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**Scientific and technical needs to support the implementation  
of the Kunming-Montreal Global Biodiversity Framework:  
strategic review of and updates to the expanded programme  
of work on forest biodiversity**

**Information related to the review of and potential updates to the  
expanded programme of work on forest biodiversity in the context of the  
Kunming-Montreal Global Biodiversity Framework\*\*****Note by the Secretariat**

The present document was prepared by a consultant under the guidance of the Secretariat of the Convention on Biological Diversity on the basis of the comments received in response to the peer review launched with notification No. [2025-079](#). It is provided in support of document [CBD/SBSTTA/27/5/Add.2](#) on the strategic review of and update to the expanded programme of work on forest biodiversity in the context of the Kunming-Montreal Global Biodiversity Framework.

\* CBD/SBSTTA/27/1.

\*\* The present document is being issued without formal editing.

## **Review and potential updates of the expanded programme of work on forest biodiversity in the context of the Kunming-Montreal Global Biodiversity Framework**

Commissioned to a consultant by the Secretariat of the Convention on Biological Diversity for the twenty-seventh meeting of the Subsidiary Body on Scientific, Technical and Technological Advice

4 August 2025

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## Acronyms

|             |                                                                                                                                                    |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| AHTEG       | ad hoc technical expert group                                                                                                                      |
| AFoCo       | Asian Forest Cooperative                                                                                                                           |
| CBD         | Convention on Biological Diversity                                                                                                                 |
| CIFOR-ICRAF | Center for International Forestry Research and World Agroforestry                                                                                  |
| CITES       | Convention on International Trade in Endangered Species of Wild Fauna and Flora                                                                    |
| COFO        | Committee on Forestry                                                                                                                              |
| COP         | Conference of the Parties to the Convention on Biological Diversity                                                                                |
| CPF         | Collaborative Partnership on Forests                                                                                                               |
| FAO         | Food and Agriculture Organization of the United Nations                                                                                            |
| FERI        | Forest Ecosystem Restoration Initiative                                                                                                            |
| GMO         | genetically modified organisms                                                                                                                     |
| IPF         | Intergovernmental Panel on Forests                                                                                                                 |
| ITTO        | International Tropical Timber Organization                                                                                                         |
| IUCN        | International Union for Conservation of Nature                                                                                                     |
| KMGBF       | Kunming-Montreal Global Biodiversity Framework                                                                                                     |
| NBSAP       | national biodiversity strategy and action plan                                                                                                     |
| OECM        | other effective area-based conservation measure                                                                                                    |
| PoW         | programme of work                                                                                                                                  |
| PoWFB       | programme of work on forest biodiversity                                                                                                           |
| REDD        | reducing emissions from deforestation and forest degradation in developing countries                                                               |
| RIL         | reduced impact logging                                                                                                                             |
| SDG         | Sustainable Development Goal                                                                                                                       |
| SEA         | strategic environmental assessment                                                                                                                 |
| SER         | Society for Ecological Restoration                                                                                                                 |
| SBSTTA      | Subsidiary Body on Scientific, Technical and Technological Advice                                                                                  |
| SFM         | sustainable forest management                                                                                                                      |
| UNCCD       | United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa |
| UNDP        | United Nations Development Programme                                                                                                               |
| UNFCCC      | United Nations Framework Convention on Climate Change                                                                                              |
| UNFF        | United Nations Forum on Forests                                                                                                                    |
| UNEP-WCMC   | United Nations Environment Programme World Conservation Monitoring Centre                                                                          |
| WRI         | World Resources Institute                                                                                                                          |
| WTO         | World Trade Organization                                                                                                                           |

## 1.0 Introduction and background

1. The Conference of the Parties (COP) established seven thematic programmes of work (PoWs) that established basic principles to guide future work of the Convention on Biological Diversity (CBD) and to provide advice to Parties. The PoWs set out key issues for consideration, identify potential outputs, and suggest a timetable and means for achieving these. Implementation of the work programmes depends on contributions from Parties, the Secretariat, and intergovernmental and other organizations.

2. In its decision [16/12](#), the Conference of the Parties (COP), in recalling paragraph 9 of decision [15/4](#), requested the Secretariat to conduct a strategic review and analysis of the programmes of work of the Convention in the context of the Kunming-Montreal Global Biodiversity Framework to facilitate its implementation. The COP further requested that, on the basis of this analysis, draft updates of these programmes of work be prepared, taking into account documents prepared for the twenty-sixth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice related to that work, and submit them for consideration by the Subsidiary Body at a future meeting held before the seventeenth meeting of the Conference of the Parties.

3. Pursuant to these requests, this document provides a review and gap analysis of the extended programme of work on forest biodiversity vis-à-vis its alignment with the Kunming-Montreal Global Biodiversity Framework (KMGBF), in particular the 2030 action targets. Based on the review and analysis, this document suggests the potential areas that require further guidance and enhanced attention that could be complementary to the current PoWFB. The review and gap analysis take into consideration the following primary sources of information:

a) Document [CBD/SBSTTA/25/INF/1](#) (2023) containing the rapid analysis of programmes of work established under the Convention with respect to the targets of the KMGBF;

b) Document [CBD/SBSTTA/26/INF/15](#) (2024) containing the review and analysis of existing tools and guidance and their gaps to support the implementation of the targets of the KMGBF;

c) Submission of views and information relating to the strategic review and analysis of the current expanded programme of work forest biodiversity (PoWFB) in the context of the Kunming-Montreal Global Biodiversity Framework<sup>1</sup>;

d) COP decisions on forest biodiversity and other COP decisions relevant to forest biodiversity.

### 1.1 Overview of COP decisions on forest biodiversity

4. The CBD has recognized the crucial importance of conservation and sustainable management of forests since the Convention entered into force in 1993. Through the last two decades, COP has taken decisions to assist the Parties to reduce deforestation and forest degradation, conserve biodiversity, and illustrate good forest management practices.

5. The increasing global awareness and concern about the high rate of tropical deforestation, especially in the Amazon Basin and Southeast Asia, led to the establishment of the Intergovernmental Panel on Forests (IPF) in 1995. In the same year, the first COP decision on forests was taken (decision [II/9](#)) on the role of the CBD in emphasizing the importance of conservation of biodiversity and sustainable use of forests for achieving the objectives of the Convention. In the same decision, COP provided a statement to the IPF on biological diversity and forests, expressing its readiness to contribute to the fulfilment of the mandate of the IPF while avoiding duplication of efforts and coordinating with other relevant organizations on issues of biological diversity.

6. A first programme of work on forest biodiversity was presented and adopted by COP in 1998 (decision [IV/7](#)). This programme of work aimed at assisting Parties to develop measures for enhancing the integration of conservation and sustainable use of biological diversity into their national forest and land-use programmes, identifying traditional forest systems on conservation and sustainable use of forest

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<sup>1</sup> All submissions are posted on the following website: <https://www.cbd.int/notifications/2025-031>.

biodiversity, facilitating resource mobilization and technology transfer. The programme of work was set up to be implemented through workshops, regional meetings, the clearing-house mechanism, scientific meetings, and case studies on a rolling three-year planning horizon in three phases with a periodic report after each three-year phase.

7. In 2000, COP decision [V/4](#) requested expanding the forest work programme to provide practical actions for conserving biodiversity. An ad hoc technical expert group (AHTEG) was formed to assist the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) by providing further recommendations for forest biodiversity. The current PoWFB was adopted by decision [VI/22](#) in 2002, which also requested the Secretariat to form an AHTEG on reviewing and implementing the PoWFB, work with other agencies, establish a liaison group on non-timber forest resources, report on forest law enforcement and related trade, and provide recommendations on protected areas. The expanded programme of work on forest biodiversity consist of three programme elements, 12 goals, 27 objectives and 130 activities.

8. The second AHTEG report on reviewing and implementing the PoWFB was posted as document [CBD/SBSTTA/13/INF/5](#) and included a series of criteria and indicators to evaluate progress against the objectives of the PoWFB. Based on the AHTEG report, decision [IX/5](#) provided several recommendations related to forest management, stressing the need for better enforcement and the importance of forest certification processes.

9. Since its adoption in 2002, the extended PoWFB has been implemented through several mechanisms. First, the Parties themselves have used the extended PoWFB as advice in developing their forest policies on sustainable forest management. To assist further in this regard, the Secretariat, through its various mechanisms, has provided guidance in the form of tools<sup>2</sup>, a series of case studies on implementation successes<sup>3</sup>, thematic reports on forests<sup>4</sup>, and several science-based technical reports in the CBD Technical Series, including on forest biodiversity and climate change<sup>5</sup>, forest resilience<sup>6</sup>, reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+)<sup>7</sup>, mainstreaming<sup>8</sup>, threats<sup>9</sup>, and on indicators<sup>10</sup>.

10. In addition, the Secretariat, together with the Republic of Korea, Korean Forest Service, has undertaken the 'Forest Ecosystem Restoration Initiative' (FERI). This programme was designed to assist Parties in their forest restoration initiatives through a combination of workshops and individual projects. Under KMGBF Target 2, FERI is strengthening country capacities to plan effective restoration, mainstreaming restoration across sectors, and applying new monitoring indicators in the national reporting. FERI, in part, relies on long-term partnerships with scientific and technical agencies such as the Society for Ecological Restoration (SER), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP), the Institute for Capacity Exchange in Environmental Decisions, and multistakeholder platforms such as the UN Decade on Ecosystem Restoration, Collaborative Partnership on Forests (CPF), Global Partnership on Forest and Landscape Restoration, among others.

11. COP 10 introduced significant changes in recommendations regarding forests, shifting away from specific forest concepts and toward considering the management of multiple resource uses together (i.e., agriculture, fisheries, and forests). COP decision [X/36](#) was the last significant decision that was specifically called "forest biodiversity" or that uses the term 'forest' in the title, except for a decision [XIII/7](#) that emphasized the importance of assistance from other organizations in accomplishing the Aichi Targets.

<sup>2</sup> <https://www.cbd.int/forest/tools.shtml>.

<sup>3</sup> <https://www.cbd.int/programmes/areas/forest/case-studies.aspx>.

<sup>4</sup> <https://www.cbd.int/reports/search?type=nr-fe>.

<sup>5</sup> <https://www.cbd.int/doc/publications/cbd-ts-10.pdf>, <https://www.cbd.int/doc/publications/cbd-ts-41-en.pdf>.

<sup>6</sup> <https://www.cbd.int/doc/publications/cbd-ts-43-en.pdf>.

<sup>7</sup> <https://www.cbd.int/doc/publications/cbd-ts-59-en.pdf>.

<sup>8</sup> <https://www.cbd.int/doc/publications/cbd-ts-34-en.pdf>.

<sup>9</sup> <https://www.cbd.int/doc/publications/cbd-ts-07.pdf>.

<sup>10</sup> <https://www.cbd.int/doc/publications/cbd-ts-32.pdf>.

Many previous and subsequent decisions, such as Decision 16/35, have also requested the Secretariat to collaborate with other agencies, including the Food and Agriculture Organization (FAO), the United Nations Forum on Forests (UNFF), the International Tropical Timber Organization (ITTO), and the CPF.

12. Post COP 10 (2010) decisions relating to forests focus on cross-cutting concerns, such as climate change and human health. COP decision [15/4](#) adopted the Kunming-Montreal Global Biodiversity Framework, where revised targets for forests were again pooled with agriculture, fisheries, and aquaculture, and under other targets on ecosystem restoration, protected areas, sustainable management, wildlife management, ecosystem services, and monitoring. For examples, decision [16/22](#) on biodiversity and climate change noted the necessity of protecting ecosystems for a full carbon cycle, decision [16/19](#) on biodiversity and health provided actions to mainstream linkages into KMGBF, and decision [16/20](#) on plant conservation and its voluntary complementary actions.

13. The current PoWFB was adopted more than 23 years ago and, since that time, forest management has advanced and changed considerably. While the PoWFB remains a relevant source of advice to Parties, there are now gaps when compared to current forestry practices, including monitoring methods, and other gaps with respect to the KMGBF.

14. Moreover, as part of the submissions received by the Secretariat on this topic in response to notification [2025-031](#), six Parties reiterated that the current expanded PoWFB is a relevant and useful instrument to support the formulation of national policies and the implementation of activities on forest biodiversity, and recognized the importance of the expanded PoWFB as a useful tool to achieve the KMGBF targets. One Party mentioned that the expanded PoWFB has contributed to fostering common understanding of the importance of forest biodiversity around the world through the inclusion of the concept into the Strategic Plan for Biodiversity 2011-2020 and the KMGBF. All Parties noted that it would be useful to align the current expanded PoWFB with the Kunming-Montreal Global Biodiversity Framework and that the implementation of the PoWFB should be fully embedded within the broader implementation tools and processes.

## **2.0 Alignment of the expanded programme of work on forest biodiversity with the Kunming-Montreal Global Biodiversity Framework**

### **2.1 Alignment with the overarching elements**

15. The KMGBF addresses the three objectives of the Convention, namely the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources is the conservation of biodiversity. In terrestrial landscapes, forests support the highest levels of biodiversity, providing habitats for 80% amphibian species, 75% of bird species and 68% of mammal species (FAO 2022). Around 1.6 billion people depend on forests for their livelihood, including 70 million indigenous peoples<sup>11</sup>. According to the FAO Global Forest Resources Assessment (FRA), 420 million ha of forest were lost between 1990 and 2020 as a result of land conversion (FAO 2022). Forests, especially moist tropical and subtropical forests, are species-rich but have been declining in area for decades on a global scale (Figure 1). The main drivers of biodiversity loss in forests include poor logging practices, forest degradation, species exploitation, climate change, illegal logging, agricultural expansion, and invasive species (IPBES 2019, 2023).

16. Since the PoWFB was adopted in 2002, improved knowledge about forest ecosystems, management methods, and forest monitoring have been applied to sustainable forest management systems. Areas of improvement have included landscape planning, satellite-based monitoring, revised management techniques, and science-based advances in understanding forest ecology.

17. The following is a review of the relevance of gaps in the expanded PoWFB with respect to the KMGBF and advances in forest science, and with emphasis on targets particularly important for forest biodiversity conservation and management. While the gap assessment focuses primarily on the analysis of

<sup>11</sup> <https://www.climateandforests-undp.org/sites/default/files/resources/Final%20IP%20Brief.pdf>.

the expanded PoWFB and the 23 targets, the overview of the relationship between the overarching elements of the KMGBF is also illustrated.

18. The vision and mission of the KMGBF are as follows:

*2050 Vision: A world of living in harmony with nature where by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.*

19. With regard to the alignment with the 2050 Vision, the main purpose of the PoWFB is to assist Parties to ensure that the conservation of biodiversity is an equal consideration to the economic and other social benefits obtained from the management of forest landscapes. From climate, ecosystem services, and functioning perspectives, forests are essential ecosystems for sustaining biodiversity and human life on Earth. They also provide services to other ecosystem types, including freshwater and coastal marine ecosystems, for example, through mangroves and by reducing flooding risks. Forests support approximately 80% of terrestrial biodiversity, provide goods and services for more than a billion households and contribute an estimated US\$250 to \$539 billion directly to the global economy (Agrawal et al. 2013, Li et al. 2019, FAO 2020). Furthermore, forests are fundamental for regulating Earth's climate by producing oxygen and exchanging carbon, water, and energy with the atmosphere, while also helping to cool the planet (Bonan 2008, Laurance et al. 2022). Despite the global importance of forests, deforestation and forest degradation have continued as a result of poor forest management, illegal logging, and increased wildfires, especially in the tropics where 47 million hectares of primary forests were lost between 2000 and 2020 (FAO 2022b).

*2030 Mission: To take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet by conserving and sustainably using biodiversity and by ensuring the fair and equitable sharing of benefits from the use of genetic resources, while providing the necessary means of implementation*

20. With regard to alignment with the 2030 Mission, the expanded PoWFB recognizes the need for urgent conservation action for forests that are ecologically significant and/or most important for biological diversity on national and regional scales, in accordance with national priorities, where forest biodiversity loss or threats of loss are significant and of great concern, but also to work to enhance conservation in all types of forests, both within and outside protected areas. This intent agrees with the 2030 Mission.

21. The PoWFB is generally also consistent with the four goals of the KMGBF, although some gaps were noted (Table 1).

Table 1

**Relationship of the current PoWFB, the four KMGBF Goal statements and the existing gaps**

| <i>2050 KMGBF Goals</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <i>Relationship with the expanded PoWFB and gaps</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Goal A:</b> The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050;</p> <p>Human-induced extinction of known threatened species is halted, and, by 2050, the extinction rate and risk of all species are reduced ten fold and the abundance of native wild species is increased to healthy and resilient levels;</p> <p>The genetic diversity within populations of wild and domesticated species, is maintained, safeguarding their adaptive potential.</p> | <p><b>Relevant sections:</b> The expanded PoWFB uses the term “landscape management” in several of its objectives: Element 1, Goal 1: Objective 1; Goal 2: Objectives 4, 5, 6; Goal 3, Objectives: 1, 2; Goal 4: Objectives 1, 2, 3. Element 2, Goal 1: Objectives 3; Element 3, Goal 4: Objective 1.</p> <p>Endangered species are covered in Element 1, Goal 3, Objective 2; Goal 4, Objective 4; Element 3, Goal 3, Objective 1.</p> <p>Genetic diversity is explicitly considered in Element 1 Goal 1 Objective 2; Goal 4 Objectives 3, 4 and 5; Goal 5 Objective 1, Element 2, Goal 1, Objective 3 and in Element 3 Goal 1.</p> |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p><b>Gaps:</b> While the expanded PoWFB discusses ‘landscape management’, further guidance might include more recent terms, including integrity and connectivity (See Target 1 and 2 for more information)</p>                                                                                                                                                                                                                                                                             |
| <p><b>Goal B:</b> Biodiversity is sustainably used and managed and nature’s contributions to people, including ecosystem functions and services, are valued, maintained and enhanced, with those currently in decline being restored, supporting the achievement of sustainable development for the benefit of present and future generations by 2050.</p>                                                                                                                                                                                                                                                                                                                                             | <p><b>Relevant Sections:</b> Sustainable management – the expanded PoWFB is focusing on managing forests sustainably and all sections apply. Similarly, ecosystem services and their restoration are covered in Element 1 Goal 3, Objective 1.</p> <p><b>Gaps:</b> The expanded PoWFB recognised the importance of ecosystem services to people but could be strengthened with respect to the socio-economic realities for forest management such as benefits sharing and job creation.</p> |
| <p><b>Goal C:</b> The monetary and non-monetary benefits from the utilization of genetic resources and digital sequence information on genetic resources, and of traditional knowledge associated with genetic resources, as applicable, are shared fairly and equitably, including, as appropriate with indigenous peoples and local communities, and substantially increased by 2050, while ensuring traditional knowledge associated with genetic resources is appropriately protected, thereby contributing to the conservation and sustainable use of biodiversity, in accordance with internationally agreed access and benefit-sharing instruments.</p>                                         | <p><b>Relevant sections:</b> Both access and benefit-sharing and traditional knowledge are recognized in the PoWFB as important concerns for forest management in Element 1 Goal 4 Objective 4 and Goal 5; and Element 2, Goal 1 Objective 3.</p> <p><b>Gaps:</b> The expanded PoWFB makes no reference to the Nagoya Protocol on Access and Benefit-sharing or digital sequence information on genetic resources.</p>                                                                      |
| <p><b>Goal D:</b> Adequate means of implementation, including financial resources, capacity-building, technical and scientific cooperation, and access to and transfer of technology to fully implement the Kunming-Montreal Global Biodiversity Framework are secured and equitably accessible to all Parties, especially developing country Parties, in particular the least developed countries and small island developing States, as well as countries with economies in transition, progressively closing the biodiversity finance gap of \$700 billion per year, and aligning financial flows with the Kunming-Montreal Global Biodiversity Framework and the 2050 Vision for biodiversity.</p> | <p><b>Relevant sections:</b> Capacity building is addressed in Element 1, Goal 4, Objective 1, 3; Goal 5, Objective 1; Element 2, Goal 1, Objective 2, 4; Element 3, Goal 4, Objective 1. Improved research and monitoring is fully addressed in Element 3.</p> <p><b>Gaps:</b> This goal is not addressed in the expanded PoWFB and specific relevant funds, for example the Green Climate Fund, were initiated after its adoption. There is also no mention of offsets.</p>               |

## 2.2. Alignment with and gaps vis-à-vis the Kunming-Montreal Global Biodiversity Framework Targets

22. To determine the alignment of the PoWFB with the Framework’s targets and carry out the subsequent gaps analysis, each of the 130 activities in the PoWFB was mapped against the targets. This process showed

a strong alignment of the PoWFB with most targets, except for targets 12 and 23, where no relevant activities were identified within the current programme of work. It also became evident that not all targets of the Framework are equally addressed by the relevant activities, nor do all activities assigned to a specific target fully meet its requirements. The mapping process helped identify gaps in guidance and highlighted additional activities needed to fill those gaps. Since the expanded PoWFB was developed nearly twenty years ago, a few activities were recognised as candidates for retirement based on their relevance over time.

### **Target 1. Plan and Manage all Areas to Reduce Biodiversity Loss**

*Ensure that all areas are under participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes addressing land- and sea-use change to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030 while respecting the rights of indigenous peoples and local communities.*

23. PoWFB Element 1, Goal 1, Objective 1, and Goal 2, Objective 6 includes activities to minimize the negative impacts of forest fragmentation on forest biodiversity, including among other practices, watershed management and land use planning aimed at providing a combination of economic and environmental goods and services to stakeholders. These activities are closely aligned with KMGBF Target 1.

24. There are no CBD decisions specifically on landscape planning, and the concept is only implied by more complex issues, such the request to the Global Environment Facility in decision [15/12](#) on engagement with subnational governments, cities and other local authorities to enhance implementation of the KMGBF, and decision [14/30](#) referring to developing spatial assessments for forest restoration.

25. It should be noted that following decision [15/19](#), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) will conduct a fast-track assessment of integrated biodiversity-inclusive spatial planning and ecological connectivity, considering elements such as land- and sea-use change and restoration. The assessment will be completed in 2027 and presented to the COP in 2028. In decision [16/12](#), Parties decided that work could be advanced on biodiversity-inclusive spatial planning, among other areas, avoiding duplication with existing multilateral processes and respecting their mandates.

### **Gaps in alignment and guidance**

26. While the PoWFB discusses managing forests at landscape scales, current methods have advanced along with the concepts of forest integrity and intactness, neither of which occurs in the PoWFB. Planning at large landscape scales has become increasingly essential to conserve biodiversity as forests are lost continuously or become fragmented (also see Gaps for Target 10). Although implied throughout, there is no specific mention of ‘spatial planning’ or ‘ecological integrity’, instead ‘landscape scale’ is a theme of the PoWFB, recognizing the importance of conserving and managing forests at large scales. Integrity is essentially the converse of degradation (at all scales) and so, in reality, it is dealt with extensively in the PoWFB, although the concept of alternate stable states is absent.

27. The PoWFB could be updated to include these more contemporary terms, as well as specifically to include mechanisms for spatial planning. Decision 16/12, agreed that work could be advanced on biodiversity-inclusive spatial planning, among other areas. In this respect, the proposal for potential further work on biodiversity-inclusive spatial planning, including along coastlines, under the Convention could present an opportunity for responding to the gaps identified in the PoWFB to create synergies and avoid duplication.

28. The POWFB could provide guidance for sustainable forest management on large landscapes, for example, at a subnational scale, including consultation with indigenous groups and local communities. Such guidance would include recommendations for zonation, protected areas, management of buffer zones near protected areas, the use, value, and placement of plantations, area in agroforests, guidance for road placement and road restoration, identifying and protecting key biodiversity areas, and agricultural zones (e.g., Frost et al. 2006, Arroyo et al. 2017, Putz and Thompson 2020).

29. Among important objectives for a revision of the PoWFB would be sustaining primary forests, and forests with high biodiversity value (e.g. sacred forests respected by indigenous peoples and local communities, which are now recognized as an important consideration to conserve unique species and genetic biodiversity, store carbon for climate change mitigation, and as benchmarks for sustainable management and climate change. Therefore, large areas of intact primary forests should be a conservation priority (Watson et al. 2018, Mackey et al. 2020), as was also recently highlighted in a report to FAO Committee of Forestry (COFO) 27. Maintaining primary forests is especially important when there are large and intact areas that sustain important biodiversity and enable uninterrupted gene flow in populations (see also Target 10). The PoWFB does not include any objectives for primary forests, and these areas should be conserved as a part of a landscape plan.

30. Six submissions from Parties suggested aligning the PoWFB to Target 1 through including participatory, integrated, and biodiversity-inclusive spatial planning in forest landscapes. Furthermore, six submissions highlighted the critical role of conserving intact, high-integrity, primary forest ecosystems, and forested Key Biodiversity Areas.

## **Target 2. Restore 30% of all degraded ecosystems**

*Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.*

31. Restoration of degraded forests and forest biodiversity is reflected in two programme elements of the PoWFB, including Element 1, Goal 1, Objective 1 on application of ecosystem approach in managed and unmanaged forests, Goal 3, Objective 1 on restoration of biodiversity in secondary forests, and Element 3, Goal 3, Objective 3 on knowledge, assessment and monitoring.

32. Decision [XIII/5](#), on short-term action planning on ecosystem restoration, provides Parties with comprehensive guidance on restoration across all ecosystems, including forests. Other decisions, including 13/5, [XI/16](#), [14/30](#) and [14/24](#) encourage collaboration between the CBD and the Global Partnership on Forest Landscape Restoration to help achieve the restoration objectives and encourage Parties to foster landscape connectivity for forest species through restoration initiatives. Decision [XIII/3](#) encourages forest restoration near protected areas and decision 14/30 refers to developing spatial assessments for forest restoration.

33. The Forest Ecosystem Restoration Initiative (FERI), hosted by the CBD Secretariat since 2014 under decision [XII/19](#) and funded by the Korea Forest Service, has contributed to capacity development in developing countries through organizing regional workshops, developing decision making tools on optimized restoration choices, producing technical publication and assessment on forest and landscape restoration.<sup>12</sup>

34. The Target 2 Resource Manual<sup>13</sup> was developed by FAO, CBD, SER, and the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) in consultation with Parties and observers to provide the reference for effective restoration across the ecosystem continuum.

35. Today, many forest conservation and restoration initiatives are being implemented at a large scale to restore ecosystems and for climate change mitigation. Forest restoration projects have been accomplished by multiple agencies and governments, including through the Global Partnership on Forest Landscape Restoration<sup>14</sup>, under the UN Decade on Forest Restoration<sup>15</sup>, and the Bonn Challenge, among others. Between 2000 and 2020, 130.9 Mha of land gained tree cover globally, but the loss of forests was greater, resulting in a net loss of >1 million ha<sup>16</sup>. However, from a climate mitigation perspective, the area of forests

<sup>12</sup> More information available at the following link: <https://www.cbd-feri.org/>.

<sup>13</sup> The manual is available at the following link: <https://s3.amazonaws.com/cbdocumentspublic-imagebucket-15w2zyxk3prl8/b6e6e8cd9fba946309080dcf36eef9a6-5>.

<sup>14</sup> <https://www.forestlandscaperestoration.org/>.

<sup>15</sup> <https://www.decadeonrestoration.org/types-ecosystem-restoration/forests>.

<sup>16</sup> <https://research.wri.org/gfr/latest-analysis-deforestation-trends>.

restored would have to be increased by a factor of 40 to fulfill the potential contribution of tropical and subtropical forests towards limiting global warming to below 2 °C (Atmadja et al. 2022).

36. At the same time, over the past 10 years, forests have been increasingly turning from being a valuable carbon sink to carbon emitters, with emissions from forest fires surging by 60% globally (Johns et al. 2024). In restoration projects, including for carbon, careful planning, based on the assessment of forest conditions, is essential to avoid fuel build-ups and to ensure that biodiversity conservation is an associated main objective (e.g., Bond et al. 2024). As an example, optimizing biodiversity and carbon outcomes simultaneously can deliver 95% of the maximum potential biodiversity benefit and 89% of the maximum carbon sequestration benefit (Strassburg et al. 2020).

### **Gaps in alignment and guidance**

37. The PoWFB considers landscape management throughout, although the concept of connectivity is not mentioned. It also includes general guidance but provides no direction on how to restore a forest landscape, the criteria for a restored forest, or suggestions for priority areas for restoration, such as buffer zones around protected areas, denuded river valleys, mangroves, corridors, ecological connectivity, etc. Restoring resilient forest landscapes requires an approach not mentioned by the PoWFB, with consideration to heterogeneous forests and forest structure, individual species silviculture, ecosystem functions, and composition, risks of wildfires and other disturbances due to climate change and with particular attention to habitats for important functional species (Travers et al. 2012, Parrotta et al. 2012). Communities are an integral part of forest landscape restoration and so community involvement in planning is essential. The relevance of the PoWFB could be improved with a more detailed level of guidance (objectives) for forest restoration to improve connectivity and resilience and to provide a definition of ‘successfully restored’. There are also recent guidelines available for defining degraded areas, which are not defined in the PoWFB<sup>17</sup>.

38. Six submissions recommended that restoration of degraded forest ecosystems, including post-fire and other post-disturbance regeneration of forests and soils, and enhancement of biodiversity and ecosystem functions and services, ecological integrity and connectivity could be integrated in the PoWFB.

### **Target 3. Conserve 30% of Land, Waters, and Seas**

*Ensure and enable that by 2030 at least 30 percent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.*

39. In Element 1, Goal 3, Objective 3, and Element 2, Goal 1, Objective 2, the PoWFB provides substantial guidance on protected areas and so is closely aligned with Target 3.

40. There have been numerous decisions on protected areas after COP 10 and there is a current PoW specifically on protected areas as well. Among the many post-2010 decisions, decisions [XI/24](#) and [14/8](#) encourage Parties to integrate protected areas into wider land and seascape planning through inter-sectoral cooperation. Decision [XIII/2](#) requests Parties to determine the management effectiveness of their protected areas based on many such areas being degraded through illegal activities, and determine priority areas for protection based on their importance to biodiversity, while decision [XIII/3](#) asks Parties to establish connectivity among protected areas. Decisions [XI/21](#) and [XIII/4](#) notes the importance of protected areas, including Indigenous and Community Conserved Areas and Territories, for climate change adaptation and mitigation as well as disaster risk reduction.

<sup>17</sup> <https://www.jstor.org/stable/26269330>; <https://www.mdpi.com/1999-4907/9/11/726>.

41. Barr et al. (2011) found that 73% of countries have inequitably safeguarded their biodiversity by placing protected areas in areas that do not represent heavily used ecosystem types. Similarly, Watson et al. (2023) reported that many countries focus on quantity rather than quality in their placement of protected areas. Others have suggested that many protected areas are insufficiently large to sustain all species, especially wide-ranging large mammals and birds (e.g., Brennan et al. 2022).

### **Gaps in alignment and guidance**

42. The PoWFB provides insufficient guidance on how to decide on a minimum amount of protected area required or on maximizing the effectiveness of protected area placement. Methods are available to ensure that important areas for biodiversity are conserved and the PoWFB can provide this information to Parties (IUCN, Watson et al. 2023). Secondly, several recent concepts are absent, including other effective area-based conservation measures (OECMs) and community forests, which are classes of protected areas developed after the PoWFB was adopted (e.g., Dudley and Stolton 2020, Alves-Pinto et al. 2021). For the latter, a revised PoWFB could provide robust guidelines for formal identification and improved monitoring, and management including OECMs that have a production objective. Similarly, the concept of integrated management approach that encompasses the entire ecosystem from upland ridges and mountains to coastal and marine areas (i.e., ridge-to-reef) (Oleson et al. 2018) is also absent and direction could also be provided in an PoWFB update.

43. These gaps are also reiterated by four submissions that recommend including the actions around high-integrity and high conservation value forests, such as primary forests co-management models, through well-connected and equitably governed systems/networks of protected areas and other effective area-based conservation measures, including those on indigenous and local community areas.

### **Target 4. Halt Species Extinction, Protect Genetic Diversity, and Manage Human-Wildlife Conflicts**

*Ensure urgent management actions to halt human-induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex-situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.*

44. Under Element 1, Goal 3, Objective 2 and Goal 4, Objective 4; and Element 3, Goal 3, Objective 1, the PoWFB provides the necessary management steps needed to protect threatened species. Human-wildlife conflict, however, is not considered in the PoWFB.

45. There is a CBD Programme of Work for Protected Areas, also adopted at COP 10. More recent decisions include [XI/24](#) on protected areas, with action plans, to build on the existing PoW, to increase the representativeness of ecosystems protected, work with other agencies such as the Ramsar Convention and International Union for Conservation of Nature, make use of multi-sectoral and stakeholder committees, and increase training. Decisions [XIII/2](#), [XIII/3](#), and [14/8](#) discuss (and define) the use of OECMs and the importance of protecting high biodiversity areas, and decision [14/1](#) noted the importance of protected areas in conserving endangered species and ecosystem types.

46. The global species extinction rate is about 1000 times higher than the average over the past 10 million years (De Vos et al. 2014), with more than 44,000 species currently threatened with extinction (IUCN Red List 20248). Climate change will cause that rate to rise dramatically (Roman-Palacios and Wiens 2020, IPBES 2023), and reduced populations of species can result in genetic erosion, reducing the capacity of species and ecosystems to adapt to changes (De Vos et al. 2017, Pinto et al. 2024). Human-wildlife conflict is a serious threat to food security, conservation, and human health resulting from zoonoses, predation on livestock, and damage to crops, human mortality, and a threat to some wildlife populations (Nyamwamu 2016, White and Razgour 2020, Shaffer et al. 2019, 2021).

## Gaps in alignment and guidance

47. For threatened species, forest conservation through protected areas and increased restoration near such areas, including in corridors, is essential because >54% of vulnerable, endangered, and critically endangered species occur in forests (as of early 2024) based on the International Union for Conservation of Nature (IUCN) Red List<sup>18</sup>. The PoWFB provides general direction and high-level guidance for the protection and recovery of threatened species (and ecosystems) but could be updated as noted for Targets 1, 2, 3, and 4 to provide better guidance.

48. The PoWFB does not consider human-wildlife conflicts and conflict with wildlife is not a primary focus of sustainable forest management. However, in areas where such conflicts are common, forest-based solutions may prove effective and could be incorporated into planning that also involves the communities. Details on planning for reducing human-wildlife conflicts are available, primarily by IUCN, which maintains an extensive library on human-wildlife conflicts. The peer-reviewed literature also provides some concepts and management solutions for reducing conflicts with wildlife (e.g., Brano et al. 2020, Karanth and Vanamamalai 2020, Chomba et al. 2012). A revision to the PoWFB on this issue could provide sources of information to Parties, as well as highlighting nature-based solutions.

49. The World Trade Organization (WTO) understands the importance of environmental protection in its international agreement, including wildlife conservation. However, there is no specific WTO agreement dealing with wildlife trade, and the WTO recognizes that Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is responsible for regulating international trade. Under CITES listed species can only be traded when there is a document from the country of origin proving that the species population is being managed sustainably.

50. In this regard, five submissions highlighted the need to strengthen the alignment between the PoWFB and Target 4 by implementing sustainable forest practices that support the conservation of endemic and threatened species. Furthermore, four submissions recommended the inclusion of human-wildlife management, while one Party noted the need that “the fundamental relationship between Indigenous Peoples and nature are accounted for while also enabling conservation efforts”.

## Target 5. Ensure Sustainable, Safe and Legal Harvesting and Trade of Wild Species

*Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spillover, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.*

51. Under Element 1, Goal 4, Objectives 2 and 3, the PoWFB provides actions for planning for priority species, which could apply to Targets 5 and 9 for wildlife. Wildlife management is not directly considered in the current PoWFB. In addition, under Element 2, Goal 2, Objectives 4 and 3, the PoWFB addresses forest law enforcement and related trade

52. Other COP decisions on sustainable wildlife management include [XII/18](#), [XIII/8](#), [15/23](#), and [16/15](#) on the need for technical guidance and support especially for indigenous people and local communities on the role of sustainable wildlife management for the implementation of the Strategic Plan for Biodiversity and the KMGBF. Decision [14/7](#) provided guidance for the wild meat sector in an annex to that decision.

53. Illegal trade in wild species is an ongoing issue that is contributing to the decline in many wildlife species including pangolins, tigers, elephants and many others (IPBES 2022). These species have various functional roles in ecosystems such as seed dispersal, herbivory, nutrient cycling, regulating trophic structure in wildlife communities, and insect predation (Marcot and Vander Hayden 2001, Campos-Arceiz and Blake, Brookerkoff et al. 2017). Further, from a human health perspective, wildlife can carry zoonoses transmissible to humans (Chornei et al. 2007, IPBES 2022).

<sup>18</sup> <https://www.iucnredlist.org/>.

### Gaps in alignment and guidance

54. While hunted/traded species, as a separate category of animals, are not a specific concern in the PoWFB nor of sustainable forest management, but biodiversity conservation is a constant theme. While management direction for wildlife depends on local situations and priority species, generic direction could be provided in the PoWFB for avoiding excessive road density and for maintaining forest integrity and intactness, as a means to protect populations of hunted species. A revision would include insuring the inclusion of Plan of Action on Customary Sustainable Use (CBD COP XII).

55. While six submissions reiterated the importance of promoting legal and sustainable use, one Party suggested the inclusion of “traceable value chains for timber and non-timber forest product” and another Party “combatting illegal logging and harmful trade, including implementation of global standards”.

### Target 6. Reduce the Introduction of Invasive Alien Species by 50% and Minimize Their Impact

*Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands.*

56. Element 1, Goal 2, Objective 1 provides activities to prevent the introduction of invasive alien species and to mitigate their negative impact on forest ecosystems.

57. Invasive alien species are one of the main drivers of biodiversity loss. It is recognized under the Convention as a cross-cutting issue and has an impact on all ecosystems. The negative effects of invasive alien species on forest biodiversity have long been recognized<sup>19</sup> and specific actions identified.<sup>20</sup>

58. Management of established invasive species is difficult, depending on the local conditions, the species and its capacity to invade, and often requires radical approaches including removal of food sources, chemical spraying, or direct removal of the invasive species (Hulme 2009, Tobin 2018). Often, invasive species have moved an ecosystem to a new stable state that would require expensive intervention to eliminate the species or make it impossible to recover the original forest type (Hulme 2009).

59. Decision [16/18](#) endorsed six elements of guidance on various issues related to IAS. Decision [15/27](#) provided additional advice on invasive species management and requested to update the [toolkit](#) for the KMGBF Target 6. Decisions [XII/21](#) and [XI/28](#) note the linkages between alien species and the negative effects on human health.

60. As Target 6 calls for a series of actions to address IAS, especially in priority sites, and these will be determined depending on national circumstances, the Secretariat of the Convention, through its work on invasive alien species is providing support and information to Parties to implement the different elements of the Target such as prevention, management, control, eradication and capacity building and outreach. In this respect, the PoWFB presents an opportunity to complement those efforts and ensure that considerations related to IAS are included in actions related to this program.

### Gaps in alignment and guidance

61. The PoWFB has no significant gaps vis-à-vis Target 6. However, it would benefit from further knowledge on the pathways of introduction and spread of IAS in forest ecosystems.

62. Forest ecosystems should be kept under review to ensure that the negative impacts from IAS are minimized by gathering information, carrying out surveillance, among others.

<sup>19</sup> Decision IV/7 has been retired. However, the proposed work programme included paragraph 32 “Promote activities to minimize the impact of harmful alien species on forest biological diversity, particularly in small island developing States”.

<sup>20</sup> Decisions VI/22 and VI/23.

63. Strengthening collaboration with the IAS area of work and finding opportunities for synergies while avoiding duplication will be crucial towards strengthening the elements around prevention and control of the introduction of IAS and mitigation of their negative impacts on forest biodiversity.

64. Five submissions reiterated the importance of addressing IAS and suggested strengthening the elements around prevention and control of the introduction of IAS and mitigation of their negative impacts on forest biodiversity.

### **Target 7. Reduce Pollution to Levels That are not Harmful to Biodiversity**

*Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution.*

65. Element 1, Goal 2, Objective 2 of the PoWFB addresses the wide spectrum of pollution, including acidification, eutrophication and other pollutants, such as mercury and cyanide.

66. At the time of adoption of the PoWFB, knowledge on the impact of pollution on forests was primarily concerned with airborne pollutants in forests, when acid rain and airborne heavy metal pollution were a common global issue, causing dieback in forests.

67. There are no COP decisions on the use of pesticides in forests or in agroforestry, and also no decisions relating to soil nutrient loss in forests. However, the Plan of Action (2020-2030) for the international initiative for the conservation and sustainable use of soil biodiversity, adopted by decisions 15/28<sup>21</sup> (2022), addresses the mitigation of soil pollution, among other objectives. Soil erosion and nutrient loss as a result of improper logging practices and poor road placement are a persistent problem in many forest types that occur on slopes, including in the tropics (Vjith et al. 2018, Wenger et al. 2018, Flores et al. 2020). Samec et al. (2022) suggested that irreversible changes in soil ecosystem self-organization result in a change of the potential for natural vegetation types to regenerate, leading to a decrease in land usability.

### **Gaps in alignment and guidance**

68. The PoWFB does not consider soil erosion resulting from poor forestry practices, such as deforestation of river valleys, compaction by logging equipment, and poor road design. There are solutions available to reduce these latter effects, and a revision to the PoWFB could assist forest managers by highlighting these possibilities (e.g., Sidle et al. 2004, Suryatmojo et al. 2011).

69. There is no mention of the use of pesticides in the PoWFB, and although their use is uncommon in tropical forests, they are commonly and improperly used in tropical agriculture and agroforestry, resulting in elevated concentrations in aquatic systems (Wanger et al. 2023). Improper application in tropical agriculture is a consequence of inadequate training to smallholders, resulting in elevated concentrations and impacts in soils and aquatic ecosystems (Wanger et al. 2023), with impacts to human health (Bruhl et al. 2023) and wildlife (Constantini 2015). Other effects include a reduction in pollinators that results in reduced crop yields (Oakley and Bicknell 2022). A revision of the PoWFB could provide information and guidelines for the effects and proper uses of pesticides, including the clear need for end-user support and training.

70. Mangrove forests are exposed to diverse ocean-sourced and land-based contaminants like trace metals, persistent organic pollutants, polycyclic aromatic hydrocarbons, microplastics, and pharmaceuticals and personal care products (Szafranski and Granek 2023). Environmentally sound technology should be adapted for pollution prevention, control and remediation in mangrove ecosystems. A revision of the PoWFB could provide information and guidelines for the prevention, control and remediation of pollution in mangrove forests.

<sup>21</sup> <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-28-en.pdf>.

71. Three submissions mentioned the need to address the impact of pollution in forests, e.g. sedimentation and ozone. One submission suggested including industrial pollution as well. As a part of responses on the linkages with Target 8 on mitigating climate change, two Parties mentioned the need to study the environmental impact of extinguishing agents and fire retardants on forests.

### **Target 8. Minimize the Impacts of Climate Change on Biodiversity and Build Resilience**

*Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solutions and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.*

72. The current PoWFB has several climate change actions listed under Element 1, Goal 2, Objectives: 3 and 4. Two subsequent AHTEGs on biodiversity and climate change provided background and advice<sup>22</sup>. The PoWFB has a detailed section on fire prevention and mitigation that can assist Parties to adapt to these global changes in fires regimes (Goal 1, Objective 3).

73. In three extensive decisions ([X/33](#), [XI/19](#), [XII/20](#)) the COP recognized the importance of ecosystem-based approaches in forests to adapt to and mitigate climate change, as well as to protect biodiversity in all ecosystems, including forests. Decision XII/20 also recognized the Warsaw Framework for REDD, including its forest decisions. Decision [XIII/7](#) encouraged Parties to include climate change mitigation and adaptation in forest policies, while decision [XIII/5](#) linked forest restoration to climate change mitigation. Recent decision [16/22](#) on biodiversity and climate change provides further guidance applicable to forest ecosystems by urging Parties to prioritize the protection, restoration and management of ecosystems and species important for the full carbon cycle and contributing to climate change adaptation.<sup>23</sup>

74. Globally, climate change is a cause of biodiversity loss (Bellard et al. 2012, IPBES 2019, Habibullah et al. 2022), often interacting with other variables, including over-exploitation, invasive species, and habitat change (Martey et al. 2017), exacerbating the already negative effects on habitats and biodiversity. Increased areas burned by wildfire appear related to climate change, coupled with deforestation and human causes (e.g., Celis et al. 2023, Jones et al. 2024). Under the warming environment, especially in the fire-prone regions, forest conservation and expansion of forest areas will increase fire risks and carbon emissions. Therefore, the carbon offsetting programmes should account for forest conditions (hydrological and thermal) and manage them holistically ([UNU, 2025](#)).

75. The United Nations Framework Convention on Climate Change (UNFCCC) has noted the importance of sustainably managing forests, using forests to adapt to and mitigate global climate change, and the need to reduce deforestation. A UNFCCC decision relevant to forest biodiversity was the Cancun Agreements (decision [1/CP.16](#)), which remains important to the implementation of REDD programmes, with clear reference to forest integrity and the conservation and sustainable management of forests. Further guidance on forest conservation was provided in UNFCCC decision [4/CP.15](#) on the enhancement of carbon stocks in developing countries and on safeguards in decision [1/CP.16](#), appendix I. UNFCCC decision [15/CP.19](#) specifically addresses the urgent need to address the drivers of deforestation and forest degradation. In 2023, the Global Stocktake (GST) under the UNFCCC<sup>24</sup> emphasizes the importance of conserving, protecting and restoring nature and ecosystems towards achieving the Paris Agreement<sup>25</sup> temperature goal, including through enhanced efforts towards halting and reversing deforestation and forest degradation by 2030, and other terrestrial and marine ecosystems acting as sinks and reservoirs of greenhouse gases and by conserving biodiversity, while ensuring social and environmental safeguards, in line with the Kunming-Montreal Global Biodiversity Framework.

<sup>22</sup> <https://www.cbd.int/doc/publications/cbd-ts-10.pdf> and <https://www.cbd.int/doc/publications/cbd-ts-41-en.pdf>.

<sup>23</sup> <https://www.cbd.int/doc/decisions/cop-16/cop-16-dec-22-en.pdf>.

<sup>24</sup> <https://unfccc.int/documents/637073>.

<sup>25</sup> Adopted under the United Nations Framework Convention on Climate Change (see FCCC/CP/2015/10/Add.1, decision 1/CP.21, annex).

## Gaps in alignment and guidance

76. The gaps in the PoWFB for climate change result, in part, from terms that have become more contemporary, especially ‘forest integrity’ and the understanding of the importance of maintaining ‘forest resilience’, both of which are related to ecological functions provided by biodiversity. Maintaining heterogeneous forests and forest landscapes is essential to protecting forest resilience and sustaining integrity and hence the ability of forests to maintain carbon stocks over time (Thompson et al. 2009, Falk et al. 2022, Rogers et al. 2022). Managing landscapes and stands to reduce synergistic climate change effects with other factors on biodiversity by increasing ecosystem integrity and also mitigating carbon emissions could be among the revised objectives and advice provided in the PoWFB (Mackey et al. 2023). Furthermore, with respect to climate change, the PoWFB does not include or discuss the need for ‘safeguards’, which are necessary for climate change forest-based programmes.

77. The current PoWFB could account for climate actions driven by market incentives (Voluntary Carbon Markets and Verified Carbon Standards) that prioritize forestry and land use sectors, and could provide guidance for biodiversity co-benefits.

78. For increased wildfires resulting from climate change, the PoWFB could be modified to recognize the threat of forest fires that have intensified since its adoption years ago. The review of the PoWFB could include the concepts of integrated fire management and its techniques, use of current fire data collection systems and detection tools, and actions for training fire-fighting personnel, especially in local communities. With increased firefighting comes the need to assess the impacts of fire retardants on forest ecosystems.

79. The term ‘nature-based solutions’ (NbS) was coined well after the PoWFB and a multilaterally agreed definition of NbS was adopted at UNEA-5<sup>26</sup> in 2022. The NbS are defined as ‘actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits’ This relates as well to Target 12 to protect urban areas from flooding and against storm surges, such as by using mangroves. The PoWFB could be improved to include the specific use of forests as nature-based solutions to various problems.

80. Eight submissions reiterated the importance of working on integrated fire management, while three submissions suggested addressing the resilience of forests to climate change and three noted the need for disaster risk reduction actions on minimizing negative and fostering positive impacts of climate action on biodiversity.

## Target 9. Manage Wild Species Sustainably To Benefit People

*Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.*

81. Under Element 1, Goal 4, Objectives 2 and 3, the PoWFB provides actions for planning for priority species.

82. Other COP decisions on sustainable wildlife management include [XII/18](#), [XIII/8](#), [15/23](#), and [16/15](#) on the need for technical guidance and support, especially for indigenous peoples and local communities on the role of sustainable wildlife management for the implementation of the Strategic Plan for Biodiversity and the KMGBF. Decision [14/7](#) provided guidance for the wild meat sector in an annex to that decision.

83. Declining populations of wildlife, especially hunted and large-bodied species, are a secondary effect of deforestation, road access, and fragmentation (Wilkie et al. 2011, Kleinschroth and Healey 2017,

<sup>26</sup> UNEP/EA.5/Res.5.

Benítez-López et al. 2019). Wild species are important for global food security, and the importance of bushmeat to rural and indigenous people is well known (Nasi and Van Vliet 2011, IPBES 2022). Aside from food security, animals play functional roles in ecosystems and are a vital part of healthy ecosystems.

### Gaps in alignment and guidance

84. Complemented by the identified gaps for Target 5, the current PoWFB would benefit from the consolidated knowledge and best practices on “sustainable biodiversity-based activities, products and services” that are important for forest-dependent communities. In the decision [16/12](#), COP decided that work could be advanced on the sustainable biodiversity-based activities, products and services that enhance biodiversity, among other areas. The proposal for potential further work could take into consideration the elements of the PoWFB to create synergies and avoid duplication.

85. Five submissions suggested the activities in support of traditional knowledge and community-based forest management.

### Target 10. Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries, and Forestry

*Ensure that areas under agriculture, aquaculture, fisheries, and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity-friendly practices, such as sustainable intensification, agroecological and other innovative approaches, contributing to the resilience and long-term efficiency and productivity of these production systems, and to food security, conserving and restoring biodiversity and maintaining nature’s contributions to people, including ecosystem functions and services.*

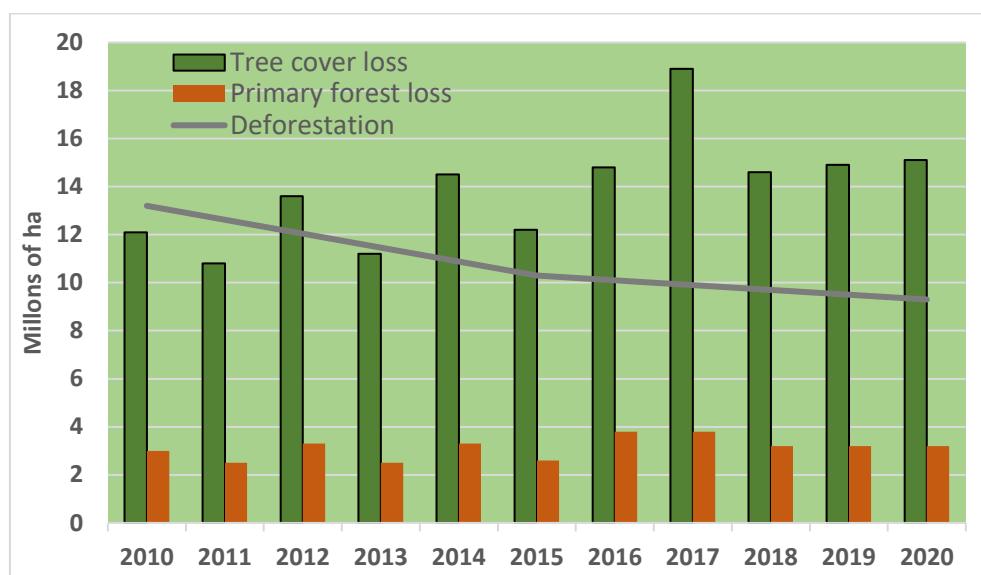
86. Target 10 on sustainable management is perhaps the most important target for the PoWFB to consider. The PoWFB covers most aspects of sustainable forest management and was designed to assist Parties in applying the principles of sustainability in their forest management policies and practices. Nevertheless, forest management has seen changes and an evolution of concepts since 2000, and is particularly illustrative of the need to revise the PoWFB.

87. One other decision was adopted with a direct reference to sustainable management of forests: Decision [13/3](#) asks Parties to strengthen enforcement and promote sustainable forest management through policies, and encourages forest companies to integrate the sustainable use, conservation and restoration of biodiversity into the development and use of forest management plans, and to seek third party certification of their operations. Parties, in their submissions, noted that this target is an essential priority for a PoWFB.

88. It is clear, at least at a global scale, that sustainable forest management (SFM) is still not sufficiently widely practiced to halt continued tree cover and primary forest loss (Figure 1), and so SFM needs to remain a major focus of the PoWFB. Properly managing forests is crucial to sustaining terrestrial biodiversity (e.g., Loiseau et al. 2020, Gaisberger et al. 2022), including within protected areas. Fragmentation is a well-understood cause of forest degradation and loss of biodiversity that occurs in all forest types (Barlow et al. 2016, Potapov et al. 2017, Siegel et al. 2024).

Figure 1

**Global tree cover loss, primary tropical forest loss, and deforestation rate, from 2010 to 2020. (Data from WRI 2023<sup>27</sup>, and FAO 2010, 2015, 2020)**



### Gaps in alignment and guidance

89. As agricultural expansion continues to be the main driver of deforestation, there needs to be statements in the PoWFB on how to reduce the agricultural footprint using a variety of techniques, such as sustainable intensification, inter-cropping for better yields, using drought-resistant crops, and improved shifting cultivation practices. A publication by the International Union of Forest Research Organizations (World Series Nos. 31 and 33) could be used as a background reference to inform a revision to the PoWFB to provide tools to reduce the agricultural footprint.

90. Reduced impact logging (RIL) techniques, when used, have minimized the environmental impact of logging activities (Pinto et al. 2024). RIL methods focus on reducing soil damage, maintaining tree canopy cover, harvesting and restoring certain tree species and size classes, and optimal road planning, resulting in improved regeneration of forests after harvesting. These techniques are absent in the PoWFB and would necessarily be included in a revision.

91. The PoWFB refers once to agroforestry but provides no guidance despite the relationship to forest landscape planning and ecosystem services. Agroforestry practices that combine agricultural crops, tree crops, and other trees have become a key component of SFM in the tropics. The agroforestry approach can enhance biodiversity, increase carbon sequestration, and increase income to farmers (Udawatta et al. 2019, 2021). Further, Ulyshen et al. (2023) and Hackett et al. (2024) both reported a clear, strong relationship between forests and pollinator diversity, with a positive effect on adjacent crops.

92. Social and economic aspects are important components of SFM, but are not a current focus in the PoWFB and hence require inclusion. Community-based forest management has become a focus for successful and sustainable forest projects conducted by many agencies and governments (Mrema 2017). With sufficient training, these community-involved practices ensure that forest management is ecologically sound and socially and economically beneficial to local populations, with an increased emphasis on maintaining biodiversity (e.g., ITTO 2017, AFoCO 2022).

93. Element 1, Goal 4, Objective 3 of the PoWFB considers community forests, but not in the sense of community ownership, protected areas, nor with respect to the advances that have been made to the concept

<sup>27</sup> <https://www.wri.org/insights/tracking-global-tree-cover-gain>.

since 2002. While the PoWFB has an objective for “socio-economic considerations”, it provides no guidance for the development of alternative livelihoods.

94. In its decision [VII/11](#), COP adopted the ‘Ecosystem Approach’ that includes the consideration of the relationship between SFM and the ecosystem approach. This decision recognized that the ecosystem approach and SFM are broadly overlapping concepts, and more could be done in a PoWFB to ensure their integration by including strengthening cross-sectoral integration in SFM, developing and implementing biodiversity indicators in SFM, consideration of risks and threats (climate change, insecure land tenure, wildfires, etc.). However, the principles for ecosystem approaches adopted in 2004 did not include the concept or principles for ‘high ecological integrity’ or ‘ecosystems of high biodiversity importance’, nor forest resilience.

95. A revised PoWFB would promote the ecosystem approach to reduce fragmentation, increase intactness, and maintain forest integrity and resilience, especially in remaining large forest areas, by providing tools for forest managers based on the many advances in forest management, including monitoring tools (see Target 21). Much better guidance is now available for SFM (e.g., the FAO “Sustainable Forest Management Toolbox”<sup>28</sup>). A revision to the PoWFB could provide a summary of the information available and the direct sources of information to assist Parties to improve management of forests including through the use of reduced impact logging in the tropics.

96. Aside from improved management for forest sustainability, other gaps to be addressed in a revised PoWFB include: the concepts of OECMs and community forests (see Target 3 above), including how they can be planned on a landscape, regulated, and managed; advice for agroforestry; guidance for landscape connectivity, intactness and heterogeneity; primary forests, and the importance of forest for ecosystem services that are beneficial to agriculture. The PoWFB also requires a broader approach to the socio-economic realities of sustainable forest management, including information on alternative livelihoods, public-private partnerships, and green value chains.

97. There was an overwhelming consensus, expressed in sixteen submissions from Parties and observers, on the need to strengthen the PoWFB with regard to the role of SFM for social, economic and environmental benefits and recognizing SFM as a priority element for the potential update of the PoWFB. More specifically, five submissions noted the need to promote sustainable forest management, in particular through the sustainable use of biodiversity and application of biodiversity-friendly practices. Eleven submissions noted the increased role of timber and non-forest timber products to support livelihoods, especially for forest-dependent communities, while one Party and one observer highlighted the role of innovative business models that contribute to the conservation and sustainable use of forests through bioeconomy. One Party and two observers highlighted the importance of policies and initiatives that ensure deforestation and conversion-free agriculture and supply chains.

### **Target 11. Restore, Maintain, and Enhance Nature’s Contributions to People**

*Restore, maintain and enhance nature’s contributions to people, including ecosystem functions and services, such as the regulation of air, water and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.*

98. Under Element 1, Goal 1, Objective 1; Goal 3, Objective 1; Goal 4, Objectives 1, 2; and Element 2, Goal 3, Objective 1 the PoWFB provides multiple actions for restoring ecosystem services to enhance nature’s contribution to people, although the advice is general in some cases. There are also objectives for sustainable consumption relative to the limits of the ecosystems. For forests, Target 11 is understood as a result of implementing Targets 3 and 10, in particular.

99. Forest ecosystems are living entities with intrinsic value and are integral to the health of Earth. Further, while there are many mentions of ecosystem services among COP decisions, none specifically pertain to forests or forest biodiversity. Forests provide a vast array of goods and services including wood

<sup>28</sup> <https://www.fao.org/sustainable-forest-management/toolbox/en/>.

products, clean water, soil protection, and non-timber forest products (medicines, food, firewood, etc.), as well as ecosystem services to agriculture.

### **Gaps in alignment and guidance**

100. The PoWFB has no gaps with respect to restoring ecosystem services, except as noted under Targets 2, 3, and 10.

101. Four submissions mentioned the need to recognition and enhancement of forest ecosystem functions and services and benefits to the people.

### **Target 12. Enhance Green Spaces and Urban Planning for Human Well-being and Biodiversity**

*Significantly increase the area and quality, and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature, and contributing to inclusive and sustainable urbanization and to the provision of ecosystem functions and services.*

102. There is no mention of urban forests in the PoWFB, as it was primarily designed to promote conservation of biodiversity in commercial and community-based sustainable forest management.

103. Decisions [XII/9](#) and [13/6](#) noted the importance of considering biodiversity and urban forests in city planning as a means to support certain ecosystem services in and near cities, but also as a means to improve human health. The Global Action Plan on Biodiversity and Health, adopted by decision [16/19](#), includes the voluntary actions for mainstreaming biodiversity and health interlinkages into the implementation of the KMGBF, including for Target 12, that provides guidance for filling in the gap.

104. [FAO Guidelines](#) on urban and peri-urban forestry, published in 2016, provides a reference framework for decision makers and planners to adequately plan, design and manage the forest and trees in and around their cities. The Guideline includes provision for human health and well-being as well as biodiversity and landscape.

105. Many studies, such as Goldenberg et al. (2018) and Dodev et al. (2020) have pointed to the importance of maintaining and restoring nearby natural and nature-based green-blue areas as key solutions for improving the well-being of people in cities by providing opportunities for local recreation and a peaceful environment.

### **Gaps in alignment and guidance**

106. The PoWFB does not consider urban forests or green spaces in cities. A PoWFB could recognize the importance and provide further guidance on the importance of urban forests and their biodiversity for people, based on their well-known contribution to many aspects of the health of city dwellers. Actual implementation would remain for city planners, but the PoWFB could provide sources of information and link the ecosystem-based solutions to Target 11 on ecosystem services as well.

107. To increase areas of urban forests and connectivity was suggested in four submissions.

### **Target 13. Increase the Sharing of Benefits From Genetic Resources, Digital Sequence Information, and Traditional Knowledge**

*Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030, facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.*

108. There are no major gaps for Target 13 and Element 1, Goal 4, Objective 4; Element 1 Goal 5, Objective 1, and Element 2 Goal 1, Objective 3 deal with access to and sharing of benefits of forest genetic resources, and traditional knowledge associated with genetic resources, and provides actions for sustainability use genetic resources in forests and share benefits.

109. In addition to the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization and related decision taken by the Conference of the Parties serving as the meeting of the Parties to the Protocol, CBD COP decisions [XI/1](#), [XI/24](#), [XI/29](#), [XIII/1](#), [14/2](#), [14/31](#), [15/9](#), [15/29](#), and [16/2](#) consider various aspects of access and benefit-sharing as they relate to genetic resources and associated traditional knowledge.

#### **Gaps in alignment and guidance**

110. A revised PoWFB could provide an update to implementing Target 13 taking into consideration the Nagoya Protocol on Access and Benefit-sharing, as it was only adopted after the PoWFB, related decisions, as well as recent developments related to digital sequence information on genetic resources and refer to the recently updated “State of Forest Genetic Resources” provided by the FAO.

111. Six submissions highlighted the importance of promoting fair and equitable sharing of benefits resulting from the utilization of forest genetic resources, digital sequence information and associated traditional knowledge as a part of the review process.

#### **Target 14. Integrate Biodiversity in Decision-making at Every Level**

*Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environment assessments, environmental impact assessments, and, as appropriate, national accounting within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, and fiscal and financial flows with the goals and targets of this framework.*

112. Cross-sectoral policy in the PoWFB is covered by Element 2, Goal 1, Objective 2, referring to integrating biological diversity conservation and sustainable use into forest and other sector policies and programmes. Environmental impact is included throughout the PoWFB (e.g., Element 2, Goal 3), and specifically in Element 2, Goal 1, Objectives 2 and 3, which provide actions for the policies and laws required.

113. There are no decisions explicitly covering the environmental impact on forest biodiversity. However, there are several decisions on the use of environmental impact assessments to reduce the loss of biodiversity, including [XI/18](#), [XIII/3](#), [XIII/4](#), [XIII/6](#), [14/3](#), and [14/7](#). Strategic environmental assessment is discussed in decisions [XIII/3](#) and [14/3](#) as a means to assess broad-scale impacts of future developments. The importance of cross-sectoral conservation policy is found in decisions [XII/1](#), [XIII/3](#), [XIII/29](#), [16/18](#), where Parties are urged to consider biodiversity policy in all sectors, and the KMGBF explicitly refers to the need for a whole-of-government approach to implementation.

114. One way that governments can visualize the long-term impacts of development policies is through strategic environmental assessment (SEA), a component of Target 14. These assessments can be used for identifying and evaluating possible impacts of policies and plans, and to promote sustainable development and nature-based solutions or ecosystem-based approaches, especially within sectors (Fundingsland Tetlow and Hanusch 2012). This target and Target 1 on landscape planning should be viewed together for the forestry sector. Where it has been applied, SEAs have provided an improved assessment of the cumulative effects of forestry at large scales, as opposed to the project-by-project assessments of individual environmental impact assessment (e.g., Kim et al. 2013, Bashkent 2024).

#### **Gaps in alignment and guidance**

115. Target 14 stresses the integration of policies across government. The PoWFB could be improved with respect to guidance for national cross-sectoral policy development and updated accordingly to provide

examples of the required policy changes. For example, in many countries, the agency responsible for biodiversity and other environmental issues remains separated from the major resource management and development departments or ministries. This situation can result in a lack of communication between ministries and departments and less attention to biodiversity concerns in various policies, long-term plans, and for major developments such as mines, roads, and rail corridors. Broader buy-in across governments is needed for the successful implementation of the KMGBF and could be highlighted in a revised PoWFB for this target.

116. SEAs are not mentioned in the PoWFB. A revised PoWFB could provide an indication of the value of SEAs to examine the possible cumulative impacts of forest management over space and time, and indicate the relevance also to Target 1 on spatial planning. While cross-sectoral importance is among current objectives, a revised PoWFB could provide guidance for reducing impacts on forests in specific sectors such as transportation, mining, and tourism.

117. Two Parties highlighted the importance of cross-sectoral mainstreaming, especially through the inclusion of biodiversity-positive forest policies and integration of biodiversity into forest and land-use policies.

### **Target 15. Businesses Assess, Disclose, and Reduce Biodiversity-related Risks and Navigate Impacts**

*Take legal, administrative, or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions: (a) regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains, and portfolios; (b) provide information needed to consumers to promote sustainable consumption patterns; (c) report on compliance with access and benefit-sharing regulations and measures, as applicable; in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.*

118. The PoWFB provides some guidance for Target 15 under Element 1, Goal 4, Objective 1; Element 2, Goal 1, Objective 2; Goal 2, Objective 1, for Target 15a; under Element 2, Goal 1, Objective 4, Goal 2, Objective 1; Goal 3, Objective 1 for 15b; and for 15c on access and benefits sharing is well covered under Element 1, Goal 4, Objective 4.

119. Decision [XIII/30](#) encourages Parties to work directly with businesses to reduce biodiversity impacts. Decisions on the impacts by businesses include [XIII/3](#), which seeks to have businesses consider biodiversity during their operations and decision [14/3](#) covers the environmental impacts of businesses on biodiversity including development of disaggregated indicators (cf. Target 14). Decision [XII/10](#) notes the work of the Global Partnership for Business and Biodiversity (requested previously in decision [XI/7](#)), the results achieved through the partnership in some countries and the need to integrate the ecosystem services concept into business operations.

### **Gaps in alignment and guidance**

120. The PoWFB only tangentially refers to industries other than forest management companies. While the PoWFB focusses on the consumption of forest products, it does not link the increase in agricultural land use with loss of forests, nor does it discuss other business issues, such as sustainable tourism. These omissions could be developed further in a revised PoWFB, for example by highlighting green value chains for forest products (cf. Target 10). A revision could also provide more explicit objectives dealing with impacts of other industries on forests, such as hydropower development, transportation corridors, tourism, and mining. The role of private sector/business could also include addressing certification, Environmental, Social and Governance (ESG) reporting requirements and sustainability reporting.

121. Six submissions provided views on the gaps related to Target 15. Two Parties and one observer highlighted the importance of due diligence laws in producer countries that exempt deforestation in imported goods and actions to reduce the global footprint of forest biodiversity loss by encouraging

consumers “to buy from legal, deforestation-free and sustainable supply chains and by disclosing forest biodiversity related risks for business and financial institutions”. One Party encourages the CBD to develop practical guidance for integrating biodiversity into production forests, while another Party suggested adding a new activity to “support innovative business models that contribute to the conservation, sustainable use or restoration of biodiversity through the development and promotion of bioeconomy programmes and policies”.

### **Target 16. Enable Sustainable Consumption Choices To Reduce Waste and Overconsumption**

*Ensure that people are encouraged and enabled to make sustainable consumption choices, including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030, reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.*

122. The PoWFB considers the sustainable consumption of forest products widely among its goals and objectives including under Element 1, Goal 4, Objective 1 on sustainable use; Element 2, Goal 1, Objective 2 on policies for sustainable use; Element 2, Goal 3, Objective 1 on the proper valuation of biodiversity-related goods and services. Element 2, Goal 3 encourages increased education on the sustainable use of resources.

123. Several COP decisions consider sustainable consumption for various sectors and in a general fashion, including [XI/7](#), [XII/10](#), [XIII/3](#), and [14/3](#), although none refers specifically for forest products. For example, Decision [14/3](#) refers to promoting biodiversity-related sustainable production and consumption in the energy and mining, infrastructure, and manufacturing and processing sectors.

#### **Gaps in alignment and guidance**

124. There are no gaps for this target for the sustainable consumption of forest products. Nevertheless, green value chains (noted for Target 10) could also be considered under this target, and Elements 2 and 3 of the PoWFB could be improved to include better information provided to consumers on the footprint of forest products and the concept of forest-based food products.

125. Four submissions highlighted the need to promote responsible consumption of products derived from forests and actions to reduce the global footprint of forest biodiversity loss. The submissions for Target 15 are also relevant to sustainable consumption.

### **Target 17. Strengthen Biosafety and Distribute the Benefits of Biotechnology**

*Establish, strengthen capacity for, and implement in all countries, biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.*

126. Care in the use of genetically modified organisms (GMOs) is an objective under Element 1, Goal 4, Objective 4.f. Actions for benefit-sharing are under Element 1, Goal 5, Objective 1, and Element 2, Goal 2, Objective 1. The PoWFB does not rule out their use in forest management but insists on a careful experimental approach.

127. During its eighth and ninth meetings, the Conference of the Parties to the CBD recognized “the uncertainties related to the potential environmental and socio-economic impacts, including long-term and transboundary impacts, of genetically modified trees on global forest biological diversity”, recommended “Parties to take a precautionary approach when addressing the issue of genetically modified trees” and urged Parties to undertake a number of actions with regard to living modified trees, such as “to develop risk-assessment criteria specifically for genetically modified trees”.

128. While LMOs are widely considered in COP decisions, their use in forest management is not dealt with recently, but was explicitly covered in the early decision [IX/5](#) that urged Parties to consider using LM trees only after experimental trials and under stringent controls. Other more general decisions on synthetic

biology include [X/13](#), [XI/11](#), [XII/24](#), [XIII/17](#), [14/19](#), and [15/31](#), and there is a current AHTEG on synthetic biology.

129. LMOs are used in forest management to improve yields in reduced time from plantations and also to provide resistance to diseases, but the technology has not been widely applied or commercialized owing to several concerns (Thomas et al. 2024). Concerns include persistence and long-term effect of the LM trees in the environment including potential for the non-LMO and LM species to be invasive, long-term interactions with other organisms including in the food webs as well as possible impacts of the modified trait on loss of biodiversity and ecosystem stability, capacity to interbreed with native stock, a lack of regulatory frameworks, and the long-term unknown consequences. Generally, there are few LMO impact studies available and while the research suggests clear benefits for production and disease control, the public concern remains high over unexpected consequences (Strauss et al. 2017, Pinhiero et al. 2023, Thomas et al. 2024).

### Gaps in alignment and guidance

130. Biosafety is not specifically mentioned in PoWFB. In forests, biosafety is relevant to the species selected for reforestation and direction provided should highlight the importance of using stock of endemic species. On the other hand, there were 25 different living modified trees registered on the Biosafety-Clearing House as of June 2025, highlighting some success in modifying tree species, including for disease resistance (e.g. the endangered American chestnut (*Castanea dentata*)), for increased yield (e.g., hybrid eucalyptus (*Eucalyptus grandis* × *Eucalyptus urophylla*)) and for insect resistance and herbicide tolerance (e.g., eucalyptus (*Eucalyptus urophylla*)) (Newhouse et al. 2021; Biosafety Clearing-House<sup>29</sup>).

131. The PoWFB could provide a review and best practice guidance on the use of LM trees, including a checklist of important issues that would have to be considered prior to the use of such trees, improving on the recommendations outlined in decision IX/5. Interventions will take into account developments under the Cartagena Protocol on Biosafety on guidance materials to support case by case risk assessment and risk management of living modified organisms. For example, the risk assessment of living modified trees was addressed in the Voluntary Guidance on Risk Assessment of Living Modified Organisms and Monitoring in the context of Risk Assessment.<sup>30</sup>

132. One submission recognized the overall gap for Target 17, however, no specific guidance was provided on how this could relate to forest biodiversity.

### Target 18. Reduce Harmful Incentives by at Least \$500 Billion per Year and Scale Up Positive Incentives for Biodiversity

*Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least \$500 billion per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.*

133. The PoWFB deals extensively with the issue of both positive and negative impacts of incentives for forest biodiversity under Element 2, Goal 2, Objective 1.

134. The use and impacts of incentives on biodiversity is included in many decisions, again not specifically for forests, including [XI/7](#), [XI/27](#), [XI/30](#), [XII/19](#), [14/1](#), [14/3](#), and [14/22](#) all requesting that Parties examine incentives policies to eliminate or re-purpose negative incentives and consider using positive incentives to promote conservation.

135. There are few studies of subsidies to the forest industry and their effects on biodiversity. Intensive management of timber production may result in trade-offs, especially with local ecosystem services, such as water purification and regulation, nutrient cycling, soil maintenance, genetic diversity maintenance, recreation and possibly cultural values (Baral et al. 2016). Poorly designed forest subsidies for plantations

<sup>29</sup> Available at: <https://bch.cbd.int/en/registries/living-modified-organisms>.

<sup>30</sup> UNEP/CBD/BS/COP-MOP/8/8/Add.1, Section 4.

can also lead to extensive monocrop plantations with low levels of biodiversity that replace natural forests (Heilmayr et al. 2020).

### Gaps in alignment and guidance

136. There are no gaps in the PoWFB for this target on eliminating harmful incentives.

137. Five submissions recommended strengthening the elements on reforming harmful subsidies for forest biodiversity and promoting positive incentives, while one Party suggested that “this gap be prioritized in the updated programme of work, focused both on the negative impacts of subsidies, and repurposing subsidies as an opportunity for halting and reversing forest losses”.

### Target 19. Mobilize \$200 Billion per Year for Biodiversity From all Sources Including \$30 Billion Through International Finance

*Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, mobilizing at least \$200 billion per year by 2030, including by: (a) increasing total biodiversity related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, to at least \$20 billion per year by 2025, and to at least \$30 billion per year by 2030; (b) significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances; (c) leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments; (d) stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards; (e) optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises; (f) enhancing the role of collective actions, including by indigenous peoples and local communities, Mother Earth centric actions<sup>31</sup> and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity; (g) enhancing the effectiveness, efficiency and transparency of resource provision and use.*

138. Developing and implementing national financing strategies in the framework of national forest programme to provide adequate financial, human and technical resources is part of the PoWFB Element 2, Goal 1, Objective 2.

139. A search of the CBD decisions database revealed more than 5000 references to the need for increased funding for biodiversity management and conservation, and on resource mobilization. These many decisions point to the need for vastly increased funding to conserve biodiversity on a global scale. Some decisions particularly noted the need for increased funding for conservation on lands of indigenous peoples and local communities (e.g., decision [XI/14](#)).

140. The recent decision [16/34](#) on resource mobilization urges Parties to continue and enhance their efforts to substantially and progressively increase the level of financial resources from all sources, including the enhancement of uptake, accessibility, effectiveness, efficiency, transparency and accountability in resource provision by the Global Environmental Facility. According to the GEF Strategy on Forests, the GEF grant investment in SFM increased from \$ 234,5 million in the GEF-1 replenishment period to \$ 943.1 million in the GEF-7.

<sup>31</sup> Mother Earth Centric Actions: Ecocentric and rights-based approach enabling the implementation of actions towards harmonic and complementary relationships between peoples and nature, promoting the continuity of all living beings and their communities and ensuring the non-commodification of environmental functions of Mother Earth.

141. The Special Report of the Forest Declaration Assessment “Emerging Forest finance instruments”<sup>32</sup> (2024) summarizes diverse financial instruments, provides case studies and the principles for forest financing and could guide the decision-makers and programme developers in pursuing the appropriate financial strategies for forests.

142. The UNFF Global Forest Financing Facilitation Network provides the Generic guide and modular training package to assist countries in developing national forest financing strategies<sup>33</sup> and training workshops on accessing funds from multilateral financing mechanisms.

143. While all developing countries require increased funding for biodiversity conservation, priorities for funding can be determined by assessing where the biodiversity is rich, but losses are most severe. For example, Waldren et al. (2013) developed a method to determine how limited available funding can achieve the highest impact by showing that the 40 most severely underfunded countries contain 32% of all threatened mammalian diversity and occur in some of the world’s most biodiversity-rich areas. Similarly, Wilson et al. (2007) suggested that, by investing in a sequence of conservation actions targeted towards specific threats, protecting many more plant and vertebrate species is possible compared to equality of funding.

### **Gaps in alignment and guidance**

144. Although the provision of adequate financial, human and technical resources is mentioned in the PoWFB, it does not address the need for increased funding. Some of the available funding mechanisms, for example, through the Green Climate Fund, results-based REDD+, voluntary carbon markets, biodiversity offsets, Payment for Ecosystem Services schemes, etc., were initiated after the PoWFB was adopted. The PoWFB could include statements similar to those in the Global Forest Goals for increased funding and alert parties to the various mechanisms by which funding for forest programmes could be raised. A revision could also point to the BIOFIN mechanisms that will assist Parties to achieve better funding opportunities. Such solutions would include the repurposing for harmful subsidies, particularly in agriculture.<sup>34</sup>

145. Five submissions stressed the importance of mobilization of financial resources and innovative finance for forest biodiversity from all sources. One observer referred to the six principles of forest finance developed in the Forest Declaration Assessment Special Report (2024).

### **Target 20. Strengthen Capacity-building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity**

*Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the Framework.*

146. Actions for capacity building and scientific cooperation/research are well-addressed in Element 1, Goal 4, Objectives 1 and 3; Goal 5, Objective 1; Element 2, Goal 1, Objectives 2 and 4; and in Element 3, Goal 4, Objective 1, for capacity-building. The need for improved research is fully addressed under the goals and objectives of Element 3.

147. The most recent decision on capacity-building and research is decision [16/3](#). That decision invited Parties and partners to continue the implementation of a long-term strategic framework for capacity-building and development and welcomed the entities that host the regional and subregional technical and

<sup>32</sup> [https://forestdeclaration.org/wp-content/uploads/2024/09/2024EmergingFinance\\_low-res.pdf](https://forestdeclaration.org/wp-content/uploads/2024/09/2024EmergingFinance_low-res.pdf).

<sup>33</sup> <https://www.un.org/esa/forests/wp-content/uploads/2019/10/GFFFN-ModularTrainingPackageFINAL.pdf>.

<sup>34</sup> [https://www.panda.org/wwf\\_news/?11884966/Turning-harm-into-opportunity-Repurposing-agricultural-subsidies-that-destroy-forests-and-non-forest-natural-ecosystems](https://www.panda.org/wwf_news/?11884966/Turning-harm-into-opportunity-Repurposing-agricultural-subsidies-that-destroy-forests-and-non-forest-natural-ecosystems).

scientific cooperation support centres. Special need for capacity building for women, youth, and indigenous peoples and local communities is fully integrated in the capacity development mechanisms under the Convention.

148. FERI has been playing an active role in addressing capacity-building gaps and needs in forest-related requests under the Convention. The initiative has conducted seven regional workshops between 2015-2020 to deliver information to Parties on forest restoration techniques, priorities, and data assessment. The educational materials developed for these workshops were published in a series of publications. Overall, as a result of these efforts under FERI, 37% of 71 countries improved the quality of their targets, while an additional 29% included restoration targets for the first time, demonstrating notable progress<sup>35</sup>.

### **Gaps in alignment and guidance**

149. There are no gaps for this target. Capacity building is a theme throughout the PoWFB, and Element 3 deals with the need for research and collaboration in knowledge-sharing. A revised PoWFB would make detailed reference to the CBD long-term strategic framework for capacity-building and development.

150. Nine submissions highlighted the need to enhance and support capacity development and knowledge exchange, enhance technical cooperation and training, especially with developing countries and those most affected by forest biodiversity loss.

### **Target 21. Ensure That Knowledge Is Available and Accessible To Guide Biodiversity Action**

*Ensure that the best available data, information and knowledge are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent,<sup>36</sup> in accordance with national legislation.*

151. The PoWFB makes detailed reference to forest monitoring and data analysis under Element 1, Goal 2, Objectives 2 and 3; Goal 4, Objectives 2 and 4; and throughout Element 3. The latter element in particular provides a suite of actions and mechanisms for forest monitoring. Education and awareness-raising are addressed under Element 1, Goal 1, Objective 1; Goal 4, Objective 3 (traditional knowledge); Element 2, Goal 1, Objective 2; Goal 3, Objective 1.

152. There is no individual decision for monitoring biodiversity conservation in forests, but the CBD also provides a suite of indicators for each of the KMGBF targets, including for Target 10 on sustainable management. Decision [14/2](#) notes the aspects to be considered when monitoring the Post-2020 Biodiversity Framework and decision [XIII/31](#) illustrates the important scientific and technical needs for research and monitoring. Other decisions, including [XI/9](#), [XIII/3](#), [14/5](#), [16/15](#) discuss monitoring requirements and the development of indicators, including through the use of remote sensing, for various issues such as health, endemic species, and wildlife management and also encourage community-based monitoring.

153. Monitoring is essential to measure progress and to provide evidence for policy and management changes through the use of regional and national databases. The use of remote sensing (satellite, LiDAR, and drone technologies) for monitoring forests has improved consistently over time, including through the increased use of machine learning. Accurate methods are available to monitor changes in forest canopy cover monthly at a 10 m resolution with Sentinel 1 or 2 satellite data (available from the European Space Agency). Other developments using remote sensing include the increased ability to detect individual tree species in certain ecosystems (Cross et al. 2019, Deur et al. 2020, Malcolm et al. 2021). These technologies allow forest managers to track forest condition, growth rates, species composition, and illegal logging activities, enabling better planning and management of forests (Buchelt et al. 2024, Mulverhill et al. 2025),

<sup>35</sup> [biocap-10-en.pdf](#).

<sup>36</sup> Free, prior and informed consent refers to the tripartite terminology of “prior and informed consent” or “free, prior and informed consent” or “approval and involvement.”

and enabling improved monitoring for KMGBF Targets 2, 10, and 11. Other advances in monitoring include the use of community-based sampling.

### **Gaps in alignment and guidance**

154. While the PoWFB deals extensively with the need for data collection and monitoring of forest extent and condition to measure the progress towards sustainability, it refers to remote sensing only once, which is inadequate given the advanced tools and databases that have become available since 2000 and are in regular use. These advances in remote sensing and their value to forest monitoring would need to be updated, and a revised PoWFB could provide sources of data, information on tools, and the application of specific technologies relevant to forest managers. The PoWFB could also provide guidance for community-based sampling that has high applicability, especially in community forests.

155. Improving the quality, accessibility, and sharing of data, information, and knowledge on forest ecosystems and biodiversity was recommended in five submissions. Among them, two submissions highlighted the need to incorporate indigenous traditional knowledge into management practices, while one Party noted the alignment with “international work such as the Collaborative Partnership on Forests’ Joint Call to Action for Forests towards 2030, the UNFF Communications and Outreach Strategy, and the Global Forest Goals”.

### **Target 22. Ensure Participation in Decision-making and Access to Justice and Information Related to Biodiversity for all**

*Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.*

156. The PoWFB has no mention of inclusive involvement in sustainable forest management and there is no mention of women and girls, children and youth environmental human rights defenders, or persons with disabilities in the PoWFB. However, indigenous participation and rights to land and consultation are weaved throughout the PoWFB, including using traditional knowledge, as addressed in: Element 1, Goal 4, Objectives 1 and 3; Goal 5, Objective 1; Element 2, Goal 2, Objective 3, and Goal 3, Objective 1.

157. While there are no COP decisions solely focused on forest-dwelling indigenous peoples and local communities, there are many decisions that address the use of traditional knowledge in biodiversity conservation, participation in resource management decisions, and the need for tenure on traditional lands (e.g., decisions 14/5, 14/12, and 16/2). Further, secure, equitable, and legally recognized land and forest tenure for indigenous peoples and local communities is a prerequisite for sustainable forest management in these areas. The programme of work could explicitly support the recognition and legal enforcement of customary tenure systems and appropriate legal orders.

158. The understanding of forest ecosystems by indigenous peoples and local communities is now widely recognized as an important consideration in forest and landscape planning. Decision [16/4](#) that adopted the programme of work on Article 8 (j) and other provisions of the Convention related to indigenous peoples and local communities to 2030 reiterates the importance of communicating with and including indigenous peoples and local communities in policy decision making and in national reporting, and urges Parties to implement the work programme included in an annex to the decision.

### **Gaps in alignment and guidance**

159. The PoWFB’s support for the roles of indigenous peoples and local communities in forest management is complemented by the programme of work on Article 8 (j) and other provisions of the Convention, which provides more specific guidance on the rights, participation and traditional knowledge of indigenous peoples and local communities. There are no gaps in the PoWFB regarding the support for the roles of indigenous peoples and local communities in forest management.

160. Nevertheless, eleven submissions included the views on strengthening the participation of indigenous peoples and local communities in the planning and governance of conservation and sustainable management of forest ecosystems. Among them, one Party highlighted the importance of “integrating their knowledge and respecting collective rights, within the framework of forest conservation agreements”, while another Party considered critically important “to respect the rights of Indigenous Peoples and local communities including land rights in forests”, while minimizing industrial-scale land-use impact and retaining it as a core element of the programme.

### **Target 23. Ensure Gender Equality and a Gender-responsive Approach for Biodiversity Action**

*Ensure gender equality in the implementation of the Framework through a gender-responsive approach, where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.*

161. The PoWFB does not deal with gender issues in the management of forests.

162. With respect to gender, there are many decisions affirming the need for gender representation in resource decisions and participation in decision-making bodies. Decision [15/11](#) provides a ‘Gender Plan of Action’ that is expected to be implemented throughout the National Biodiversity Strategy and Action Plans (NBSAPs) for the KMGBF.

163. An important aspect of managing forests, and especially community forests, is the involvement of all members of the community, including women, and disadvantaged persons, (indigenous peoples and local communities are considered above in Target 22), while avoiding elite control (e.g., Mrema 2017), and ensuring a strong and committed management committee. There is evidence that women are more open to conservation initiatives than men, and so achieving multiple forest objectives is more likely when women serve on management committees (e.g., Ray et al. 2017). In part, this is because of the different roles of women in using forests as compared to men, including collecting firewood, food, and medicines. As a result, women have a particular perspective of forest values and can provide valuable input to local management (Ota et al. 2020), hence forest management, especially in community forests can benefit from developing inclusive management committees.

### **Gaps in alignment and guidance**

164. The PoWFB does not specifically address the establishment of management committees and the inclusion of women in decision-making. A revised PoWFB could also build complementarities with the Gender Plan of Action under the CBD. It provides guidance to Parties on these issues based on an extensive literature of positive effects, as well as on a wealth of experiences based on case studies that are widely available. The CBD Technical Series No. 49: “Guidelines for Mainstreaming Gender into National Biodiversity Strategies and Action Plans”<sup>37</sup> can assist with guidance on this target as many of the recommendations are especially relevant to forests.

165. Six submissions recommended promoting gender-equity and gender-responsive approach in conserving and sustainably managing and restoring forest biodiversity.

## **2.3 Concluding notes on gaps**

166. Based on the gap analysis with respect to the KMGBF and current forest science, the PoWFB provides guidance for all of the targets that are directly applicable to forests or forest management although most can be updated to some extent. There is strong direction in the PoWFB for 13 targets (1, 3, 6, 8, 10, 13, 14, 16, 17, 18, 20, 21, and 22), including comprehensive direction for sustainable forest management, although guidance for each target could be improved. For several other targets (especially 2, 4, 5, 7, 9, 11, 12, 15, and 19), there is only limited or no information in the PoWFB, or the gaps are about issues that were raised post-2002. To conclude, the PoWFB remains largely relevant to Parties as advice on sustainable

<sup>37</sup> <https://www.cbd.int/doc/publications/cbd-ts-49-en.pdf>.

forest management, but could be updated to conform more completely with the KMGBF and with contemporary changes in forest management methods, planning, science, and terminology. The PoWFB could also guide and strengthen the collaboration, cooperation and mainstreaming between different sectors and actors at national, regional and international levels.

### 3.0 Concluding observations based on the analysis and review

#### 3.1 Potential approaches for addressing identified gaps

167. The rapid gaps analysis, included in document [CBD/SBSTTA/25/INF/1](#), and complemented in the present document with information on current trends in forests and advances in forest conservation and sustainable management in science and research, indicates that a revision to the PoWFB could improve its value to Parties. Five submissions recommended not renegotiating the current expanded PoWFB, instead linking its elements with the KMGBF goals and targets and adding new elements that are currently missing, with the objective of enhancing the alignment and contribution of forest actions towards the attainment of the KMGBF targets. One Party noted that complementary guidance could be issued when needed.

168. Considering the review of trends and advances as discussed above, the availability of external guidance by relevant organizations, and the submissions views and information provided by Parties and observers, the current PoWFB could benefit from further guidance on potential areas, as follows:

a) Conservation of primary, high-integrity forests, biodiversity-inclusive spatial planning, ecological integrity, intactness, OECMs and forest landscape connectivity, including up-to-date terminology, concepts and definitions (Targets 1, 2, 3);

b) Best practices in forest restoration (including spatial and within-stand heterogeneity, connectivity, and resilience, consideration of climate change projections and risks of wildfires), types of priority areas to be restored, and definition of a 'restored forest' (Target 2);

c) Conservation of forest biodiversity through the use of OECMs, including in indigenous and/or local community forests, as well as guidance on the area required for protected areas to meet biodiversity objectives, including forest integrity and the use of 'ridge-to-reef' management concepts (Targets 3, 10 and 22);

d) Management of human-wildlife conflicts, while recognizing and respecting the rights of indigenous peoples and local communities (Targets 4 and 22);

e) Management of forests and forest-based activities that reduce overexploitation and enhance attention to combating illegal logging and harmful trade, also including the implementation of global standards (Targets 5 and 9);

f) Reduction of soil loss and the impacts of pesticides on forest biodiversity and human health (Target 7);

g) Integrated fire management and its techniques, including the assessment of the impacts of fire retardants on forest ecosystems; advice on the specific use of forests as nature-based solutions, consideration of benefits and risks for biodiversity from carbon market-driven incentives for large-scale afforestation programmes; enhancing forest ecosystem integrity and resilience (Target 8);

h) Reduction of the agricultural footprint, thereby enabling the recovery of forest areas previously cleared; guidance for establishing better socio-economic conditions for indigenous peoples and local communities, including the use of alternative livelihoods; improved guidance for agroforestry to enhance biodiversity (Target 10);

i) Urban forestry and urban green space planning objectives (Target 12);

j) Application of strategic environmental assessments as a part of an overall landscape plan; to provide further guidance on comprehensive integrated national-level policy development across all sectors (Targets 14 and 1)

k) Sustainable value chains as a means to improve the sustainable use of both forests and agricultural products, reducing global footprint of forest biodiversity loss by supporting consumers to make informed decisions, by encouraging them to buy from legal, deforestation-free and sustainable supply chains, including through forest certification, and by disclosing forest biodiversity related risks for business and financial institutes (Targets 15, 16 and 10);

l) Funding mechanisms for forest planning and management, including innovative mechanisms, repurposing subsidies as an opportunity for halting and reversing forest losses; guidance on capacity building in indigenous peoples and local communities to access funds, guidance on forest biodiversity-positive financing instruments (Targets 18, 19 and 22), including through BIOFIN planning;

m) Access to and application of remote sensing data, available databases, and tools to facilitate improved forest monitoring; integration of indigenous traditional knowledge into management practices (Target 21).

n) Improved participation in planning and management of forests by all sectors of civil society, including women, youth, indigenous peoples and local communities, and disabled persons (Targets 22 and 23).

169. The additional guidance identified above and summarized in Annex I could complement the expanded PoWFB and provide a draft update.

### **3.2 Potential approaches for collaboration with other relevant organizations and international processes**

170. Since the adoption of the PoWFB in 2002, many advances have been made in global forest governance, among them the key instruments include:

a) The adoption in 2011 of the Bonn Challenge target of restoring 350 million hectares of degraded and deforested land by 2030;

b) The adoption in 2015 of the 2030 Agenda for Sustainable Development, notably Target 15.2 (by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally);

c) The adoption in 2015 of land degradation neutrality targets under the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa;

d) The adoption in 2015 of the Paris Agreement under the United Nations Framework Convention for Climate Change, with provisions on nationally determined contributions;

e) The adoption in 2017 of the United Nations strategic plan for forests 2017–2030, with global forest goals;

f) The proclamation in 2019 of the United Nations Decade on Ecosystem Restoration (2021–2030);

g) The adoption in 2022 of the Kunming-Montreal Global Biodiversity Framework.

171. A revised PoWFB, regardless of the format, could provide the most recent guidance, information, and techniques on the conservation and sustainable management of biodiversity in forests. Hence, the PoWFB aligned to the KMGBF will serve as a guidance document for Parties, other Governments, indigenous peoples and local communities, and relevant organizations to assist in the implementation of the KMGBF and to enhance sustainable management programmes based on the whole of government and whole of society approaches.

172. The importance of the alignment with other intergovernmental processes, strengthening existing and building new partnerships, while avoiding duplication, fragmentation and redundancies, and building on complementarities was highlighted in the majority of the submissions. Two Parties recommended a stronger

alignment with the UN Strategic Plan for Forests 2017-2030 and the Global Forest Goals, and the CPF. One Party suggested extending the partnership to the new networks, such as the Model Forest Network, the FAO Global Fire Management Hub, the International Boreal Forest Research Association, the Global Bioenergy Partnership, the Commission on Environmental Cooperation and the International Forest Products Association. One observer suggested strengthening the work with the Collaborative Partnership on Sustainable Wildlife Management.

173. Existing collaborative arrangements include working with the CPF (including through the Global Forest Expert Panels, including IPBES, and Forest Reporting), ITTO<sup>38</sup>, FAO (ongoing collaborations), UNFCCC and UNFF<sup>39</sup>. In addition, the FERI project, funded by the Republic of Korea, is continuing to assist global forest restoration initiatives. These collaborative partnerships offer the opportunity to assist countries in implementing a revised PoWFB, including through GEF-funded projects on forest biodiversity that relate to their NBSAPs.

174. The CBD Secretariat works closely with the secretariats of the Rio Conventions through the Joint Liaison Group. The recent decision [16/22](#) on biodiversity and climate change requested the Secretariat to invite Parties, observers and other stakeholders to submit their views on options for enhanced policy coherence, including a potential joint work programme of the Rio conventions. The revision or implementation of the PoWFB should take into consideration the outcomes of the negotiations on the potential joint work programme of the Rio conventions, as the need to halt and reverse deforestation and forest degradation by 2030 is a shared agenda among the three conventions.

175. Since the establishment of the UNFF in 2000, the PoWFB and relevant CBD decisions provided clear guidance on the collaboration between the two bodies, recognizing complementary roles, strengthened ability to support actions by government and other bodies, the technical advice on forest biodiversity conservation, avoiding duplication in work. The UNFF adopted the UN Strategic Plan for Forests and six Global Forest Goals, which include objectives for assisting communities to benefit from forests (Goal 2.1) and the conservation of biodiversity (2.5). As a guide to conducting sustainable management, the PoWFB can assist in achieving those objectives.

176. The CBD Secretariat is an active member of the CPF, the voluntary network of sixteen international organizations and secretariats with substantial programmes on forests. One of the core functions of the CPF is to support the work of the UNFF and its member countries. The CBD Secretariat, as a focal point for forest biodiversity, co-leads with the Secretariat of UNFF and FAO the implementation of the Joint Initiative on the KMGBF and the Global Forest Goals: Harnessing Complementarities and addressing Fragmentation in the Global Forest Agenda as a part of the recently developed CPF Work Plan for 2025-2028<sup>40</sup>.

177. The members of the CPF have distinct mandates from those of the CBD, but formal decisions and resolutions taken by them often reflect conservation values. Similarly, SDG Target 15.2 on forests, the United Nations Convention to Combat Desertification (UNCCD) 2018-2030 Strategic Framework, and many of the global forest restoration programmes (such as the UN Decade on Ecosystem Restoration, the Global Partnership for Forest Landscape Restoration) can benefit from the strategic guidance because the PoWFB was specifically designed to conserve biodiversity in forests.

### **3.3. Potential mechanisms to strengthen alignment with the KMGBF processes**

178. The submissions from the Parties and observers provided views relevant to the effectiveness of the implementation of the PoWFB. Enhanced mechanisms for the implementation of the PoWFB aligned with the KMGBF mechanisms were recommended in several submissions. One observer specifically highlighted that “the real challenge is not in textual changes to the PoW, but instead creating new incentives, improving existing delivery mechanisms, intensified consultation and collaboration amongst forest-related

<sup>38</sup> Memorandum of Understanding signed in 2004.

<sup>39</sup> Memorandum of Understanding signed in 2004.

<sup>40</sup> <https://openknowledge.fao.org/server/api/core/bitstreams/7564f0fc-7257-4def-ab32-c95da286b1f7/content>

organizations/actors and securing necessary sustainable investments to increase effective action on the recommended activities to address an accelerating biodiversity crisis”.

179. In a few submissions it was pointed out that the updated PoWFB could promote the development of new and common assessment, while one Party noted the development of “indicators and monitoring that capture both biodiversity outcomes and sustainable forest management practices” and two observers saw the contribution of the PoWFB in providing more knowledge on the functional role of forest biodiversity and forest ecosystem integrity. If requested by the Parties, the technical documents could be developed aimed at specific KMGBF targets that would encourage and assist in implementation. These information documents, based on the revised PoWFB, would be designed to provide advice to Parties on current issues and advances on forest biodiversity, and to promote best practices based on current science and lessons learned from a review of many case studies.

180. As an important pillar of implementation, four submissions mentioned the need to enhance and support capacity development and knowledge exchange, especially with developing countries and those most affected by forest biodiversity loss, while one Party and one observer expressed readiness to facilitate capacity development.

181. The PoWFB had an accompanying document containing potential actors, timeframes, performance measures and indicators of progress of the PoWFB, developed by the AHTEG on the review of the implementation for the period 2002-2010 ([CBD/COP /6/INF/ 9](#)). While some of these indicators remain valid, KMGBF has provided a comprehensive set of indicators (headline, component, and complementary).

182. Most importantly, to improve the data available, a revised PoWFB could provide considerably improved information for Parties and forest managers for the remote sensing tools and databases that are now available for assessing forest change. These tools can assist with national determination of forest integrity and degradation, area(s) of primary forest, forest intactness, as well as providing managers with information on illegal activities.

183. Avoiding fragmentation and duplication, harmonization of policies, and making use of a wide range of existing data, tools, and frameworks were noted in seven submissions. One observer suggested a toolbox approach including forest certification, while one Party recommended a “smooth integration of the updated PoW on forest biodiversity into the KMGBF, avoiding establishing a parallel process separate from the KMGBF, and increasing difficulties for monitoring and reporting”. One Party suggested that the PoWFB should consider the seventh National Reports and the Global Report on Collective Progress.

### **3.4 Potential approaches to updating the programme of work on forest biodiversity**

184. Following the mapping of activities of the programme of work on forest biodiversity in relation to the targets of the Framework and taking into account gaps identified, a set of additional activities, contained in Annex 1 of the present document, was formulated to enhance the guidance of the programme of work. Most of the activities in the current PoWFB align well both with the KMGBF targets and with ongoing approaches and practices of sustainable forest management. Nevertheless, as well-documented in the present document, some updates could be added to improve the guidance provided on how countries can align their forest management policies and methods to implement the KMGBF targets.

185. The following two options could be considered for the updates of the programme of work on forest biodiversity:

a) To revise the programme of work and add complementary activities, as deemed appropriate. At the same time, activities of the original PoWFB that are now redundant would be removed. This approach would involve re-negotiating the programme of work but would result in a robust and contemporary document to assist the implementation of the GBF targets.

b) To re-organize the current programme of work by each target of the Framework, and endorse new complementary activities as an addendum to the current expanded programme of work. Since the programme of work remains relevant to conservation and sustainable management of forests, the update could take the form of reorganizing the various objectives and activities by each of the targets, to include

the complementary activities. This approach would focus on a limited number of complementary activities that can facilitate better alignment of resources, technical and methodological support based on the needs of targets.

## Annex 1. Draft update

186. The following table contains a summary of the relevant sections in the current CBD Programme of Work on Forest Biodiversity (PoWFB) aligned with the KMGBF targets, the identified gaps, and the potential complementary activities that require further guidance.

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Identified gaps in the</b><br><b>current expanded</b><br><b>PoWFB</b>                                                                                                                                                                                               | <b>Potential complementary activities for</b><br><b>further guidance</b>                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Target 1</b></p> <p>Clarify the conceptual basis of the ecosystem approach in relation to sustainable forest management. (1.1.1.a.)</p> <p>Develop guidance for applying the ecosystem approach in forest ecosystems. (1.1.1.b.)</p> <p>Identify key structural and functional ecosystem elements to be used as indicators for decision-making and develop decision-support tools on a hierarchy of scales. (1.1.1.c.)</p> <p>Develop and implement guidance to help the selection of suitable forest management practices for specific forest ecosystems. (1.1.1.d.)</p> <p>Develop and implement appropriate mechanisms for the participation of all stakeholders in ecosystem-level planning and management. (1.1.1.e.)</p> <p>Develop an informal international network of forest areas for piloting and demonstrating the ecosystem approach and exchange related information through the clearing-house mechanism. (1.1.1.f.)</p> <p>*Hold workshops to train and familiarize decision makers and managers with the foundations, principles and modalities of the ecosystem approach. (1.1.1.g.)</p> <p>Promote research and pilot projects to develop understanding of the functional linkages between forest biological diversity and agriculture with the aim to developing practices that could improve the relations between forest management and other land use methods.</p> <p>Promote assessment of functional linkages between mining, infrastructure and other development projects and forest biodiversity, and develop best practice, guidelines for such development projects to mitigate adverse impacts on forest biodiversity. (1.1.1.h.)</p> <p>Promote activities that minimize the negative impacts of forest fragmentation on forest biodiversity, including afforestation, forest restoration, secondary forest and plantation management, and agroforestry, watershed management and land use planning aimed at</p> | <ul style="list-style-type: none"> <li>• Biodiversity-inclusive spatial planning;</li> <li>• Ecological integrity, or intactness;</li> <li>• Conserving and managing forests at landscape level;</li> <li>• Conservation of primary, high-integrity forest.</li> </ul> | <p>Conservation of primary, high-integrity forests, biodiversity-inclusive spatial planning, ecological integrity, intactness, other effective area-based conservation measures (OECMs) and forest landscape connectivity, including up-to-date terminology, concepts and definitions;</p> <p>Create synergy and avoid duplication with the proposal for potential further work on biodiversity-inclusive spatial planning under the CBD.</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Identified gaps in the current expanded PoWFB</b>                            | <b>Potential complementary activities for further guidance</b>                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <p>providing a combination of economic and environmental goods and services to stakeholders. (1.1.1.i.)</p> <p>Encourage the creation of private reserves and private conservation methods where appropriate, respecting the rights and interests of indigenous and local communities. (1.2.6.a.)</p> <p>Establish ecological corridors on a national and regional basis. (1.2.6.b.)</p> <p>Promote cost-benefit analysis of development projects that might lead to the conversion of forest into other land uses incorporating the impacts on forest biological diversity. (1.2.6.c.)</p> <p>Implement policies, practices and measures aimed at addressing the causes and reducing impacts on forest biological diversity resulting from human-induced uncontrolled clearing or other uncontrolled land-use activities. (1.2.6.d.)</p> <p>Develop appropriate measures and regulations to secure a permanent forest area sufficient to allow for the conservation and sustainable use of forest biological diversity. (2.1.3.a.)</p> <p>Develop and apply environmental and socio-economic impact assessment methods as appropriate prior to land-conversion decisions. (2.1.3.h.)</p> <p>*Each Party to carry out, in a transparent and participatory way, thorough analysis of local, regional, national and global direct and underlying causes of losses of forest biological diversity. A distinction should be made between broad socio-economic causes such as demographic growth and more specific causes such as institutional weaknesses and market or policy failures. (2.1.1.a.)</p> <p>* Each Party on the basis of the above analysis to implement their recommendations. (2.1.1.b.)</p> <p>* Parties to report through the clearing-house mechanism of the Secretariat on successful experiences involving control and mitigation of the underlying causes of deforestation, which would make it possible to understand lessons learned. (2.1.1.c.)</p> |                                                                                 |                                                                                 |
| <b>Target 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                 |                                                                                 |
| <p>Promote the implementation of systems and practices for restoration in accordance with the ecosystem approach (1.3.1.a.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>Integrity and connectivity as</li> </ul> | <p>Best practices in forest restoration (including spatial and within-stand</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Identified gaps in the current expanded PoWFB</b>                                                                                                                                     | <b>Potential complementary activities for further guidance</b>                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Promote restoration of forest biological diversity with the aim to restore ecosystem services. (1.3.1.b.)</p> <p>Create and improve where appropriate international, regional and national databases and case-studies on the status of degraded forests, deforested, restored and afforested lands. (1.3.1.c.)</p> <p>Develop and apply forest ecosystem restoration techniques to address biodiversity loss at the ecosystem level. (3.3.1.c.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p>objectives for restoration;</p> <ul style="list-style-type: none"> <li>• Climate-smart restoration;</li> <li>• Overall, guidance on restoration is very general.</li> </ul>           | <p>heterogeneity, connectivity, and resilience, consideration of climate change projections and risks of wildfires), types of priority areas to be restored, and definition of a 'restored forest'.</p>                                                                                                                      |
| <b>Target 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                              |
| <p>Assess the comprehensiveness, representativeness and adequacy of protected areas relative to forest types and identify gaps and weaknesses. (1.3.3.a.)</p> <p>*Establish (in accordance with Article 8(j)) with the full participation and with respect for the rights of indigenous and local communities, and other relevant stakeholders, comprehensive, adequate, biologically and geographically representative and effective networks of protected areas. (1.3.3.b.)</p> <p>Establish, in a similar manner, restoration areas to complement the network of protected areas where needed. (1.3.3.c.)</p> <p>*Revise in a similar manner and ensure the comprehensiveness, adequacy, representativeness and efficacy of existing protected area networks. (1.3.3.d.)</p> <p>Assess the efficacy of protected forest areas for the conservation of biological diversity. (1.3.3.e.)</p> <p>Ensure that relevant protected areas are managed to maintain and enhance their forest biodiversity components, services and values. (1.3.3.f.)</p> <p>Develop strategies for effective enforcement of sustainable forest management and protected area regulations, including adequate resourcing and involvement of indigenous and local communities (2.1.2.f.)</p> | <ul style="list-style-type: none"> <li>• Concept and application of OECMs;</li> <li>• Concept of integrating the network of protected areas into wider landscapes, seascapes.</li> </ul> | <p>Conservation of forest biodiversity through the use of OECMs, including in indigenous and/or local community forests, as well as on the area required for protected areas to meet biodiversity objectives, including forest integrity and the use of 'ridge-to-reef' management concepts, including mangrove forests.</p> |
| <b>Target 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                              |
| <p>Determine status and conservation needs of endemic or threatened species and the impacts of current forest management practices on these species. (1.3.2.a.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• Concept and application of human-wildlife conflict.</li> </ul>                                                                                  | <p>Management of human-wildlife conflicts, while recognizing and respecting the</p>                                                                                                                                                                                                                                          |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Identified gaps in the current expanded PoWFB</b>                                  | <b>Potential complementary activities for further guidance</b>                                                                                                   |
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| <p>Develop and implement conservation strategies for endemic and threatened species for global or regional application, and practical systems of adaptive management at national level. (1.3.2.b.)</p> <p>Develop, harmonize and assess the diversity of forest genetic resources, taking into consideration the identification of key functional/keystone species populations, model species and genetic variability at the deoxyribonucleic acid (DNA) level. (1.4.4.a.)</p> <p>Select, at a national level, the most threatened forest ecosystems based on the genetic diversity of their priority species and populations and develop an appropriate action plan in order to protect the genetic resources of the most threatened forest ecosystems. (1.4.4.b.)</p> <p>Improve understanding of patterns of genetic diversity and its conservation in situ, in relation to forest management, landscape-scale forest change and climate variations.(1.4.4.c.)</p> <p>Provide guidance for countries to assess the state of their forest genetic resources, and to develop and evaluate strategies for their conservation, both in situ and ex situ. (1.4.4.d.)</p> <p>Develop national legislative, administrative policy measures on access and benefit-sharing on forest genetic resources, taking into account the provisions under Articles 8(j), 10(c), 15, 16 and 19 of the Convention on Biological Diversity and in conformity with future decisions of the Conference of the Parties, as appropriate. (1.4.4.e.)</p> <p>Develop a holistic framework for the conservation and management of forest genetic resources at national, subregional and global levels. (1.4.4.g.)</p> <p>Implement activities to ensure adequate and representative in situ conservation of the genetic diversity of endangered, overexploited and narrow endemic forest species and complement the in situ conservation with adequate ex situ conservation of the genetic diversity of endangered, overexploited and narrow endemic species and species of economic potential. (1.4.4.h.)</p> |                                                                                       | <p>rights of indigenous peoples and local communities.</p>                                                                                                       |
| <b>Target 5</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |                                                                                                                                                                  |
| <p>*Establish a liaison group with an associated workshop to facilitate development of a joint work plan with relevant members of the Collaborative Partnership on Forests to bring harvesting of non-timber forest products (NTFP)s, with a particular focus on bush meat, to sustainable levels. This group should have a proportionate regional representation, giving special consideration to subregions where bush meat is a major</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>• Concept of wildlife exploitation.</li> </ul> | <p>Management of forests and forest-based activities that reduce overexploitation and enhance attention to combating illegal logging and harmful trade, also</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Identified gaps in the current expanded PoWFB</b> | <b>Potential complementary activities for further guidance</b>                                                                                                                                                                                                  |
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| <p>issue and representation of relevant organizations such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora. (1.4.2.a.)</p> <p>Promote projects and activities that encourage the use and supply of alternative sources of energy to prevent forest degradation due to the use of firewood by local communities. (1.4.2.b.)</p> <p>Develop any necessary legislation for the sustainable management and harvesting of non-timber forest resources. (1.4.2.c.)</p> <p>*Solicit input from Parties, other countries and relevant organizations on ways and means to encourage and assist importing countries to prevent the entry of unsustainably harvested forest resources, which are not covered by the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and consider this information as a basis for further steps on this issue. (1.4.2.d.)</p> <p>Strengthen the capacity of, and provide incentives for, indigenous and local communities to generate opportunities for sustainable use of forest biodiversity and for access to markets. (1.4.3.a.)</p> <p>Encourage the conservation and sustainable use of forest biological diversity by indigenous and local communities through their development of adaptive management practices, using as appropriate traditional forest-related knowledge. (1.4.3.c.)</p> |                                                      | <p>including the implementation of global standards.</p> <p>Also relevant for Target 9.</p>                                                                                                                                                                     |
| <b>Target 6</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                      |                                                                                                                                                                                                                                                                 |
| <p>Reinforce, develop and implement strategies at regional and national level to prevent and mitigate the impacts of invasive alien species that threaten ecosystems, including risk assessment, strengthening of quarantine regulation, and containment or eradication programmes taking into account the guiding principles on invasive alien species if adopted at the sixth meeting of the Conference of the Parties. (1.2.1.a.)</p> <p>Improve the knowledge of the impacts of invasive alien species on forest ecosystems and adjacent ecosystems. (1.2.1.b.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p>No significant gap.</p>                           | <p>Addressed under the cross-cutting area of work on IAS.</p> <p>Provide guidance to assist forest managers to prevent the introduction of invasive species, particularly those that may be unintentionally spread through forest machinery and operations.</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Identified gaps in the current expanded PoWFB</b>                                                                                                                                  | <b>Potential complementary activities for further guidance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| <b>Target 7</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p>Increase the understanding of the impact of pollution, e.g., acidification and eutrophication, and other pollutants (such as mercury and cyanide) on forest biodiversity; at genetic, species, ecosystem and landscape levels. (1.2.2.a.)</p> <p>Support monitoring programmes that help evaluate the impacts of air, soil and water pollution on forest ecosystems, and address the impacts of changing environmental conditions on forest ecosystems. (1.2.2.b.)</p> <p>Encourage the integration of forest biodiversity consideration into strategies and policies to reduce pollution. (1.2.2.c.)</p> <p>Promote the reduction of pollution levels that adversely affect forest biodiversity and encourage forest management techniques that reduce the impacts of changing environmental conditions on forest ecosystems. (1.2.2.d.)</p>                                                                           | <ul style="list-style-type: none"> <li>• Cumulative effects of pollution;</li> <li>• Guidance provided to avoid erosion;</li> <li>• Impact of pesticides.</li> </ul>                  | <p>Reduction of soil loss and the impacts of pesticides on forest biodiversity and human health.</p>                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Target 8</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p>*Taking into account the work of the Ad Hoc Technical Expert Group on Climate Change and Biodiversity:</p> <p>Promote monitoring and research on the impacts of climate change on forest biological diversity and investigate the interface between forest components and the atmosphere. (1.2.3.a.)</p> <p>Develop coordinated response strategies and action plans at global, regional and national levels. (1.2.3.b.)</p> <p>Promote the maintenance and restoration of biodiversity in forests in order to enhance their capacity to resist to, and recover from and adapt to climate change. (1.2.3.c.)</p> <p>Promote forest biodiversity conservation and restoration in climate change mitigation and adaptation measures. (1.2.3.d.)</p> <p>Assess how the conservation and sustainable use of forest biological diversity can contribute to the international work relating to climate change. (1.2.3.e.)</p> | <ul style="list-style-type: none"> <li>• Nature-based solution concept and practices;</li> <li>• Minimizing the negative impact of climate actions on forest biodiversity.</li> </ul> | <p>Integrated fire management and its techniques, including the assessment of the impacts of fire retardants on forest ecosystems;</p> <p>Specific use of forests as nature-based solutions, such as mangroves;</p> <p>Consideration of benefits and risks for biodiversity from carbon market-driven incentives for large-scale afforestation programmes;</p> <p>Apply guidance from the Paris Agreement<sup>41</sup> to forest restoration and management, including for market-based incentives mechanisms</p> |

<sup>41</sup> Adopted under the United Nations Framework Convention on Climate Change (see FCCC/CP/2015/10/Add.1, decision 1/CP.21, annex)

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Identified gaps in the current expanded PoWFB</b>                                                                 | <b>Potential complementary activities for further guidance</b>                                                                                                                                                                                                                                             |
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| <p>Identify policies, practices and measures aimed at addressing the causes and reducing impacts on forest biological diversity resulting from human-induced uncontrolled/unwanted fires, often associated with land clearing and other land use activities. (1.2.4.a.)</p> <p>*Promote understanding of the role of human-induced fires on forest ecosystems and on species, and of the underlying causes. (1.2.4.b.)</p> <p>Develop and promote the use of fire management tools for maintaining and enhancing forest biological diversity, especially when there has been a shift in fire regimes. (1.2.4.c.)</p> <p>Promote practices of fire prevention and control to mitigate the impacts of unwanted fires on forest biological diversity. (1.2.4.d.)</p> <p>Promote development of systems for risk assessment and early warning, monitoring and control, and enhance capacity for prevention and post-fire forest biodiversity restoration at the community, national and regional levels. (1.2.4.e.)</p> <p>Advise on fire-risk prediction systems, surveillance, public education and other methods to minimise human-induced uncontrolled/unwanted fires. (1.2.4.f.)</p> <p>Develop strategies to avoid the negative effects of sectoral programmes and policies which could induce uncontrolled forest fires. (1.2.4.g.)</p> <p>Develop prevention plans against devastating fires and integrate them into national plans targeting the biological diversity of forests. (1.2.4.h.)</p> <p>Develop mechanisms, including early warning systems, for exchange of information related to the causes of forest biodiversity loss, including fires, pests and diseases, and invasive species. (1.2.4.i.)</p> <p>Develop and promote management methods that restore or mimic natural disturbances such as fire, wind-throw and floods. (1.2.5.a.)</p> |                                                                                                                      | <p>Enhance forest ecosystem integrity and resilience by using nature-based solutions and/or ecosystem-based approaches as an objective for adaptation and mitigation and disaster risk reduction, considering the likely long-term ecosystem changes and relevant environmental and social safeguards;</p> |
| <b>Target 9</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                      |                                                                                                                                                                                                                                                                                                            |
| <p>See activities relevant to Target 5</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>The PoWFB would benefit from the consolidated knowledge and best practices on “sustainable biodiversity-based</p> | <p>Create synergy and avoid duplication with the proposal for potential further work under the CBD on sustainable biodiversity-based activities, products and services that benefit biodiversity.</p>                                                                                                      |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Identified gaps in the current expanded PoWFB</b>                                                                                                                                        | <b>Potential complementary activities for further guidance</b>                                                                                                                                                                                                                                                                                                                                               |
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| <b>Target 10</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p>Support activities of indigenous and local communities involving the use of traditional forest-related knowledge in biodiversity management. (1.4.1.a.)</p> <p>Develop, support and promote programmes and initiatives that address the sustainable use of timber and non-timber forest products. (1.4.1.b.)</p> <p>Support regional cooperation and work on sustainable use of timber and non-timber forest products and services, including through technology transfer and capacity-building within and between regions. (1.4.1.c.)</p> <p>Improve forest management and planning practices that incorporate socio-economic and cultural values to support and facilitate sustainable use. (1.4.1.d.)</p> <p>Promote cooperative work on the sustainable use of forest products and services and its relation to biodiversity conservation with the other members of the Collaborative Partnership on Forests. (1.4.1.e.)</p> <p>Encourage implementation of voluntary third-party credible forest certification schemes that take into consideration relevant forest biodiversity criteria and that would be audited, taking into consideration indigenous and local community rights and interests. (1.4.1.f.)</p> <p>*Set up demonstration sites that would illustrate forest conservation and on-ground delivery of goods and services through sustainable forest management, which are also representative of various types of forest, themes and regional needs, through case-studies. (1.4.1.g.)</p> <p>Facilitate and support a responsible private sector committed to sustainable harvesting practices and compliance with domestic laws through effective development and enforcement of laws on sustainable harvesting of timber and non-timber resources. (1.4.1.h.)</p> <p>*Invite Governments and relevant organizations to develop and forward to the Secretariat case-studies and research on the impacts of unsustainable timber and non-timber harvesting and related trade. (2.1.4.f.)</p> | <ul style="list-style-type: none"> <li>• Agroforestry and community forestry,</li> <li>• Forest contribution to people (socio-economic value of forest, alternative livelihoods)</li> </ul> | <p>Reduction of the agricultural footprint, thereby enabling the recovery of forest areas previously cleared;</p> <p>Establishing better socio-economic conditions for indigenous peoples and local communities, including the use of alternative livelihoods;</p> <p>Improvement of agroforestry to enhance biodiversity</p> <p>Also see potential areas for further guidance under Targets 1, 2 and 3.</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Identified gaps in the current expanded PoWFB</b>                                              | <b>Potential complementary activities for further guidance</b>                                                                                                                                                                                                                                                                                 |
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| <b>Target 11</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                   |                                                                                                                                                                                                                                                                                                                                                |
| <p>*Set up demonstration sites that would illustrate forest conservation and on-ground delivery of goods and services through sustainable forest management, which are also representative of various types of forest, themes and regional needs, through case-studies. (1.4.1.g)</p> <p>See activities relevant to Targets 5 and 10</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No significant gaps.                                                                              | See potential areas for further guidance under Targets 5 and 10.                                                                                                                                                                                                                                                                               |
| <b>Target 12</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                   |                                                                                                                                                                                                                                                                                                                                                |
| None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Urban forestry was not considered in the PoWFB.</li> </ul> | Provide and apply the principles of urban forestry and urban green space planning to urban development to enable green and blue spaces including by establishing guidelines for tree density, area and size of green spaces and for connectivity of these areas.                                                                               |
| <b>Target 13</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                   |                                                                                                                                                                                                                                                                                                                                                |
| <p>Develop national legislative, administrative policy measures on access and benefit-sharing on forest genetic resources, taking into account the provisions under Articles 8(j), 10(c), 15, 16 and 19 of the Convention on Biological Diversity and in conformity with future decisions of the Conference of the Parties, as appropriate. (1.4.4.e.)</p> <p>*Based on the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization, as adopted by the Conference of the Parties at its sixth meeting:</p> <p>Establish mechanisms to facilitate the sharing of benefits at local, national, regional and global levels. (1.5.1.a.)</p> <p>Strengthen capacity of indigenous and local communities to negotiate benefit-sharing arrangements. (1.5.1.b.)</p> <p>Promote dissemination of information about benefit-sharing experiences through the clearing-house mechanism and appropriate means at the local level. (1.5.1.c.)</p> | No significant gap.                                                                               | Guidance on how to ensure the fair and equitable sharing of benefits that arise from the utilization of forest genetic resources and from digital sequence information on forest genetic resources, as well as traditional knowledge associated with genetic resources, as appropriate, in accordance with relevant international instruments. |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Identified gaps in the current expanded PoWFB</b>                                    | <b>Potential complementary activities for further guidance</b>                                    |
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| <p>Develop legislation, administrative or policy measures on access and benefit-sharing for forest genetic resources, taking into account the draft Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization. (2.1.3.e.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                         |                                                                                                   |
| <b>Target 14</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                         |                                                                                                   |
| <p>Parties to formulate appropriate policies and adopt sets of priority targets for forest biological diversity to be integrated into national forest programmes, national sustainable development strategies, poverty reduction strategy papers, related non-forest programmes and national biological diversity strategies and action plans. Ensure that there is coherence and direct interaction between the different programmes. (2.1.2.a.)</p> <p>*Develop a set of indicators that might be used in assessing progress in implementing the national biodiversity strategies and action plans and relevant work programmes.(2.1.2.c.)</p> <p>Donor bodies and other financial institutions to incorporate forest biological diversity and sustainable use principles and targets into forest and related programmes, including watershed management, land-use planning, energy, transport, infrastructure development, education and agriculture, mineral exploitation, and tourism. (2.1.2.d.)</p> <p>Seek to harmonize policies at regional and subregional levels in the area of forest biological diversity. (2.1.2.e.)</p> <p>Develop strategies for effective enforcement of sustainable forest management and protected area regulations, including adequate resourcing and involvement of indigenous and local communities. (2.1.2.f.)</p> <p>*Encourage the Executive Secretary to coordinate and seek synergies between Convention on Biological Diversity, the United Nations Forum on Forests and the members of the Collaborative Partnership on Forests, including establishment of memoranda of understanding, as appropriate, between the Convention on Biological Diversity and the other members of the Collaborative Partnership on Forests, and recommend such an memorandum of understanding with the International Tropical Timber Organization and the United Nations Framework Convention on Climate Change as a first step. (2.1.2.h.)</p> | <ul style="list-style-type: none"> <li>• Strategic environmental assessments</li> </ul> | <p>Application of strategic environmental assessments as a part of an overall landscape plan.</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Identified gaps in the current expanded PoWFB</b>                                                                                                                                                                                                                                                                                    | <b>Potential complementary activities for further guidance</b>                                                                                                                                                                                                                                                                                                                                                              |
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| <p>Encourage Parties and countries to ensure that forest and forest-related laws adequately and equitably incorporate the provisions of the Convention on Biological Diversity and the decisions of the Conference of the Parties. (2.1.3.c.)</p> <p>Parties, Governments and relevant stakeholders to develop mechanisms and processes to work toward good governance to promote conservation and sustainable use of forest biological diversity. (2.1.3.g.)</p> <p>Develop mechanisms to ensure that monetary and non-monetary costs and benefits of forest biodiversity management are equitably shared between stakeholders at all levels. (2.2.1.a.)</p> <p>Increase knowledge on monetary and non-monetary cost-benefit accounting for forest biodiversity evaluation. (2.2.1.i.)</p> <p>Develop, test and disseminate methods for valuing forest biological diversity and other forest ecosystem goods and services and for incorporating these values into forest planning and management, including through stakeholder analysis and mechanisms for transferring costs and benefits. (2.2.1.b.)</p> <p>Incorporate forest biological diversity and other forest values into national accounting systems and seek to estimate such figures for subsistence economies. (2.2.1.c.)</p> |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Target 15</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p>For 15a):</p> <p>Facilitate and support a responsible private sector committed to sustainable harvesting practices and compliance with domestic laws through effective development and enforcement of laws on sustainable harvesting of timber and non-timber resources. (1.4.1.h.)</p> <p>*Invite Parties, Governments and relevant organizations to provide information on a voluntary basis to enable a better comprehension of the effects of unsustainable harvesting, exploitation of other forest resources and associated trade, as well as on the underlying causes, on forest biological diversity. On the basis of dissemination of this information countries may decide to take relevant measures such as enforcement actions. (2.1.4.a.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>• For 15a): Limited scope of industries other than forest management companies; more explicit language dealing with other industries is required.</li> <li>• For 15b): Insufficient link between the expansion of agricultural land and the loss of forests</li> <li>• For 15c): None</li> </ul> | <p>Promote due diligence in production and supply chains of non-forest industries to address risk of deforestation and forest degradation, taking into account national socio-economic conditions and legislation;</p> <p>Provide information to consumers to make informed decisions, by encouraging them to buy from legal, deforestation-free and sustainable supply chains, including through forest certification;</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Identified gaps in the current expanded PoWFB</b> | <b>Potential complementary activities for further guidance</b>   |
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| <p>Evaluate and reform, as required, legislation to include clear definition of illegal activities and to establish effective deterrents. (2.1.4.b.)</p> <p>Develop methods and build capacity for effective law enforcement. (2.1.4.c.)</p> <p>Develop codes of conduct for sustainable forest practices in logging companies and the wood-processing sector to improve biodiversity conservation. (2.1.4.d.)</p> <p>Seek to promote national laws and policies and international trade regulations are compatible with conservation and sustainable use of forest biological diversity. (2.2.1.h.)</p> <p>For 15b):</p> <p>Encourage and support the development and implementation of tracking and chain-of-custody systems for forest products to seek to ensure that these products are legally harvested. (2.1.4.e.)</p> <p>For 15c):</p> <p>See activities relevant to Target 13</p>                                                                                                                                                                     |                                                      | <p>Also relevant for Target 16.</p>                              |
| <b>Target 16</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                      |                                                                  |
| <p>Develop and disseminate analyses of the compatibility of current and predicted production and consumption patterns with respect to the limits of forest ecosystem functions and production. (2.2.1.g.)</p> <p>Increase broad-based awareness of the value of forest biological diversity through international, national and local public awareness campaigns. (2.3.1.a.)</p> <p>Promote consumer awareness about sustainably produced forest products. (2.3.1.b.)</p> <p>Increase awareness amongst all stakeholders of the potential contribution of traditional forest-related knowledge to conservation and sustainable use of forest biological diversity. (2.3.1.c.)</p> <p>Develop awareness of the impact of forest-related production and consumption patterns on the loss of forest biological diversity and the goods and services it provides. (2.3.1.d.)</p> <p>Increase awareness of the value of forest biological diversity amongst public authorities and decision makers through specific information and training actions. (2.3.1.e.)</p> | <p>No significant gap.</p>                           | <p>See potential areas for further guidance under Target 15.</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Identified gaps in the current expanded PoWFB</b>                                                                                                              | <b>Potential complementary activities for further guidance</b>                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Target 17</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>Monitor developments in new biotechnologies and ensure their applications are compatible with the objectives of the Convention on Biological Diversity with respect to forest biological diversity, and develop and enforce regulations for controlling the use of genetically modified organisms (GMOs) when appropriate. (1.4.4.f.)</p>                                                                                                                                                                                                                                                             | <p>No significant gap.</p>                                                                                                                                        | <p>The use of living modified trees should take into account the ongoing work under the Cartagena Protocol on Biosafety.</p>                                                                                                                                                                                                                                                                                            |
| <b>Target 18</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>Elaborate and implement economic incentives promoting forest biological diversity conservation and sustainable use. (2.2.1.d.)</p> <p>Eliminate or reform perverse incentives, in particular subsidies that result in favouring unsustainable use or loss of forest biological diversity. (2.2.1.e.)</p> <p>Provide market and other incentives for the use of sustainable practices, develop alternative sustainable income generation programmes and facilitate self-sufficiency programmes of indigenous and local communities. (2.2.1.f.)</p>                                                     | <p>No significant gap.</p>                                                                                                                                        | <p>See potential areas for further guidance under Target 19.</p>                                                                                                                                                                                                                                                                                                                                                        |
| <b>Target 19</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>Parties and donor bodies to develop and implement, strategies, in particular national financing strategies in the framework of national biodiversity strategies and action plans and national forest programmes, and provide adequate financial, human and technical resources (2.1.2.g.)</p> <p>Invite Parties, Governments and other relevant organizations to submit case-studies and research on the role of performance bonds in forest concessions, in the conservation and sustainable use of forest biological diversity; and request the Secretariat to make these available. (2.1.3.f.)</p> | <ul style="list-style-type: none"> <li>• Need for increased funding;</li> <li>• Innovative financial schemes with environmental and social safeguards.</li> </ul> | <p>Funding mechanisms for forest planning and management, including innovative mechanisms, repurposing subsidies as an opportunity for halting and reversing forest losses;</p> <p>Capacity building for indigenous peoples and local communities on how to access funds;</p> <p>Forest biodiversity-positive financing instruments;</p> <p>Point to the BIOFIN mechanisms to achieve better funding opportunities.</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Identified gaps in the current expanded PoWFB</b> | <b>Potential complementary activities for further guidance</b>                                                         |
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| <b>Target 20</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                      |                                                                                                                        |
| <p>Increase emphasis on capacity-building, research and training, public education and awareness, access to and transfer of information and technology, technical and scientific cooperation, with focus on capacities required to address forest biodiversity-related issues. (2.1.2.i.)</p> <p>Develop and implement a strategy and a plan of action and facilitate transfer of technology to provide infrastructure and training in developing countries, in order to monitor forest biological diversity and develop associated databases. (3.4.1.a.)</p> <p>Review and adopt a minimum forest classification for forest types, compatible with remote sensing technologies, that includes broad indicators of biodiversity that can be taken into account in all international and regional forest-related programmes, plans and activities. (3.1.1.a.)</p> <p>Adapt frequency of forest resource inventory at regional and global scales, where resources permit, preferably at least to every ten years. (3.1.1.b.)</p> <p>Seek ways of streamlining reporting between the different forest-related processes, in order to improve the understanding of forest quality change and improve consistency in reporting on sustainable forest management. (2.1.2.b.)</p> <p>*Review and contribute (from the biodiversity point of view) to standard forest definitions in cooperation with the United Nations Forum on Forests and the Collaborative Partnership on Forests to be used in global and regional reporting to the scale of forest types. (3.1.1.c.)</p> <p>Review existing national forest ecosystem classification systems and maps. (3.1.2.a.)</p> <p>Develop and apply national forest ecosystem classification systems and maps that include key components of forest biological diversity to be used in assessment reports on forest types including socio-economic and cultural aspects. (3.1.2.b.)</p> <p>Use adapted technology, for example geographic information system, to develop a baseline for assessing levels of deforestation and impacts on biodiversity. (3.1.2.c.)</p> | None.                                                | Create synergy and avoid duplication with the CBD long-term strategic framework for capacity-building and development. |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Identified gaps in the current expanded PoWFB</b> | <b>Potential complementary activities for further guidance</b>                                                                                                                                                      |
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| <p>Advance the development and implementation of international, regional and national criteria and indicators based on key measures within the framework of sustainable forest management. (3.2.1.a.)</p> <p>Develop and select international, regional and national criteria and where appropriate quantifiable, indicators for forest biological diversity, taking into account, as appropriate, existing work and processes on criteria and indicators on sustainable forest management, as well as the knowledge held by indigenous and local communities. Such criteria and indicators should be used for assessment reporting at least 10-year intervals. (3.2.1.b.)</p> <p>Develop and support focused research to improve understanding of the relationship between forest biological diversity and ecosystem functioning, taking into account forest ecosystem components, structure, functions and processes to improve predictive capability. (3.3.1.a.)</p> <p>Develop and support research to understand critical thresholds of forest biological diversity loss and change, paying particular attention to endemic and threatened species and habitats including forest canopies. (3.3.1.b.)</p> <p>Develop and support research on impact of current forest management practices for forest biodiversity within forests and on adjacent land. (3.3.1.d.)</p> |                                                      |                                                                                                                                                                                                                     |
| <b>Target 21</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                      |                                                                                                                                                                                                                     |
| <p>Support monitoring programmes that help evaluate the impacts of air, soil and water pollution on forest ecosystems, and address the impacts of changing environmental conditions on forest ecosystems. (1.2.2.b.)</p> <p>Promote monitoring and research on the impacts of climate change on forest biological diversity and investigate the interface between forest components and the atmosphere. (1.2.3.a.).</p> <p>Develop and implement education and awareness programmes on traditional uses of forest biological diversity in accordance with Article 8(j). (1.4.3.e.)</p> <p>Create an environment that fosters respect, and stimulates, preserves and maintains traditional knowledge related to forest biological diversity, innovations and practices of indigenous and local communities. (1.4.3.f.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | None.                                                | <p>Access to and application of remote sensing data, available databases, and tools to facilitate improved forest monitoring;</p> <p>Integration of indigenous traditional knowledge into management practices.</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Identified gaps in the current expanded PoWFB</b>                                                                                                                | <b>Potential complementary activities for further guidance</b>                                                                                                                                                                                                                                                                            |
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| <p>Increase awareness amongst all stakeholders of the potential contribution of traditional forest-related knowledge to conservation and sustainable use of forest biological diversity. (2.3.1.c.)</p> <p>Increase awareness of the value of forest biological diversity amongst public authorities and decision makers through specific information and training actions. (2.3.1.e.)</p> <p>Implement effective measures to recognize, respect, protect and maintain traditional forest-related knowledge and values in forest-related laws and forest planning tools, in accordance with Article 8(j) and related provisions of the Convention on Biological Diversity. (2.3.1.f.)</p> <p>Develop awareness of the value of forest biological diversity among forestry workers, owners of forest land, logging contractors, and consulting firms. (2.3.1.g.)</p> <p>Identify and prioritize relevant areas to carry out specific forest ecosystems surveys in priority areas for conservation and sustainable use of forest biodiversity. (3.1.3.a.)</p>                                                                                 |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                           |
| <b>Target 22</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                           |
| <p>Taking into account the outcome of the Ad Hoc Open-ended Inter-Sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity:</p> <p>Strengthen the capacity of, and provide incentives for, indigenous and local communities to generate opportunities for sustainable use of forest biodiversity and for access to markets. (1.4.3.a.)</p> <p>Strengthen the capacity of indigenous and local communities to resolve land rights and land use disputes in order to sustainably manage forest biodiversity. (1.4.3.b.)</p> <p>Encourage the conservation and sustainable use of forest biological diversity by indigenous and local communities through their development of adaptive management practices, using as appropriate traditional forest-related knowledge. (1.4.3.c.)</p> <p>Provide incentives for the maintenance of cultural diversity as an instrument to enhance forest biological diversity. (1.4.3.d.)</p> <p>Develop and implement education and awareness programmes on traditional uses of forest biological diversity in accordance with Article 8(j). (1.4.3.e.)</p> | <ul style="list-style-type: none"> <li>• Complete stakeholder representation and whole-of-society approach in implementation of forest related projects.</li> </ul> | <p>Refer to the programme of work on Article 8(j) and other provisions.</p> <p>Refer to the Gender Plan of Action under the Convention:</p> <p>Improving participation in planning and management of forests by all sectors of civil society, including women, youth, indigenous peoples and local communities, and disabled persons.</p> |

| <b>Relevant activities in the current expanded PoWFB</b><br><b>(Numbering is based on #Programme Element, #Goal, #Objective)</b><br><b>*Activities that could be retired</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Identified gaps in the current expanded PoWFB</b>                                                                         | <b>Potential complementary activities for further guidance</b>                                                               |
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| <p>Seek to resolve land tenure and resource rights and responsibility, in consultation with all relevant stakeholders including for indigenous and local communities, in order to promote the conservation and sustainable use of forest biodiversity. (2.1.3.b.)</p> <p>Implement effective measures to protect traditional knowledge and values in forest laws and planning tools. (2.1.3.d.)</p> <p>Implement effective measures to recognize, respect, protect and maintain traditional forest-related knowledge and values in forest-related laws and forest planning tools, in accordance with Article 8(j) and related provisions of the Convention on Biological Diversity. (2.3.1.f.)</p> |                                                                                                                              |                                                                                                                              |
| <b>Target 23</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                              |                                                                                                                              |
| <p>None.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Gender responsive approaches in implementation of forest related projects.</li> </ul> | <p>Refer to the Gender Plan of Action under the Convention</p> <p>See potential areas for further guidance on Target 22.</p> |

## Annex 2. CBD COP Decisions relevant to forest biodiversity or forest management, 1995-2024

| COP    | Decision | Year | Subject                                                                                                                                      |
|--------|----------|------|----------------------------------------------------------------------------------------------------------------------------------------------|
| COP 1  | N/A      | 1994 | General discussion of the role of the CBD in forests, but no decisions                                                                       |
| COP 2  | II/9     | 1995 | <a href="#">Forests and biological diversity</a>                                                                                             |
| COP 3  | III/12   | 1996 | <a href="#">Programme of work for terrestrial biological diversity: forest biological diversity</a>                                          |
| COP 4  | IV/7     | 1998 | <a href="#">Forest biological diversity</a>                                                                                                  |
| COP 5  | V/4      | 2000 | <a href="#">Progress report on the implementation of the programme of work for forest biological diversity</a>                               |
| COP 6  | VI/22    | 2002 | <a href="#">Forest biological diversity</a>                                                                                                  |
| COP 7  | VII/1    | 2004 | <a href="#">Forest biological diversity</a>                                                                                                  |
| COP 8  | VIII/19  | 2006 | <a href="#">Forest biological diversity: implementation of the programme of work</a>                                                         |
| COP 9  | IX/5     | 2008 | <a href="#">Forest biodiversity</a>                                                                                                          |
| COP 10 | X/2      | 2010 | <a href="#">Strategic Plan for Biodiversity and Aichi Targets</a>                                                                            |
|        | X/33     |      | <a href="#">Biodiversity and climate change</a>                                                                                              |
|        | X/36     |      | <a href="#">Forest biodiversity – Cooperation with UNFF and ITTO and LFCC Secretariat</a>                                                    |
| COP 11 | XI/19    | 2012 | <a href="#">Biodiversity and climate change</a>                                                                                              |
| COP 12 | XII/6    | 2014 | <a href="#">Cooperation with other conventions, international organizations and initiatives</a>                                              |
|        | XII/19   |      | <a href="#">Ecosystem conservation and restoration</a> (FERI)                                                                                |
| COP 13 | XIII/3   | 2016 | <a href="#">Strategic actions to implement the Aichi Targets</a>                                                                             |
|        | XIII/5   |      | <a href="#">Ecosystem restoration</a>                                                                                                        |
|        | XIII/7   |      | <a href="#">Forest biodiversity: the role of international organizations in supporting the achievement of the Aichi Biodiversity Targets</a> |
| COP 14 | XIV/4    | 2018 | <a href="#">Biodiversity and human health</a>                                                                                                |
|        | XIV/6    |      | <a href="#">Pollinators</a>                                                                                                                  |
|        | XIV/7    |      | <a href="#">Sustainable wildlife management</a>                                                                                              |
|        | XIV/30   |      | <a href="#">Cooperation with other conventions international organizations and initiatives</a>                                               |
| COP 15 | XV/4     | 2022 | <a href="#">Global Biodiversity Framework</a>                                                                                                |
| COP 16 | XVI/L30  | 2024 | <a href="#">Cooperation with other agencies</a>                                                                                              |

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