**Review Comment Template for the document on indicators for the draft goals and targets of the post-2020 global biodiversity framework**

Parties and stakeholders are invited to make suggestions of indicators (currently available or under development) that may be used to measure progress towards the post-2020 framework. The draft components and elements of the monitoring framework for the post-2020 global biodiversity framework are based on updated draft goals and targets, as was requested by the second meeting of the OEWG, and presented in document <https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf>.

Please note: there are two tables in this document, one for suggestions for indicators for the draft monitoring elements of goals, and another table for indicators for the draft monitoring elements of targets

**Instructions for providing input on indicators and completion of indicator tables (for goals and targets):**

* Please do not add columns to the tables below
* Please add rows for additional indicators related to monitoring elements for specific components from goals (table 1) and components from targets (table 2). The information of draft components and monitoring elements for goals and targets is available in document <https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf>
* To add an indicator for specific monitoring elements, please provide the following information:
  + Column 1: copy/paste the component of the goal (enter information in table 1) or target (enter information in table 2) from <https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf>, which the indicator can be used for. This MUST be provided
  + Column 2: copy/paste the specific monitoring element of the goal (enter information in table 1) or target (enter information in table 2), which the indicator can be used for from <https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf>. This MUST be provided
  + Column 3: the published or accepted name of the indicator. This MUST be provided
  + Column 4: the name of the organisation(s) responsible for producing the indicator and keeping it up to date. This MUST be provided
  + Column 5: please state whether the indicator is ready for use today (with an X) or if is still under development (Y). This MUST be provided
  + Column 6: if you are adding a new indicator that is still under development, please indicate the year that you expect it to be available
  + Column 7: for any existing indicator, please add the year of the last update
  + Column 8: please provide the time series for the indicator and frequency of update (e.g. 1990-2020, available every 5 years).
  + Column 9: please state (Y or N) whether there is a published methodology for application of the indicator at the national level
  + Column 10: please state (Y or N) whether any new or existing indicator can be disaggregated at the national level for use by Parties
  + Column 11: please state (Y or N) whether the indicator is aggregated from data that is collected at the national level (e.g. with data from national institutions)
  + Column 12: please state (Y or N) whether any indicator has been used in the 4th Edition of the Global Biodiversity Outlook (GBO-4).
  + Column 13: please state (Y or N) whether the indicator is currently included in the SDG indicator framework and provide the SDG indicator number
  + Column 14: please state whether an indicator is used for any Multi-Lateral Environmental Agreements other than the CBD (e.g. Ramsar Convention, CMS) or is used as an indicator by IPBES, by writing the abbreviated name of the MEA or process
  + Column 15: please enter any further information or relevant links
* Example entries have been provided in the tables below for goals and targets, please follow the same format for each indicator entry
* Inputs should be sent by e-mail to[*secretariat@cbd.int*](mailto:secretariat@cbd.int)no later than 25 July 2020

**For general comments please use the template provided in page 2 below**

**Table 1. Indicators for monitoring elements of the draft goals (with example entries)**

| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Components of the draft Goals**  **(copy/paste text from** [**CBD/SBSTTA-24/post-2020-monitoring.en.pdf**](https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf)**)** | **Goal Monitoring Elements**  **(copy/paste text from** [**CBD/SBSTTA-24/post-2020-monitoring.en.pdf**](https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf)**)** | **Indicator name** | **Responsible Institution for the indicator** | **Available today (X) or under active development (Y)** | **Date of availability for indicator in development (Year)** | **Year of last update (e.g. 2019)** | **Time series and frequency of updates (e.g. 1985-2019, annually)** | **Methodology available for national use (Y/N)** | **Global indicator can be disaggregated for national use (Y/N)** | **National data aggregated to form global indicator (Y/N)** | **Used in GBO-4 (Y/N)** | **SDG indicator (Y/N)** | **Indicator used to measure other MEAs or processes (e.g. Ramsar Convention, IPBES, CMS)** | **Comments** |
| Goal A2 (Ecosystem integrity and connectivity (terrestrial, freshwater and marine ecosystems)): | Trends in fragmentation and quality of forest ecosystems. | River Connectivity Status Index (CSI) | WWF | Y |  | 2019 | WWF to confirm | Y | Y | N | N | N | Could be applied to CMS (to show river fragmentation effects on migratory species), Ramsar | Grill, G., Lehner, B., Thieme, M. et al. 2019. Mapping the world’s free-flowing rivers. Nature 569, 215–221). A baseline Connectivity Status Index was published in 2019. Plans are being considered for periodic updates, subject to availability of resources. A specific time frame has not been presented yet |
| Goal A6 (Protection of critical ecosystems) | Trends in areas of particular importance for ecosystem services conserved. | Irrecoverable carbon | Conservation International | Y | 2020 | 2020 | Annually | Y | Y | Y | N | N | N |  |
| Goal A6 (Protection of critical ecosystems): Protected area coverage. | Trends in area of terrestrial and inland water areas conserved | PADDD (Protected area downgrading, downsizing, and degazettement) | CI (developed)  WCMC (reporting) | X |  | 2019 | 1892-2018 | Y | N | Y | N | N | N | CI has data on PADDD in ~75 countries (systematic archival research for 15 countries, opportunistic for the rest – over the last ~10 years of work with many partners) but have Including PADDD monitoring as part of the WDPA reporting process would allow for globally consistent tracking. CI could support this process. |
| GA2. Ecosystem integrity and connectivity (terrestrial, freshwater and marine ecosystems) | Trends in fragmentation and quality of inland wetlands | Sustainable watershed & inland fisheries index | FAO & USGS | Y | 2022 |  | Every two years (to align with the FAO SOFIA Reports) | Y | N | Y | N | N | IPBES, Ramsar, CMS | A new ‘sustainable watershed & inland fisheries index’ is being proposed for development. This will provide a measure of watershed health and, once developed, could be applied to measuring trends in fragmentation and quality of inland wetlands. There is a non-binding agreement to cooperate on developing this index between FAO, USGS and several other partner organizations (e.g. Conservation International), to have a first version ready by 2022. |
| GB1. Nature’s regulating contributions including climate regulation, disaster prevention and other | Trends in regulation of freshwater quantity, quality, location and timing | Sustainable watershed & inland fisheries index | FAO & USGS | Y | 2022 |  | Every two years (to align with the FAO SOFIA Reports) | Y | N | Y | N | N | IPBES, Ramsar, CMS | A new ‘sustainable watershed & inland fisheries index’ is being proposed for development. This will provide a measure of watershed health and, once developed, could be applied to measuring trends in regulation of freshwater quantity, quality, location, and timing. There is a non-binding agreement to cooperate on developing this index between FAO, USGS and several other partner organizations (e.g. Conservation International), to have a first version ready by 2022. |
| GB2. Nature’s material contributions including food, water and others | Add a Monitoring element on “Trends in status of ecosystems providing globally important services for water security and health”. | Sustainable watershed & inland fisheries index | FAO & USGS | Y | 2022 |  | Every two years (to align with the FAO SOFIA Reports) | Y | N | Y | N | N | IPBES, Ramsar, CMS | A new ‘sustainable watershed & inland fisheries index’ is being proposed for development. This will provide a measure of watershed health and, once developed, could be applied to measuring trends in status of ecosystems providing globally important services for water security. There is a non-binding agreement to cooperate on developing this index between FAO, USGS and several other partner organizations (e.g. Conservation International), to have a first version ready by 2022. |
| Goal B1 (Nature’s regulating contributions including climate regulation, disaster prevention and other) | Trends in regulation of freshwater quantity, quality, location and timing. | Status of ecosystems providing globally important services for the regulation of water quantity, quality, location and timing | Critical Natural Capital partnership: A collaboration of researchers at Stanford, King’s College London, Cornell University, Colorado State University, Conservation International, and elsewhere. | Y | 2020-2021 (refers to the methodology) | 2020 | Each data layer for the ecosystem service is different; data on the status of the ecosystem can be updated annually | Y | Y | N | N | N | N | The indicator can include determining the status of the health/integrity of the ecosystems and/or the provisioning of services |
| Goal Element B2. Nature’s material contributions including food, water and others. | Trends in status of ecosystems providing globally important services for food security and nutrition | Status of ecosystems providing globally important services for food | Critical Natural Capital partnership: A collaboration of researchers at Stanford, King’s College London, Cornell University, Colorado State University, Conservation International, and elsewhere. | Y | 2020-2021 (refers to the methodology) | 2020 | Each data layer for the ecosystem service is different; data on the status of the ecosystem can be updated annually | Y | Y | N | N | N | N | The indicator can include determining the status of the health/integrity of the ecosystems and/or the provisioning of services |
| Goal Element B2. Nature’s material contributions including food, water and others. | Trends in status of ecosystems providing globally important services for meeting human water needs | Status of ecosystems providing globally important services for the regulation of water quantity, quality, location and timing | Critical Natural Capital partnership: A collaboration of researchers at Stanford, King’s College London, Cornell University, Colorado State University, Conservation International, and elsewhere. | Y | 2020-2021 (refers to the methodology) | 2020 | Each data layer for the ecosystem service is different; data on the status of the ecosystem can be updated annually | Y | Y | N | N | N | N | The indicator can include determining the status of the health/integrity of the ecosystems and/or the provisioning of services |
| Goal B2 (Nature’s material contributions including food, water and others) | Trends in the provision of food and feed from biodiversity | State of important sites delivering ecosystem services related to food | Critical Natural Capital partnership: A collaboration of researchers at Stanford, King’s College London, Cornell University, Colorado State University, Conservation International, and elsewhere. | Y | 2020-2021 (refers to the methodology) | 2020 | Each data layer for the ecosystem service is different; data on the status of the ecosystem can be updated annually | Y | Y | N | N | N | N | The indicator would include identification of the sites that deliver these services and monitoring of their status. This information can be provided at regular intervals to assess the state of food provisioning through ecosystem services across the globe. This entails mapping the places around the world that are highest-performing in terms of providing provisioning of food-related ecosystem services to all humanity, particularly to the world’s most vulnerable people. |
| Goal B2 (Nature’s material contributions including food, water and others) | Trends in the provision of materials and assistance from biodiversity. | State of areas that provide critical levels of ecosystem services through delivery of materials | Critical Natural Capital partnership: A collaboration of researchers at Stanford, King’s College London, Cornell University, Colorado State University, Conservation International, and elsewhere. | Y | 2020-2021 (refers to the methodology) | 2020 | Each data layer for the ecosystem service is different; data on the status of the ecosystem can be updated annually | Y | Y | N | N | N | N | The indicator would include identification of the sites that deliver these services and monitoring of their status. This information can be provided at regular intervals to assess the state of food provisioning through ecosystem services across the globe. This entails mapping the places around the world that are highest-performing in terms of providing provisioning of food-related ecosystem services to all humanity, particularly to the world’s most vulnerable people. |

**Table 2. Indicators for monitoring elements of the draft targets (with example entries)**

| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Components of the draft Targets**  **(copy/paste text from** [**CBD/SBSTTA-24/post-2020-monitoring.en.pdf**](https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf)**)** | **Target Monitoring Elements**  **(copy/paste text from** [**CBD/SBSTTA-24/post-2020-monitoring.en.pdf**](https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf)**)** | **Indicator name** | **Responsible Institution for the indicator** | **Available today (X) or under active development (Y)** | **Date of availability for indicator in development (Year)** | **Year of last update (e.g. 2019)** | **Time series and frequency of updates (e.g. 1985-2019, annually)** | **Methodology available for national use (Y/N)** | **Global indicator can be disaggregated for national use (Y/N)** | **National data aggregated to form global indicator (Y/N)** | **Used in GBO-4 (Y/N)** | **SDG indicator (Y/N)** | **Indicator used to measure other MEAs or processes (e.g. Ramsar Convention, IPBES, CMS)** | **Comments** |
| T1.4 (Restoration of degraded ecosystems): | Trend in the area of degraded terrestrial ecosystems restored | Proportion of land that is degraded over total land area (Trends.Earth) | Conservation International | X |  | 2020 | Reported every 4 years, updated annually | Y | Y | Y |  | Y | UNCCD, SDG Indicator 15.3.1 | Indices are used to monitor changes in primary productivity, land cover and soil organic carbon.. |
| T1.4 (Restoration of degraded ecosystems): | Trend in the area of degraded terrestrial ecosystems restored | Increase in secondary natural forest cover | CI plus partner | Y | 2021 |  |  |  |  |  |  |  |  | This indicator would assess restoration quality which is important to ensure that restoration efforts contribute to improvement not just in extent but also integrity of natural ecosystems. |
| Target T1.5 (Maintenance and restoration of connectivity of natural ecosystem) | Trends in habitat connectivity | Marine connectivity | Conservation International, IUCN’s Marine Connectivity Working Group, academic and other institutions. | Y | 2021 or 2022 |  |  |  |  |  |  |  | The resulting indicator would also have relevance for other UN Conventions and processes such as the High Seas Treaty and the SDGs | This would entail the development of a method for assessing connectivity of marine protection and/or connectivity of marine habitats (also relevant to the habitat fragmentation element).. |
| T2.1 (Trends in extent of protected areas) | Protected area coverage | PADDD (Protected area downgrading, downsizing, and degazettement) | CI (developed)  WCMC (reporting) | X |  | 2019 | 1892-2018 | Y | N | Y | N | N | N | PADDD specifically tracks 1) losses in coverage due to downsizing and degazettement and (2) Change in status and rules within protected areas, including downgrades to protected areas and other area-based conservation measures |
| T2.1 (Area of terrestrial, freshwater and marine ecosystem under protection and conservation) | Trends in extent of areas under other area-based conservation measures | Extent of IPLC lands that have some form of recognition, documentation and/or titling | Several institutions, see Comments section for list | Y | 2020 |  | Annually | It could be | Y |  | N | N | N | Landmark.com (WRI)  World Database on Protected Areas (UNEP WCMC)  Other Effective Area-based Conservation Measures (UNEP WCMC)  Indigenous and Community Conserved Areas Registry (UNEP WCMC)  Conservation Atlas (CI) |
| T2.2. (Areas of particular importance for biodiversity are protected and conserved as priority) | Trends in proportion of areas of particular importance for biodiversity protected and conserved. | Status of protected area and OECM coverage of priority areas delivering ecosystem services for climate, food and water | Critical Natural Capital partnership: A collaboration of researchers at Stanford, King’s College London, Cornell University, Colorado State University, Conservation International, and elsewhere. | Y | 2020 | 2020 | annually | Y |  |  | N | N |  | Synthesis of 15 different ES layers; caveats and limitations (all of these are global; different layers are from different years |
| T2.7 (Policy and governance practices outside of protected areas and OECMs compatible with their management objectives) |  | Extent of IPLC lands that have some form of recognition, documentation and/or titling | Several institutions, see Comments section for list | Y | 2020 |  | Annually | It could be | Y |  | N | N | N | Landmark.com (WRI)  World Database on Protected Areas (UNEP WCMC)  Other Effective Area-based Conservation Measures (UNEP WCMC)  Indigenous and Community Conserved Areas Registry (UNEP WCMC)  Conservation Atlas (CI) |
| T4.1. Harvest is legal, sustainable and safe for human health and biodiversity | Trends in proportion of biological resources harvested within the established harvest limits | Sustainable watershed & inland fisheries index | FAO & USGS | Y | 2022 |  | Every two years (to align with the FAO SOFIA Reports) | Y | N | Y | N | N | IPBES, Ramsar, CMS | A new ‘sustainable watershed & inland fisheries index’ is being proposed for development. This will incorporate a nationally-applied method for assessing the adoption of ecosystem-based management approaches for inland fisheries (see T8.1). The method could be applied nationally, or by river catchments, depending on spatial origin of fisheries data. The method, once developed, could be applied to assessing trends in proportion of inland fisheries resources harvested within established harvest limits. There is a non-binding agreement to cooperate on developing this index between FAO, USGS and several other partner organizations (e.g. Conservation International), to have a first version ready by 2022. |
| T4.1. Harvest is legal, sustainable and safe for human health and biodiversity | Trends in proportion of biological resources harvested though sustainable harvest practices | Sustainable watershed & inland fisheries index | FAO & USGS | Y | 2022 |  | Every two years (to align with the FAO SOFIA Reports) | Y | N | Y | N | N | IPBES, Ramsar, CMS | A new ‘sustainable watershed & inland fisheries index’ is being proposed for development (see T8.1). This will incorporate a nationally-applied method for assessing the adoption of ecosystem-based management approaches for inland fisheries. The method could be applied nationally, or by river catchments, depending on spatial origin of fisheries data. The method, once developed, could be applied to assessing trends in proportion of inland fisheries resources harvested through sustainable harvest practices. There is a non-binding agreement to cooperate on developing this index between FAO, USGS and several other partner organizations (e.g. Conservation International), to have a first version ready by 2022. |
| T7.1 (Increased biodiversity contribution to climate change mitigation, adaptation and disaster risk reduction) | Trends in global stocks of Irrecoverable carbon | Irrecoverable carbon | Conservation International | Y | 2020 | 2020 | Annually | Y | Y | Y |  | N | N |  |
| T8.1. Sustainable management of aquatic species of fauna and flora, including fisheries | Trends in fish stocks | Sustainable watershed & inland fisheries index | FAO & USGS | Y | 2022 |  | Every two years (to align with the FAO SOFIA Reports) | Y | N | Y | N | N | IPBES, Ramsar, CMS | A new ‘sustainable watershed & inland fisheries index’ is recommended for the T8.1 monitoring element ‘Trends in sustainable fisheries management’. The current indicator listed for that element, SDG Indicator 14.4.1, has only been applied to marine capture fisheries, and there are insufficient existing data to allow this indicator to be applied to inland waters fisheries. The recommended new ‘sustainable watershed and inland fisheries index’ will build upon a measure of watershed health and will incorporate a nationally-applied method for assessing the adoption of ecosystem-based management approaches for inland fisheries. The method could be applied nationally, or by river catchments, depending on spatial origin of fisheries data. The method, once developed, could be applied to assessing trends in inland fish stocks. There is a non-binding agreement to cooperate on developing this index between FAO, USGS and several other partner organizations (e.g. Conservation International), to have a first version ready by 2022. |
| T8.1. Sustainable management of aquatic species of fauna and flora, including fisheries | Trends in sustainable fisheries management | Sustainable watershed & inland fisheries index | FAO & USGS | Y | 2022 |  | Every two years (to align with the FAO SOFIA Reports) | Y | N | Y | N | N | IPBES, Ramsar, CMS | A new ‘sustainable watershed & inland fisheries index’ is recommended for the T8.1 monitoring element ‘Trends in sustainable fisheries management’. The current indicator listed for that element, SDG Indicator 14.4.1, has only been applied to marine capture fisheries, and there are insufficient existing data to allow this indicator to be applied to inland waters fisheries. The recommended new ‘sustainable watershed and inland fisheries index’ will build upon a measure of watershed health and will incorporate a nationally-applied method for assessing the adoption of ecosystem-based management approaches for inland fisheries. The method could be applied nationally, or by river catchments, depending on spatial origin of fisheries data. The method, once developed, could be applied to assessing trends in inland fish stocks. There is a non-binding agreement to cooperate on developing this index between FAO, USGS and several other partner organizations (e.g. Conservation International), to have a first version ready by 2022. |
| T9.1 (Sustainable management of agricultural biodiversity, including soil biodiversity, cultivated plants and farmed and domesticated animals and of wild relatives) | Trends in area of agriculture under sustainable practices) | Proportion of land that is degraded over total land area (Trends.Earth) | Conservation International | X |  | 2020 | Reported every 4 years, updated annually | Y | Y | Y |  | Y | UNCCD, SDG Indicator 15.3.1 | “Trends.Earth” uses indices that monitor changes in primary productivity, land cover and soil organic carbon. |
| T13.1. (Biodiversity reflected in policies and planning at all levels) | Trends in integration of biodiversity and ecosystem service values into planning processes | Integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental- Economic Accounting | United Nations |  |  |  |  |  |  |  |  | Y | SDG indicator 15.9.1 | See <https://seea.un.org/> for more detail |
| T13.2 (Biodiversity reflected in national and other accounts) | Trends in integration of biodiversity and ecosystem service values into national accounts | Integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental- Economic Accounting | United Nations |  |  |  |  |  |  |  |  | Y | SDG indicator 15.9.1 | See <https://seea.un.org/> for more detail |