Position paper – inclusion of MSA and MSA.km² as headline indicators in the post-2020 framework of the CDB

In May 2022, Business for Nature updated their position on the post-2020 global biodiversity framework, in particular calling Parties at OEWG4 to: "Adopt an ambitious Target 15 that requires business and financial institutions to transform their business practices" and "Adopt a clear, simple and rallying mission to halt and reverse biodiversity loss by 2030 based on the strong consensus expressed by Parties and Observers on this proposed mission at the OEWG3" (Business for Nature 2022). CDC Biodiversité supports this position, and wishes to contribute to reinforcing the monitoring framework for the post-2020 global biodiversity framework, through suggestions on Goal A and Target 15. Our objective is to contribute to a pragmatic and operational framework, taking into account both scientifically sound metrics and current market practices, so that business and financial institutions can measure progress against the framework's goals and targets, and contribute to their achievement. The Mean Species Abundance (MSA) is identified as a *complementary indicator* (a.43) for Goal A in the monitoring framework, but is not however identified as a possible *headline indicator* for Goal A, nor as a possible *headline indicator* for *Target 15* (CBD 2022a). CDC Biodiversité suggests **MSA** as a **headline indicator for Goal A and Target 15**, as well as **MSA.km²** as a headline indicator for Target 15.

Considering its properties, MSA has much potential as a metric: it is sensitive to change, easy to interpret (0-100 % scale), can be globally assessed based on pressure-impact relationships from the GLOBIO model (Alkemade et al. 2009; Schipper et al. 2020), and is regularly used in scientific studies (Leclere et al. 2018; Leclère et al. 2020; Wilting et al. 2017; Wilting and van Oorschot 2017; Lucas and Wilting 2018) and international outlook studies for the Living Planet Report (Almond, Grooten M, and Petersen 2020), IPBES (Rounsevell 2018) and the CBD (Secretariat of the Convention on Biological Diversity 2020). A first estimate of the global planetary boundary for functional biodiversity has been estimated using MSA: it stands at 72 % (Lucas and Wilting 2018). Using MSA could thus potentially facilitate negotiations by providing an indication of the level to aim for for ecosystems (in a similar fashion to the 1.5°C-2°C for climate). The MSA is also used in several biodiversity impact assessment tools. Examples include the Global Biodiversity Score (GBS) (CDC Biodiversité 2020), launched in May 2020 by CDC Biodiversité to assess the biodiversity footprint of companies and financial institutions; the Biodiversity Impact Metric (BIM) developed by the University of Cambridge Institute for Sustainability Leadership (CISL) to measure the impact of commodity supply chains (University of Cambridge Institute for Sustainability Leadership (CISL) 2020); and the Biodiversity Integrated Assessment and Computation Tool (B-Intact) developed by the Food and Agriculture Organisation of the UN (FAO), to assess the impact on biodiversity of projects in the Agriculture, Forestry and Other Land Use sector (Food and Agriculture Organisation 2021). We thus believe that (global) MSA would be valuable as a headline indicator for Goal A.

CDC Biodiversité suggests as a headline indicator: "Condition in MSA (mean condition) and extent in km² of ecosystems impacted by businesses, split between direct operations, upstream and downstream" for Target 15. Indeed, MSA is already identified as a complementary indicator in Appendix 1 (a.43). Since in practice, MSA (in %) is difficult to produce for businesses, we also wish to suggest "Condition-weighted business direct operations, upstream and downstream impacts (MSA.km^2)" as a headline indicator for Target 15. This indicator is already available at the country level through GLOBIO-IMAGE produced by the PBL (Dutch environmental agency), and which is for example used in Global Biodiversity Outlooks (Secretariat of the Convention on Biological Diversity 2020). The indicator is also used by most financial institutions (through the CBF and BIA-GBS databases) assessing their biodiversity footprint and transition risk and by a number of corporates (e.g. through the GBS tool).

For further information, please contact Joshua Berger, Head of Biodiversity Footprint: joshua.berger@cdc-biodiversite.fr – please see attached appendix for references and comments on other headline indicators suggested for Target 15.

CDC Biodiversité is a subsidiary of the Caisse des dépôts et consignations, the largest French public financial institution. CDC Biodiversité is a French consulting & engineering firm specialized in positive actions for biodiversity, biodiversity sustainable management (biodiversity offsets), and the measurement of corporate biodiversity footprint in particular through the Global Biodiversity Score.

Position paper – inclusion of MSA and MSA.km² as headline indicators in the post-2020 framework of the CDB - appendix

Appendix - References

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Appendix – feedback on other indicators

Table 1. Feedback from CDC Biodiversité on the CBD's list of proposed alternative or additional headline indicators for Target 15 (CBD 2022b).

Proposed alternative or additional headline indicator (CBD 2022b)	Feedback from CDC Biodiversité
"Dependencies and impacts of businesses on biodiversity and related human rights"	This is very broad, and both MSA and MSA.km² are specific indicators to track impacts of businesses on biodiversity.
"Ecological footprint"	This is not used by companies and is not directly related to biodiversity.
"Extent of natural vegetation/terrestrial ecosystems converted due to commodity/soft production"	We believe it is more relevant to directly measure condition-weighted impact in MSA.km² (and to cover the whole value chain, not just commodity production).
"Indicator on dependencies, impacts, risks, and opportunities from the Taskforce on Nature-related Financial Disclosures (TNFD)"	As for the indicator mentioning dependencies above, this seems too broad. Furthermore, at this stage, the TNFD does not suggest metrics or indicators.
"Number of companies assessing and reporting on their net impact on biodiversity"	We believe the word "net" is not useful here: companies should report separately on their negative and positive impacts.
"Number of companies publishing sustainability reports"	This seems too broad.
"Number of production sectors in each country that use biodiversity includes certification schemes or biodiversity practice guidelines"	This does not seem to be what is needed to achieve a 50 % reduction (it would be insufficient).
"Policies and measures in place that prevent and regulate impacts on biodiversity and biodiversity related human rights."	This seems too broad.
"Proportion of total revenue, of business (a) assessing and disclosing material biodiversity impacts and dependencies of their operations and supply chains through quantitative metrics; (b) having set science-based targets for nature; and (c) having set science-based targets for climate"	The mention of science-based targets for climate does not seem necessarily relevant here. Furthermore, the proportion of total revenue/of business is interesting but seems hard to achieve in practice (the number of businesses may be easier to quantify).