

SUBSIDIARY BODY ON IMPLEMENTATION
Third meeting
Online, 16 May-13 June 2021
Agenda item 7

**CAPACITY-BUILDING AND DEVELOPMENT, TECHNICAL AND SCIENTIFIC
COOPERATION AND TECHNOLOGY TRANSFER**

Draft recommendation submitted by the Chair

The Subsidiary Body on Implementation *recommends* that the Conference of the Parties adopt a decision along the following lines:

The Conference of the Parties,

A. Capacity-building and development

Recalling decisions [XIII/23](#) and [14/24](#),

Noting with appreciation the support provided by Parties, other Governments, the Global Environmental Facility relevant organizations and other stakeholders for capacity-building and development and technical and scientific cooperation activities to assist developing country Parties, Parties with economies in transition, indigenous peoples and local communities, women and youth,

Reaffirming the need to promote strategic and coherent approaches to capacity-building and development and technical and scientific cooperation in supporting the implementation of the Convention and its protocols,

Underscoring, the critical importance of capacity-building and development, technical and scientific cooperation and technology transfer for the effective implementation of the post-2020 global biodiversity framework, [while *acknowledging* that some Parties might not yet have the necessary capacities to fully implement the post-2020 global biodiversity framework and related decisions taken by the Conference of Parties and its fifteenth meeting],

Taking note of the final report on the implementation of the short-term action plan (2017-2020) to enhance and support capacity-building for the implementation of the Convention and its Protocols, and the lessons learned,¹

[*Taking note of*] [*Welcoming*] the United Nations Summit on Biodiversity held on 30 September 2020,²

[*Welcoming* partnerships and commitments among organizations, such as PANORAMA: Solutions for a Healthy Planet, the Biodiversity and Ecosystem Services in Territories of European Countries Overseas Initiative (BEST) and the Biodiversity and Protected Areas Management programme (BIOPAMA) to support implementation,]

[*Acknowledging* the importance of increasing the provision and mobilization of resources from all sources for the effective implementation of the post-2020 global biodiversity framework, in particular for

¹ The preliminary final report is available as CBD/SBI/3/INF/14; the final report will be issued in due course.

² See <https://www.un.org/pga/75/united-nations-summit-on-biodiversity-summary>.

capacity-building and development, and *recalling* Articles 20 and 21 of the Convention, as well as taking into account decision 15/-- on resource mobilization,]

[1. *[Adopts][Takes note of]* the long-term strategic framework for capacity-building and development to support nationally determined priorities for the implementation of the post-2020 global biodiversity framework, contained in annex I to the present decision;^{3]}

2. *[[Welcomes]* the capacity-building action plan for the Cartagena Protocol on Biosafety and its Supplementary Protocol,⁴ which has been developed to be complementary to the long-term strategic framework referred to in paragraph 1 above;]

3. *Takes note* of the findings and recommendations of the evaluation of the strategic framework for capacity-building and development to support the effective implementation of the Nagoya Protocol,⁵ and *welcomes* decision NP-4/-- requesting the Executive Secretary to prepare its revision in line with the long-term strategic framework referred to in paragraph 1 above;

4. *Urges* Parties [according to their capabilities] and *invites* other Governments, indigenous peoples and local communities, women and youth, the capacity-building task force of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, relevant organizations and other stakeholders, to use [the guidance provided in the long-term strategic framework for capacity-building and development] as a flexible framework in the design, implementation, monitoring and evaluation of their capacity-building and development initiatives and programmes supporting the achievement of the vision, mission, goals and targets of the post-2020 global biodiversity framework;

5. *Urges* Parties [according to their capabilities] and *invites* Governments [to put in place enabling environments (including relevant policies, legislation and incentives, [and sufficient funding]) to promote and facilitate capacity-building and development at various levels, [according to national legislation] in partnership with relevant stakeholders, including indigenous peoples and local communities, women and youth organizations, in accordance with Article 20 of the Convention;]

6. *Invites* biodiversity-related multilateral environmental agreements and processes to consider the long-term strategic framework when designing their capacity-building and development strategies, action plans, work programmes and mechanisms, as appropriate, to foster synergies and avoid duplications;

7. *[Also invites]* Parties, [in accordance with Articles 20 and 21 of the Convention] as well as other Governments, and all relevant organizations [in a position to do so], to provide financial and technical support [from all sources] to enable all developing country Parties, including in particular [least developed countries, small island developing States], and Parties with economies in transition, indigenous peoples and local communities and relevant stakeholders, including women and youth organizations, to design and implement capacity-building and development programmes aligned with the long-term strategic framework [and in accordance with national priorities and legislation]];

8. *[Invites]* the [governing bodies of the] [secretariats of the] biodiversity-related conventions and other multilateral environmental agreements, in collaboration with governments, indigenous peoples and local communities, women and youth organizations, and other relevant organizations and stakeholders, to prepare, immediately following the adoption of the post-2020 global biodiversity framework, thematic capacity-building and development action plans for specific targets or groups of related targets, and to develop dedicated global, regional and subregional programmes to implement those thematic plans, in line with the long-term strategic framework and the Convention's post-2020 gender plan of action, as appropriate;]

³ The long-term strategic framework is further elaborated in document [CBD/SBI/3/7/Add.1](#).

⁴ See CBD/SBI/3/18.

⁵ See CBD/SBI/3/16.

9. [*Urges* Parties [according to their capabilities] and *invites* other Governments to identify and prioritize capacity-building and development needs, including with the participation of indigenous peoples and local communities, women and youth, and relevant stakeholders, and to integrate capacity-building and development components in their national biodiversity strategies and action plans while updating them in line with the post-2020 global biodiversity framework and/or develop dedicated biodiversity capacity-building and development action plans, as appropriate];

10. [*Urges* Parties [according to their capabilities] and *invites* other Governments and relevant organizations to institutionalize and deliver capacity-building and development interventions as part of their regular policies, plans and programmes, as appropriate];

11. [*Urges* Parties [according to their capabilities] and *invites* other Governments and relevant organizations, [in accordance with Article 20 of the Convention], to allocate [additional] financial resources to support biodiversity capacity-building and development, taking into account the priority needs identified in national biodiversity strategies and action plans and/or national capacity-building and development strategies as well as those identified by indigenous peoples and local communities, women and youth organizations];

12. [*Urges* Parties [according to their capabilities] and *invites* other Governments to include biodiversity capacity-building and development, [as appropriate], in relevant development cooperation frameworks, partnerships and programmes];

13. [*Invites* Parties in accordance with Articles [14], 16, 18 and [19] to enhance and support capacity-building cooperation activities, especially in developing countries, for the implementation of the Convention and its protocols and the post-2020 global biodiversity framework, taking into account synergies between capacity-building and technology transfer, technical and scientific cooperation and effective participation in biotechnological research];

14. *Invites* universities and other academic institutions to develop and integrate into their curricula specialized and transdisciplinary academic courses and programmes and/or expand and strengthen existing ones, generate and share new knowledge, and implement continuing education programmes to support the post-2020 global biodiversity framework with the full and effective participation of indigenous peoples and local communities, women and youth;

15. *Invites* relevant organizations and regional and subregional bodies, including regional economic integration organizations, to promote sharing of expertise and information, to strengthen existing regional and subregional support networks or establish new ones as appropriate, to provide, upon request, assistance to enable national and subnational government institutions, local authorities and non-government actors, including indigenous peoples and local communities, women and youth organizations, within the respective regions or subregions to strengthen their capacities, while also mobilizing and fostering effective use and retention of the capacities developed;

**[16. *Invites* the United Nations Environment Management Group, in collaboration with the Liaison Group of Biodiversity-related Conventions, to designate a biodiversity capacity-building and development task team to foster United Nations system-wide synergy, coherence and effectiveness in the provision of capacity-building and development support and guidance for the implementation of the post-2020 global biodiversity framework,[in line with the proposed United Nations common approach to integrating biodiversity and [nature-based solutions] for sustainable development into United Nations policy and programme planning and delivery⁶];

17. [*Invites* regional teams of the United Nations Sustainable Development Group and the United Nations regional commissions to initiate and facilitate the coordination and synergistic

** It was proposed that this paragraph be deleted if Co-Chairs' proposal in paragraph 19 (f) below is accepted.

⁶ See General Assembly resolution [75/233](#) and [CEB/2021/HLC41/CRP.2](#).

implementation of capacity-building and development interventions in support of the post-2020 global biodiversity framework];

18. *[Also invites* United Nations Resident Coordinators and the United Nations country teams, in consultation with the United Nations Inter Agency Group for Indigenous Peoples and other relevant United Nations agencies, to integrate biodiversity capacity-building and development into country-level United Nations sustainable development cooperation frameworks to support national implementation of the post-2020 global biodiversity framework and the Sustainable Development Goals];

19. *Requests* the Executive Secretary, subject to the availability of resources:

(a) To promote awareness of the long-term strategic framework [including through the creation of a specific section in the clearing-house mechanism and linked to the technical and scientific cooperation website] [including through the creation of a dedicated web page] as part of the Secretariat's capacity-building and development portal;

(b) To [develop and] make available through the clearing-house mechanism of the Convention and the clearing-houses of the Protocols [additional] [existing] [guidance on] capacity-building and development, including [new and innovative tools], methods and case studies on good practices and lessons learned that can assist Parties, indigenous peoples and local communities, women and youth organizations, and other relevant stakeholders in their capacity-building and development efforts [and to monitor and receive new and updated tools, methods, and cases studies as necessary];

[(c) To review the capacity and technology absorption and sustaining abilities of small island developing States and develop specific tools, methods and identify lessons on maintaining absorbed capacities and technologies;]

[(d) To enable Parties, indigenous peoples and local communities, women and youth organizations, and other relevant organizations to prepare, immediately following the adoption of the post-2020 global biodiversity framework, thematic capacity-building and development action plans for specific 2030 targets or groups of related targets, as appropriate, [and taking into account needs and gaps previously identified and decided by Parties with special consideration for the development of an island biodiversity capacity-building and development action plan];]

[(e) To support and advise Parties to integrate capacity-building and development components into their national biodiversity strategies and action plans;]

**[(f) To invite the United Nations Environment Management Group, in collaboration with the Liaison Group of Biodiversity-related Conventions, to designate a biodiversity capacity-building and development task team to foster United Nations system-wide synergy, coherence and effectiveness in the provision of capacity-building and development support and guidance for the implementation of the post-2020 global biodiversity framework in line with the quadrennial comprehensive policy review of operational activities for development of the United Nations system⁷];

[(g) To develop, in collaboration with relevant partners and stakeholders, including indigenous peoples and local communities, women and youth, complementary indicators and a methodology for measuring progress in the achievement of the long-term strategic framework goals and for enabling Parties, indigenous peoples and local communities, women and youth organizations, to monitor, assess and report on capacity-building and development at the national level, in line with the indicators to be adopted under target 18 of the post-2020 global biodiversity framework;]

[(h) To convene, in collaboration with partners, [a workshop on capacity-building and development] [the first biodiversity capacity-building and development forum], to facilitate networking and share experiences, good practices and lessons learned in capacity-building and development for biodiversity, [in parallel] [back-to-back] with [the sixteenth meeting of the Conference of the Parties][twenty-sixth

⁷ Ibid.

meeting of the Subsidiary Body on Scientific, Technical and Technological Advice], [and to facilitate the participation and inclusion of the perspectives of indigenous peoples and local communities, women and youth]]];

[(i) To prepare updates on the status of the long-term strategic framework for consideration by the Subsidiary Body on Implementation;]

[(j) To undertake, in collaboration with other biodiversity-related conventions and partners, a review of the long-term strategic framework in 2025 [in conjunction with the mid-term review and global stocktake of the post-2020 global biodiversity framework] to assess its use by Parties, indigenous peoples and local communities, women and youth organizations, and other relevant stakeholders and, if necessary, propose updates to ensure its continued relevance and effectiveness];

[(k) To commission an independent evaluation of the long-term strategic framework in 2029 and submit a report to facilitate its review by the Subsidiary Body on Implementation and the Conference of the Parties in conjunction with the review of the post-2020 global biodiversity framework];

B. Technical and scientific cooperation

Recalling decisions 14/24 B, XIII/23, XIII/31, XII/2 B, X/16, IX/14, VIII/12 and VII/29 regarding technical and scientific cooperation and technology transfer,

Reaffirming that technical and scientific cooperation is essential to the effective implementation of the post-2020 global biodiversity framework,

Acknowledging the close interlinkages between technical and scientific cooperation and the other means of implementation [and the need for Parties to consider them as a package and not in isolation],

Taking note of the progress report on technical and scientific cooperation, including the achievements made under the Bio-Bridge Initiative, presented in document CBD/SBI/3/INF/18,

[20. *Adopts* the proposals to strengthen technical and scientific cooperation in support of the post-2020 global biodiversity framework contained in annex II below;]

21. [*Takes note* of the proposals for an inclusive process to review and renew technical and scientific cooperation programmes contained in annex III below, and] *requests* the Executive Secretary, subject to the availability of resources, [to commission the review process] as outlined in annex III below, and to submit a report for [peer review [by Parties] prior to the] consideration by the Subsidiary Body on Implementation at its fourth meeting;

22. [*Urges* Parties, [according to their capabilities], and *invites* other Governments and relevant organizations to recognize and support the important role of science, technology, innovation and other knowledge systems in supporting the implementation of the goals and targets of the post-2020 global biodiversity framework towards achieving the 2050 Vision of “living in harmony with nature”];]

23. *Reminds* Parties, pursuant to decision XIII/23, paragraph 6, to identify and communicate their biodiversity-related technical and scientific needs and requests for assistance, and *invites* Parties, other Governments and relevant organizations [in a position to do so] to register as providers of technical assistance and offer support to address the needs identified by Parties through the technical and scientific cooperation and capacity-building and development matchmaking platform of the clearing-house mechanism and the Clearing Houses of the Protocols;

24. [*Urges*][*Invites*][*Encourages*] Parties and *invites* other Governments to put in place enabling environments (including relevant policies, legislation and incentives) to promote and facilitate technical and scientific cooperation [with other Parties, in particular developing country Parties], including through joint research programmes and joint ventures for the development of appropriate biodiversity-related technologies and innovative solutions, [ensuring that the proposed cooperation is based on the precautionary approach and [is in line with the objectives of the Convention]][with relevance for the Convention]][in accordance with

Article 20 of the Convention], ensuring full and effective participation of indigenous people and local communities, women and youth;]

[25. *Encourages* Parties and other Governments, in collaboration with relevant partners and financial institutions [to support the establishment or strengthening of incubator programmes and accelerator mechanisms] to promote and facilitate the development of appropriate biodiversity-related technologies and innovations, including biotechnology, as well as locally designed solutions and indigenous technologies of indigenous peoples and local communities, with their [free], prior and informed consent [or approval and involvement], [in accordance with national legislation], and [with relevance for the Convention][in accordance with Article 20 of the Convention], and to increase technology transfer for all Parties, in particular for developing country Parties;]

[26. *Further encourages* Parties, other Governments and relevant organizations to take practical steps to promote and strengthen relevant networks of institutions and communities of practice to facilitate the exchange of biodiversity-related information, experiences, skills and technical know-how, among others, through networks of national and regional clearing-house mechanisms;]

[27. *Takes note* of the outcomes and key messages of the fifth Science-Policy Forum on Biodiversity and the eighth International Conference on Sustainability;⁸]

[28. *Urges* Parties, [according to their capabilities], and *invites* other Governments to develop new and pilot solutions, based on innovative technologies embedded in local contexts, to address the Sustainable Development Goals, while enhancing the protection of biological diversity, and to scale them up at the national and regional levels;]

[29. *Decides* to establish an Informal Advisory Group on Technical and Scientific Cooperation, [with experts from indigenous peoples and local communities and relevant organizations,] to provide strategic advice on practical measures, tools and opportunities to promote and facilitate technical and scientific cooperation in accordance with the terms of reference contained in annex IV below;]

[30. *Also decides*, in the light of the advantages, disadvantages and costs presented in document CBD/SBI/3/INF/16, to pursue [option B] [a hybrid of] [options A and B] [options B and C] of the institutional mechanisms to promote and facilitate technical and scientific cooperation proposed in section IV of annex II below, whereby a global technical and scientific cooperation support centre would work together with a network of regional support centres, other relevant organizations, and indigenous peoples and local communities;]

[31. *Invites* the United Nations Environment Programme to establish, in collaboration with relevant organizations [and indigenous peoples and local communities], the global technical and scientific cooperation support centre for biodiversity to catalyse, facilitate and enhance technical and scientific cooperation and technology transfer, [ensuring equitable geographic coverage,] to support [the implementation of the three objectives of the Convention and the] achievement of the goals and targets of the post-2020 global biodiversity framework [and of the 2030 Agenda for Sustainable Development,⁹] [in line with Articles 16, 18 and 19 of the Convention,] drawing on the lessons learned from, and maximizing synergies with [other technology transfer initiatives and mechanisms, including] the Climate Technology Centre and Network, [the BIOPAMA Regional Observatories and Reference Information Systems, the technology facilitation mechanism under the 2030 Agenda, WIPO GREEN, and others, and to clearly define the costs of the centre in order to mobilize the necessary funds for its operations];]

[32. [*Decides*][*Proposes*] that the core functions of [the global support centre and] the regional support centres and organizations, will be [carried out in coordination with the Secretariat and in line with

⁸ See CBD/SBSTTA/24/INF/28.

⁹ See General Assembly resolution [70/1](#) of 25 September 2015 entitled “Transforming our world: the 2030 Agenda for Sustainable Development”.

the long-term strategic framework for capacity-building and development to support the implementation of the post-2020 global biodiversity framework:]

[(a) To promote and facilitate, [on a demand-driven basis,] technical and scientific cooperation and technology transfer among Parties, [especially from developed country Parties to developing country Parties,] [to support the implementation of [the Convention and] the post-2020 global biodiversity framework], [including through joint research programmes and joint ventures for the development of technologies relevant to the objectives of this Convention];]

[(b) To provide a “one-stop service centre” for Parties to biodiversity-related conventions [and other multilateral environmental agreements,] indigenous peoples and local communities, [women and youth organizations,] and other relevant stakeholders to access technical and scientific knowledge, expertise, tools and other resources, [taking into account the science, technology and innovation capability gaps identified by Parties, especially developing country Parties];]

[(c) To provide [Parties, especially developing country Parties,] access to information on opportunities for technical and scientific cooperation, technology transfer and innovations [and effective participation in biotechnological research];]

[(d) To mobilize resources to provide punctual and targeted support for small-scale projects and activities to address specific identified technical and scientific needs;]

[(e) To facilitate matchmaking between [developing country] Parties with specific needs and [developed country] Parties or organizations in a position to provide assistance in response to the priority needs identified;]

[(f) To catalyse and support the development, implementation, monitoring and evaluation of technical and scientific cooperation projects and programmes [that][in order to]:

(i) Promote and incubate international and regional cooperation and partnerships using a programmatic approach;

[(ii) Facilitate the development, transfer and diffusion of technologies and innovative [national, regional and] local solutions, including [those of indigenous peoples and local communities, with their [free,] prior and informed consent,] through scalable initiatives;]

[(iii) Facilitate access to and utilization of available scientific knowledge, information and data, as well as indigenous and traditional knowledge, subject to [free], prior and informed consent;]

[(g) To strengthen capacities, [with an emphasis on innovation,] of regional and national centres to facilitate technical and scientific cooperation;]

[(h) To facilitate knowledge sharing and organizational learning [through appropriate tools, means and methodologies];]

[(i) To identify, collate and disseminate good practices and lessons learned regarding biodiversity-related technical and scientific cooperation, technology transfer and innovation, [and effective participation in biotechnological research];]

[(j) To maximize synergies and collaborate with other technology transfer initiatives and mechanisms;]

[(k) To perform such other activities as may be necessary;]

[33. *Also decides* that the global support centre shall begin its operations as soon as possible;]

[34. [*Requests*][*Invites*] the Global Environment Facility to support eligible activities [of the global technical and scientific cooperation support centre for biodiversity [and, as appropriate,][as well as] of the regional support centres and organizations] [contributing to both technical and scientific

capacity-building and development at global, regional and national levels, as appropriate, including activities] [referred to in paragraph 30 above];]

[35. *Invites* [developed country] Parties, other Governments, relevant organizations, [and other stakeholders] [in a position to do so] to provide financial, technical and human resources to support the global technical and scientific cooperation support centre for biodiversity [and, as appropriate,][as well as] activities of the regional support centres and organizations referred to in paragraph 30 above, [in line with Articles 16 and 18 of the Convention, while noting that this support does not in any way replace their commitments under Article 20 of the Convention];]

36. *Requests* the Executive Secretary, subject to the availability of resources:

(a) To further promote and facilitate technical and scientific cooperation in support of the post-2020 global biodiversity framework, in collaboration with [Parties,] relevant partners, [the global support centre and regional support centres], other organizations [and indigenous peoples and local communities];

[(b) To communicate to the global technical and scientific cooperation support centre the priorities established by Parties regarding capacity-building and development;]

[(c) To be actively involved in coordinating a harmonized approach in the delivery of the proposed support tools;]

(d) To maintain synergy and collaboration with biodiversity-related conventions, [the United Nations Framework Convention on Climate Change,] and relevant organizations, initiatives and networks, [including the Consortium of Scientific Partners on Biodiversity, the Global Partnership for Business and Biodiversity, and others with technical and scientific expertise, technologies and information, and/or] that are involved in biodiversity-related technical and scientific cooperation;

[(e) To maintain active communication with Parties and relevant stakeholders with a view to keeping them and the public informed of the achievements of the technical and scientific cooperation support activities;]

[(f) To organize, in collaboration with [partners][relevant organizations] [and indigenous peoples and local communities], [biodiversity] science forums, technology and innovation expos, round tables and other events to showcase cooperation initiatives, technologies and opportunities;]

(g) To compile relevant information related to technical and scientific cooperation and technology transfer in the field of biological diversity [for the implementation of the three objectives of the Convention] and to make it available to Parties through the clearing-house mechanism, in line with the knowledge management component of the post-2020 global biodiversity framework;

[(h) To perform such other activities as may be necessary to facilitate technical and scientific cooperation in support of the post-2020 global biodiversity framework;]

(i) To prepare relevant documents and reports on technical and scientific cooperation and technology transfer for consideration by [the Subsidiary Body on Implementation at its fifth meeting and] the Conference of Parties [at its seventeenth meeting] [and its subsidiary bodies];

[(j) To submit a report on the work of the Informal Advisory Group on Technical and Scientific Cooperation for peer review by Parties and for subsequent consideration by the Subsidiary Body on Scientific, Technical and Technological Advice at a meeting to be held prior to the sixteenth Conference of the Parties.]

*Annex I***LONG-TERM STRATEGIC FRAMEWORK FOR CAPACITY-BUILDING AND DEVELOPMENT****I. INTRODUCTION**

1. The long-term strategic framework for capacity-building and development is intended to guide the capacity-building and development efforts of government and non-government actor¹⁰, including indigenous peoples and local communities, in support of [priorities determined by Parties in their national biodiversity strategies and action plans for the implementation of] the post-2020 global biodiversity framework. It seeks to catalyse institutionalized capacity-building and development interventions that are robust, coordinated and delivered in a holistic and complementary manner and promote coherence, efficiency and effectiveness of capacity-building and development efforts at all levels through strategic, coordinated and harmonized approaches.

2. The study carried out to provide the knowledge base for the framework¹¹ noted that capacity-building and development efforts, especially in developing countries, are fragmented and undertaken in silos, largely through externally funded short-term projects. Many countries have not yet adopted systemic, long-term and institutionalized approaches to capacity-building and development. Capacity-building and development interventions are often implemented in an ad hoc manner and not as part of coherent long-term programmes, and without an adequate enabling environment. Consequently, many have not succeeded in bringing about the desired changes in a sustainable manner. The strategic framework aims to help address these shortcomings.

3. In this strategic framework, capacity is described as “the ability of people, organizations and societies as a whole to achieve the biodiversity-related goals and action targets”, and capacity-building and development is understood as “the process whereby people, organizations and society as a whole unleash, strengthen, create, adapt and maintain capacity over time to achieve positive biodiversity results.”¹² Capacity-building and development is considered at three levels: the enabling environment, organizational and individual levels.

II. STRATEGIC DIRECTION AND OUTCOMES**A. Overall vision and theory of change**

4. The long-term vision of this strategic framework is that by 2050 all societies will be fully empowered and effectively living in harmony with nature. The medium-term vision is that by 2030 governments and relevant non-government actors will have the requisite capacities to effectively and sustainably contribute to the achievement of the goals and 2030 targets of the post-2020 global biodiversity framework and the implementation of the three objectives of the Convention and its Protocols.

5. The overall goal is to support ongoing development and strengthening of the capacities necessary for the achievement of the goals and targets of the post-2020 global biodiversity framework. This calls for enhancing the coherence, efficiency and effectiveness of capacity-building and development initiatives at all levels and ensuring alignment with relevant initiatives supporting the achievement of the Sustainable

¹⁰ In this framework, government actors include, as appropriate, government institutions at national and subnational levels. The term “non-government actors” includes United Nations organizations and programmes, multilateral environmental agreements, intergovernmental organizations, community organizations, indigenous peoples and local communities, academia, faith-based and religious groups, women and youth organizations, non-governmental organizations, media, the scientific community, and private sector entities such as private financial institutions, businesses, industries, insurers, producers and investors.

¹¹ A report of the study is available as information document [CBD/SBI/3/INF/9](#).

¹² Adapted from the definition given in UNDG “Capacity building and development: UNDAF Companion Guidance” 2017 available at <https://unsdg.un.org/resources/capacity-development-undaf-companion-guidance>.

Development Goals. These changes can only be achieved by having in place effective, agile and continuously learning organizations¹³ supported with [sufficient] appropriate financial, technical and human resources.

6. The long-term strategic framework, similarly to the post-2020 global biodiversity framework, is underpinned by a theory of change, which is elaborated and visualized in figure 3 of document CBD/SBI/3/7/Add.1.¹⁴ The theory of change outlines the intended pathways of change in capacity, the underlying assumptions and the anticipated high-level changes/outcomes. The purpose of the theory of change is to ensure that relevant actors are conscious of the causal relationships, the change pathways, the expected changes/capacity results, and the important contextual factors and underlying assumptions.

B. Capacity results

7. The strategic framework establishes indicative high-level and long-term capacity-building and development results relevant to [the implementation of the three objectives of the Convention and] the achievement of the post-2020 global biodiversity framework goals and targets and the Sustainable Development Goals (see Box 1). Government and relevant non-government actors are also encouraged to set capacity-building and development targets at various levels and clearly include them in relevant documents, such as national biodiversity strategies and action plans, programme strategies and plans. Capacities can be categorized as “functional” capacities (cross-cutting skills needed to get things done and not associated with any one particular sector or theme); and “technical” capacities (associated with specific areas of expertise, sectors or themes).

Box 1. Expected capacity results

Long-term, high-level outcomes

- Successful implementation of national biodiversity strategies and action plans [and, if appropriate, their development]
- Achievement of 2030 targets and 2050 vision of the post-2020 global biodiversity framework
- Biodiversity mainstreamed throughout sectors and society
- [Substantial increase in access to and transfer of technology and in effective participation in scientific and technical cooperation, particularly for developing countries]

Medium-term outcomes

- Sound enabling frameworks and institutional arrangements support achievement of national biodiversity strategies and action plans
- Strategic partnerships and learning networks enhance biodiversity conservation and sustainable use efforts along with the equitable sharing of benefits arising from the use of genetic resources
- High-quality programmes and projects that are technically sound, have realistic and achievable plans, address gender and youth considerations, and embed monitoring
- Effective monitoring and evaluation (M&E) and learning processes embedded into projects and programmes from the start, to support evidence-based decision-making at all levels
- Reinforcing mechanisms, incentive structures and investments ensure utilization and retention of capacity of all types at all levels

¹³ An organization can become a “learning organization” by applying existing internal knowledge and learning from past experiences and lessons with the aim of improving its performance (e.g. see <https://warwick.ac.uk/fac/soc/wbs/conf/olkc/archive/olk4/papers/villard.pdf>).

¹⁴ The development of this theory of change took into account the technical guidance provided as part of the United Nations Development Assistance Framework (UNDAF) process: <https://unsdg.un.org/resources/theory-change-undaf-companion-guidance>.

III. GUIDING PRINCIPLES

8. Governments and non-governmental actors [including indigenous peoples and local communities and relevant international organizations,] are encouraged to apply the following overarching guiding principles, [in support of priorities for capacity-building and development determined by Parties in their national biodiversity strategies and action plans], which, if applied, would contribute to more effective and sustainable capacities to support the post-2020 global biodiversity framework:

- (a) Inclusive analysis of existing capacities and needs is essential to ensure effective interventions;
- (b) Country ownership and commitment should be cornerstones for capacity-building and development actions;
- (c) Strategic and integrated system-wide approaches to capacity-building and development should be promoted;
- (d) Interventions should be designed and implemented according to recognized good practice and lessons learned;
- (e) Gender and youth perspectives should be fully integrated into biodiversity capacity-building and development efforts taking into account the post-2020 Gender Plan of Action;
- (f) Monitoring, evaluation and learning frameworks should be incorporated into capacity-building and development strategies, plans and programmes from the start.

IV. KEY STRATEGIES TO IMPROVE CAPACITY-BUILDING AND DEVELOPMENT

9. Government and non-government actors are encouraged to adopt, as appropriate, the strategies below to enhance capacity-building and development initiatives in support of the post-2020 global biodiversity framework and ensure alignment and synergy with the Sustainable Development Goals and other relevant national and global processes. Each country should decide which strategies to apply, taking into account its needs, circumstances and local contexts:

- (a) *Institutionalize capacity-building and development*: Ensure that capacity-building and development interventions are planned and delivered as an integral part of the institutions' broader corporate strategic plans, ongoing human resources and organizational development and knowledge management, organizational learning, mentorship and peer-to-peer support, nurturing of communities of practice, and systematic sharing of experiences, best practices and lessons learned;
- (b) *Integrate long-term capacity-building and development into national biodiversity strategies and action plans*: Integrate capacity-building and development components into national biodiversity strategies and action plans and similar strategic documents or develop dedicated national capacity-building and development action plans, as appropriate,¹⁵ to identify the core capacity-building and development needs, goals, targets and milestones and foster their alignment with the strategic framework, alongside initiatives on related Sustainable Development Goals. This would help ensure that capacity-building and development for biodiversity is planned strategically and streamlined into national development investments and budgeting processes; [These plans are encouraged to include plans on youth engagement and capacity-building and development and integrate inter-generational initiatives;]
- (c) *Increase focus on life-long learning*;
- (d) *Align biodiversity capacity-building and development with broader cross-sectoral plans and programmes*: Apply the whole-of-government and whole-of-society approaches to national implementation proposed in the post-2020 global biodiversity framework to galvanize capacity-building and development for

¹⁵ At least 19 Parties to the Convention on Biological Diversity have prepared biodiversity capacity building and development strategies or plans, either as a chapter or section within their NBSAP or as stand-alone documents: <https://www.cbd.int/cb/plans/>.

the achievement of the Sustainable Development Goals and the biodiversity goals and targets. Focal points of the Rio conventions, biodiversity-related conventions and the Sustainable Development Goals, and representatives of line ministries and sectors should adopt a road map for alignment and coordinated action. The United Nations country teams should also play a key role in promoting integrated programming and coordination of capacity-building and development as part of the United Nations Sustainable Development Cooperation Framework;¹⁶

(e) *Undertake measures to fully utilize and retain existing capacity*: Undertake context-specific assessments and stocktaking processes to identify existing capacity, and the obstacles preventing its utilization and retention. Likewise, identify and promote incentives that will help retain and fully utilize existing capacity and minimize not only loss of expertise and institutional memory, but discontinuity of partnerships/relationships built;¹⁷

(f) *[Develop thematic and regional [or sub-regional] capacity-building and development action plans and programmes*: It is recommended that, following the adoption of the post-2020 global biodiversity framework, thematic capacity-building and development strategies or action plans be developed to support the achievement of the respective targets or groups of related targets. Parties, other governments, biodiversity-related conventions, international organizations and other relevant stakeholders in a position to do so should, as appropriate, consider developing dedicated regional, subregional, national and subnational capacity-building and development action plans and programmes across multiple thematic sectors, with specific capacity targets and indicators];

(g) *Promote partnerships and networks for implementation [and learning]*: Establish and strengthen partnerships for effective mobilization of capacities and resources; the sharing of existing knowledge, expertise and technologies; and implementation of medium to long-term capacity-building and development programmes on specific issues related to the post-2020 targets, in line with national priorities;

(h) *Enhance synergies between capacity-building and development efforts of relevant processes*: Enhance synergies with the capacity-building and development initiatives of biodiversity-related conventions, the Rio conventions and the Sustainable Development Goal implementation processes at the global, regional and national levels. At the national level, the focal points of relevant conventions and processes, and of funding mechanisms, such as the Global Environment Facility and the Green Climate Fund, should consider establishing a mechanism to foster integrated and/or coordinated planning, programming, monitoring and evaluation, as appropriate;

(i) *Promote North-South cooperation* to support capacity-building and development of developing countries, with a view to addressing institutional and technical constraints that could undermine access to and transfer of technology, access to scientific and technical cooperation and the effective participation in biotechnological research, [in line with Articles 16, 18 and 19 of the Convention]. This could include joint research programmes and joint ventures for the development of technologies that are relevant to the conservation and sustainable use of biological diversity.

(j) *Promote South-South and triangular cooperation* to support capacity-building and development of developing countries that have common challenges and share similar characteristics (e.g. economic and social conditions and language), [as a complement for North-South cooperation]. This could include sharing of knowledge, expertise, technologies and resources and establishment of regional nodes, networks or centres of excellence;

(k) *Engage the private sector*: Engage the private sector, proactively and as appropriate, in the development of national capacities, as many technical and financial resources and relevant expertise and

¹⁶ Capacity building and development is one of the core outcome areas of the United Nations Development Assistance Framework (UNDAF), renamed United Nations Sustainable Development Cooperation Framework by General Assembly resolution 72/279, in a number of countries, as demonstrated by the example of Bhutan (https://www.unicef.org/evaldatabase/index_70552.html).

¹⁷ As cited in the UNDP publication [Incentive Systems: Incentives, motivation and development performance](#).

technologies lie in the hands of private entities. In doing so, ensure transparency and accountability. Also strengthen the capacity of small and medium enterprises to address biodiversity-related issues;

(l) *Strengthen the monitoring and evaluation of capacity-building and development interventions:* Develop and implement adaptive management systems for monitoring and evaluation of biodiversity capacity-building and development efforts, to assess whether the intended capacity results are achieved in an impactful and sustainable manner, to identify and correct mistakes, and to capture and share good practices and lessons.

V. MECHANISMS FOR IMPLEMENTATION

A. Governance and coordination mechanisms

10. [There is a need for mechanisms that could provide strategic leadership and foster coordinated capacity-building and development action for biodiversity at the global, regional and national levels. Specifically, the roles of such mechanisms may include: (a) enhancing synergy, by facilitating inter-agency coordination and cooperation among relevant organizations, initiatives, and funding agencies; [(b) providing strategic guidance, advice and support to government and non-government actors]; (c) promoting strategic and coherent approaches to capacity-building and development; (d) fostering partnerships and multi-stakeholder initiatives; (e) identifying opportunities to mobilize additional resources for biodiversity capacity-building and development efforts; and (f) proposing innovative ideas to improve and advance the implementation of the strategic framework.]

11. At the global level, the above roles could be accomplished through [for example]:

(a) [The establishment of a new high-level biodiversity capacity-building and development committee or a broader inter-agency implementation support committee¹⁸];

(b) [The establishment of a biodiversity] capacity-building and development [committee under the Informal Advisory Group on Technical and Scientific Cooperation mentioned in annex IV below];

(c) [The designation of a biodiversity capacity-building and development task team under existing mechanisms such as the United Nations Environment Management Group (EMG) or the Liaison Group of Biodiversity-related Conventions (BLG)].¹⁹

12. At the regional level, biodiversity capacity-building and development coordination and coherence could be achieved with the support of the United Nations regional economic commissions and the regional teams of the United Nations Sustainable Development Group (UNSDG);

13. At the country level, coordination of biodiversity capacity-building and development could be done through the national biodiversity committees or similar mechanisms and facilitated through the United Nations country teams, within the United Nations Sustainable Development Cooperation Framework for the country.

14. [In addition, an informal biodiversity capacity-building and development forum could be established and convened periodically on a rotational basis by different biodiversity-related conventions to bring together government and non-government actors to network and share experiences, good practices and lessons learned.]

B. Mutual supportiveness between various implementation strategies and processes

15. This long-term strategic framework should be synergized with the other means of implementation and enabling conditions for the post-2020 global biodiversity framework (including technical and scientific cooperation, technology transfer, knowledge management and resource mobilization), the long-term

¹⁸ [The implementation support committee would provide advice and strategic guidance on all the means of implementation of the post-2020 global biodiversity framework, including capacity-building and development, technical and scientific cooperation, technology transfer, knowledge management, resource mobilization and others.]

¹⁹ The EMG (<https://unemg.org/>) or BLG (www.cbd.int/blg/) could include on the task team senior representatives of relevant organizations, indigenous peoples and local communities, civil society organizations, the private sector, donors and academia.

approach to mainstreaming biodiversity and with the mechanisms for reporting, assessment and review of implementation.

C. Resource mobilization for capacity-building and development

16. [There is a need to mobilize [human and] [financial] resources [from all sources] to support national capacity-building and development and help create an enabling environment. The [provision of financial resources in line with article 20 and the] Biodiversity Finance Initiative of the United Nations Development Programme (BIOFIN) could support countries to include options to mobilize resources for capacity-building and development in their national resource mobilization strategies]*.

D. Regional and global support networks

17. Existing regional and global support networks should be strengthened, [or established], to provide, upon request, capacity-building and development support to national government institutions, subnational governments, local authorities and non-government actors within the respective geographic regions or subregions.

E. Enhanced review mechanisms

18. [The enhanced planning, reporting and review mechanism should consider the capacity-building and development dimension. The guidelines for national reporting by governments should also include provisions for reporting on capacity-building and development and provide opportunities for countries to share experiences and lessons learned. The national biodiversity strategy and action plan review and revision process and the voluntary peer review of the national biodiversity strategy and action plan implementation should also include a review of the capacity-building and development strategies and approaches].

F. Outreach and dissemination of the framework

19. A campaign targeting various stakeholders and actors will be undertaken to raise awareness of, and support for, the long-term strategic framework. Key partners and stakeholders will be invited to support the implementation, including through alignment of their capacity-building and development actions with the framework, [elaboration of thematic action plans], and establishment of coalitions and communities of practice. A dedicated web portal within the clearing-house mechanism will be created and linked to the websites of biodiversity-related conventions and organizations to share information about the framework and the activities and experiences of various actors.

G. Reporting and review of the framework

20. [The long-term strategic framework is intended to be a living document. It will be reviewed periodically and, if necessary, updated to ensure its continued relevance, effectiveness and use by government and non-government actors. A first review will be carried out in 2025 and an independent evaluation will be undertaken in 2029, to coincide with the review of the post-2020 global biodiversity framework. Reporting on its application and the lessons learned by governments will be done through national reports; and reporting by non-government actors will be through voluntary submission of reports and case studies to the Secretariats of biodiversity-related conventions and processes].

21. [A set of headline indicators for capacity-building and development will be included in the monitoring framework for the post-2020 global biodiversity framework. [A complementary set of indicators and a methodology for measuring progress towards the achievement of the strategic directions proposed in the long-term strategic framework for capacity-building and development could be prepared with the support of experts and made available immediately following the adoption of the strategic framework]. Government and non-government actors could also adapt and use the complementary indicators to monitor, assess and report on their capacity building and development efforts at the subnational, national and regional levels. [The information generated from the monitoring and capacity-building and development assessments processes at the national and regional levels should inform the periodic review and update of the framework].]

* Cross-reference the decision on resource mobilization.

*[Annex II]***PROPOSALS TO STRENGTHEN TECHNICAL AND SCIENTIFIC COOPERATION IN SUPPORT OF THE POST-2020 GLOBAL BIODIVERSITY FRAMEWORK****I. INTRODUCTION**

1. Article 18(1) of the Convention on Biological Diversity requires Parties to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity, where necessary, through the appropriate international and national channels.

2. [Various provisions of other biodiversity-related conventions and agreements require Parties to promote technical and scientific cooperation.] [In addition, the preamble of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) recognizes that international cooperation is essential for the protection of certain species of wild fauna and flora. Article 2 of the Convention on Migratory Species of Wild Animals [, as well as Article 5 of the Ramsar Convention on Wetlands,] require[s] Parties to promote, cooperate in and support research relating to migratory species. Several articles of the International Treaty on Plant Genetic Resources for Food and Agriculture stress the importance of international cooperation. Article 4 of the World Heritage Convention states that each State Party will do all it can, including with international assistance and cooperation, to ensure the identification, protection and conservation of its cultural and natural heritage.]

II. GOAL, OBJECTIVES AND GUIDING PRINCIPLES**A. Goal and objectives**

3. The overall goal of the proposals is to promote and facilitate cooperation among Parties and relevant organizations to enable them to effectively utilize science, technology, and innovation to support the implementation of the post-2020 global biodiversity framework. The specific objectives are:

(a) To enhance local, national, regional and international capacities in relation to science, technology and innovation by means of human resource and institutional capacity-building and development;

(b) To enable technology horizon scanning, assessment, monitoring, and judgement on the appropriate technologies;

(c) To promote and facilitate the development, transfer and use of appropriate technologies, including indigenous and traditional technologies subject to prior informed consent, as applicable;

(d) To promote and encourage joint research, cooperation and collaboration in the use of scientific advances and good practices in research;

(e) To promote the development, implementation and scaling up of appropriate and responsible innovative solutions;

(f) To facilitate access to and exchange of relevant technical and scientific data, information and knowledge.

B. Guiding principles

4. Technical and scientific cooperation initiatives (activities, projects and programmes) would be guided by the following principles:

(a) *Demand-driven*: Initiatives should be started at the request of Parties and relevant institutions and stakeholders, including indigenous peoples and local communities, in response to their needs and in accordance with national legislation;

(b) *Flexibility*: Initiatives should be implemented in a flexible and adaptive manner, taking into account the varying needs, conditions and circumstances of the Parties and stakeholders involved;

(c) *Efficiency*: Measures should be taken to ensure that the initiatives achieve the intended results on time and with the least possible resources;

(d) *Efficacy*: Measures should be taken to ensure that the initiatives generate the desired changes while taking into account the potential interconnections and unintended impacts, and that results can be monitored, assessed and evaluated;

(e) *Tailored*: Initiatives should be adapted to local conditions and circumstances, also taking into account cultural and other considerations, to foster buy-in and uptake, ownership, and sustainability at the local level;

(f) *Programmatic*: Delivery should be done through sustained long-term engagement and in a holistic and integrated manner, whereby various interventions (activities, projects and other initiatives) unified by an overarching vision and common objectives, are interconnected to achieve larger-scale and sustained impact that is more than the sum of its components;

(g) *Synergistic*: Initiatives should be implemented in a collaborative, interlinked, complementary and mutually supportive manner to achieve enhanced impact in supporting the implementation of the post-2020 global biodiversity framework at all levels and across conventions, processes and sectors;

(h) *Multi-stakeholder engagement*: Initiatives should actively engage relevant societal actors, institutional partners and providers of technical assistance, including (i) indigenous peoples and local communities and their networks; (ii) multidisciplinary research and professional networks; (iii) civil society, including youth networks; (iv) academic and scientific institutions; (v) the private sector; (vi) subnational, national and regional governmental institutions; (vii) national and international non-governmental organizations, including organizations engaging in citizen science; (viii) bilateral and multilateral institutions; and (ix) funding institutions;

(i) *Mutual respect*: Initiatives should adhere to the principles of mutual respect and equality and mutual benefit, under a human rights approach, including respect for diverse knowledge systems including the knowledge and experience of practitioners, and of indigenous peoples and local communities;

(j) *Respect for regulatory requirements*: Initiatives should adhere to appropriate and proportionate safeguards and comply with the legal and regulatory requirements of collaborating countries;

(k) *Continuous learning*: Initiatives should incorporate provisions for continuous education and learning opportunities, including interdisciplinary education in the research and development of new and emerging technologies, as a part of the long-term programmatic approach to strengthen the technical knowledge of the recipients;

(l) *Participation*: Initiatives should seek to maximize participatory approaches, recognizing the value of drawing on diverse perspectives, including those from outside the technical and scientific realm;

(m) *Precaution*: Initiatives should operationalize the precautionary approach as set out in the Convention on Biological Diversity and its protocols as a balance against risks arising from new technological threats;

(n) *Free, prior and informed consent*: Initiatives should respect the principle of free, prior and informed consent of indigenous peoples and local communities when considering the introduction, dissemination or use of innovations that may potentially impact their rights, traditional practices and territories;

(o) *Liability and redress*: Initiatives should take into account the requirement for ensuring liability and redress, as well as options for recall in the event the introduction or use of innovations cause unexpected or unanticipated adverse effects on the conservation and sustainable use of biodiversity.

III. MAIN FOCAL AREAS

5. Technical and scientific cooperation work in support of the post-2020 global biodiversity framework could be organized around the following focal areas:

(a) *Science*: Promotion of research cooperation to foster effective generation and use of relevant scientific and analytical information and facilitate science-policy dialogue to support evidence-based policies, actions, tools and mechanisms, based on or informed by the best available science;

(b) *Technology*: Horizon scanning, technology assessment, development, transfer, promotion, monitoring, governance, and use of appropriate technologies, including biotechnology, existing know-how of relevant sectors and indigenous and traditional technologies and knowledge, to scale up solutions;

(c) *Innovation*: Promotion of appropriate, supportive and socially responsible innovation, in line with the needs of people and the environment.

IV. OPTIONS FOR INSTITUTIONAL MECHANISMS AND MODALITIES

6. Enhanced technical and scientific cooperation in support of the post-2020 global biodiversity framework will require an effective governance structure, efficient operational mechanisms, transparent processes and procedures based on a synergistic approach, and adequate financial and human resources.

7. With regard to governance, the Conference of the Parties would provide the overall strategic and policy/political guidance. The Informal Advisory Group on Technical and Scientific Cooperation, whose establishment is to be considered by the Conference of the Parties at its fifteenth meeting pursuant to decision 14/24 B, paragraph 5, would provide advice and recommendations on programmatic and operational matters. The proposed terms of reference of the Informal Advisory Group are presented in annex IV.

8. Possible options for operational institutional mechanisms to facilitate and enhance technical and scientific cooperation in support of the post-2020 global biodiversity framework could include the following:

(a) A global technical and scientific cooperation support centre autonomous from the Secretariat, working in close collaboration with various technical assistance providers;

(b) Regional and/or subregional technical and scientific cooperation support centres designated by the Conference of the Parties;

(c) [Initiatives and programmes implemented/coordinated by the Secretariat of the Convention on Biological Diversity, in collaboration with partners.]

Option A: Global technical and scientific cooperation support centre

9. Under this option, technical and scientific cooperation and technology transfer would be promoted and facilitated by an autonomous global technical and scientific cooperation support centre that would be separate from the Secretariat of the Convention on Biological Diversity. This operational entity would be hosted and managed by a reputable international institution designated by the Conference of the Parties and could operate in a manner similar to such entities as the Climate Technology Centre and Network (CTCN), an operational arm of the United Nations Framework Convention on Climate Change (UNFCCC) Technology Mechanism and hosted by the United Nations Environment Programme and the United Nations Industrial Development Organization (UNIDO).

10. Criteria for selecting the host institution for the centre would be considered and approved by the Conference of the Parties at its fifteenth meeting. The Conference of the Parties may, for example, require that any organization or consortium wishing to host such a global support centre should have:

(a) Demonstrated ability to provide technical advice and support to Parties in planning and implementing country-led projects and/or programmes;

(b) Broad experience in the areas of work undertaken by Parties in implementing the Convention on Biological Diversity and its protocols;

- (c) Capacity to mobilize resources for technical scientific cooperation programmes;
- (d) Appropriate policies, procedures and other institutional mechanisms and demonstrated ability in place to manage multiple complex projects and programmes;
- (e) Active networks of collaborators, including institutions working at both the global and regional levels on biodiversity-relevant issues;
- (f) Experience of working with other biodiversity-related conventions, intergovernmental processes, indigenous peoples and local communities, civil society and other stakeholders.

11. The global support centre would have a mandate to mobilize resources to promote and facilitate technical and scientific cooperation and technology transfer in support of the post-2020 global biodiversity framework. It would provide a central “one-stop shop” for Parties to submit their requests for assistance or opportunities for technical and scientific cooperation and support. Its specific proposed functions would include the following:

- (a) *Operate a help desk:* to provide, at the request of Parties and relevant institutions and stakeholders, including indigenous peoples and local communities, information, advice, and technical support, including in terms of articulating their needs and developing targeted project proposals, in collaboration with a network of institutional partners and providers of technical assistance to harness a broader pool of institutional knowledge and technical expertise;
- (b) *Promote network development and partnership-building by:*
 - (i) Catalysing and strengthening international and regional technical and scientific cooperation networks and partnerships, including regional technology assessment platforms, the Consortium of Scientific Partners on Biodiversity, and others;
 - (ii) Promoting the use of relevant communities of practice, including the NBSAP Forum, the Global ABS Community, the Biodiversity and Ecosystem Services Network (BES-Net), the Sub-Global Assessment Network and others;
 - (iii) Promoting the sharing of relevant and appropriate biodiversity research data, including through platforms that facilitate systematization and data backup in an open-source setting, provide adequate protection against exploitation and appropriation, and respect principles of free, prior and informed consent; and developing safeguards against misuse and extractive data mining by or commercial or other data aggregators;
 - (iv) Further improving biodiversity monitoring through cooperation with, inter alia, the Committee on Earth Observation Satellites and the Group on Earth Observations Biodiversity Observation Network (GEO-BON);
 - (v) Improving the governance, fair acquisition, coordination, delivery and controlled use of biodiversity-related Earth observation data and related services;
 - (vi) Strengthening long-term field monitoring programmes for biodiversity through cooperation, exchange of experiences, methodology transfer and data-sharing;
 - (vii) Identifying, publicizing and linking centres of expertise;
- (c) *Facilitate matchmaking:* to connect requesting Parties and relevant partners selected from among the members of the above-mentioned network of partners and providers, in order to respond to self-identified and self-prioritized needs by:
 - (i) Providing information and guidance regarding technical and scientific cooperation, with a view to facilitating access to technical expertise and know-how;
 - (ii) Mobilizing technical assistance through matchmaking between requesting Parties, based on self-identified needs, and Parties and/or relevant institutions and stakeholders in a position to assist;

- (iii) Promoting partnerships and joint ventures to accelerate the development and diffusion of appropriate technologies and equitable scalable solutions;
 - (iv) Promoting the engagement of all sectors, including the private sector, in the development and application of innovative solutions, while ensuring that such engagement does not overshadow, marginalize or take advantage of the actions of the public sector and communities;
- (d) *Provide project, research and development, and technology support services:* to assist with the implementation of technical and scientific cooperation projects in order to:
- (i) Foster North-South, South-South and triangular partnerships, using a programmatic approach;
 - (ii) Strengthen the organizational capacities of national and subnational scientific institutions to conduct relevant research by facilitating partnerships with counterpart organizations in other countries, joint research projects, and exchange of experts and staff;
 - (iii) Facilitate the development, transfer and diffusion of technologies, including existing tools and techniques, scalable initiatives, and innovative local solutions;
 - (iv) Identifying, mapping and publicizing existing relevant technologies with a view to facilitating their accessibility and utilization;
 - (v) Identifying, mapping and publicizing impactful innovations with a view to facilitating their implementation and scaling up;
 - (vi) Supporting the establishment or strengthening of technology incubator programmes and accelerator mechanisms to promote and facilitate the development of biodiversity-related innovations and solutions, including locally designed technologies and solutions, and indigenous technologies;
 - (vi) Organizing technology and innovation fairs and expos to showcase cutting-edge technologies and solutions;
 - (vii) Facilitate access to and utilization of scientific knowledge, information, and data, as well as indigenous and traditional knowledge;
- (e) *Facilitate information-sharing* through the identification and submission to the clearing-house mechanism of relevant information, success stories, exemplary cooperation projects (bright spots), case studies, and best practices, in line with the knowledge management component of the post-2020 global biodiversity framework, including information on results of technical and scientific research, relevant training and technical assistance programmes, and funding mechanisms;
- (f) *Promote capacity-building and development in areas related to technical and scientific cooperation* by:
- (i) Supporting Parties to develop and implement enabling and synergistic policies, regulatory frameworks, institutional arrangements and incentives to catalyse and scale up innovation;
 - (ii) Strengthening the organizational capacities of scientific institutions, including through educational programmes, exchange of experts and mentoring of young scientists;
 - (iii) Facilitating the provision of skills training to develop technical know-how in specialized areas, such as remote sensing, scenario analyses and modelling, valuation of biodiversity and ecosystem functions and services, modern biotechnology, DNA technologies, gene editing, synthetic biology, digital sequence information, status assessments for species and ecosystems, identification of spatial biodiversity priority areas, and others;
 - (iv) Facilitating the provision of guidance material on social and ethical matters related to science and technology;
 - (g) Perform such other activities as may be necessary to carry out its functions.

12. The global centre would work under the strategic guidance of the Conference of the Parties and would take into consideration the advice and recommendations of the above-mentioned Informal Advisory Group on Technical and Scientific Cooperation. The centre would submit progress reports on its activities to the Conference of the Parties through the Secretariat of the Convention on Biological Diversity. A schematic illustration of the possible operational framework of the global centre, and its relationship with the Conference of the Parties and other stakeholders, is presented in figure 1 below.

13. The global support centre would require dedicated resources for its operations. If this option is selected, the Conference of the Parties may wish to invite the financial mechanism of the Convention and other donors to provide the global centre with funding to enable it to provide Parties with timely support so that they can access relevant technologies, expertise and other technical support required in order to implement the post-2020 global biodiversity framework effectively.

Option B: Regional and/or subregional technical and scientific cooperation support centres

14. Under this option, technical and scientific cooperation and technology transfer would be promoted and facilitated through regional and/or subregional centres designated by the Conference of the Parties. The regional support centres would be hosted in existing partner institutions that possess relevant expertise and institutional capacity to provide technical assistance to countries in the region or subregion, upon request, as well as capacity to mobilize resources for technical scientific cooperation projects and programmes in their respective regions.

15. Criteria for selecting the host institutions for the centres would be considered and approved by the Conference of the Parties at its fifteenth meeting. The Conference of the Parties may, for example, require that any organization or institution wishing to host such a centre should have:

(a) Demonstrated ability to provide technical advice and support to Parties in planning and implementing country-led projects and/or programmes;

(b) Broad experience in the areas of work undertaken by Parties in implementing the Convention on Biological Diversity and its protocols;

(c) Capacity to mobilize resources for technical scientific cooperation programmes;

(d) Appropriate policies, procedures and other institutional mechanisms and demonstrated ability in place to manage multiple complex projects and programmes;

(e) Active networks of collaborators, including institutions working at regional and subregional levels on biodiversity-relevant issues;

(f) Experience of working with other biodiversity-related conventions, intergovernmental processes, indigenous peoples and local communities, civil society and other stakeholders.

16. The regional support centres would carry out functions similar to those of the global centre as described above but would operate within their respective regions or subregions. Where necessary, they would coordinate with other centres to mobilize all the expertise required to fully support the implementation of the post-2020 global biodiversity framework and address priorities identified in their regions or subregions. They would also collaborate with and support any existing regional technology assessment platforms that engage a range of stakeholders in a participatory approach to horizon scanning, technology assessment, monitoring, capacity-building and development, citizen science and other activities to support responsible research and innovation.

17. The centres would work under the strategic guidance of the Conference of the Parties and would take into consideration the relevant guidance and recommendations of the Informal Advisory Group on Technical and Scientific Cooperation. The centres would submit progress reports on their activities to the Conference of the Parties through the Secretariat of the Convention. A schematic illustration of the proposed regionally based institutional mechanism to promote and support technical and scientific cooperation,

including the relationship between the above components, the Conference of the Parties and other stakeholders, is presented in figure 2 below.

18. The regional support centres would require dedicated resources for their operations. If this option is selected, the Conference of the Parties may wish to invite the financial mechanism of the Convention and other donors to provide the regional centres with funding to enable them to provide Parties with timely support so that they can access relevant technologies, expertise and other technical support required in order to implement the post-2020 global biodiversity framework effectively.

Option C: Technical and scientific cooperation support through Secretariat-coordinated programmes

19. Under this option, technical and scientific cooperation and technology transfer would continue to be promoted and facilitated through programmes coordinated by the Secretariat of the Convention in collaboration with relevant partners and initiatives. Each programme would implement targeted interventions. The Secretariat would submit progress reports to the Conference of the Parties, which would take into consideration the guidance of the Informal Advisory Group on Technical and Scientific Cooperation. The functions of the different programmes would vary on the basis of the priorities and requirements of Parties.

20. The Secretariat would also continue to promote and facilitate technical and scientific cooperation through partnership agreements and collaborative programmes with various partners and initiatives, including research and academic institutions, United Nations agencies, and international organizations and networks.

21. To play the above roles more effectively in support of the post-2020 global biodiversity framework, the Secretariat would require adequate and predictable funding support. The Secretariat's core budget would need to provide for dedicated staff positions for technical and scientific cooperation, as well as for core activities. At present, the functions related to technical and scientific cooperation are largely performed by project staff funded by the Republic of Korea through the Bio-Bridge Initiative. The current funding commitment for the Bio-Bridge Initiative is scheduled to end in 2020.

V. ROLE OF THE SECRETARIAT OF THE CONVENTION

22. In line with Article 24 of the Convention, the Secretariat of the Convention will:

(a) Prepare or submit, as appropriate, relevant documents and reports on technical and scientific cooperation and technology transfer (Articles 16-18 of the Convention) for the Conference of Parties and its subsidiary bodies;

(b) Compile relevant information related to technical and scientific cooperation and technology transfer in the field of biological diversity and make it available through the clearing-house mechanism, in line with the knowledge management component of the post-2020 global biodiversity framework;

(c) Maintain active communication with Parties and stakeholders involved or interested in technical and scientific cooperation;

(d) Coordinate, as appropriate, with biodiversity-related conventions, relevant Parties' agencies, the Consortium of Scientific Partners on Biodiversity, the Global Partnership for Business and Biodiversity, and other relevant networks and initiatives with technical and scientific expertise and/or involved in technical and scientific cooperation;

(e) Co-organize with partners biodiversity science forums, technology and innovation expos and other events on the margins of international meetings;

(f) Perform such other activities as may be necessary to carry out its functions.

VI. MONITORING AND REVIEW

23. The present proposals will be reviewed periodically and, if necessary, updated to ensure their continued relevance and effectiveness in supporting the implementation of the post-2020 global biodiversity framework. A first review will be carried out in 2025 and an independent evaluation will be undertaken in 2030, together with the review of the long-term strategic framework for capacity-building and development and the review of the post-2020 global biodiversity framework. The reviews will be based on the information provided by Parties in their national reports and on voluntary reports and case studies provided by non-government actors to the secretariats of biodiversity-related conventions and processes.

24. Indicators to monitor progress on technical and scientific cooperation and technology transfer, including the utilization of science, technology and innovation, will be included in the monitoring framework for the post-2020 global biodiversity framework. A complementary set of indicators and a methodology for measuring progress could be prepared with the support of experts and practitioners and made available for use, as appropriate, by government and non-government actors at the subnational, national and regional levels. The periodic review and update of the proposals will be informed by information generated from the monitoring process, which may be communicated through the Parties' national reports and the voluntary reports by non-governmental actors.]

*Annex III***PROPOSALS FOR AN INCLUSIVE PROCESS TO REVIEW AND RENEW TECHNICAL AND SCIENTIFIC COOPERATION PROGRAMMES**

1. In decision [14/24 B](#), paragraph 9, the Conference of the Parties requested the Executive Secretary to prepare proposals for an inclusive process to review and renew technical and scientific cooperation programmes in order to support the post-2020 global biodiversity framework, and to submit these proposals for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice and the Subsidiary Body on Implementation at their meetings prior to the fifteenth meeting of the Conference of the Parties. In response, the Executive Secretary developed the present proposal[s]; further details are provided in CBD/SBI/3/INF/15.
2. The review will be conducted by a small independent team of experts under the [guidance] [overview] [oversight] of the Secretariat and would provide a comprehensive and inclusive review of relevant technical and scientific cooperation initiatives and programmes and present recommendations for the renewal process for the consideration of Parties. The review process would include a desk review as well as interviews and surveys. The review will take into account information from Parties, indigenous peoples and local communities, women and youth, non-Parties and other stakeholders on existing programmes and initiatives. They will be asked to provide information on these programmes and initiatives through the capacity building and technical and scientific cooperation sections of the clearing-house mechanism, the Access and Benefit-sharing Clearing-House and the Biosafety Clearing-House. Engaging an expert review team would allow for a detailed, focused and relatively quick and unbiased assessment.
3. The review and renewal process will be aligned with relevant targets and indicators under the post-2020 global biodiversity framework and will be implemented with due consideration for gender and indigenous and traditional knowledge.
4. The outcome of the process for the review and renewal of technical and scientific cooperation programmes may include the following elements:
 - (a) A summary of the main findings, including the lessons learned drawn from the review;
 - (b) Proposals for possible renewal of the programmes and initiatives (including a theory of change aligned with the theory of change for the post-2020 global biodiversity framework), and a description of the renewal process;
 - (c) A proposed monitoring, review and reporting framework for the programmes and initiatives, including possible key performance indicators associated with the relevant goals and targets of the post-2020 global biodiversity framework;
 - (d) Estimates of resource requirements, and an associated resource mobilization strategy, for the programmes and initiatives.

*Annex IV***DRAFT TERMS OF REFERENCE OF THE INFORMAL ADVISORY GROUP ON
TECHNICAL AND SCIENTIFIC COOPERATION****A. Background**

1. Article 18 of the Convention on Biological Diversity requires Parties to promote international technical and scientific cooperation [with other Parties, in particularly developing country Parties,] in the field of conservation and sustainable use of biological diversity, where necessary, through appropriate international and national institutions, including by promoting cooperation in human resources development and institution-building, encouraging and developing methods of cooperation for the development and use of relevant technologies (including indigenous and traditional technologies), promoting cooperation in the training of personnel and exchange of experts, and promoting the establishment of joint research programmes and joint ventures for development of relevant technologies. Article 18 also stresses the importance of the clearing-house mechanism for fostering technical and scientific cooperation.

2. [Other articles of the Convention, such as Article 15.6 on scientific research based on genetic resources, Article 16 on access to and transfer of technology, Article 17 on exchange of information, and Article 19 on biotechnological research, are of relevance to technical and scientific cooperation. Article 19 also requires Parties to provide for the effective participation in research activities, especially developing country Parties, which provide genetic resources for such research.]

3. In decisions, VII/29, VIII/12, IX/14, X/15, X/16, XII/2 B, XIII/23 and XIII/31, the Conference of the Parties adopted a number of measures and provided guidance on various aspects relating to technical and scientific cooperation and technology transfer.

4. In decision 14/24 B, the Conference of the Parties decided to consider establishing, at its fifteenth meeting, an informal advisory group on technical and scientific cooperation, to be operational at the end of the mandate of the current Informal Advisory Committee to the Clearing-house Mechanism in 2020, to provide the Executive Secretary with advice on practical measures, tools and opportunities to promote technical and scientific cooperation for the effective implementation of the Convention.

B. Purpose

5. The Informal Advisory Group on Technical and Scientific Cooperation will provide advice and guidance to the Executive Secretary of the Convention on Biological Diversity and other relevant bodies and stakeholders on ways and means to promote and facilitate technical and scientific cooperation, technology transfer, capacity building and development, knowledge management, and the clearing-house mechanism in support of the post-2020 global biodiversity framework [and the three objectives][the effective implementation] [of the Convention,] [in a balanced manner]. In particular, the Informal Advisory Group will provide advice, guidance and recommendations on:

(a) Practical measures and approaches to promote technical and scientific cooperation for the effective implementation of the Convention;

(b) [Measures to address the technological, technical and institutional capability gaps of developing countries, in accordance with national priorities and circumstances;]

(c) Measures to enhance collaboration with other relevant international agreements, processes and organizations with respect to technical and scientific cooperation and technology transfer initiatives, [especially for developing country Parties];

(d) Strategic approaches to addressing the needs and priorities of Parties through programmatic implementation of relevant technical and scientific cooperation initiatives established under the Convention;

(e) Monitoring the implementation of the strategies on technical and scientific cooperation, capacity building and development and knowledge management in support of the post-2020 global biodiversity framework to ensure coherence and consistency;

(f) Development and implementation of tools and mechanisms for promoting and facilitating technical and scientific cooperation, [distribution of benefits from the access to genetic resources,] capacity building and development and knowledge management, including science, [biotechnology] research and traditional knowledge, [systems], [taking into account the specific needs of developing country Parties] [as well as indigenous peoples and local communities, women and youth];

(g) Matters relating to the clearing-house mechanism and, in particular, on how to improve its effectiveness as a mechanism for promoting and facilitating technical and scientific cooperation and exchange of information;

(h) Potential opportunities for mobilizing technical and financial resources to promote and sustain technical and scientific cooperation activities on a long-term and predictable basis;

(i) Identification, mapping and promotion of existing collaboration activities, [including those related to the most recent technological developments];

6. The Secretariat of the Convention on Biological Diversity will support the work of the Informal Advisory Group, including through the provision of necessary logistical and secretarial support for its work.

C. Membership

7. The Informal Advisory Group will be composed of experts nominated by Parties, with due regard to equitable regional representation and gender balance, including experts [nominated by][from] indigenous peoples and local communities, [women and youth,] [small islands], and relevant organizations. The number of experts from organizations will not exceed the number of experts nominated by Parties. The membership will reflect a balanced representation of experts on matters regarding the three objectives of the Convention. Members will be selected on the basis of the following criteria, as evidenced in their curriculum vitae:

(a) At least five years of working experience on technical and scientific issues related to the implementation of the Convention on Biological Diversity and/or other relevant international agreements and processes;

(b) Expertise relevant to technical and scientific cooperation, capacity building and development, and knowledge management and the clearing-house mechanism or similar online information-sharing platforms;

(c) Demonstrated experience with regional or international cooperation processes and programmes related to biodiversity and/or the environment.

8. The co-chairs of the Consortium of Scientific Partners on Biodiversity will be invited as ex officio members.

9. Members of the Informal Advisory Group will be selected through a formal nomination process based on the above criteria. The Executive Secretary, in consultation with the co-chairs of the Informal Advisory Group, may invite additional experts knowledgeable in specific issues or thematic areas to be discussed at relevant meetings of the Informal Advisory Group, ensuring a balance of experts on matters related to the Convention. The members will serve in their personal capacity and not as representatives of a government, organization or other entity.

10. Members of the Informal Advisory Group will serve for a term of [two][three] years, with a possibility of renewal for one additional [two][three]-year term.

D. Modus operandi

11. The Informal Advisory Group will meet [face-to-face] at least once per year, subject to the availability of resources, wherever possible in the margins of other meetings. The frequency of meetings may be adjusted by the members as the need arises. [Between the face-to-face sessions,] the Advisory Group may work remotely via electronic means, as appropriate.

12. The Informal Advisory Group may, as appropriate, establish subcommittees to support it in addressing specific issues or thematic areas and co-opt relevant experts to assist.

13. [The Informal Advisory Group will support the Ad Hoc Technical Expert Group on Indicators for the post-2020 global biodiversity framework [in their work in identifying indicators for capacity building and development][on the identification of existing capacity, gaps and needs in terms of capacity building and development, technology transfer and financing needs related to the monitoring of the global biodiversity framework.]

14. The Informal Advisory Group members shall not receive any honorarium, fee or other remuneration from the United Nations. However, costs for the participation of Advisory Group members nominated by developing country Parties and Parties with economies in transition will be covered, in line with the rules and regulations of the United Nations.

15. The Informal Advisory Group will elect two co-chairs and a rapporteur to serve for a [two][three]-year period.

16. The working language of the Informal Advisory Group will be English.
