# Comments on Draft Monitoring Framework for the post-2020 Global Biodiversity Framework

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15 August, 2020

The comments below are based on the documents below, accessed on 4 August 2020 at: <https://www.cbd.int/sbstta24/review.shtml>:

* “Draft monitoring framework for the post-2020 global biodiversity framework for review”
* “Indicators for The Post-2020 Global Biodiversity Framework – Information Document prepared for SBSTTA24 by UNEP-WCMC in collaboration with the Biodiversity Indicators Partnership”

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| **Review comments on the draft monitoring framework for the post-2020 global biodiversity framework** |
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| ***General Comments on Draft Monitoring Framework***  |
| The document includes vague or imprecise language for components and monitoring elements. In some cases (e.g., ecological integrity in Table 1 Goal A), concepts need to be clarified and defined, in order to ensure that monitoring elements are developed for all aspects of the concept. For instance, ecological integrity includes ecosystem composition, structure, function, and complexity; monitoring elements should include each of these. Currently, the focus is primarily on composition. Clarifying the language would allow for consistency between Goals, Goal Components and Monitoring Elements. |
| In multiple places throughout the document, specific ecosystems are referenced as monitoring elements. However, the list of included ecosystems varies among sections. The list should be consistent among sections and emphasize that all ecosystems are important. As it reads now, some ecosystems seem to be prioritized in some sections, and others prioritized in other sections, without any clear rationale for the differences. |
| Ecological restoration (and “restorative activities” in general) have been entirely left out of the 2050 goal components, monitoring elements and indicators. It should be added to these elements of Goal A (see specific comments below) |
| Although indicators are listed for most monitoring elements, it is unclear how the indicator meets the intent of the monitoring element. Most of the items listed as indicators are databases or tools not measurable variables (more on this below). There is a need for clear measurable indicators for well-defined monitoring elements (see comment above) and then to list the tools that will be used to assess the indicator. It is critical to have clear links between the monitoring elements, indicators, and tools, in order to determine what tools need to be developed. The current list of indicators seems to be based on what is available, rather than what is needed.  |
| ***Specific Comments on Draft Monitoring Framework***  |
| **Table** | **Page** | **Column letter** | **Row number** | **Comments** |
| 1 | 2 | A |  | A missing component to achieve Goal A is measuring reduction in threat to native ecosystems and increased conservation of ecosystems (similar to Component A3 but for ecosystems). A new component could be added to this effect (reduction in the [number or percentage] of threatened ecosystems and increased area of threatened ecosystems moved into conservation status). The indicators could be the Red List of Ecosystems and well as databases of protected areas. Note that Component A6 addresses protection of critical ecosystems. The monitoring element “trends in ecological representativeness of areas conserved” from Component A6 should be moved to the component being suggested here. |
| 1 | 2 | A |  | A missing component to achieve Goal A is measuring the extent of ecological restoration. A new component could be added to this effect, or restoration could get added to a monitoring element of Component A1 (The former would be stronger). See more on this below. |
| 1 | 2 | A | 1-14 | 1. Goal A uses the word “area” but component A1 uses the word “extent”, which is vague. Change to “spatial extent” or replace “extent” with “area”. The latter would be consistent with the text of the monitoring elements.
2. Component A1 uses the word “natural” which is vague; in English there are multiple definitions of this word (e.g., as in natural resources, or untrammeled by people). For instance, to many stakeholders, it will be unclear whether or not farmlands are included as natural ecosystems. They appear to be considered as natural ecosystems in this document, as in the next component (A2) they are included as a monitoring element. “Natural ecosystems” either needs to be defined or a different word should be selected (perhaps “native ecosystems”).
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| 1 | 2 | B | 1-14 | 1. Some ecosystems are specifically mentioned within monitoring elements (e.g., forests), while others (i.e. grasslands) are not (i.e. they are lumped in with “other terrestrial ecosystems”). This was likely done because of currently available indicators. However, given that this is a framework for the next 30 years, it is critical to monitor all types of terrestrial ecosystems, not just forests. Thus, the framework would be stronger if there were monitoring elements for all biomes or alternatively if just terrestrial, freshwater, and marine were listed. In other words, the monitoring elements should indicate equal importance for all ecosystems. One advantage to listing out the biomes and ecosystems is that it would highlight the ones for which indicators are available versus in need of development.
2. For each listed ecosystem(s), the monitoring element is “trends in area”. Trends are the cumulative of losses and gains, each of which needs separate monitoring. It would be useful to separate the “trends” into two separate monitoring elements: 1) Decreased loss and degradation of native ecosystems and 2) Increased ecological restoration of degraded ones. Alternatively, restoration of degraded habitat could be its own component of Goal A. The latter would be stronger.
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| 1 | 2 | C | 1-14 | Per the suggestions above, it would be useful to include indicators for restoration. There is currently a limited number of indicators/databases available (e.g., the IUCN Bonn Challenge Barometer), but additional ones will likely be available as new products of the UN Decade of Ecosystem Restoration. |
| 1 | 2 | B | 15-28 | The monitoring elements for Component A2 include the “quality” of different ecosystems. A few comments: 1) the term “quality” is unclear. Given that Component A2 is about ecosystem integrity, “quality” should be replaced with the elements of ecosystem integrity, including composition, structure, function, and complexity of ecosystems. |
| 1 | 2 | B | 16 | Unclear why farmland is included. 1) Since Goal A is about “natural” ecosystems, including a human-dominated landscape seems inconsistent (depending on definition of natural – see above); 2) If the definition of natural includes human-dominated landscapes, such as farmlands, it is unclear why farmlands are the only type included. |
| 1 | 2-3 | B | 15-28 | The list of ecosystem types being referenced needs to be revisited. Different ones are mentioned in Component A2 than A1. Was this intentional? The framework should be clear that all types of ecosystems need to be considered and monitored. |
| 1 | 2-3 | B+C | 15-28 | There are few listed indicators that provide information on the structure and function of ecosystems. It might be useful to specifically break apart the monitoring elements into composition, structure, and function, so that indicators could be assigned to each. That way, gaps in indicators of integrity could be identified. |
| 1 | 3 | A | 16-35 | For both components A3 and A4, it is necessary to qualify which species the component and monitoring elements refer to. For instance, the monitoring element, “trends in species abundance” should specify increased abundance of native threatened species and decreased abundance of noxious and invasive nonnative species. |
| 1 | 6-7 | A | 77-85 | Goal D is lacking components related to generating new knowledge to fill gaps in available information that is critical for achieving the 2050 goals; similarly, this goal is lacking components related to developing new monitoring products. Monitoring elements could be gap analysis of information needs, number of synthesis articles published, and development of databases that allow meta-analyses of outcomes. |
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| 2 | 8 | A | 6-22 | Component T1.2: “Degradation” should be included in component T1.2, along with “reduction” and “fragmentation”. Reword to include this concept.  |
| 2 | 8 | B | 6-22 | Similar to my comments above, there is a need to be consistent in the ecosystems that are listed within monitoring elements among tables and components. Forest ecosystems are always listed, yet grassland ecosystems are only sometimes listed. Best practice would be to list each type separately in all instances to ensure that indicators are available. |
| 2 | 8 | B | 6-22 | Monitoring elements focus on area and extent rather than ecological integrity. Suggest adding the word “intact” or “native” to address this. For instance. Row 6 monitoring element could be revised to: Trends in extent and rate of change of “intact” or “native” forest ecosystems. It is critical to know the extent to which we are degrading remaining functioning ecosystems. |
| 2 | 8 | B | 24-29 | Similar to comments above, there is a need to be consistent in the ecosystems that are listed within monitoring elements among tables and components. Forest ecosystems are always listed, yet grassland ecosystems are only sometimes listed. Best practice would be to list each type separately in all instances to ensure that indicators are available. |
| 2 | 8 | B | 24-29 | Given that restoration is a process, the monitoring elements for “trend in area of…restored” should be changed to “trend in area of….undergoing ecological restoration”. |
| 2 | 8 | B | 24-29 | There is a need for additional monitoring elements for restoration: 1) The current monitoring elements for restoration are entirely area based. There is a need for additional monitoring elements that are related to ecological integrity, such as degree of ecological integrity achieved in restored areas. 2) There is also a need for a monitoring element related to number of countries that have completed analyses of priorities for ecological restoration. |
| 2 | 8 | C | 24-29 | The indicators related to restoration are inadequate: 1) there is a need for a comprehensive database of restoration activities to determine area undergoing restoration treatments (perhaps indicators could be developed through the UN Decade); 2) there is also a need for an indicator related to the ecological integrity of restored areas or areas under restoration. This is particularly true if areas in which restorative activities (e.g., change from industrial to sustainable agriculture) other than ecological restoration are being included as “restoration”. The International Principles and Standards for Ecological Restoration (Gann et al 2019) published by of the Society for Ecological Restoration includes tools that could be used to develop indicators. 3) There is also a need for an indicator related to national restoration planning (perhaps indicators could be developed through the UN Decade). |

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| ***General Comments on Indicators*** |
| The term “indicator” may not be the correct term to use for the items listed. Most of the listed “indicators” are databases or tools. An indicator should be the specific measurable metric (i.e. a variable that has units). In addition to listing these measuring variables, there is a need to specify the database or tool used to obtain the measurement. |
| Although “indicators” are listed for most “monitoring elements”, it is unclear how the indicator meets that element. In part, this is due to issues with the monitoring elements. If monitoring elements were better defined (see comment above), there could be a clear list of measurable variables and then the list of tools and databases that will be used to assess the indicator.  |
| The current list of indicators seems to be a list of databases that are available, rather than what is needed. It is critical to have clear links between the monitoring elements, indicators, and tools/databases, in order to determine what tools need to be developed. There is a need to go through each monitoring element and determine what specific variables need to be measured and then if these data area available. |
| Additional databases and tools being developed for the UN Decade on Ecosystem Restoration should be included. |