Template for submission of scientific and technical comments on Appendix 2 of the recommendation adopted by the Subsidiary Body on Scientific, Technical and Technological Advice for the Resumed Session of its twenty-fourth meeting

TEMPLATE FOR COMMENTS

Review comments on Appendix 2 of the present recommendation	
Scope of this template for comments	Template for submitting comments in accordance with recommendation CBD/SBSTTA/REC/24/2, paragraph 2, where the Executive Secretary of the Convention on Biological Diversity (CBD), under the guidance of the Bureau of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), invites Parties, other Governments and relevant stakeholders to submit views on Appendix 2 of the recommendation.
Contact information	
Party/Government/Observer	Observer
Party/Government/Observer representative	Scientist working with GEO BON

Comments

Please provide any general comments on the Appendix 2.

I recommend that an Ecological Integrity Index be included as a Headline Indicator under Goal A and Targets T1, T2, T3, and T10. There is general agreement that ecosystem integrity includes components of ecosystem structure, function and composition (Díaz et al. 2020, Hansen et al. 2021, Nicholson et al. 2021). There is, however, no common agreement on the individual indicators for each of these components, nor their respective weights. This situation is evolving rapidly, and the concept, means of monitoring, and demonstrated applications of ecosystem integrity are well developed for some types of ecosystems such as forests (Hansen et al. 2021, Nicholson et al. 2021, Background Appendix-Figure 1). Indicators of the components of ecosystem integrity are now available for application for many ecosystems and can be applied for the GBF (Hansen et al. 2021, These can be combined into an overall ecosystem integrity index and used as a headline indicator for some ecosystems (Hansen et al. 2021, CBD/WG2020/4/INF/2/Rev.2 14 June 2022 Background Appendix-Table 1). Steps are: 1) Identify "natural" cells within an ecoregion (e.g., Human Footprint < .4); 2) use the average value of the metric for these natural cells as representing maximum integrity; 3) derive a relative value for each cell across the ecoregion as a percentage of this average for natural cells); 4) average these relative values across all the metrics to derive the Ecological Integrity Index. Countries may choose to weight the individual relative metrics differentially based on national goals and targets. For forested ecosystems, we particularly recommend the Forest Structural Condition Index (Hansen et al 2019) as a Component Indicator. This metric is a globally consistent, fine-scale measure of forest structure and allows identification of taller, older, more closed-canopy humid tropical forests. Forests of high structural condition are important ecologically because they tend to be high in biodiversity, productivity, carbon storage, and water

provisioning. The FSCI is derived from canopy cover, canopy height and time since forest loss (Hansen et al. 2020). The index ranges from 1 to 18 , with the lowest value assigned to stands approximating 5 m tall, disturbed since 2000 or with canopy cover approximating 25%. The highest value is for stands not undergoing loss since 2000 that are tall in stature and closed canopy. The threshold values for height and canopy cover are based on the natural potential within an ecoregion. The index can now be expanded to global forests and updated annually.