

Biodiversity and climate change

Non-paper – version 2

The Conference of the Parties,

Recalling decision 16/22 of 1 November 2024,

Reaffirming paragraph 8 of decision [X/33](#) of 29 October 2010 and paragraphs 3 and 6 of decision [16/22](#) of 1 November 2024,

[*Recognizing* that biodiversity loss, climate change, water scarcity and degradation and insecurity, ocean warming and degradation, ocean acidification, sea-level rise, desertification, land degradation, soil erosion, drought, invasive alien species, pollution, among others, are interconnected and interdependent [crises][challenges] and need to be addressed urgently and in a coherent, sustained and balanced manner to achieve the objectives of the Convention and the goals and targets of the Framework, in accordance with the respective frameworks, agreements and mandates, and in full respect of their distinct principles, processes and decision-making authorities,]

[Alt. *Recognizing* that biodiversity loss and climate change are interconnected and interdependent global [crises], [impacting food, water scarcity, soil erosion, pollution, mountain ecosystem degradation, land degradation, sea-level rise and health,] and require coherent, sustained and integrated approach to achieve the objectives of the Convention and the goals and targets of the Framework, in accordance with the respective frameworks, agreements and mandates, and in full respect of their distinct principles, processes and decision-making authorities,]*Recognizing* that coherent action must ensure gender-responsive and human rights-based approaches and intergenerational equity, in line with its relevant decisions, and that the right to a clean, healthy and sustainable environment is acknowledged in section C of the Framework,

1. [Takes note of][Welcomes] *The Thematic Assessment Report on Interlinkages among Biodiversity, Water, Food and Health* (“nexus assessment”) [and *The Thematic Assessment Report on the Underlying Causes of Biodiversity Loss and the Determinants of Transformative Change and Options for Achieving the 2050 Vision for Biodiversity* (“transformative change assessment”)] [and other relevant assessments] of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services and [its][their] relevance to the work undertaken under the Convention and to the implementation of the Framework;

2. *Encourages* Parties, other Governments [at all levels], indigenous peoples and local communities, women, youth, relevant organizations and stakeholders to take steps to promote and implement integrated and synergistic approaches for biodiversity and the other nexus elements, including climate change, as appropriate, in accordance with national priorities and circumstances;

[3. [Takes note of][Welcomes] Advisory Opinion No. 31 of 21 May 2024 of the International Tribunal for the Law of the Sea on climate change and international law and the advisory opinion of 23 July 2025 of the International Court of Justice concerning the obligations of States in respect of climate change;]

[4. [Stresses][Recognizes] that the achievement of the mission, goals and targets of the Kunming-Montreal Global Biodiversity Framework [would benefit from][is only possible with urgent and effective] action on climate change [in a manner that is mutually supportive of the objective of the United Nations Framework Convention on Climate Change¹ and the goals of the

¹ United Nations, *Treaty Series*, vol. 1771, No. 30822.

Paris Agreement,² [and vice versa,] as this is pivotal to avoid further biodiversity loss and ecosystem degradation];]

[5. [Adopts][Takes note of] the primer for policymakers of the supplement to the Voluntary Guidelines for the Design and Effective Implementation of Ecosystem-based Approaches to Climate Change Adaptation and Disaster Risk Reduction,³ entitled “Voluntary Guidelines for the Design, Effective Implementation and Scaling Up of Nature-based Solutions and/or Ecosystem-based Approaches with Climate Change Mitigation Co-benefits”, contained in annex I to the present decision;]

6. [Encourages][Urges] Parties and other Governments at all levels, when undertaking actions to achieve Targets 8 and 11 of the Framework, as well as Target 2 and other related targets, with the full and effective participation of indigenous peoples and local communities, women and youth, persons with disabilities, people in vulnerable situations and those most dependent on biodiversity:

[(a) To identify and operationalize actions to address potential synergies related to biodiversity and climate change through their national biodiversity strategies and action plans and relevant national targets, including by prioritizing the conservation and restoration of ecological integrity and ecosystem functions and services, particularly those directly impacted by human activities, promoting synergies with other national planning processes, including nationally determined contributions, national adaptation plans and voluntary land degradation neutrality targets, and promoting positive impacts and avoiding negative impacts of climate action on biodiversity, in a manner that is consistent with Section C and Targets 21, 22 and 23 of the Framework, in accordance with national legislation and international obligations, and ensuring that the development and implementation of those integrated plans are supported by adequate, predictable and easily accessible means of implementation;]

[(b) To prioritize the protection, conservation, restoration, and sustainable management of ecosystems and species important for the full carbon cycle and contributing to climate change adaptation, carbon storage and sequestration, and taking into account future climate projections and scenarios to ensure their long-term resilience;]

[(c) To consider, as appropriate and in accordance with national circumstances, the use of the response options assessed in *The Thematic Assessment Report on Interlinkages among Biodiversity, Water, Food and Health* of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services;]

7. *Also encourages* Parties, other Governments at all levels and relevant organizations, in accordance with national priorities, circumstances and capabilities, to make use of the Voluntary Guidelines and its supplement, including through effective social and environmental safeguards, to avoid or minimize social and environmental risks, when designing and implementing nature-based solutions⁴ and/or ecosystem-based approaches for climate change mitigation, adaptation and disaster risk reduction, recognizing the co-benefits for biodiversity and livelihoods;

8. *Further encourages* Parties, and invites other Governments and relevant stakeholders, financial institutions, multilateral development banks and the private sector, when undertaking actions towards the achievement of Targets 8 and 11 of the Framework, as well as other related targets, in line with national circumstances, priorities and capabilities, to act in accordance with Article 20 of the Convention and consistent with Target 19 to collectively scale up investments for the conservation, restoration and sustainable use of biodiversity through climate change mitigation, adaptation and disaster risk reduction, leveraging the potential of nature-based solutions and/or ecosystem-based approaches and their multiple benefits with environmental and social safeguards;

² United Nations, *Treaty Series*, vol. 3156, No. 54113.

³ Decision [14/5](#), annex; see also [CBD Technical Series No. 93](#) for complementary information.

⁴ In accordance with resolution 5/5 of the United Nations Environment Assembly.

9. *Invites* the Coalition of Finance Ministers for Climate Action and its institutional partners to further integrate biodiversity and climate change interlinkages into its work programme, including through the development of tools and guidance to support the implementation of the Framework;

[10 *Notes* the relevance of the Belém Adaptation Indicators,⁵ taking into account their voluntary and non-prescriptive nature, for measuring progress achieved towards the targets mainly referred to in paragraphs 9.d and 10.b of decision 2/CMA.5 of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement to the monitoring framework for the Kunming-Montreal Global Biodiversity Framework;⁶]

11. *Invites* the United Nations Environment Programme to consider the use of, as appropriate, the indicators used under [the United Arab Emirates Framework for Global Climate Resilience and] the monitoring framework for the Kunming-Montreal Global Biodiversity Framework as the basis for monitoring the contribution of biodiversity and ecosystem functions and services to climate change adaptation;

[12. *Requests* the Executive Secretary, subject to the availability of resources, to develop dissemination tools for Parties, other Governments, relevant organizations, indigenous peoples and local communities, women and youth, on the use of the Voluntary Guidelines and its supplement, which could include the development of a Technical Series issue integrating both the Voluntary Guidelines adopted in decision 14/5 [and its supplement referred to in paragraph 5], examples of nature-based solutions and/or ecosystem-based approaches, activity-based reporting templates, metrics for demonstrating multiple benefits or other practical tools or toolkits, and share them, as appropriate, through the technical and scientific cooperation mechanism and the network of regional and subregional technical and scientific cooperation support centres, with a view to promoting both enhanced capacities and the effective uptake of scientific and technical guidance by Parties;]

13. *Invites* the respective bodies of the United Nations Framework Convention on Climate Change and its Parties to consider using the Voluntary Guidelines [and its supplement] for Parties to integrate biodiversity, nature-based solutions and/or ecosystem-based approaches and social and environmental safeguards in mitigation and adaptation measures;

14. *Encourages* the regional and subregional technical and scientific cooperation support centres to make use of the Voluntary Guidelines [and its supplement] in supporting Parties in the implementation of Targets 8 and 11 of the Framework;

[14.bis *Takes note* of the multilevel road map for enhancing cooperation, policy coherence and synergies across the Rio conventions, contained in the annex II to the present decision, as flexible guidance, and encourages Parties and invites Parties to the UNFCCC and UNCCD, on a voluntary basis and in accordance with national circumstances and respective mandates, to take such actions into account, as appropriate, with a view to strengthening the synergistic implementation of the Rio conventions, and requests the Executive Secretary, in collaboration with the Joint Liaison Group, to disseminate the multilevel road map across the Rio conventions for peer review by Parties and other Governments, and submit an updated version for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice at its twenty-ninth meeting;]

[15. *Requests* the Executive Secretary, subject to the availability of resources and avoiding the duplication of efforts, in collaboration with the Joint Liaison Group of the Rio Conventions and the partners in the Rio Conventions Joint Capacity-building Programme, rights holders and stakeholders, including indigenous peoples and local communities, women, youth, other relevant multilateral environmental agreements, organizations, partnerships, initiatives and coalitions⁷ and

⁵ See FCCC/PA/CMA/2025/19/Add.2, decision 12/CMA.7, annex

⁶ Decision [15/5](#), annex I.

⁷ Organizations, partnerships, initiatives and coalitions include the National Biodiversity Strategy and Action Plan Accelerator Partnership, the Nationally Determined Contributions Partnership, the National Adaptation Plan Global Network, the Enhancing

their respective members, to further strengthen capacities to enhance cooperation and policy coherence as appropriate;]

16. *Also requests* the Executive Secretary to collaborate with the Executive Secretaries of the United Nations Framework Convention on Climate Change and the Convention to Combat Desertification on assessing and strengthening the mandate of the Joint Liaison Group of the Rio Conventions, and increase transparency and engagement between the Group and Parties by inviting representatives of the bureaux of the scientific and technical bodies of the Rio conventions to participate in meetings of the Group.

[Annex I

Supplement to the Voluntary Guidelines for the Design and Effective Implementation of Ecosystem-based Approaches to Climate Change Adaptation and Disaster Risk Reduction: Primer for Policymakers

Voluntary Guidelines for the design, effective implementation and scaling up of nature-based solutions and/or ecosystem-based approaches with climate change mitigation co-benefits

I. Introduction

1. Nature-based solutions and/or ecosystem-based approaches form part of effective and coherent responses to interdependent crises, including biodiversity loss, climate change and disaster risk as well as desertification, land degradation and drought.⁸ These actions can be taken to tackle societal, economic and environmental challenges under, inter alia, the Convention on Biological Diversity,⁹ the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa,¹⁰ the United Nations Framework Convention on Climate Change,¹¹ the United Nations Environment Assembly and the United Nations Office for Disaster Risk Reduction. When well designed and implemented, they can support resilience and restore ecological integrity while advancing efforts towards sustainable development.

2. The Voluntary Guidelines for the Design and Effective Implementation of Ecosystem-based Approaches to Climate Change Adaptation and Disaster Risk Reduction were adopted at the fourteenth meeting of the Conference of the Parties, in 2018.¹² A more detailed version was published in 2019 as *CBD Technical Series No. 93*. They provide clear guidance on how to integrate ecosystem-based approaches into climate change adaptation and disaster risk reduction effectively. Much of the guidance, including the principles and safeguards, may also be applicable to climate change mitigation and other social, economic and environmental challenges. Since 2019, there have been substantial developments in international policy and scientific understanding, notably the adoption of the Kunming-Montreal Global Biodiversity Framework¹³ in 2022. The present supplement is aimed at complementing the Voluntary Guidelines and relevant decisions,¹⁴ responding to the new developments and paying particular attention to conservation and restoration in a changing climate and to implementing safeguards for climate change mitigation co-benefits in line with Target 8 of the Framework, which is not covered in the Voluntary Guidelines.

Nature-based Solutions for an Accelerated Climate Transformation Partnership, the Friends of Ecosystem-based Adaptation network and the Partnership for Environment and Disaster Risk Reduction.

⁸ Decision [X/33](#) on biodiversity and climate change contains guidance for Parties on the implementation of ecosystem-based approaches for climate change mitigation and adaptation.

⁹ United Nations, *Treaty Series*, vol. 1760, No. 30619.

¹⁰ *Ibid.*, vol. 1954, No. 33480.

¹¹ *Ibid.*, vol. 1771, No. 30822.

¹² Decision [14/5](#), annex.

¹³ Decision [15/4](#), annex.

¹⁴ Decisions [XII/20](#), [14/5](#), [15/4](#) and [16/22](#).

3. In its resolution 5/5 of 2 March 2022, the United Nations Environment Assembly defined nature-based solutions as actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems that address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits.

4. Ecosystem-based mitigation can be understood as actions that protect, conserve, restore or sustainably use and manage ecosystems for their carbon storage and sequestration service, to aid climate change mitigation by reducing greenhouse gas emissions and enhance carbon removals from the atmosphere and to deliver benefits for biodiversity, recognizing that a large share of anthropogenic greenhouse gas emissions come from sectors such as energy, industrial processes and product use. In decision [X/33](#) of 29 October 2010, Parties and other actors were invited to follow specific guidance for various ecosystems.

II. Key messages

5. Nature-based solutions and/or ecosystem-based approaches provide many tangible benefits that directly support the achievement of global environmental, climate and development goals and targets, including Targets 8 (on minimizing the impacts of climate change and climate action on biodiversity and building resilience) and 11 (on restoring, maintaining and enhancing nature's contributions to people) of the Framework. The effective implementation of those approaches can enhance synergies across the Rio conventions, as well as other environmental and social priorities, including those of the biodiversity-related multilateral environmental agreements and the Sustainable Development Goals.

6. Embedding nature-based solutions and/or ecosystem-based approaches into climate action policies, strategies and budgets, where relevant, can enhance policy coherence. Strategies that are ambitious, rights-based, gender-responsive, locally-led and long-term in vision can help to ensure the continued central contribution of ecosystem health and integrity to resilience, climate-resilient development and just transitions, in accordance with national circumstances and priorities, while increasing equity.

7. Fit-for-purpose social and environmental safeguards, including frameworks for implementing and monitoring them, would promote the multiple benefits for biodiversity, ecosystem services, resilience and human well-being offered by nature-based solutions and/or ecosystem-based approaches, while avoiding or minimizing social and environmental risks. Safeguards for nature-based solutions and/or ecosystem-based approaches with climate change mitigation co-benefits should be consistent with decisions taken under the United Nations Framework Convention on Climate Change¹⁵ and the Paris Agreement.¹⁶

8. Nature-based solutions and/or ecosystem-based approaches are most effective when they deliver across multiple objectives, and there is whole-of-government and whole-of-society participation, including broad meaningful and sustained engagement and support from indigenous peoples and local communities, scientists and stakeholders. Such planning, design, implementation, governance and monitoring efforts will help to ensure success in delivering benefits for both biodiversity and climate. This is most effective when the multiple benefits and services across various timescales and for different actors or sectors are properly identified and quantified. It is also important to ensure that benefits for biodiversity take into account natural ecosystem integrity and functions. In addition, they need to be grounded in evidence-based decision-making, including traditional and scientific knowledge, and in respect for diverse world views and knowledge systems. Inclusive, rights-based design and governance are built on key principles, such as free, prior and

¹⁵ United Nations, *Treaty Series*, vol. 1771, No. 30822.

¹⁶ United Nations, *Treaty Series*, vol. 3156, No. 54113.

informed consent,¹⁷ gender equality and respect for traditional knowledge, cultures and practices. Adaptive monitoring frameworks will support ownership, transparency and long-term impact.

9. The Voluntary Guidelines for the Design and Effective Implementation of Ecosystem-based Approaches to Climate Change Adaptation and Disaster Risk Reduction and the present supplement could be usefully complemented by regionally and culturally tailored toolkits, which may be ecosystem- or sector-specific. User-friendly, actionable toolkits could offer guidance on various topics, such as safeguards, design standards, co-benefit evaluation and institutional readiness.

III. Principles and safeguards

10. The Voluntary Guidelines are underpinned by a set of 10 principles and nine safeguards. The principles serve as high-level standards to guide planning and implementation. They are framed as actions that promote: (a) resilience and adaptive capacity; (b) inclusivity and equity; (c) success on multiple scales; and (d) effectiveness and efficiency. The safeguards are aimed at preventing harm to people and to nature, facilitating transparency and promoting multiple benefits. The existing principles and safeguards, designed primarily for ecosystem-based adaptation and disaster risk reduction, are also broadly applicable to nature-based solutions and/or ecosystem-based approaches that can provide climate change mitigation co-benefits.

11. The present supplement updates the guidance on fit-for-purpose social and environmental safeguards by integrating some additional principles and safeguards for ensuring benefits for biodiversity from nature-based solutions and/or ecosystem-based approaches with climate change adaptation and mitigation co-benefits, in particular to deliver biodiversity benefits and to strengthen the safeguards for indigenous peoples and local communities, women and youth.

12. Together, the principles and safeguards are an essential part of the inclusive, participative approaches to design and implementation described throughout the present text. These existing biodiversity principles and safeguards¹⁸ apply to all stages of project design. None of the principles or safeguards should be understood as precondition for financial, technological and capacity-building support to be provided to developing countries under Article 20 of the Convention on Biological Diversity, Article 4 of the United Nations Framework Convention on Climate Change, or under Article 9 of the Paris Agreement.

13. The principles and safeguards outlined in the present section provide a facilitative and flexible approach to the implementation of nature-based solutions and/or ecosystem-based approaches, while acknowledging that countries may wish to adapt those standards in accordance with national circumstances and priorities. Nothing in the present Guidelines should be understood as modifying the rights and obligations of Parties under the Convention or any other international agreement, nor should it be understood as requiring Parties to accept declarations, decisions, principles, guidelines or other provisions, contents and requirements to which they have not originally consented.

1. Additional principles and safeguards for ensuring benefits for biodiversity from climate change mitigation

14. When climate change mitigation is a key objective, additional principles and safeguards are necessary to ensure that the actions to be undertaken meet both climate and nature goals and avoid contradictions. Where countries follow these voluntary principles and safeguards, they should ensure alignment with their commitments, the relevant rules, modalities, procedures and methodologies adopted under the United Nations Framework Convention on Climate Change and the Paris

¹⁷ “Free, prior and informed consent” refers to the tripartite terminology of “prior and informed consent”, “free, prior and informed consent” and “approval and involvement”.

¹⁸ I.e. applying environmental impact assessments at the earliest stages of project design and robust monitoring and evaluation systems; preventing the transfer of risks and impacts; avoiding degradation of natural habitats, loss of biodiversity, the introduction of invasive species and the creation or exacerbation of vulnerabilities to future disasters; promoting and enhancing biodiversity and ecosystem functions and services; and aiming for sustainable resource use while not enhancing the drivers of climate change and disaster risks.

Agreement. The table below includes descriptions of each of those principles, as well as potential safeguards.

2. Strengthening safeguards for indigenous peoples and local communities, women and youth

15. Building on the principles and safeguards laid out in the Voluntary Guidelines, and consistent with section C of the Framework, the following areas deserve further attention:

(a) *Respect for different value systems.* Nature embodies different concepts for different people, including biodiversity, ecosystems, Mother Earth and systems of life. Nature's contributions to people also embody different concepts, such as ecosystem goods and services and nature's gifts, and the Framework recognizes and considers diverse value systems and concepts that nature embodies, including biodiversity, ecosystems, Mother Earth and systems of life. For example, in some countries, nature itself is assigned an intrinsic value and rights, including within legal frameworks, for example, in countries that recognize a Mother Earth-centric world view.^{19,20} This understanding is rooted in a common indigenous perspective that sees humans as part of nature and does not privilege them above other parts of an ecosystem. While existing safeguards, frameworks and standards often address the rights and traditional knowledge of indigenous peoples and local communities, they do not directly address all value systems, such as Mother Earth-centric world views. This aspect could be further developed and in ways that are supportive of human rights and consistent with different national legislation and international obligations and principles of international law;

(b) *Respect for human rights.* Human rights-based approaches are essential to the legitimacy, integrity and effectiveness of nature-based solutions and/or ecosystem-based approaches. This is already embedded in the existing safeguards, but further strengthening in line with the Framework is recommended. Safeguarding the right of indigenous peoples and local communities to participate in governance structures and decision-making pertaining to nature-based solutions and/or ecosystem-based approaches that affect them is essential. Ensuring transparency, building trust and supporting flexible, inclusive implementation are also critical to successful scaling up. To address concerns around the recognition of the multiple values of nature and the distribution of benefits and burdens, the rights of indigenous peoples and local communities should be fully integrated into project design, implementation and governance, and rights-holders should actively and safely participate in designing and navigating any required remedy process, in accordance with national legislation and international obligations. This will involve giving attention to free, prior and informed consent, attention to customary rights, cultural protection, participatory decision-making, participatory implementation, transparent communication and equitable benefit-sharing. Wherever solutions that would affect existing rights holders are proposed, the guidance outlined in the present supplement is relevant.

IV. Overarching considerations

16. As temperatures rise, adaptive management approaches for biodiversity conservation and ecosystem management are needed, including climate-smart conservation that connects fragmented protected and conserved areas, maintains ecological corridors and promotes landscape connectivity, and spatial planning that mainstreams biodiversity. The considerations below are intended to complement those presented in the Voluntary Guidelines in relation to the stepwise approach to design and implementation.

¹⁹ Cristina Espinosa, "The advocacy of the previously inconceivable: a discourse analysis of the Universal Declaration of the Rights of Mother Earth at Rio+20", *The Journal of Environment and Development*, vol. 23, No. 4 (December 2014).

²⁰ Haydn Washington and others, "Why ecocentrism is the key pathway to sustainability", *The Ecological Citizen*, vol. 1, No. 1 (2017).

1. Scaling up

17. Good practices for the scaling-up of nature-based solutions and/or ecosystem-based approaches to climate change adaptation, mitigation and disaster risk reduction include:^{21,22}

- (a) Identifying the costs and benefits (social, environmental and economic) of different approaches in different contexts, including over various timescales or for different actors;
- (b) Addressing factors that enable success and the barriers to scaling, through systematic monitoring, evaluation and reporting on effectiveness and efficiency;
- (c) Adopting integrated approaches for scaling up, aligning policies, incentives, finance and safeguard measures, and including regional planning;
- (d) Applying fit-for-purpose safeguards, standards and guidelines;
- (e) Enabling effective locally led actions, scaling up and coordinating existing local initiatives, with safeguards tailored to risks and settings, in the application of the precautionary approach;
- (f) Applying evidence-based decision-making and recognizing science and other knowledge systems as a driver of nature-based solutions and/or ecosystem-based approaches;
- (g) Integrating traditional knowledge and the efforts of indigenous peoples and local communities.

(a) Recognizing and respecting traditional knowledge and the efforts of indigenous peoples and local communities

18. Recognizing and respecting traditional knowledge, innovations and practices and valuing the efforts of indigenous peoples and local communities are crucial for the successful design, implementation and scaling up of nature-based solutions and/or ecosystem-based approaches. Key actions include:

- (a) The full, equitable, inclusive, effective and gender-responsive representation and participation of indigenous peoples and local communities, women and youth at the design stage and throughout project implementation, ensuring the co-creation of actions to be taken and enabling ownership at the local level. This may be facilitated by developing or amending policy and legislative frameworks that enable the full and effective participation of indigenous peoples and local communities, as well as facilitating their efforts to address climate change and biodiversity loss. This consideration builds upon principle 4 of the Voluntary Guidelines;
- (b) Addressing land tenure rights and access to natural resources, in accordance with national legislation, and recognizing the role of indigenous peoples and local communities in managing biodiversity and ecosystem services. Many indigenous peoples and local communities face unclear and unrecognized tenure despite having customary land- or sea-use rights, which undermines their ability to implement actions that address biodiversity and climate concerns and build resilience within their traditional territories. If the issue is left unaddressed, outside interventions can exacerbate land dispossession²³ or create uncertainty about land ownership. These considerations build upon safeguard 9 of the Voluntary Guidelines;
- (c) Building bridges between different science and knowledge systems on the basis of best practices in existing forums, such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Much traditional knowledge is passed on orally and is context-specific. For

²¹ United Nations Environment Programme, *Nature-based Solutions: Opportunities and Challenges for Scaling Up* (Nairobi, 2022).

²² European Environment Agency, *Scaling Nature-based Solutions for Climate Resilience and Nature Restoration* (Publications Office of the European Union, 2023).

²³ Laura Notess and others, *The Scramble for Land Rights: Reducing Inequity between Communities and Companies* (Washington, D.C., World Resources Institute, 2018).

this reason, care and attention to data sovereignty must be exercised when including such knowledge alongside scientific findings.²⁴ Data sovereignty policies can provide frameworks that Parties should use for the ethical use of data to advance collective indigenous well-being, and to prevent the unlawful use of traditional knowledge associated with genetic resources.²⁵

(b) Mainstreaming nature-based solutions and/or ecosystem-based approaches

19. Nature-based solutions and/or ecosystem-based approaches can only deliver their full transformative potential when mainstreamed into appropriate governance and policy frameworks and underpinned by inclusive planning, monitoring and transparency systems. When operationalizing the Framework, governments at all levels can ensure that the approaches are embedded through coherent land- and sea-use planning, as appropriate, climate-biodiversity budget alignment and spatial strategies. Many Governments have implemented programmes and frameworks to deliver nature-based solutions and/or ecosystem-based approaches with climate change mitigation benefits, for example, by reducing emissions from deforestation and forest degradation, from which lessons can be learned. Governments can, and increasingly do, integrate these approaches into national biodiversity strategies and action plans, national adaptation plans, nationally determined contributions and other national plans and strategies, as appropriate, also with a view to fostering collaboration and integrated policy and planning approaches across related multilateral environmental agreements in a manner consistent with national circumstances and priorities. Enhanced collaboration among the responsible ministries will help to leverage synergies, ensure alignment across different programmes or frameworks and avoid the duplication of efforts.

(c) Raising awareness and developing capacity

20. Communicating the multiple benefits of nature-based solutions and/or ecosystem-based approaches to a wide audience is crucial to uptake and sustainability. It is also essential to opening or expanding avenues for funding. Understanding the information and communication needs of diverse stakeholder groups will help to ensure effective outreach, build a common knowledge base, raise awareness and strengthen capacities in accordance with the long-term strategic framework for capacity-building and development.²⁶ Many organizations, partnerships, initiatives and coalitions are working on awareness-raising and capacity-building or on offering platforms for knowledge exchange.²⁷

2. Stepwise approach to design and implementation

21. The Voluntary Guidelines provide a stepwise approach designed for adaptation and disaster risk reduction objectives. Some additional considerations for each step, including for initiatives towards climate change mitigation, are highlighted below.

Step A: understanding the social-ecological system

22. It is important to explore several issues when defining the challenge to be tackled and setting objectives for a new initiative, as outlined below:

(a) The history of the target social-ecological system, the drivers of ecosystem change and the rate of greenhouse gas emissions from ecosystem loss or degradation must be identified. Furthermore, the impact of future climate scenarios on the rate of ecosystem change and subsequent

²⁴ See <https://www.gida-global.org/careprinciples>

²⁵ Stephanie Russo Carroll, Tahu Kukutai and Maggie Walter, “Indigenous data sovereignty” in *The Indigenous World 2021*, 35th edition, Dwayne Mamo and others, eds., (International Work Group for Indigenous Affairs, 2021).

²⁶ Decision [15/8](#), annex I.

²⁷ Initiatives such as the National Biodiversity Strategy and Action Plan Accelerator Partnership, the Nationally Determined Contributions Partnership, the National Adaptation Plan Global Network, the Enhancing Nature-based Solutions for an Accelerated Climate Transformation Partnership, the Friends of Ecosystem-based Adaptation network and the Partnership for Environment and Disaster Risk Reduction, as well as their respective members, facilitate capacity-building, in particular for developing countries, and help to increase awareness and understanding of the impacts of climate change on biodiversity, including by sharing lessons learned from the implementation of nature-based solutions and/or ecosystem-based approaches.

greenhouse gas emissions should also be considered. Such an assessment will feed into an estimate of emission reductions and removals from possible activities that will be undertaken under step D;

(b) With regard to the social context, the dependence of local jobs, industries, livelihoods and cultures on natural and managed ecosystems, the destruction of ecosystems, barriers to ecosystem conservation, protection, restoration and sustainable management, and the aspirations of the local population must all be considered;

(c) It is necessary to identify how and with whom the benefits would need to be shared. In addition, the rights to development and land and sea tenure, where established under national legislation, should be recognized and respected, as appropriate, as well as local attitudes towards payments for ecosystem services.

Step B: assessing vulnerabilities and risks

23. Step B is focused on the vulnerability of nature and people to climate change and risk to hazardous events. Engaging early with traditional knowledge holders and including their knowledge into climate vulnerability and risk assessments, with full respect for knowledge and data sovereignty, are essential.

24. Social and environmental safeguards are crucial tools to supporting the understanding and reduction of risks. Environmental safeguards include addressing the risk of negative impacts of climate change measures on biodiversity, including ecosystem integrity, as well as assessing the impact of future climate change on the ecosystem's own carbon storage capacity, and reducing the risk of reversals of emission reductions and removals that may result from extreme events or slower onset climate impacts.

Step C: identifying options for nature-based solutions and/or ecosystem-based approaches

25. To reflect the Framework, step C will need to accommodate effective, equitable and scalable nature-based solutions and/or ecosystem-based approaches. The potential barriers to effectiveness and the multiple benefits derived from and the wider impacts of each envisaged option should be identified. Key actions for identifying climate change adaptation and mitigation options specifically could involve: (a) identifying broad options for action, based on step A; (b) exploring specific options selected in similar geographical areas (e.g. through case studies); and (c) working with the multi-stakeholder group concerned to identify favoured options.

Step D: prioritizing, appraising and selecting options

26. Some additional criteria should be considered when prioritizing and appraising options for action with a climate change mitigation objective (key action (a) of the Voluntary Guidelines). The criteria may include: adaptation and disaster risk reduction benefits, as the first criterion; mitigation potential; resilience to climate change; and capacity to implement over the long term.^{28,29} Relatively simple methods can be used to derive a first estimate of climate change mitigation potential for many options. Current understanding of ecosystem resilience to climate change (step B) is a factor in assessing the long-term viability of each option in delivering climate change mitigation benefits. The capacity to implement will depend on existing skills and knowledge, training opportunities and access to the financial and other resources needed to enable implementation through time.

Step E: project design, implementation and scaling up

27. Alongside the key actions specified in the Voluntary Guidelines, nature-based solutions and/or ecosystem-based approaches will also be more successful when diverse knowledge systems are acknowledged and incorporated. It may be especially helpful to integrate traditional knowledge into

²⁸ Sara M. Leavitt and others, *Natural Climate Solutions Handbook: A Technical Guide for Assessing Nature-Based Mitigation Opportunities in Countries*, 2nd ed. (Arlington, The Nature Conservancy, 2021).

²⁹ United Nations Environment Programme, *Nature-based Solutions for Climate Change Mitigation* (Nairobi and Gland, 2021).

design and implementation.³⁰ When climate change mitigation co-benefits are intended, attention to the carbon-focused safeguards detailed in the table below is needed at the design and implementation stages.

28. One clear pathway to scaling up is the inclusion of nature-based solutions and/or ecosystem-based approaches in nationally determined contributions, national adaptation plans and other national plans. A first step is to quantify the potential for multiple benefits, including for biodiversity, ecosystem integrity and climate change adaptation, mitigation and disaster risk reduction, often through spatial analysis and planning. Scaling up requires sufficient means of implementation, in line with the Article 20 of the Convention and commitments outlined in Target 19 of the Framework, Article 4 of UNFCCC and Article 9 of the Paris Agreement, as well as related principles under the respective frameworks. also represents a unique opportunity to promote private sector and multilateral investment for implementation, as well as an incentive for technology development related to adaptation, nature conservation, sustainable use and risk reduction.

Step F: holistic and transparent monitoring and evaluation mechanisms

29. Nature-based solutions and/or ecosystem-based approaches aim to result in multiple benefits that help to address several social, economic and environmental challenges. Monitoring and evaluation frameworks should therefore encompass the entire suite of interventions, including the multiple intended benefits, as well as track any negative impacts. Emission reductions and removals are measured and reported in accordance with the relevant decisions adopted under the United Nations Framework Convention on Climate Change and the Paris Agreement. Multiple carbon standards and protocols are available, though they do not cover all types of nature-based solutions and/or ecosystem-based approaches.³¹ Governments that deploy actions through REDD-plus are expected to develop safeguard information systems to provide transparent and consistent information on how safeguards are being addressed and respected.

Table 1

Additional principles and safeguards focused on nature-based solutions and/or ecosystem-based approaches that provide climate change mitigation co-benefits

<i>Theme</i>	<i>Principle</i>	<i>Potential safeguard</i>
Multiple benefits	Prioritize approaches that address multiple social, economic and environmental challenges, seeking benefits for biodiversity, water security, ecosystem services, resilience and human well-being, without undermining the environmental quality of the ecosystems where they are implemented (see also principle 10 of the Voluntary Guidelines). Prioritize the protection, restoration and improved management of ecosystems, and their ecological integrity, and species, including wild fauna, important for the full carbon cycle, in particular vulnerable and climate-sensitive species and ecosystems.	Planning for multiple benefits Appropriate conservation and restoration actions should be prioritized, and nature-based solutions and/or ecosystem-based approaches that provide climate change mitigation co-benefits and support Targets 8 and 11 of the Kunming-Montreal Global Biodiversity Framework should be designed taking their ability to deliver multiple benefits into account. This may involve: (a) Assessing the benefits, risks and trade-offs of selected actions across multiple social, economic and environmental challenges, considering the vulnerability of ecosystems; (b) Undertaking spatial prioritization that incorporates an analysis of the social and environmental risks and benefits of the proposed

³⁰ Nathalie Seddon and others, “Understanding the value and limits of nature-based solutions to climate change and other global challenges”, *Philosophical Transactions Royal Society B*, vol. 375, No. 1794 (March 2020).

³¹ World Business Council for Sustainable Development, “Carbon standards for natural climate solutions (NCS) credits”, associated technical paper for the report *Nature-based Solutions in strategies for Net Zero, Nature Positive and addressing Inequality* (November 2022).

<i>Theme</i>	<i>Principle</i>	<i>Potential safeguard</i>
	Give priority to adaptation and disaster risk reduction benefits, with mitigation as a co-benefit, that arise from managing natural systems in a manner that enhances structural integrity and function. Maximise synergies and ensure a balanced mix of approaches across communities and diverse ecosystems.	actions, including ecological integrity and ecosystem connectivity; (c) Over larger areas, aiming to achieve a balance among actions that prioritize several benefits, communities and ecosystems, so that all efforts are not solely directed to ecosystems and species important for the full carbon cycle; (d) Consulting with stakeholders, including indigenous peoples and local communities, on the various benefits, recognized risks and trade-offs when comparing proposed actions through a participatory and inclusive process in which the principles of free, prior and informed consent are respected, as part of participative decision-making processes.
Urgency and irreversibility of biodiversity loss	Consider the pressing urgency of the biodiversity and climate crises, together with the longevity of greenhouse gases in the atmosphere. Actions that prevent or reduce emissions or enhance removals, while protecting or restoring biodiversity, that have an immediate, ongoing and permanent effect are more valuable than those with results that materialize temporarily or only over a longer time frame. Avoid the trap of prioritizing speed over resilience (see “long-term ecological integrity and resilience” below). This climate urgency never justifies shortening, rushing, or circumventing consultation processes with indigenous peoples and local communities.	Projecting carbon and biodiversity outcomes through time Nature-based solutions and/or ecosystem-based approaches that provide climate change co-benefits should be selected on the basis of an assessment of the expected results, where such information is available. Benefits to biodiversity should be considered and estimated. Cost per ton of carbon dioxide equivalent should be considered and, together with resilience and ecological integrity considerations, may, for example, help countries to identify the types of conservation, restoration or management intervention most suitable for a given area. Urgent post-disaster responses may also provide opportunities to enhance benefits for biodiversity.
Avoiding biodiversity loss first	Prioritize the prevention of further loss or degradation of natural ecosystem carbon stocks and, in a complementary and simultaneous manner where national circumstances permit, promote the restoration of degraded ecosystems and the recovery of their carbon stocks This principle is closely connected with the urgency principle and multiple benefit principles above. Emissions from the destruction of a natural ecosystem are near-instantaneous, while the carbon removals resulting from the full restoration of an equivalent area of the same ecosystem will typically take many years.	Avoiding biodiversity loss first, then restoring When considering the use of nature-based solutions and/or ecosystem-based approaches that provide climate change co-benefits, emissions preventions and reductions from all sectors are essential first steps to helping to prevent biodiversity loss and maximising their effectiveness and long-term sustainability. Where there is a choice between reducing both negative impacts on biodiversity and emissions by preventing the loss or degradation of natural ecosystems (e.g., deforestation) and emissions removals by restoring natural ecosystems, and each option has similar mitigation benefits, the conservation of existing carbon pools should be prioritized so as to avoid further negative impacts before restoring degraded ecosystems. Where comparable benefits can be achieved either by preventing loss or degradation or by restoring degraded ecosystems, avoidance of further biodiversity loss and ecosystem degradation is the preferred approach.

<i>Theme</i>	<i>Principle</i>	<i>Potential safeguard</i>
		Only when prevention, reduction and restoration are insufficient or not technically feasible may compensation be considered as a last resort.
Additional biodiversity benefits	Account only for biodiversity and ecosystem integrity benefits or carbon emission reductions or removals that would not have otherwise occurred (i.e. new benefits resulting from the activity). Additionality is a crucial requirement where carbon credits are generated, traded or retired; nature-based solutions and/or ecosystem-based approaches that deliver mitigation co-benefits without being part of a carbon-crediting scheme need not treat additionality as a deliverable, provided that they entail other co-benefits.	Ensuring biodiversity outcomes and recognition of stewardship Where carbon credits are generated, traded or retired, nature-based solutions and/or ecosystem-based approaches that provide climate change mitigation co-benefits should be designed on the basis of a stringent assessment of additionality, following accepted carbon and nature market standards, including those agreed under the Paris Agreement. The net reduction of carbon stocks in all organic carbon pools (above and below ground in the case of terrestrial ecosystems, and in near-shore, pelagic and deeper-ocean pools in the case of marine ecosystems) should be prevented, ensuring the avoidance of double counting in accordance with the Paris Agreement, including through corresponding adjustments, as applicable.
Long-term ecological integrity and resilience	Prioritize activities where the emission reductions or removals and the biodiversity benefits are likely to be long-lasting, taking social and ecological factors into account.	Promoting permanence Nature-based solutions and/or ecosystem-based approaches that provide climate change mitigation co-benefits should have long-lasting results. They should protect, maintain and restore biodiversity and ecological integrity (ecosystem condition, composition, structure and function). Actions should be designed to reduce the risk of reversals consistent with established environmental and social safeguard frameworks applicable to the relevant activity type (e.g. Cancun safeguard f),³² which typically means tackling the underlying drivers of ecosystem degradation and barriers to ecosystem restoration or sustainable management. Actions should be designed for climate and ecosystem resilience, prioritizing the use of local, climate-resilient native species in planting and restoration, and supporting the recovery of native flora and fauna and the ecological interactions that sustain long-term resilience. Monitoring systems should be able to assess any reversals, and carbon and biodiversity accounting or crediting systems should include buffers to cater for the remaining risk of reversals.
Displacement of pressures	Avoid displacement of emissions to, and negative impacts on biodiversity in, another location. Displacement of emissions can occur at local, national and international levels.	Avoiding displacement of emissions on biodiversity Nature-based solutions and/or ecosystem-based approaches that provide climate change mitigation co-benefits should be designed to avoid displacement of emissions. Where international carbon markets are

³² Decision 1/CP.16, appendix I, subpara. 2 (f), of the Conference of the Parties to the United Nations Framework Convention on Climate Change.

<i>Theme</i>	<i>Principle</i>	<i>Potential safeguard</i>
		used, proponents should act consistently with relevant decisions under the Paris Agreement, as appropriate. Solutions include: (a) Strengthening landscape governance and locating mitigation activities as part of an integrated spatial plan (see Target 1 of the Kunming-Montreal Global Biodiversity Framework); (b) Working in collaboration with actors who depend on land-use change, with respect for free, prior and informed consent and taking into account national and territorial contexts to co-design alternative livelihoods and economic pathways that do not lead to displacement of emissions or to rebound effects, including by reducing the underlying drivers of ecosystem degradation; (c) Undertaking biodiversity and carbon accounting national or at the appropriate scale (project, programme, jurisdictional or nested), taking into account host-country capacities and existing bilateral agreements to integrate local and domestic displacement of emissions into overall results; (d) Estimating the remaining risk of displacement of emissions on the local, domestic and international scales; (e) Deducting projected remaining displacement of emissions from the biodiversity and carbon results in accounting or crediting schemes, while recognizing that biodiversity loss displaced as a result cannot be directly offset elsewhere.
Equity, gender equality and human rights	Take a human rights-based approach, including by respecting and protecting the contributions and rights of indigenous peoples and local communities, women and youth, who are crucial actors in both protecting and restoring biodiversity and in implementing climate action. Their traditional knowledge, priorities and needs should be taken into account for biodiversity and climate actions to be equitable, inclusive, effective and rights-based.	Promoting equitable outcomes Rights-based and gender-responsive considerations in the use of nature-based solutions and/or ecosystem-based approaches that provide climate change co-benefits should be designed and implemented with the full, effective, inclusive and gender-responsive participation and representation of indigenous peoples and local communities, women and youth, where applicable. Actions that present risks or imply potential risks of dispossession, undermine rights or fail to consider free, prior and informed consent or benefit-sharing, among others, should be identified, assessed and mitigated through robust grievance mechanisms, benefit-sharing arrangements and transparent monitoring, in line with host-country legal frameworks and applicable international standards. Actions with a direct or indirect impact on the rights of indigenous peoples and local communities should only be pursued with their free, prior and informed consent, subject to national legislation and consistent with international instruments. When risks to indigenous peoples and local communities, women or youth cannot be fully avoided, an accessible, culturally appropriate

<i>Theme</i>	<i>Principle</i>	<i>Potential safeguard</i>
		grievance and redress mechanism should be established and maintained to enable affected rights holders to raise concerns and obtain remedy throughout the project cycle.

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[Annex II

Multilevel road map for enhancing cooperation, policy coherence and synergies across the Rio conventions

A. Background

1. The actions set out in the tables below are aimed at enhancing synergies among the Rio conventions in a manner consistent with the mandates of the conventions and their secretariats.
2. Between 22 April and 13 June 2026, a series of four technical information exchanges – two held online and two in hybrid format³³ – was convened with the broad participation of experts from Parties, observers and other stakeholders, with a view to discussing the identified building blocks for enhancing policy coherence and cooperation and providing inputs to the mapping study and the multilevel road map. The building blocks are structured around eight thematic areas:
 - (a) Alignment of national strategies: national biodiversity strategies and action plans, nationally determined contributions, national adaptation plans and land degradation neutrality targets;
 - (b) Nature-based solutions and/or ecosystem-based approaches;
 - (c) Monitoring, reporting and review;
 - (d) Role of scientific assessments and evidence-based policy;
 - (e) Knowledge management and capacity-building;
 - (f) Resource mobilization;
 - (g) Indigenous peoples and local communities;
 - (h) Whole-of-society approach.
3. The exchanges were guided by principles that were:
 - (a) Party-driven and respectful of the respective mandates of the three conventions;
 - (b) Science-based and informed by existing assessments, including those of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, the Intergovernmental Panel on Climate Change, the UNCCD Science-Policy Interface and others;
 - (c) Open to, and respectful of, different perspectives and worldviews;
 - (d) Focused on implementation, coherence and impact rather than on procedural harmonization;
 - (e) Incremental and pragmatic, building on existing mechanisms and decisions;
 - (f) Cognizant of national, regional and local implementation realities, including capacities and national circumstances.

³³ 1. 22 April 2026 (online): www.cbd.int/meetings/CCB-OM-2026-01; 2. 6 May 2026 (online) www.cbd.int/meetings/CCB-OM-2026-02; 3. 2–5 June 2026 (online and Vilm, Germany): www.cbd.int/meetings/CCB-OM-2026-03; 4. 13 June 2026 (online and Bonn, Germany): www.cbd.int/meetings/CCB-OM-2026-04.

4. The multilevel road map was developed on the basis of the mapping study referred to in paragraph 3 above. Whereas the mapping study identified over 400 possible actions across the eight building blocks, the review highlighted that a set of that magnitude would not be feasible for effective consideration by the Conference of the Parties. Accordingly, the actions were consolidated and prioritized against the following criteria – namely their potential impact, efficacy, feasibility and strategic importance for enhancing synergies – while seeking to preserve the substance and balance of the options identified through the technical information exchanges. Readers wishing to consult the full range of actions, together with the underlying analysis and supporting detail, are invited to refer to the mapping study presented in document CBD/COP/17/INF/11.

B. Purpose and scope

5. The implementation of the multilevel road map and of the actions contained therein should be to the mutual benefit of the conventions concerned and compatible with their provisions, obligations, mandates and objectives, while respecting their independent nature. It should further respect ongoing efforts to enhance synergies, take into account the need to make efficient use of resources and result in improved implementation of the relevant conventions and in more efficient and streamlined processes.

6. The road map and its associated actions are considered to be voluntary and intended to serve as flexible guidance for enhancing cooperation, policy coherence and synergies in the implementation of the Rio conventions, the Kunming-Montreal Global Biodiversity Framework, the Paris Agreement and the United Nations Convention to Combat Desertification (UNCCD) 2018–2030 Strategic Framework, as well as their follow-on processes.

7. Any implementation of the multilevel road map is in accordance with national circumstances, priorities and capabilities. Nothing in the present multilevel road map should be understood as modifying the rights and obligations of Parties under the Convention or any other international agreement, nor should it be understood as requiring Parties to accept declarations, decisions, principles, guidelines or other provisions, contents and requirements to which they have not originally consented.

8. The actions have been categorized as short-term (for delivery by the end of 2028), medium-term (2029–2030) and long-term (2030 onward). It should be noted that their successful delivery may depend on enabling activities being initiated earlier than the indicated time frames would suggest.

9. Actions should be adapted to national circumstances. Not all actions would be applicable to all countries, and countries may also undertake additional actions not included in the road map. Some actions may be relevant to enhancing synergies between only two of the Rio conventions, or among a subset thereof, rather than among all of them. Parties are encouraged to select from among the various actions those best suited to enhancing synergies, in accordance with their national circumstances.

C. Voluntary multilevel road map for enhancing cooperation, policy coherence and synergies across the Rio conventions

10. The road map supports the pursuit of the objectives of the three Rio conventions in a mutually reinforcing manner, so that, by 2030 and beyond, the conservation and sustainable use of biodiversity, the response to climate change and the achievement of land degradation neutrality are planned, financed, implemented and monitored coherently at all levels, to the mutual benefit of the conventions and in support of sustainable development.

11. The actions are organized around three time-bound horizons that serve as strategic milestones: by the end of 2028 (short term) as the foundations for coherent planning, monitoring and coordination are established; by 2030 (medium term) as aligned national strategies, reporting and financing become operational; and from 2030 onward (long term) where coherent implementation and a

mutually supportive international architecture are sustained. Enabling activities for a given milestone may need to commence in advance of the horizon indicated. The actions do not remove the central role of each Rio convention to meet their individual objectives.

12. Within each horizon as they are presented in the tables below, actions have been arranged to provide a form of implementation logic. Firstly, scale with global actions being followed by regional, national and subnational. Secondly, within each geographical scale, actions related to assessments, analyses and gathering of information are listed first, followed by implementation, monitoring and finally reporting. Finally, actions related to means of implementation, such as capacity-building, finance and technology needs, that do not fit into the above are listed.

13. In the tables below, the column “Proposed actors” identifies such actors for collaboration and support on each action. Parties are the primary actors responsible for implementation, acting through their national focal points and relevant line ministries; the secretariats of the Rio conventions and the Joint Liaison Group play a facilitating and coordinating role; donors and financial mechanisms in a broad sense. The actions entrusted to the Rio Secretariats and UN agencies would be subject to the availability of resources.

Table 1
Short-term (now to end 2028)

	<i>Action</i>	<i>Scale</i>	<i>Building block</i>	<i>Proposed actors</i>
i.1	Undertake a cross-mapping of Convention-level targets across the Rio Conventions and the SDGs to identify areas of alignment and inform the development or revision of coherent national strategies.	International	Alignment of national strategies and plans	Parties; Rio secretariats; Joint Liaison Group (JLG); United Nations agencies
i.2	Identify common monitoring/reporting challenges and gaps and produce recommendations, and invite IPBES/IPCC/SPI as appropriate, in accordance with their respective mandates, collaborate and advise on the synergistic use of indicators.	International	Planning, monitoring, reporting and review	Parties; Rio secretariats; Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES)/Intergovernmental Panel on Climate Change (IPCC)/UNCCD Science-Policy Interface (SPI)
i.3	Build the evidence base and economic case for NbS and/or EBA, including cost-effectiveness metrics, ROI/case-study compilations, health-benefit pilots, and how to identify and manage trade-offs.	International	Nature-based solutions and/or ecosystem-based approaches	Rio secretariats; IPBES/IPCC/SPI; researchers; multilateral research funding and coordination platforms
i.4	Promote uptake of the CBD Voluntary Guidelines on NbS and/or EBA and its supplement across UNFCCC and UNCCD	International	Nature-based solutions and/or ecosystem-based approaches	Parties; Rio secretariats; JLG
i.5	Invite collaboration among IPCC, IPBES and the UNCCD SPI (and initiate engagement with the new ISP-CWP) explore opportunities to enhance collaboration	International	Science-policy interface and evidence-based decision-making	Parties; IPBES/IPCC/SPI; subsidiary bodies/COPs, IPLC caucuses
i.6	Strengthen the collaboration between observer engagement mechanisms (constituencies/caucuses) across the Rio conventions	International	Whole-of-society approach	Parties; national focal points (NFPs); Rio secretariats; Constituencies/caucuses

	<i>Action</i>	<i>Scale</i>	<i>Building block</i>	<i>Proposed actors</i>
i.7	Encourage the development of shared, interoperable data, monitoring and reporting systems for information from across the Rio conventions, building on successful collaborations	International	Planning, monitoring, reporting and review	Parties; relevant ministries; Rio secretariats' data/IT teams, civil society organizations (CSOs)
i.8	Collect and assess case studies, grass-roots best practices and successful whole-of-society partnerships/platforms to guide strengthening cooperation, policy coherence and synergies between the Conventions.	National	Whole-of-society approach	Parties; NFPs; United Nations agencies; CSOs
i.9	Convene cross-convention multi-stakeholder dialogues and consultations to assess actions, gaps and synergies, including negotiator briefings to CSOs at COPs	National	Whole-of-society approach	Parties; NFPs; CSOs/women/IPLC networks
i.10	Develop aligned national plans that collectively advances the goals of the KMGBF, Paris Agreement and voluntary land degradation neutrality (LDN) goals using integrated, inclusive and consultative approaches, supported by the most up to date information, while respecting diverse knowledge systems	National	Alignment of national strategies and plans	Parties through relevant ministries, in cooperation with indigenous peoples and local communities (IPLC), CSOs, academia. Rio Secretariats and support agencies for guidance
i.11	Establish and/or strengthen national coordination mechanisms/platforms with regular engagement of focal points, line ministries and stakeholders tasked with identifying and managing trade-offs across the Conventions through national planning and providing shared national reporting architecture.	National	Alignment of national strategies and plans	Parties; NFPs; relevant ministries
i.12	Deliver joint capacity-building on integrated planning and monitoring, including methodologies to inform indicators and data-management systems.	International	Knowledge management and capacity-building	Parties; (sub)regional capacity-building centres, Rio Secretariats
i.13	Facilitate regular technical exchange and outreach among Rio convention national focal points on the benefits of alignment and strengthen capacity through peer learning and training.	Regional	Cross-cutting/General	Rio secretariats; United Nations agencies; (sub)regional capacity-building centres
i.14	Develop joint guidance and tools for aligned national planning (NBSAPs/NDCs/NAPs/LDN) to enable prioritization of actions which maximise positive impacts for biodiversity and climate action using relevant assessments and guidance from all conventions	International	Knowledge management and capacity-building	Rio secretariats; JLG
i.15	Strengthen, subject to available resources, the JLG's functions (staffing, meeting support, capacity-building through the Joint-Capacity-Building Programme) commensurate with the mandate and responsibilities Parties assign to it.	International	Knowledge management and capacity-building	Parties; donors; Rio secretariats; JLG

	<i>Action</i>	<i>Scale</i>	<i>Building block</i>	<i>Proposed actors</i>
i.16	Strengthen cross-convention peer learning and knowledge-exchange mechanisms to support capacity-building, coordination and sharing of good practices among Parties and stakeholders.	International	Knowledge management and capacity-building	Parties; donors; Rio secretariats; JLG; academic/research observers
i.17	Promote synergies through better coordination among existing Financial Mechanisms of the Rio Conventions to support project design and development, including, where appropriate, by aligning criteria, encouraging country ownership and integrated projects delivering co-benefits, and continued GEF support (Integrated Programmes, policy-coherence window)	International	Resource mobilization	Parties; donors; implementing agencies
i.18	Develop meaningful arrangements to ensure the full and effective participation of indigenous peoples and local communities that allow effective exchanges across CBD SB8J and CBD IPLC caucus, UNCCD IP/LC caucuses and UNFCCC LCIPP caucus	International	Contributions and rights of indigenous peoples and local communities	Parties, IPLC caucuses
i.19	Strengthen IPLC participation at the Conventions level in national delegations and positions, through informal joint IPLC meetings across the conventions, and cooperation between LCIPP, SB8J and UNCCD caucuses in order to ensure synergies in positions across the conventions	International	Contributions and rights of indigenous peoples and local communities	Parties; Rio secretariats; IPLC caucuses

Table 2

Medium-term (2029 to 2030)

	<i>Action</i>	<i>Scale</i>	<i>Building block</i>	<i>Proposed actors</i>
ii.1	Explore the potential for coordinated, aligned implementation of post-2030 targets and frameworks across the Rio conventions and the post-2030 development agenda.	International	Alignment of national strategies and plans	Parties; Rio secretariats; IGOs; non-State actors
ii.2	Strengthen the integration of scientific, traditional knowledge into assessments and decision-making, map its influence in SPI messages, seek collaboration and advice on approaches on how to create a shared knowledge base across advisory bodies, SPIs and IPLC bodies.	International	Science-policy interface and evidence-based decision-making	Rio secretariats; IPBES/IPCC/SPI; SB8j/Local Communities and Indigenous Peoples Platform (LCIPP); academia
ii.3	Promote synergies in the implementation of the three conventions' gender action plans, engage women's constituencies consistently across processes, and strengthen the digital literacy and technical capacity of rural women and communities to advance gender-responsiveness.	International	Cross-cutting/General	Parties; NFPs; constituencies

	<i>Action</i>	<i>Scale</i>	<i>Building block</i>	<i>Proposed actors</i>
ii.4	Coordinate approaches across shared sectors/themes (e.g. forests, ocean, wildlife, pollution, water, food systems)	National	Alignment of national strategies and plans	NFPs; relevant ministries
ii.5	Use ecological resilience, including in freshwater ecosystems, as a lens to review and align national strategies and plans (NBSAPs, NDCs, NAPs, LDN targets and national drought plans)	National	Alignment of national strategies and plans	Parties; NFPs; relevant national authorities
ii.6	Mainstream NbS and/or EBA into national development, sectoral and spatial planning and into NBSAPs/NDCs/NAPs/LDN to support ecological conservation, restoration and sustainable management, prioritizing the conservation and restoration of ecosystems important for the full carbon cycle	National	Nature-based solutions and/or ecosystem-based approaches	Parties; regulators
ii.7	Prioritize and resource community-led, women-led and IPLC-led NbS and/or EBA that are inclusive by design	National	Nature-based solutions and/or ecosystem-based approaches	Parties; women's and IPLC networks
ii.8	Develop practical whole-of-society tools, guidance and thematic entry points (e.g. food-systems communities of practice) and matchmaking platforms connecting governments with whole-of-society actors and funders	National	Whole-of-society approach	Parties; JLG; United Nations agencies
ii.9	Build national integrated environmental information systems that consolidate data collection and use across the three Conventions where possible, and equip national actors to generate, access and use it	National	Planning, monitoring, reporting and review	Parties; relevant ministries
ii.10	Develop monitoring, reporting and review (MRR) systems that facilitate interoperability between the Rio Conventions and significantly reduce the reporting burden on Parties, where possible, anchored in formal national coordination mechanisms	National	Planning, monitoring, reporting and review	Parties; Rio secretariats
ii.11	Develop, as appropriate and without creating additional reporting obligations, metrics to measure policy coherence and synergistic implementation (a “National Synergies Stocktake”), cooperation effectiveness, on-the-ground safeguard implementation, and multi-stakeholder participation across the Rio conventions	National	Planning, monitoring, reporting and review	Parties
ii.12	Progressively align and map national strategies, targets and indicators across the Rio conventions and the SDGs as the foundation for shared data and	National	Planning, monitoring, reporting and review	Parties; NFPs; technical partner support

	<i>Action</i>	<i>Scale</i>	<i>Building block</i>	<i>Proposed actors</i>
	streamlined reporting, thereby avoiding duplication of national efforts			
ii.13	Strengthen synergistic community-based, youth-led and women-led monitoring, integrating traditional knowledge into national reporting with dedicated support and participation channels that supports aligned monitoring across the Rio conventions	Subnational	Planning, monitoring, reporting and review	Parties; Rio secretariats; IPLCs; women's and youth groups
ii.14	Develop integrated national finance plans, or similar instruments as appropriate, based on national expenditure reviews (e.g. by expanding the BIOFIN methodology across all three conventions).	National	Resource mobilization	Parties; United Nations agencies
ii.15	Coordinate efforts across the Rio conventions to identify incentives, including subsidies, harmful for biodiversity, climate and land and eliminate, phase out or reform them.	National	Resource mobilization	Parties; relevant ministries; (sub)regional capacity-building centres
ii.16	Strengthen funding for NbS and/or EBA through national and international funding programmes and mechanisms from all sources, joint financing platforms and training national agencies on relevant financing mechanisms with a view to protect and restore ecosystem integrity	National	Resource mobilization	Parties, donors
ii.17	Strengthen private sector-community partnerships and scale up prioritization of funding for projects that deliver across the conventions	National	Resource mobilization	Parties; relevant ministries; private sector; IPLC/women's organizations
ii.18	Strengthen IPLC participation in national coordination – permanent advisory councils/platforms with clear mandates and resources – and embed traditional knowledge and engage IPLC representatives across NBSAPs, NDCs, NAPs monitoring and implementation, recognizing traditional knowledge alongside science	National	Contributions and rights of indigenous peoples and local communities	Parties; NFPs; Rio secretariats; IPLC organizations
ii.19	Strengthen and finance the participation of IPLCs, women, youth and grass-roots actors, including multi-stakeholder partnerships through dedicated participation funding, rights-based approaches, community-based funding programmes, and incentives.	National	Whole-of-society approach	Parties; multilateral/bilateral cooperation; funders
ii.20	Promote science production and uptake in developing countries, and create funding and spaces for transformative, co-created knowledge	International	Science-policy interface and evidence-based decision-making	Parties; multilateral research funding, coordination platforms, and science funding bodies

	<i>Action</i>	<i>Scale</i>	<i>Building block</i>	<i>Proposed actors</i>
ii.21	Develop guidance to improve reporting coherence – acknowledging links to other Rio frameworks, mapping shared data connection points	International	Knowledge management and capacity-building	Parties; Rio secretariats
ii.22	Develop shared, open, interoperable policy-data infrastructure and joint databases for cross-convention use (a unified United Nations-level approach), paired with needed capacity-building	International	Knowledge management and capacity-building	Parties; Rio secretariats; United Nations agencies; data organizations
ii.23	Integrate traditional knowledge indicators across the conventions – including the full and effective IPLC participation in related bodies and processes, aligning IPLC-related indicators where possible	International	Contributions and rights of indigenous peoples and local communities	Parties; Rio secretariats; JLG; SB8J/CBD IPLCs caucus/LCIPP

Table 3

Long-term (end 2030 onward)

	<i>Action</i>	<i>Scale</i>	<i>Building block</i>	<i>Proposed actors</i>
iii.1	Consider potential opportunities for aligning reporting timelines across the Conventions (NDCs, NBSAPs, NAPs, LDN targets, drought plans, national reports and BTRs)	International	Cross-cutting/General	Parties
iii.2	Send political signals urging countries to recognise and strengthen IPLCs' and women's rights, including land tenure, in law, spatial planning and MRV, including by operationalizing IPBES Nexus F16 and KMGBF Indicator 22.1	National	Contributions and rights of indigenous peoples and local communities	Parties; IPLCs
iii.3	Promote the voluntary exchange of information, experiences and good practices on, inter-operational sustainable finance approaches covering biodiversity, climate and land, taking into account national circumstances	International	Resource mobilization	Parties; United Nations agencies; multilateral development banks and funds
iii.4	Encourage greater coherence and coordination across multilateral development banks and environmental funds to help enhance synergies, consistent with respective mandates and governance arrangements	International	Resource mobilization	Parties; United Nations agencies; Donors, multilateral development banks and funds

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