Template for the review of the document on 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

TEMPLATE FOR COMMENTS

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General comments

German Life Sciences Association (Verband Biowissenschaften, Biologie und Biomedizin in Deutschland, VBIO e. V.) mainly represents scientists conducting publicly funded, non-commercial basic research in the wide range of life science research. Our members are engaging in scientific research collaborations all over the world and actively participate in capacity building, training, public outreach and Citizen Science. A huge variety of the research activities of our individual and institutional members are closely linked with the Sustainable Development Goals as well as with the CBD Goals. Many goals and targets of the post-2020 Global Biodiversity Framework (GBF) depend on a strong scientific backbone and competent expertise and thereby are bidirectionally connected with the research activities of our members.
Increasing scientific capacity and expertise to deeply monitor, mechanistically understand, sustainably use and efficiently conserve global biodiversity deliver crucial contributions to record and slow down biodiversity loss. We warmly welcome the opportunity to appraise the updated zero draft of the post-2020 GBF and hope our comments will contribute to improve it.

Need for more biodiversity research

Understanding of biological mechanisms and functions – particularly natural biodiversity – remains crucial for addressing global challenges. Thus, profound knowledge on natural biodiversity can serve as an important driving factor for technical, pharmaceutical and biotechnological development and should not be underestimated.

>>> The present momentum of post-2020 GBF discussion should be used to strengthen biodiversity research in any respect – especially concerning appreciation and funding of modern life science research.

Ease biodiversity research while complying with the Nagoya convention

Although CBD regards genetic resources as proprietary, we would like to emphasize the view that genetic resources represent world heritage. The monitoring, taking the inventory, assessing the functional interactions and so on should be eased and the regulatory hurdles should be minimized in order to rapidly increase our understanding of the genetic diversity and biodiversity.

Research directed towards the goals of the CBD, SDG 14 & 15 and AICHI Targets 9 & 19 strongly depends on access to biological material in CBD countries. But unfortunately access to genetic resources (Component C1) has slowed down since 2014 (https://link.springer.com/article/10.1007/s13127-017-0347-1) in parallel with an

increase in associated bureaucracy.
Collaborative research directed to contribute to the objectives of the CBD could be stimulated by simplifying the measures under Art. 8a NP. It would be beneficial if the post-2020 GBF indicators would highlight this engagement for the CBD and SDGs by including a parameter not only measuring increased access under Art. 8c NP, but also access under Art. 8a.

>>> **As scientists we are deeply concerned and urge SBSTTA-24 to promote simplified access under Art 8a for non-commercial research, which is a strong stimulus to promote research and capacity building in this sector.**

Baseline
As pointed out, all available monitoring parameters indicate a threatening decline in healthy and sustainable biodiversity. Figure 1 is intended to serve as a vivid and easily recognizable illustration of the targeted kinetic changes in the available monitoring parameters for biodiversity over time. It is good practice to use legends for explanation of figures, and ideally legends should be self-explaining. We understand that the "indicators of biodiversity" are considered as being closely linked to biodiversity, but in fact likely underestimating the real change. This should be better described in an associated legend, also explain the A-and B-scenarios.

The graph further implies that the year 2010 represents some sort of reference point. However, to our knowledge, various other baselines have been discussed, such as "pre-human disturbance", "pre-industrial", "1970" (IPBES), or "2000" (see item 5 in the information document prepared by UNEP-WCMC in collaboration with the Biodiversity Indicators Partnership for SBSTTA24).
According to paragraph 69, the baseline for alien species seems to be shifted at least to 2023.
We would like to note that shifting the starting point further into the 21st century seems to be problematic, as it sets an already largely impoverished and degraded state of biodiversity as a benchmark. This approach might help to reach the goals and targets more easily - but will be subject to constant criticism. In our view this would be fatal, as a well-defined, relevant and widely accepted reference point is essential to assess real trends for individual indicators. Alternatively, an inset figure depicting the larger context and indicating the magnified time-period could help strengthening the arguments.
VBIO fully supports the goal of reversing the trend of accelerated loss to recovery of biodiversity in the current decade.

Specific comments

Page	Paragraph	Comment
4	**Goal A** (29-32)	Goal A addresses the need for comprehensive understanding species and genetic diversity. VBIO fully supports this aim. The section mentions the tree of life, and later wild and domesticated species. The less informed reader might restrict his view to a few macrospecies. It would be helpful to mention here the main branches of the tree of life including bacteria, fungi and protozoa to broaden the view. In order to assess genetic diversity across populations and ranges, species and population genetics needs to be applied broadly. Improved access to samples, comparison of the genetic information obtained and availability of tools of bioinformatics and biocomputing to study and compare results are important prerequisites for measuring any impacts (positive and negative) under Goal A. The genetic diversity of populations can be affected by various factors. Although coarse data may be available for selected species, such data are not available for the vast majority of species on Earth. Assessing the genetic diversity of organisms found in nature requires huge datasets and especially sequence uploads to INSDC databases such as GenBank, EMBL, BOLD and similar data sources.

		Genetic evaluation of previously unknown populations also requires access to reference organisms and voucher specimens. Without appropriate data based on voucher specimens, any measure of the "health", "resilience" or "threat" of the genetic diversity of populations as intended by Goal A is meaningless. Given the current debate on restricting access to "DSI", we wonder how Goal A and the related and aligned targets in the GBF for the post-2020 period, Aichi Targets 9, 11 and 19, and especially contributions to SDG Targets 14 and 15, will be adequately measured. >>> **We urge SBSTTA-24 to take into account the importance of free, unrestricted access to "DSI" for non-commercial taxonomic and biodiversity research to provide meaningful reference points and trends for Goal A.**
7	**Goal C** (41-45)	VBIO strongly supports equitable sharing of benefits from utilized genetic resources. Presently the rapid application of up-to-date methodology to accelerate the needed knowledge generation on biodiversity at all scales is often hindered by complicated regulation and slow administration. By this way, the positive methodological developments mentioned above such as falling costs, better data management, and more frequent monitoring, are countered by negative developments, such as those resulting in particular from the current discussions on the possible inclusion of digital sequence information in the Nagoya Protocol. We have pointed out on various occasions that Research data including "DSI", when published, are important for achieving CBD related goals. They are maintained to the standardised quality norms of the global research community and available for use in Provider and User Countries at zero marginal cost. We regard this as a part of (scientific) benefit sharing. There is a need for easy access to genetic resources under adequate terms for basic research. Otherwise biodiversity is lost prior to its identification with irreparable loss of world heritage. The benefit of international cooperation for knowledge gain, local training and participation in science and knowledge progress should also be considered as part of ABS. >>> **We urge SBSTTA-24 to take into account seriously the opposing trends of methodology development (accelerating) versus growing effort (slowing), which**
9	(42)	We agree on the fact, that information on benefits derived from ABS agreements is limited as of different types of benefit sharing or confidential clauses. Nevertheless the examples given are anecdotic and fail to give an overall impression. They are mixing up regulatory schemes (Nagoya protocol – other regulations), use of benefit (contribution to conservation and sustainable use of biodiversity or not) and types (monetary – non monetary) of benefit sharing. To gain more information in a structured way, categories have to be developed which reflect the diversity of benefit sharing incidents. >>> **Suggestion:** **We propose to rephrase and shorten the paragraph as follows:** **„42. Due to different international and national regulations, different types and use of benefit, information on the benefits derived from ABS agreements is limited.**
10	(44)	We are pleased that the paragraph explicitly distinguishes between different types of

		benefit sharing. But we would like to note, that this differentiation is not only a matter of information. **>>> We urge SBSTTA-24 parties to recognise properly the diverse contributions of non-monetary benefit sharing. We have addressed this elsewhere many times, lastly in the review of the draft monitoring framework for the post-2020 global biodiversity framework (July 2020):** "Section III in Annex 1 of the report of 'DSI' AHTEG (CBD/DSI/AHTEG/2020/1/7) highlights the relevancy of non-monetary benefits for capacity building and the role of research infrastructures to sustain the achievements resulting from those benefits and to develop endogenous research capacities especially in the global south so that countries can identify, understand, monitor and manage their own biodiversity. We agree to all items mentioned in this section and contribute to them actively, e.g. through close scientific collaboration with researchers from countries that wish to develop own expertise. Both, assessments and responses to monitor post-2020 GBF progress will require experts mostly with academic background that do the job. This was previously reflected in the zero draft version with the indicator "new jobs created" under goal 5 and target 11 (CBD/WG2020/2/3/Add.1), but has been omitted in the current version. We propose to include this element again with a specific focus on bachelor, master & PhD degrees under target T19.3. *Promotion of biodiversity in education*. Furthermore, capacity building is often tightly linked with international research collaborations or internships and project-related work, in which scientists from different countries are united and engage. Such collaborations, which are specifically directed to contribute to all three objectives of the CBD, would benefits from simplified measures under Art. 8a NP. Selected countries already have implemented such simplified measures. The current draft version includes an own metric on access under Art. 8c and it is not intuitively clear not to include a parameter to measure access under Art. 8a as well, which could be useful to highlight the engagement for the CBD and SDGs (see would support capacity such efforts with an own indicator (see comments below to 1/6/C/72 and 2/22/C/140). See https://www.cbd.int/conferences/post2020/submissions/2020-045 (no. 76)
11	(50)	We agree, that the proposed target 12 (access and benefit-sharing) has the potential to generate funding and other non-monetary benefits which could be used to support the implementation of the post-2020 global biodiversity framework. But the sum will be not even close to the figures given in (49). **>>>To avoide the raise of false hopes, we kindly urge SBSTTA-24 to be aware of this point at any stage of discussion.**
20	Target 9 (81)	VBIO welcomes the explicit mentioning of the opportunity to improve sustainable intensification of production systems "through genetic improvements to crops and livestock." In fact this point, but also the entire section 81 should be elaborated, motivating stakeholders for unbiased assessment of risks and chances. Technologies such as mart breeding and genome editing promise to play a highly significant and essential role in the future to maintain food, feed, plant-derived pharmaceuticals and other plant services.
22	**Target 12**	**Access and benefit-sharing**

	(88)	(88) The Phrase *"By 2030, increase by [X] benefits shared for ...."* does not have any unit of measurement. It could be number of PIC/MAT, amount of money shared or any non-monetary benefit sharing. If [X] will be a percent-figure, there would be the additional question of proper baseline. The overall lack of information was already mentioned in (42 see also 90). Thus, it remains unclear to us, how this target shall be reached and which indicators might serve. We are very much aware that collecting relevant data on non-monetary benefit sharing may pose challenges. Nevertheless, non-monetary benefit sharing, especially research collaborations, training and capacity building have high relevancy not only for the post-2020 GFB, but also for SDGs and the CBD. Thus, it should be explored how data for respective indicators could be allocated on national level. We are concerned that some actors rate non-monetary benefit sharing as rather "nice to have". This is even more unfortunate, since non-monetary benefit sharing delivers most of the benefits that are currently shared unnoticed. See also https://www.cbd.int/conferences/post2020/submissions/2020-045 (no. 76)
22	(89)	We support the view that a lot of action is required to reach this target. But we would like to point out, that the mentioned formal criteria (number of states which have put in place ABS measures or establishes national authorities) are not meaningful concerning the benefits which will be transferred in real – might it be monetary or non-monetary – and how this benefit served for protection and sustainable use of biodiversity.
23	**Target 13** (91)	We fully agree that the *"integration of biodiversity issues into policies, regulations, planning, development processes, poverty reduction strategies and accounts ..."* is crucial and that any progress towards this target will support the attainment of most of the proposed goals and targets of the post-2020 global biodiversity framework. But we are equally convinced that this progress will not happen if the existing burdens to access genetic resources will not be lowered. Access, in-situ collecting and recording of species as well as unrestricted access to 'DSI' on INSDC databases are essential.
27	**Target 18**	Target 18 itself mentions *"...implement the strategy for capacity-building and technology transfer and scientific cooperation to meet the needs for implementing the post-2020 global biodiversity framework".* Unfortunately neither capacity building nor technology transfer or scientific cooperation are presented in the following paragraphs although they are of utmost importance. Without adequate appreciation, funding and international cooperation it remains unclear how the post-2020 GBF monitoring should be operational and expanded. >>> ***We encourage the addition of an element how and where funds should be used to support strategies to increase capacity-building, technology transfer and scientific cooperation***.
27	**Target18**	A funding gap of the order of $700 billion per year is estimated. Part of the measures

	(105-108)	to close this gap is related to benefit sharing (Target 12). We would like to repeat that benefit sharing generates a lot non-monetary benefit and some monetary benefit. Although there is hardly any information (42) the order monetary benefit sharing is presumably much smaller than the necessary amount of finances. **>>>To avoid the raise of false hopes and expectations for, we kindly urge SBSTTA-24 to be aware of this point at any stage of discussion.**

Comments should be sent by e-mail to secretariat@cbd.int by 22 March 2021