### Statement

# The Post-2020 Global Biodiversity Framework of the Convention on Biological Diversity

Statement of the Permanent Senate Commission on Fundamental Issues of Biological Diversity (SKBV) of the DFG on the Update of the Zero Draft

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The Permanent Senate Commission on Fundamental Issues of Biological Diversity is an interdisciplinary, independent body of experts in basic biological research, which evaluates selected topics on the basis of scientific findings with regard to their social and political significance and advises various bodies of the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) as well as national and international governments and policymakers.

With the Conferences of the Parties to all three Rio Conventions (the Convention on Biological Diversity CBD, the Convention on Desertification UNCCD and the Framework Convention on Climate Change UNFCCC), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and the start of the UN Decade for Ecosystem Restoration and the UN Decade of Ocean Science for Sustainable Development, 2021 has potential to be a "super year for nature". Accordingly, at the CBD COP-15, the Parties should negotiate a new strategic plan with ambitious biodiversity targets. Recent science-based reports such as those published by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)<sup>1,2</sup>, the Intergovernmental Panel on Climate Change (IPCC)<sup>3,4</sup>, and an Independent group of scientists appointed by the UN Secretary-General<sup>5</sup>, as well as the failure to achieve all 20 Aichi Targets<sup>6</sup>, show that significant efforts are needed to meet the goals of the Rio Conventions and the Sustainable Development Goals (SDGs). This is true regardless of the experience in failing to achieve previous targets. Last but not least, the Covid-19 pandemic shows the effects that a destructive approach to nature can have on human beings. A non-ambitious Post-2020 Framework would have far-reaching negative impacts on biodiversity and human beings worldwide; moreover, science and research on and with biodiversity could be seriously affected.

In addition to the above-mentioned reports, the literature increasingly indicates what targets and measures can be applied to formulate an ambitious Post-2020 Framework

<sup>&</sup>lt;sup>1</sup> See www.ipbes.net/global-assessment-report-biodiversity-ecosystem-services

<sup>&</sup>lt;sup>2</sup> See www.ipbes.net/assessment-reports/eca

<sup>&</sup>lt;sup>3</sup> See www.ipcc.ch/report/srccl

<sup>&</sup>lt;sup>4</sup> See www.ipcc.ch/sr15

<sup>&</sup>lt;sup>5</sup> See www.un.org/development/desa/publications/global-sustainable-development-report-2019.html

<sup>&</sup>lt;sup>6</sup> See www.cbd.int/gbo5

programme (e.g. Chan et al. 2020<sup>7</sup>, Diaz et al. 2020<sup>8</sup>). Effective implementation of science-based courses of action to protect and sustainably use biodiversity is key to achieving any international goals related to biodiversity. The transformative change needed requires more than a simple scaling up of sustainability initiatives: it also involves the moderation of trade-offs to transform collaboration between legal, political, economic and other social systems, including science. In this context, transformative change needs great openness to scientifically creative and innovative approaches to implementing the Post-2020 Framework programme.

Integrating the current state of research and our scientific expertise, we take the following position on the Update of the Zero Draft of the Post-2020 Global Framework of the CBD (CBD/POST2020/PREP/2/1<sup>9</sup>). We then present specific proposals for improving the framework.

#### Set ambitious long-term goals

The structural division of the long-term goals into goals up to 2050 and milestones up to 2030 offers clarity and is welcomed. In terms of content and target values, all goals and milestones should be as ambitious as possible and be cross-referenced with other sustainability issues and relevant policy processes. The interrelations between economic, ecological and social dimensions must be taken into account.

In order not to jeopardize achievement of the 2050 goals, no individual 2030 milestone must be achieved at the expense of another. With regard to nature's contributions to

<sup>&</sup>lt;sup>7</sup> Chan et al. (2020) Levers and leverage points for pathways to sustainability. People and Nature, 2(3), 693-717, doi.org/10.1002/pan3.10124

<sup>&</sup>lt;sup>8</sup> Diaz et al. (2020) Set ambitious goals for biodiversity and sustainability. Science, 370(6515), 411-413, doi.org/10.1126/science.abe1530

<sup>&</sup>lt;sup>9</sup> New versions of the annexes to document CBD/POST2020/PREP/2/1 were last published in November 2020. These are documents CBD/SBSTTA/24/3 (Scientific and technical information to support the review of the updated goals and targets, and related indicators and baselines) and CBD/SBSTTA/24/3/Add.1 (Proposed indicators and monitoring approach for the post-2020 global biodiversity framework). In addition, document CBD/SBSTTA/24/3/Add.2 was published in February 2021 (Scientific and technical information to support the review of the proposed goals and targets in the updated Zero Draft of the Post-2020 Global Biodiversity Framework), the details of which we do not directly address here.

people, the primary goal should be to ensure that these contributions are sustainably promoted and safeguarded so as to ensure good quality of life for all.

#### Formulate a clear 2030 mission

As in the Zero Draft, the 2030 mission mentioned in the Update of the Zero Draft remains too weakly formulated. Essential and necessary information is only to be found in the footnote associated with the mission, while the mission itself remains imprecise. In this regard, we reiterate our position on the Zero Draft – the mission of the Post-2020 Framework should:

- Be short, concise and convincing in its wording and call on the Parties to the CBD to implement the framework promptly and comprehensively.
- Present an ambitious and inspiring, but at the same time realistic intermediate step towards the 2050 vision.
- Address the protection and sustainable use of biodiversity as well as the equitable sharing of benefits from the use of biodiversity as essential core issues, especially with regard to the links between biodiversity and climate change and with regard to a socio-ecological, transformative change towards sustainable development.

We propose as mission:

"To take urgent action across society to protect, promote and restore biodiversity for the benefit of nature and people."

#### - or the extended formulation:

"To take urgent action across society on international, national and subnational scales to initiate and implement a transformative change towards concerted political, economic and societal activities that promote and enhance the protection, restoration and sustainable use of biological diversity with equitable share of benefits, for the benefit of nature, sustainable development and human wellbeing."

### Specify the action targets and focus on the protection and sustainable use of biodiversity

As in the long-term goals, overarching goal conflicts and tipping points should also be taken into account in the goals/action targets.

Protected areas should be distributed in a representative manner across the entire globe, cover particularly important and vulnerable ecosystems, and promote social equity in a sustainable manner, taking into account diverse cultures. The introduction of invasive species must be substantially reduced. Management of the impacts of invasive species is similarly important, but the focus should be on prevention rather than reaction. Environmental pollution should be significantly reduced so that it is no longer harmful to biodiversity and nature's contributions to people. Ecosystems and the natural carbon and nutrient stocks they contain must be preserved. In this way, ecosystem protection can directly contribute to achieving global climate goals and prevent eutrophication of water bodies. A potential contributing factor here is the effective and large-scale restoration and rehabilitation of ecosystems.

Ecosystem management should always be adaptable to changing social and environmental conditions. Social-ecological research can play a critical role here.

Sustainable environmental management should be strengthened so that, in turn, nature's contributions to people are secured in the long term. To this end, governments should take measurable steps to support and promote sustainable lifestyles. At the same time, effective measures should be taken to ensure that the production and consumption of goods does not take place at the expense of biodiversity. The use of various technologies such as biotechnology should not be seen exclusively as a threat to biodiversity and human health, but also as a possible part of the transformative change towards sustainability. In this context, the Post-2020 Framework should be directly linked to the implementation of the SDGs. Negative environmental impacts of economic practices harmful to biodiversity should be reduced and prevented, for example by means of incentives such as taxation or regulatory measures such as the

prohibition of certain products and practices. Resulting government revenues should flow directly into the promotion of ecological measures.

Furthermore, benefit-sharing from the use of biodiversity should be more effectively linked to the action targets. Currently, this is not capable of generating the resources needed to address the biodiversity crisis. New models, such as the "polluter pays" principle, should be taken into account in the discussion of effective resource mobilization so as to reduce the pressure on benefit-sharing, not least in connection with digital sequence information. Digital sequence information must not be an exclusive commodity but must at least be freely (or FAIRly<sup>10</sup>) available for science.

## Involve stakeholders in the implementation on an interdisciplinary and transdisciplinary basis

In addition to sufficient funding for implementation of the Post-2020 Framework programme, comprehensive participation of indigenous and local knowledge holders in political decision-making processes is necessary. They are essential guardians of biodiversity.

In the comprehensive implementation of the Post-2020 Framework programme, the interdisciplinary and transdisciplinary involvement of indigenous and local knowledge holders, as well as other stakeholders, is the key to success. This therefore requires comprehensive capacity-building, knowledge generation and knowledge exchange. As the SDGs impressively demonstrate, scientific and social innovations, in addition to technical innovations, provide the basis for successful protection and promotion of biodiversity as a foundation for sustainable development. In addition to the mainstreaming of biodiversity in all sectors of society, voluntary agreements and partnerships geared towards the responsible management of natural resources can also make a significant contribution.

<sup>&</sup>lt;sup>10</sup> Findable, accessible, interoperable und re-usable; Wilkinson et al. (2016) The FAIR Guiding Principles for scientific data management and stewardship, Sci Data 3, 160018, doi.org/10.1038/sdata.2016.18

Science, education and dialogue must not be restricted in their possibilities. Rather, they should be recognized and sustained as critical factors in the successful implementation of the Post-2020 Framework. The breadth of science can contribute in many ways to (further) developing and evaluating measures for the implementation of the Post-2020 Framework programme. Last but not least, implementation of the Post-2020 Framework should be transparent and globally comparable in order to strengthen people's trust in the CBD and an awareness of the importance of biodiversity. This requires efficient, comprehensive and internationally comparable monitoring of biodiversity and of the direct and indirect drivers of biodiversity change.

The CBD Post-2020 Framework will shape the future of biodiversity globally. We strongly believe that it can only fulfil its mandate and the scientific and societal expectations involved – namely to protect and promote biodiversity, enable sustainable use of biodiversity and ensure a fair and equitable sharing of benefits arising from the use of biodiversity – if ambitious goals are adopted and the comprehensive participation of all stakeholders is ensured. The "super year for nature" has the chance to bring alive to mankind the importance of nature to people and to send the appropriate political signals. The Parties of the CBD should have the courage to set a resolute example here.

#### Specific proposals for changes to the further development of the Post-2020 Framework programme

The table only presents sections from the Update of the Zero Draft in which changes are proposed. Orange marked text = deletion Red marked text = addition

B. 2050 Goals	(a) The area, connectivity and integrity of all natural ecosystems has increased by at least [50%], supporting healthy and resilient populations of all species while reducing the number of species that are threatened by [80%] and maintaining genetic diversity;
	(b) Nature's contributions to people have been are valued, maintained or and enhanced through conservation and sustainable use supporting global development agenda for the benefit of all people;
C. 2030 Mission	11. The 2030 Mission for this framework is: To take urgent action across society to <del>put biodiversity on a path to recovery</del> protect, promote and restore biodiversity for the benefit of <del>planet</del> nature and people.
D. 2030 Milestones	The framework has eight milestones to assess, in 2030, progress towards the 2050 goals. Each of the milestones must not be met at the expense of another:
Goal A	A.1 The area, connectivity and integrity of all natural ecosystems has increased by at least [15%].
	A.2 The number of species that are threatened is reduced by [20-50%] and the abundance of species in key functional groups has increased on average by [10%] and the genetic diversity is maintained.
Goal B	B.1 Nature's contributionses to people, which are critical for a good quality of life, are sustainably enhanced and secured for all. the sustainable diets and food security, access to safe drinking water and resilience to natural disasters for at least [X%] million people.
Goal C	C.1 Access and benefit-sharing mechanisms are established and effectively implemented in all countries.
	C.2 Benefits shared increased by [X%].
Goal D	D.2 By 2030, means to implement the framework for the period 2030 to 2040 are identified or and committed.

E. 2030 Action	12. The framework has 20 action-oriented targets for 2030 which, if
Targets	achieved, will contribute to 2030 Milestones and the outcome-oriented
	goals for 2050. Actions to reach these targets should be implemented
	consistently and in harmony with the Convention on Biological Diversity and
	its Protocols and other relevant international obligations, taking into account
	national socioeconomic conditions as well as trade-offs and tipping points
	at relevant spatial scales enabling transformative change.

(a) Reducing Target 1. By 2030, [50%] of land and sea areas globally are under spatial planning addressing land/sea use change, retaining most of the all existing intact and wilderness areas, and allowing to restore [50%] of degraded freshwater, marine and terrestrial natural ecosystems and connectivity among them.

Target 2. By 2030, protect and conserve through representative, well connected, and effective and equitably managed systems of protected areas and other effective area-based conservation measures at least 30% per cent of the planet with the focus on areas particularly important for biodiversity, considering cultural properties and heritage.

Target 3. By 2030, ensure active effective management actions to enable the recovery and conservation of wild species of fauna and flora-recovery and conservation, and significantly reduce human-wildlife conflicts [%].

Target 4. By 2030, ensure that the harvesting, trade and use of wild species of fauna and flora is legal, at sustainable, non-detrimental levels and safe.

Target 5. By 2030, manage, and where possible control, pathways for the introduction of invasive alien species, achieving [590%] reduction in the rate of new introductions, and control or eradicate invasive alien species to eliminate or reduce their impacts, including in at least [5075%] of priority sites.

Target 6. By 2030, reduce pollution from all sources, including-reducing excess nutrients [by x%], biocides, pesticides [by x%], and plastic waste [by x%], to bring them to levels that are not harmful to biodiversity and ecosystem functions and human health.

Target 7. By 2030, maintain natural carbon sinks and increase nature's contributions to climate change mitigation and adaption and to disaster risk reduction from nature-based solutions and ecosystems-based approaches, ensuring ecosystem resilience and minimizing any negative impacts on biodiversity.

(b) Meeting people's needs through sustainable use and benefitsharing Target 8. By 2030, ensure that the management of wild species of fauna and flora is sustainable, thereby providing nature's contributions to people benefits, including nutrition, food security, livelihoods, health and wellbeing, for all. people, especially for the most vulnerable through sustainable management of wild species of fauna and flora.

Target 9. By 2030, support the productivity, sustainability and resilience of biodiversity in agricultural and other managed ecosystems through the conservation and sustainable use of such ecosystems, thereby reducing productivity gaps by at least [50%].

Target 10. By 2030, ensure that, nature-based solutions and ecosystembased approaches contribute to regulation of air quality, hazards and extreme events, as well as and quality and quantity of water security for all. [at least [XXX million] people.

Target 11. By 2030, increase benefits from biodiverseity and green/blue spaces for human health and well-being, including the proportion of people with access to such spaces by at least [100%], especially for urban dwellers.

Target 12. By 2030, increase by [X] benefits shared for the conservation and sustainable use of biodiversity through ensureing access to and the fair and equitable sharing of benefits arising from utilization of genetic resources and associated traditional knowledge.

(c) Tools and solutions for implementation and mainstreaming

Target 13. By 2030, integrate diverse biodiversity values into policies, regulations, planning, development processes, poverty reduction strategies and accounts at all levels, ensuring that biodiversity values are mainstreamed across all sectors and integrated into assessments of environmental impacts, which are comprehensively applied.

Target 14. By 2030, ensure production practices and supply chains are sustainable, thereby achievinge a reduction of at least [50%] in negative impacts on biodiversity by ensuring production practices and supply chains are sustainable.

Target 15. By 2030, governments take measurable steps to eliminate unsustainable consumption patterns and lifestyles, putting in place measures to ensure that production, consumption and trade are not taking place at the expense of biodiversity, and ensuring people everywhere understand and appreciate the diverse values of biodiversity, and thus make responsible choices commensurate with the 2030 sustainability agenda and the 2050 biodiversity vision, taking into account individual and national cultural and socioeconomic conditions.

Target 16. By 2030, while recognizing the potential of biotechnology for contributing to human well-being, establish and implement measures to prevent, manage or control potential adverse impacts of biotechnology on biodiversity and human health, reducing such these impacts [in accordance with the Cartagena Protocol] [by at least 50%].

Target 17. By 2030, redirect, repurpose, reform or eliminate all incentives harmful for biodiversity, including [X] reduction in the most harmful subsidies, ensuring that incentives, including public and private economic and regulatory incentives, are either positive or neutral for biodiversity. Tax, charge or prohibit negative environmental impacts. Redistribute public revenues considering ecological criteria.

Target 18. By 2030, increase by [X%] financial resources from all international and domestic sources to a level, through new, additional and effective financial resources commensurate with the ambition of the goals and targets of the framework and with the implementation of the strategy for capacity-building and technology transfer and scientific cooperation, to meet the needs for implementing the post-2020 global biodiversity framework through new, additional and effective financial resources.

Target 20: By 2030, ensure equitable, full and effective participation in decision-making related to biodiversity and ensure rights over land and other relevant resources of indigenous peoples and local communities, women and girls as well as youth, in accordance with national circumstances.

F.(b) Capacity development is crucial for the implementation of the<br/>framework, includesing through:support

mechanisms

(ii) Supporting to governmental and non-governmental actors at all levels, particularly in developing countries and countries with economies in transition, to develop, utilize and retain requisite capacities and to learn, adapt and manage change;

(iii) Building capacities at the individual, organizational and enabling enviroment all levels to facilitate effective policy formulation, the mainstreaming of biodiversity into all sectors, implementation of the framework and the establishment of national systems and measures for transparency and reporting.

(c) Inter- and transdisciplinary Kknowledge generation, management and sharing for effective biodiversity planning, policy development, decision-making, implementation and transparency and responsibility including:

	(i) Greater protection of traditional, indigenous and local knowledge and recognition of its contributions to the conservation and sustainable use of biodiversity;
	(ii) Promotion of biodiversity related basic and applied sciences, and education, and organizational and joint learning as well as common understanding.
	(d) <b>Technical and scientific cooperation, technology transfer and innovation, scientific and social innovation</b> is crucial for the implementation of the framework including:
	(ii bis) Promote voluntary agreements and partnerships for responsible management, including self-enforcement mechanisms.
G. Enabling conditions	(b) The participation of all relevant stakeholders, including non- governmental organizations, youth, civil society, local and subnational authorities, the private sector, education, academia and scientific institutions through a whole-of-society approach and through inclusive and representative multi-stakeholder and multisectoral dialogues and platforms;
	(f) Partnerships to leverage sustainable activities and programmes at the local, national, regional and global all levels;
	(g) Inclusive and integrative governance and whole-of-government approaches coordinated at the highest level of governments to ensure policy coherence and effectiveness for the implementation the framework;
	(h) Mainstreaming biodiversity, as well as the recognition of the need for a profound societal and political transformative change towards sustainability, in all sectors;
	(k) Political will, leadership and recognition at the highest levels of government of the urgent need to halt biodiversity loss;
	(m bis) Define and ensure property and access rights that are linked to [enforceable] environmental responsibilities.
	(m ter) Set up, adjust and enforce legal and regulatory standards to sustain biodiversity and nature's contributions to people.
H. Responsibility and transparency	15. The successful implementation of the framework is dependent on the use of a comprehensive system for planning, reporting and reviewing. It allows for transparent communication of progress to all, rapid course correction and timely input in the preparation of the next global biodiversity framework.

	18. The system for planning, reporting and reviewing for national government entities includes the following elements:
(a) Planning:	a. Are the main instrument to identify, make and coordinate national commitments across sectors, through a whole-of-government approach;
	b. Include all targets and actions per sector, for each of them clearly identifying relevant actors and developing context appropriate objectives stimulating positive change;
	c. Address all performance indicators relevant to the identified targets drawing on the monitoring framework attached to this framework, and improve the integration and coherence of national legislation, sectoral policies and planning processes, to account for trade-offs and synergies;
	e. Should be able to be updated quickly according to an agreed schedule.
	e bis. Should be structured [in the same way as the Global Biodiversity Framework] [according to an agreed model].
(b) Reporting:	b bis. Should be structured [in the same way as the National strategies and action plans and the Global Biodiversity Framework] [according to an agreed model].
I. Outreach, awareness and uptake	(a) Increasing the understanding, awareness and appreciation of the multiple and diverse values of biodiversity including the associated knowledge, values and approaches used by indigenous peoples and local communities;