision-makers of the risks, and provide guidance and assistance as required. This involves catalysing planning and monitoring systems that reduce the human footprint and promote maintaining a national nature-based safety net to reduce risk of emerging zoonotic diseases.
- Support Member States in the development of human rights-based legal, institutional and policy frameworks that regulate and promote the right to a safe, clean, healthy and sustainable environment and the protection of biodiversity. In particular, this means supporting efforts to strengthen governance and the environmental rule of law for the protection of biodiversity and human rights, including with respect to land, water and natural resource use and ownership, especially for women, indigenous peoples, local communities and environmental activists. Actions in this respect should be aligned with the Secretary-General's Call to Action for Human Rights⁶⁰ and its focus on the rights of future generations, climate justice and the right to a safe, clean, healthy and sustainable environment⁶¹, and in compliance with actions taken under the UN Guiding Principles on Business and Human Rights for All that may affect biodiversity.
- Promote the inclusion of ambitious biodiversity and climate goals and targets into national policies; support country capacity and mobilize investments including access to bilateral and multilateral financing mechanisms for the purpose of implementing

related activities and measures, and national efforts for the repurposing of available financial resources.

- Incorporate use of the post-2020 global biodiversity framework as a priority in the UN's Development Account^{®2} programme and encourage UN interagency-led capacity development projects.
- Support country capacity and access to bilateral and multilateral financing mechanisms for the purpose of implementing related activities and measures, and support national efforts for the repurposing of available financial resources.

Taken together, these actions could have a significant impact in terms of improving the capacities of Member States to halt biodiversity loss and enhance ecosystems' integrity.

II. Establish strong coalitions for biodiversity

Building on their existing complementarities and in line with UN reform, the new approach of UN Country teams and UN Sustainable Development Regional Coordination, including issue-based coalitions, UN entities can play a key role in ensuring comprehensive approaches to biodiversity. The work of UN entities and such issue-based coalitions can also serve to strengthen biodiversity-related actions in the current and ongoing work of the UN in support of countries, such as the NBSAP Forum, the UN Biodiversity Lab and UNCTAD BioTrade Initiative.

Such coalitions can be powerful tools to integrate biodiversity in other key areas (such as climate, food and agriculture, health, investment⁶³, infrastructure and extractive industries, trade⁶⁴, energy, finance⁶⁵, chemicals and green technologies ⁶⁶) in ways that realize multiple benefits and avoid negative impacts on biodiversity at global, regional, national and local levels. Examples of the potential for such coalitions to be formed and strengthened are described in boxes 3 and 4.

65 https://www.greengrowthknowledge.org

⁵⁹ https://www.unenvironment.org/resources/frontiers-201819-emerging-issues-environmental-concern

⁶⁰ https://www.un.org/sg/sites/www.un.org.sg/files/atoms/files/ The_Highest_Asperation_A_Call_To_Action_For_Human_ Right_English.pdf

⁶¹ A rights-based approach to biodiversity action should, inter alia, address biodiversity loss and its negative impacts on human rights; recognize the rights of indigenous peoples and local communities to their traditional knowledge, lands, resources and territories; ensure the participation of rights-holders, including indigenous peoples and local communities, women and girls and youth, in decision-making related to conservation, sustainable use and equitable distribution of the benefits of biodiversity; respect and protect the cultural, religious, spiritual, aesthetic and recreational values associated with biodiversity, including the human rights to culture and freedom of religion, and the right of children to play; protect environmental human rights defenders from harm; and ensure the righs to participation, access to information and access to justice.

⁶² https://www.un.org/development/desa/da/

⁶³ https://www.unepfi.org/net-zero-alliance/

⁶⁴ https://unctad.org/en/Pages/DITC/Trade-and-Environment/ BioTrade.aspx

⁶⁶ http://wedocs.unep.org/bitstream/handle/20.500.11822/22205/Science-Policy-Business-Forum%20 Pogramme%202017.pdf?sequence=86&isAllowed=y

Box 3. Working with the chemical conventions and initiatives to address drivers of biodiversity loss: the case of pesticides

Pesticides can have a significant impact on biodiversity. For example, pesticides, particularly insecticides, have been demonstrated to have a broad range of lethal and sublethal effects on pollinators under controlled experimental conditions (IPBES, 2016). The governance of pesticides falls within the governance of chemicals more broadly. The Basel, Rotterdam, Stockholm and Minamata Conventions are central global instruments in the international governance of chemicals and wastes. In addition, the Montreal Protocol on Substances that Deplete the Ozone Layer controls the production and consumption of methyl bromide, a pesticide that is a powerful ozone-depleting substance. The international multi-stakeholder chemical initiative Strategic Approach to International Chemicals Management (SAICM) also plays a critical role in chemicals' governance by engaging governments, the chemical industry and other civil society actors, such as NGOs, with the potential to work on issues beyond those in the conventions' own mandates reached by consensus in multilateral negotiations.

The post-2020 global biodiversity framework will address pollution as a major driver of biodiversity loss, as well as the sustainable management of production landscapes and seascapes, as being essential to the conservation and sustainable use of biodiversity. To strengthen the implementation of the new framework, a stronger synergy between the biodiversity and the chemicals conventions will be critical to achieve success. For pesticides, this mostly concerns the Stockholm and Rotterdam Conventions and SAICM. To accomplish this, several pathways and initiatives can be envisaged, for example:

- 1. At the level of the conventions, joint action plans could be developed, with dedicated processes and accountability to their respective COPs. This approach could be explored through the work of Parties in the relevant bodies of the respective conventions and by their secretariats within the mandates provided to them.
- 2. At the national level, the focal points and authorities responsible for the CBD, other biodiversity-related conventions, the chemicals conventions and other relevant conventions and organizations including the United Nations Environment Assembly (UNEA), could collaborate more closely to bring attention to the importance of adding pesticides to the chemicals conventions' annexes and to coordinate work on finding safer alternatives, particularly for highly hazardous pesticides. In this regard, they can also work on coordinating their respective national policy instruments (such as agricultural subsidies) to reflect these synergies, and coordinate national planning, reporting and review mechanisms to increase efficiencies and improve coherence.
- 3. The multi-stakeholder platforms associated with the chemicals and biodiversity agendas provide an opportunity to enhance synergies, since actors of civil society also tend to work separately on these issues. Having biodiversity actors more actively engage with SAICM discussions, and chemicals actors engage in the CBD agenda and its discussions, could help in sharing of experiences and in building similar expectations for change (Kinniburgh and Rankovic, 2019).

Box 4. Using global and national policy instruments to increase synergies: Biodiversity and Climate Change

Despite the interrelationships of the issues they address, national policy instruments such as Nationally Determined Contributions (NDCs), Land Degradation Neutrality targets (LDNs) and NBSAPs) are still mostly developed in isolation from one another. To support the integration of ambitious climate change and biodiversity action in national policies, increased and coordinated action is needed internationally in science (for example between the respective scientific communities, IPCC and IPBES), international governance bodies (for example between the COPs to UNFCCC, CBD, UNCCD and Vienna Convention) and in civil society networks. Liaison mechanisms between convention secretariats play an important role that could be reinforced. These can be complemented by ongoing and future developments. IPBES is collaborating with IPCC on a co-sponsored workshop on biodiversity and climate change, and developing plans for a technical paper on the same subjects, as well as strengthened cooperationer in the form of a joint product between the IPCC and IPBES, which could be useful to improve the evidence base on these complex interactions. The CBD COP has provided numerous elements of guidance on biodiversity and climate change® and its Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) has continued to explore the emerging science. Consideration could be given by the respective COPs to the establishment of a work programme between the two conventions; for example, through a joint workplan between the UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA) and the CBD SBSTTA to assess the scientific basis of the best options for coordinated action on climate change and biodiversity. Another idea could be for the respective Subsidiary Bodies on Implementation (SBIs) of the two Conventions to prepare guidance for the development of NDCs that include biodiversity concerns, and NBSAPs that reflect climate objectives. Such structured initiatives at the international level could help bring the national authorities for climate change and biodiversity closer together at the national level and stimulate synergies in relation to these topics with civil society groups.

⁶⁷ Decision IPBES-7/1: Rolling work programme of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services up to 2030.

⁶⁸ CBD Decision 14/5, CBD/COP/DEC/14/5: Biodiversity and climate change.

⁶⁹ CBD/SBSTTA/23/INF/1: Review of new scientific and technical information on biodiversity and climate change and potential implications for the work of the Convention on Biological Diversity.

This would require the development and promotion of inclusive, multi-stakeholder alliances to reconnect people and biodiversity: for example, a proposed UN-ESCO and UNEP "Coalition for Nature" would support greater engagement across sectors of society on nature, and greater solidarity and equity between generations and stakeholders in the relationship between people and nature.

There is a need to further develop a common UN narrative on the essential role of biodiversity for sustainable development; improved communications on and advocacy for the interrelated biodiversity, climate and ocean agendas; and strengthened advocacy within and beyond the UN system including through the voices of biodiversity ambassadors and champions.

When strengthening coordination and coalitions for biodiversity to improve synergies in support of national actions, UN agencies should consider the potential contribution of such coalitions to:

- Address the drivers of biodiversity loss across UN programmes, and mainstream biodiversity in the UN Sustainable Development Cooperation Framework.
- Promote the adoption of green and circular economy approaches,^{70,71} along with other sustainable practices, to transform global consumption and production systems and ensure food security and better health outcomes for communities, while reducing emissions and other forms of environmental pollution and degradation. One way to do this would be to encourage countries to build on work of the SEEA framework to promote the transformation of financial and incentive systems, redirect private finance towards biodiversity-inclusive actions and nature-based solutions, and accelerate the creation of a planetary safety net⁷² for disaster⁷³ and climate resilience and inclusive development.
- Liaise with existing platforms for science and financing set up by the UN Secretary-General and others

to include biodiversity in their work, and also with regional and sub-regional alliances and action plans on biodiversity (for example, the ones taking place within the UNEP regional seas programmes)⁷⁴.

- Support enhanced synergies among MEAs and the UN system, and take leadership roles in strengthening MEAs' implementation.
- Support the establishment of inclusive, multi-stakeholder global alliances for people and biodiversity with a focus on how to reconnect with, appropriately appreciate and value nature, intergenerational equity and the passing on of the values of nature and living things to future generations.
- Promote the implementation of the post-2020 global biodiversity framework at all levels, as well as the engagement of all concerned stakeholders to mobilize action.
- Strengthen engagement with business and the private sector⁷⁵ to support its incorporation of biodiversity as a priority, and recognize nature-related business risks and the private sector's role in solutions.
- In view of the need for a consolidated UN system-wide response to mainstream biodiversity into COVID-19 recovery programmes/building back better, the EMG can play a stronger role in supporting biodiversity mainstreaming into this process.
- Building on the experiences of joint action plans around specific topics within the SDGs (such as the Global Action Plan for Healthy Lives and Well-being for All⁷⁶ on the health-related SDGs), and recognising the importance of biodiversity for the achievement of the SDGs, develop a similar Joint Action Plan for Biodiversity, that would help to enhance collaboration among UN entities and accelerate progress toward the biodiversity-related SDG targets, including through better reflection of biodiversity in national and regional UN planning.

⁷⁰ https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=126&menu=1515

⁷¹ https://www.unido.org/our-focus-cross-cutting-services/circular-economy

⁷² https://www.undp.org/content/undp/en/home/blog/2020/protecting-humanitys-safety-net-.html

⁷³ https://www.undrr.org/implementing-sendai-framework/whatsendai-framework

⁷⁴ https://www.unenvironment.org/explore-topics/oceansseas/what-we-do/working-regional-seas/regional-seas-programmes

⁷⁵ https://www.unepfi.org

⁷⁶ https://www.who.int/sdg/global-action-plan/frequently-asked-questions

III. Mainstream biodiversity in UN internal operations

UN agencies need to strengthen biodiversity awareness and capacities for biodiversity conservation and enhancement within the UN system. In line with the UN Sustainability Strategy 2020-2030⁷⁷ and the objective for "Greening the Blue", and with the recent EC and CEB decisions, UN agencies should strive to address the drivers of biodiversity loss and embed biodiversity standards in their procurement, project and programme planning and implementation, as well as "avoid adverse impacts on biodiversity from UN facilities, operations and activities"⁷⁸. In particular they should:

- Assess both the contributions to and impacts on biodiversity⁷⁹ from the perspective of their own mandates, and identify, develop, implement and scale up best practices for the sustainable use, development, conservation and enhancement of biodiversity, as part of their operations and policies⁸⁰,⁸¹,⁸².
- Embed biodiversity safeguards in procurement, project and programme planning and implementation, including ensuring to the extent possible that the sources of project funding from the private sector come from «biodiversity responsible» ones.
- Consider how public-private partnerships, particularly those making use of knowledge gained in mainstreaming biodiversity concerns in the private sector, can be used as a model for similar operations within and across the UN system.
- Develop a UN system-wide mechanism for exchange of information and «best practices» for mainstreaming biodiversity in the UN's internal operations.

Thus, there is much that can be done within individual UN agencies, as well as between coalitions of agencies and across the entirethrough the whole UN system, to conduct and manage operations in a manner that will have great impact in safeguarding the integrity of biodiversity, and lead to greater ecosystems' viability in the medium- to long-term.

IV. Enhance UN-wide coherence and follow-up on biodiversity

One of the many assets of the UN system is its diversity, providing members with a wide range of competences and know-how across its funds, programmes, specialized agencies and regional bodies. These allow the UN to respond to local, national and regional specificities and to focus on different issues and sectors, but at the same time can also lead to individual agencies working alone in narrowly-focused silos.

This challenges the capacity of the UN to address complex and interconnected issues such as biodiversity loss. In that regard, full benefit should be made from initiatives such as the UN «decades» (the UN Decade on Ecosystem Restoration⁸³, the Decade of Action to deliver the Global Goals⁸⁴ and the UN Decade of Ocean Science for Sustainable Development⁸⁵) which involve many UN agencies with complementary mandates to reflect the new vision for more coordinated approaches across the UN system and allowing for comprehensive and inclusive approaches.

Furthermore, in order to be more effective and efficient and to enhance UN-wide actions, the UN system will need to consider measures to enhance and strengthen system-wide cooperation and coordination on biodiversity. These measures could include:

⁷⁷ https://unemg.org/wp-content/uploads/2019/09/INF_3_Strategy-for-Sustainability-Management-in-the-UN-System.pdf

⁷⁸ See: https://unemg.org/wp-content/uploads/2019/07/FINAL_ Model_Approach_ES-Standards-1.pdf & https://www.unsystem.org/content/addendum-strategy-sustainability-management-united-nations-system-2020-2030

⁷⁹ At the level of genetic resources, ecosystem and/or species.

⁸⁰ http://www.fao.org/state-of-biodiversity-for-food-agriculture/en/

⁸¹ https://www.who.int/globalchange/ecosystems/biodiversity/en/

⁸² Secretariat of the Convention on Biological Diversity (2009). Biodiversity, Development and Poverty Alleviation: Recognizing the Role of Biodiversity for Human Well-being. Montreal.

⁸³ https://www.decadeonrestoration.org

⁸⁴ https://www.un.org/sustainabledevelopment/decade-of-action/

⁸⁵ https://www.oceandecade.org

- Development of a common narrative across the UN on biodiversity in the context of sustainable development and the post-2020 global biodiversity framework. Such an approach would lead to clearer communications on and stronger advocacy for biodiversity, and help to break down existing unilateral approaches to biodiversity A joint but subsidiary approach using the complementary mandates of UN agencies would be more cost-efficient and, through a common language, be more consistent. A starting point could be to mobilize demand for action through unified global and locally-adapted campaigns for the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.
- Undertake further analysis of and communicate the implications for people and the planet if biodiversity is not dealt with as a priority objective by the global community. At the present time, this could have a particular focus on zoonoses, highlighting the underlying causes of increased risk of zoonotic diseases and the importance of addressing the trends driving their more frequent emergence. These trends include an increasing demand for animal protein, a rise in intense and unsustainable farming, the increased use and exploitation of wildlife and the climate crisis. Doing so would help to prevent the transfer of viruses and other pathogens from nature to human systems. Improved biodiversity conservation and ecosystem management need to be embedded in long-term mitigation and prevention measures, and increased focus given to addressing wildlife trafficking and the introduction of wild-sourced species into legal value chains, as key actions to prevent future pandemics stemming from zoonotic pathogens.
- Building on the process established under the EMG to facilitate UN contributions in developing the post-2020 global biodiversity framework, catalyse engagement across the UN system to implement a common approach on biodiversity, engaging its leadership and coordination mechanisms at the global, regional and national levels to implement the post-2020 global biodiversity framework, including at (sub-)regional level under the leadership of regional commissions.

Consider developing a voluntary UN system-wide monitoring and reporting scheme on UN entities' contributions to the implementation of the post-2020 global biodiversity framework in line with their mandates and as part of their commitments to the implementation of the SDGs. One option to develop and implement such a scheme could be through establisment of an EMG Issue Management Group on Biodiversity for the period 2021-2030. This Group would also facilitate a UN system-wide exchange of information, «best practices» for mainstreaming biodiversity in the UN's programmes and operations, as well as supporting the development of a common narrative across the UN on biodiversity in the context of sustainable development and the post-2020 global biodiversity framework.

In this regard, the UN System could promote better reflection of biodiversity–related issues in the SDGs' follow-up and review structure, particularly by ensuring proper reflection of biodiversity in the Voluntary National Reviews submitted by Countries to the HLPF on Sustainable Development. This would provide support to the HLPF in fulfilling its mandate, and increase both the visibility and commitments of stakeholders towards the biodiversity agenda.

Concluding Message

In summary, this document set outs a roadmap towards a coherent, inclusive, pro-active and collective approach by the United Nations system to achieve the objectives of the post-2020 global biodiversity framework and facilitate progress towards the 2050 vision of "living in harmony with nature", building on existing commitments. Only deeply transformative change and collective measures by the global community will allow to halt and reverse biodiversity loss, and ensure its sustainable use and restoration in support of delivering the 2030 Agenda for Sustainable Development in the coming decade. The highly catalytic and synergistic actions proposed in the «Looking Forward» section of this document offer a road map to such UN system-wide effort on biodiversity, along with a practical and realistic means for the United Nations to deliver its support for the post-2020 global biodiversity framework.

References

Alterra, 2008. 'The Cost of Policy Inaction: The case of not meeting the 2010 biodiversity target'. Alterra, Wageningen University and Research et al. Wageningen, The Nether-lands, 314 pages. Available online at - https://www.cbd.int/financial/doc/copi-2008.pdf

Chen, S., Wang, W., Xu, W., Wang, Y., Wan, H., Chen, D. and D. Zhou, 2018. 'Plant diversity enhances productivity and soil carbon storage', in Proceedings of the National Academy of Sciences, 115(16), 4027-4032. Available online at - https://www.pnas.org/content/115/16/4027

European Environment Agency, 2019. Sustainability transitions: policy and practice. EEA Report No 09/2019 Luxembourg: Publications Office of the European Union. ISSN 1977-8449.

Food and Agricultural Organization, 2020. The State of World Fisheries and Aquaculture 2020: Sustainability in action. FAO, Rome. https://doi.org/10.4060/ca9229en .

Food and Agricultural Organization, 2019. The State of the World's Biodiversity for Food and Agriculture. Bélanger, J. and D. Pilling (eds.). FAO Commission on Genetic Resources for Food and Agriculture Assessments, Rome.

Food and Agricultural Organization, International Fund for Agricultural Development, United Nations Children's Fund, World Food Programme and World Health Organization, 2020. The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets. FAO, Rome. https://doi.org/10.4060/ca9692en.

Global Preparedness Monitoring Board, 2019. A World at Risk: Annual report on global preparedness for health emergencies. World Health Organization, Geneva, 48 pages.

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, 2016. The assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination and food production. Potts, S, G., Imperatriz-Fonseca, V. L. and H. T. Ngo (eds). IPBES Secretariat, Bonn, Germany. 552 pages.

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, 2019. The global assessment report on biodiversity and ecosystem services. Brondizio, E. S., Settele, J., Díaz, S. and H. T. Ngo (eds.). IPBES Secretariat, Bonn, Germany. Available online at - https://ipbes.net/global-assessment .

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, 2019a. Summary for policymakers of the global assessment report on biodiversity and ecosystem services. Díaz, S., Settele, J., Brondízio E.S., Ngo, H. T., Guèze, M., Agard, J., Arneth, A., Balvanera, P., Brauman, K. A., Butchart, S. H. M., Chan, K. M. A., Chowdhury, R. R., Garibaldi, L. A., Ichii, K., Liu, J., Subramanian, S. M., Midgley, G. F., Miloslavich, P., Molnár, Z., Obura, D., Pfaff, A., Polasky, S., Puris, A., Razzaque, J., Reyers, B., Shin, Y. J., Visseren-Hamakers, I. J., Willis, K. J. and C. N. Zayas (eds.). IPBES Secretariat, Bonn, Germany.

Intergovernmental Panel on Climate Change, 2018. Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Masson-Delmotte, V., Zhai, P., Pörtner, H.-O., Roberts, D., Skea, J., Shukla, P. R., Pirani, A., Moufouma-Okia, W., Péan, C., Pidcock, R., Connors, S., Matthews, J. B. R., Chen, Y., Zhou, X., Gomis, M. I., Lonnoy, E., Maycock, T., Tignor, M. and T. Waterfield (eds.). IPCC Secretariat, Geneva.

International Resource Panel, 2019. Global Resources Outlook 2019: Natural Resources for the Future We Want. Oberle, B., Bringezu, S., Hatfeld-Dodds, S., Hellweg, S., Schandl, H., Clement, J., Cabernard, L., Che, N., Chen, D., Droz-Georget, H., Ekins, P., Fischer-Kowalski, M., Flörke, M., Frank, S., Froemelt, A., Geschke, A., Haupt, M., Havlik, P., Hüfner, R., Lenzen, M., Lieber, M., Liu, B., Lu, Y., Lutter, S., Mehr, J., Miatto, A., Newth, D., Oberschelp, C., Obersteiner, M., Pfister, S., Piccoli, E., Schaldach, R., Schüngel, J., Sonderegger, T., Sudheshwar, A., Tanikawa, H., van der Voet, E., Walker, C., West, J., Wang, Z. and B. Zhu. A Report of the International Resource Panel. United Nations Environment Programme, Nairobi, Kenya. 160 pages. Kinniburgh, F. and A. Rankovic, 2019. 'Mobilising the chemical conventions to protect biodiversity: an example with pesticides and the Stockholm and Rotterdam Conventions'. IDDRI, Issue Brief N°07/19.

Organization for Economic Cooperation and Development, 2019. Biodiversity: Finance and the Economic and Business Case for Action. OECD, Paris, France. Available online at - https://www.oecd. org/env/resources/biodiversity/biodiversity-finance-and-the-economic-and-business-case-for-action. htm

Parrotta, J., Wildburger, C. and S. Mansourian, 2012. Understanding relationships between biodiversity, carbon, forests and people: The key to achieving REDD+ objectives. A global assessment report prepared by the Global Forest Expert Panel on Biodiversity, Forest Management and REDD+. IUFRO World Series, 31, 161 pages.

Santangeli, Andrea, Tolvenen, T., Pouzols, F. M., Pogson, M., Hastings, A., Smith, P. and A. Moilanen, 2016. 'Global change synergies and trade-offs between renewable energy and biodiversity', in Global Change Biology Bioenergy (2016), 8, 941 - 951. Available online at - https://onlinelibrary.wiley.com/ doi/10.1111/gcbb.12299

Secretariat of the Convention on Biological Diversity (CBD), 2020. Global Biodiversity Outlook 5. CBD, Montréal, Canada, 208 pages.

Secretariat of the Convention on Biological Diversity (CBD), no date. 'Biodiversity and the 2030 agenda for sustainable development - a policy brief'. CBD, FAO, The World Bank, UN Environment and UNDP. Montréal, Canada, 8 pages. Available online at - https://www.cbd.int/development/doc/biodiversity-2030-agenda-technical-note-en.pdf

United Nations, 2020. The Sustainable Development Goals Report 2020. UN, New York, 2020, 66 pages.

United Nations Chief Executives Board, 2019. Strategy for Sustainable Management in the UN System, 2020-2030. UN Chief Executives Board for Coordination. New York. Available online at - https://unemg. org/wp-content/uploads/2019/09/INF_3_Strategy-for-Sustainability-Management-in-the-UN-System. pdf

United Nations Development Programme, 2020. 'The Indivisible Nature of Sustainable Development: a discussion paper exploring the relevancy of biodiversity to SDG targets and indicators'. UNDP, New York, 2020, 39 pages.

United Nations Environment Programme, 2020. 'Building Resilient Societies After the Covid-19 Pandemic: Key messages from the International Resource Panel'. Paris, France. Available online at https://www.resourcepanel.org/reports/building-resilient-societies-after-covid-19-pandemic

United Nations Environment Programme, 2019. Global Environment Outlook - GEO-6: Healthy Planet, Healthy People. UNEP, Nairobi, Kenya, 708 pp.

World Economic Forum (WEF), 2020. The Global Risks Report 2020. WEF, Geneva, Switzerland. Available online at - https://www.weforum.org/reports/the-global-risks-report-2020

World Economic Forum (WEF), 2020a. The Future of Nature and Business. WEF, Geneva, Switzerland. Available online at - http://www3.weforum.org/docs/WEF_The_Future_Of_Nature_And_Business_2020.pdf

World Economic Forum and Price Waterhouse, Coopers and Lybrand (WEF/PwC), 2020. 'Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy'. WEF in collaboration with Price Warehouse Coopers, Geneva, Switzerland. Available online at - http://www3.weforum.org/ docs/WEF_New_Nature_Economy_Report_2020.pdf

World Health Organization and Convention on Biological Diversity, 2015. Connecting global priorities: biodiversity and human health: a state of knowledge review. WHO, Geneva, Switzerland. ISBN 978 92 4 150853 7. 364 pages.

World Wide Fund for Nature, 2018. Living Planet Report 2018: Aiming Higher. M. Grooten and R. E. A. Almond (eds). WWF, Gland, Switzerland. 144 pages.

List of Acronyms

BES-Net	Biodiversity and Ecosystem Services Network (of UNDP)
BIOFIN	Biodiversity Finance Initiative (of UNDP)
CBD	Convention on Biological Diversity
CEB	Chief Executives Board for Coordination (of UN)
CEO	Chief Executive Officer
COP	Conference of the Parties
COVID-19	Corona Virus Disease 2019
DESA	Department of Economic and Social Affairs (of UN)
EC	Executive Committee (of the UN Secretary-General)
ECLAC	Economic Commission for Latin America and the Caribbean
EEA	European Environment Agency
EMG	Environment Management Group of the United Nations
FAO	Food and Agriculture Organization of the United Nations
GBO	Global Biodiversity Outlook
GDP	Gross Domestic Product
GEF	Global Environment Fund
GEO	Global Environment Outlook (of UNEP)
GHG	Greenhouse Gases
GRO	Global Resources Outlook
IGC	Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (of WIPO)
IUFRO	International Union of Forest Research Organizations
HLCP	High-Level Committee on Programmes (of the UN)
HLPF	High-level Political Forum on Sustainable Development (of the UN)
IDDRI	Institute for Sustainable Development and International Relations (or «Institut du Développement Durable et des Relations Internationales»)
IFAD	International Fund for Agricultural Development
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPPC	International Plant Protection Convention
IRP	International Resource Panel
IUCN	International Union for Conservation of Nature
LDN	Land Degradation Neutrality
MEA	Multilateral Environmental Agreement
MOOC	Massive Open Online Course
NBSAP	National Biodiversity Strategy and Action Plan
NDC	Nationally Determined Contribution

NGO	Non-Governmental Organization
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
OEWG	Open-Ended Working Group
SAICM	Strategic Approach to International Chemicals Management
SBI	Subsidiary Body on Implementation (of CBD)
SBI	Subsidiary Body for Implementation (of UNFCCC)
SBSTA	Subsidiary Body for Scientific and Technological Advice (of UNFCCC)
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice (of CBD)
SDGs	Sustainable Development Goals
SEEA	System of Environmental-Economic Accounting
SG	Secretary-General (of the UN)
UNCCD	United Nations Convention to Combat Desertification
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNEA	United Nations Environment Assembly (of UNEP)
UNEP	United Nations Environment Programme
UNEP-WCMC	United Nations Environment Programme World Conservation Monitoring Centre
UNESCO	United Nations Educational, Social and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
UNSD	United Nations Statistics Division
UN SDG	United Nations Sustainable Development Group
UNU	United Nations University
UNWTO	World Tourism Organization
WEF	World Economic Forum
WFP	World Food Programme
WG2020	Open-ended Working Group on the Post-2020 Global Biodiversity Framework (of CBD)
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WMO	World Meteorological Organization
WTO	World Trade Organization
WWF	World Wide Fund for Nature

Annex Contributors and Reviewers

UN Entity	Contributor/Reviewer
BRS	María Cristina Cárdenas
CBD	Neil Pratt, Elizabeth Mrema
CITES	David Morgan
CMS	Amy Fraenkel, Laura Cerasi
UN DOS	Sungmin Patricia Kim
ECA	Charles Akol
ECE	Marco Keiner, Roman Michalak, Paola Deda
ECLAC	Marcia Tambutti
ESCAP	Stefanos Fotiou, Solène Le Doze
ESCWA	Roula Majdalani, Reem Nejdawi, Lara Geadah
FAO	Maria Helena Semedo, Eduardo Mansur, Irene Hoffmann, Frédéric Castell, Dan Leskien, Kim Friedman, Preetmoninder Lidder, Kent Nnadozie, Vera Agostini, Lev Neretin, Julie Bélanger, Sheila Wertz, Monica Kobayashi, Anna Rappazzo
IAEA	Peter Swarzenski
ICAO	Jane Hupe, Lorenzo Gavilli
IFAD	Margarita Astralaga, Renee Ankarfjard
ILO	Moustapha Kamal Gueye
IMF	Robert Powell, Evelyn Nash
IMO	Theofanis Karayannis, Fredrik Haag
IOM	Eva Mach
UNISDR	Sarah Houghton
ITC	Joseph Wozniak
ITU	Mijke Hertoghs, Rosie McDonald
OCHA	Sheilagh Henry
OHCHR	Benjamin Schachter, Therese Arnesen
Ramsar Convention	Maria Rivera
UNCCD	Sasha Alexander
UNCTAD	Lorena Jaramillo, Andreas Obrecht
UNDESA	Barbara Tavora-Jainchill, Hossein Moeini-Meybodi, Alexander Trepelkov, Madhushree Chatterjee, Xin Feng
UNDP	Tim Scott, Jamison Ervin, Midori Paxton
UNEP	Alex Owusu-Biney, Corli Pretorius, Daniela Guaras, Diane Klaimi, Doreen Robinson, Federica Pesce, Jerry Harrison, Hossein Fadaei, Hyun Sung, Marieta Sakalian, Maarten Kappelle, Neville Ash, Soo Young Hwang, Susan Gardner

Ozone Secretariat	Tina Birmpili, Sophia Mylona
UNESCO	Meriem Bouamrane
UNFCCC	Chad Tudenggongbu
UNFPA	Daniel Schensul
UN-Habitat	Andrew Rudd, Rafael Tuts
UNHCR	Anna Kaplina
UNICEF	Rakshya Thapa
UNIDO	Niels Schulz
UNITAR	Angus Mackay
UNOOSA	Shirishkumar Ravan
UNOPS	Nives Costa
UNU	William Dunbar
UN Women	Verona Collantes
UPU	Susan Alexander
WFP	Dipayan Bhattacharyya
WHO	Cristina Romanelli
WIPO	Jiao Fei, Victor Owade, Ridha Bouabid, Ignacio de Castro Llamas, Amy Dietterich, Peter Oksen, Wend Wendland
WMO	Katrin Ehlert, Robert Stefanski
World Bank	Giovanni Ruta, Olga Gavryliuk
World Trade Organization	Karsten Steinfatt
UNWTO	Sofía Gutiérrez
UNODC	Sinead Brophy, Jenna Dawson-Faber

EMG OBSERVERS CONTRIBUTORS

Bavarian School of Public Policy, Technical University of Munich	Fiona Kinniburgh
IDDRI	Aleksandar Rankovic, Damien Barchiche, Lucien Chabason, Alexandra Deprez, Marcel Jouve
(Independent)	Ronald G. Witt
IUCN	Jane Smart
WWF	Luca Chinotti
Zoinet	Otto Simonett

As the current COVID-19 emergency demonstrates, the human species is linked with and dependent upon complex natural life systems. Unsustainable societies have made this balance more precarious, putting at risk biodiversity and the ecosystems that sustain our lives. Rethinking our relationship with nature and halting biodiversity loss are therefore necessary steps toward resilient societies and a healthy planet.

Pursuing this goal, in 2021 the world community is expected to adopt a renewed global agenda for biodiversity as a successor to the Strategic Plan for Biodiversity 2011-2020, which will set the goals and targets to protect and restore nature by 2030. This renewed global agenda is a stepping-stone towards achieving the 2050 Vision of 'Living in harmony with nature' where "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for people". In light of the process for the preparation of the post-2020 global biodiversity framework, and in response to the invitation of the CBD's WG2020, the EMG was tasked to facilitate a contribution by the UN system for developing and implementing the post-2020 global biodiversity framework.

This report aims to reflect the fundamental importance of halting biodiversity loss and also to identify key areas for action on biodiversity, including by highlighting activities undertaken by UN agencies in the context of their existing mandates. It also provides a vision of how the UN agencies could contribute to tackling the loss of biodiversity, and ensuring its sustainable use for the benefit of all people, laying the groundwork for a UN-wide agenda for action on biodiversity.

We would also like to acknowledge the generous support and contribution from the Ministry of Environment of Finland.



The United Nations Environment Management Group (EMG) is a system-wide coordination body on environment and human settlements, established in 2001 pursuant to the General Assembly. The consists of the 51 specialized agencies, programmes and organs of the United Nations including the secretariats of the Multilateral Environmental Agreements, the Bretton Woods institutions and the World Trade Organization. The EMG identifies issues on the international environmental agenda that warrant cooperation, and finds ways of engaging its collective capacity in coherent management responses to those issues. Over the last decade, the EMG has provided support to the biodiversity agenda, through contributions to the shaping of the Strategic Plan for Biodiversity 2011-2020 and its follow-up.

The Convention on Biological Diversity (CBD) is an international legally-binding treaty with three main objectives: the conservation of biodiversity; the sustainable use of the components of biodiversity; and the fair and equitable sharing of the benefits arising from the use of genetic resources. The CBD covers biodiversity at all levels: ecosystems, species and genetic diversity. Because biodiversity has an impact and is impacted by so many different domains, the CBD aims to address all possible domains that are directly or indirectly related to biodiversity, including development, education, agriculture, business, indigenous peoples and many more. The Convention has two Protocols: the Cartagena Protocol on Biosafety (and its Supplementary Protocol on Liability and Redress) and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization.