Synergies for Monitoring and Reporting on Climate and Biodiversity Actions: Global frameworks and national opportunities

THEMATIC PAPER

07

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

IISD International Institute for Sustainable Development

UFZ HELMHOLTZ Centre for Environmental Research

On behalf of: Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety of the Federal Republic of Germany

IKI INTERNATIONAL CLIMATE INITIATIVE

Thematic Paper 7

Synergies for Monitoring and Reporting on Climate and Biodiversity Actions: Global frameworks and national opportunities

Authors: Anika Terton, Jeffrey Jianfeng Qi, Emilie Beauchamp, Hillary Rosentreter (International Institute for Sustainable Development [IISD]), Sylvia Wicander (Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ])
Reviewers: Clemens Link, Kirstin Hücking, Oscar Zarzo Fuertes, Carlos Essus (Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ])

Content

Key Messages

- Transparency is a cornerstone of the Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC), and the Paris Agreement. A synergistic approach to monitoring and reporting helps measure progress toward biodiversity and climate goals and demonstrates how ecosystem-based approaches deliver outcomes for both. Integrated monitoring and shared data systems can also lower countries' reporting burden and improve data quality, policy coherence, and adaptive management.

- The CBD and Paris Agreement have distinct transparency systems – the monitoring framework for the Kunming-Montreal Global Biodiversity Framework (GBF) and the Paris Agreement's Enhanced Transparency Framework (ETF). Recent decisions, including updates to the GBF monitoring framework, the United Arab Emirates (UAE) Framework for Global Climate Resilience, and the Belém Adaptation Indicators, create clear entry points for synergistic transparency through harmonised indicators, metadata, and methodologies across the CBD and Paris Agreement.

- 2026 marks a pivotal convergence point, with countries submitting their 7th national reports to the CBD and second biennial transparency reports (BTRs) under the Paris Agreement. These will feed into the GBF-global review (17th Conference of the Parties [COP 17], 2026) and the global stocktake under the Paris Agreement (2027–2028). If their technical processes are cross-referenced, these can mutually reinforce each other, offering a practical opportunity to operationalise integrated monitoring, reduce duplication, and build a shared global evidence base.

- Since global metadata and methodologies for the Belém Adaptation Indicators are still being refined (until the 32nd United Nations Climate Change Conference [COP 32] in 2027), there is a critical window to harmonise definitions, indicators, and methodologies across the GBF monitoring framework and the UAE Framework for Global Climate Resilience, before national systems are locked in.

- To enhance synergies in monitoring and reporting at the national level, countries should consider the following good practices:

  - develop shared objectives and targets across national biodiversity strategies and action plans (NBSAPs), nationally determined contributions (NDCs), and national adaptation plans (NAPs) to establish a common theory of change for biodiversity-climate outcomes;

- identify overlapping indicators and harmonise definitions at the national level to enable integrated data collection that satisfies both reporting streams simultaneously;
- establish data-sharing agreements (protocols, memorandums of understanding [MOUs], interministerial task forces) to clarify mandates and enable whole-of-government, whole-of-society data collaboration;
- invest in joint data repositories with standardised taxonomies and visualization tools to turn dispersed data into actionable, integrated climate-biodiversity information;
- align reporting timelines and workflows so that CBD national reports and BTRs are developed in a coordinated sequence, with harmonised templates and dual sign-off arrangements;
- formalise responsibilities and invest in training. Clearly assign monitoring, reporting, and coordination roles across ministries and back them with structured, cross-departmental training on different multilateral environmental agreements' (MEA) monitoring, evaluation, and learning frameworks to build shared understanding of synergies and strengthen inter-agency relationships;
- embed learning and adaptive management into evaluation cycles to continuously improve integrated implementation and demonstrate how biodiversity and climate actions reinforce each other.

1 Introduction

Climate change and biodiversity loss are two of the most pressing and interconnected global crises. They share many human-induced drivers and, importantly, many potential solutions. Addressing climate change cannot succeed without conserving and restoring ecosystems. Likewise, reversing biodiversity loss depends on, among other things, limiting global warming and strengthening ecosystem resilience. This close interdependence creates opportunities to align strategies for climate adaptation and biodiversity conservation across the policy cycle (Lottje et al., 2025; Terton et al., 2024), underpinned by scientific evidence from the Intergovernmental Panel on Climate Change (IPCC, 2022) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (Pörtner et al., 2021). Despite this evidence, negotiations under the United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement, and the Convention on Biological Diversity (CBD) have historically progressed along separate tracks.

Over the past two decades, however, there have been efforts to strengthen coherence across the UNFCCC, the Paris Agreement, and the CBD (along with the third Rio Convention adopted in 1992—the UN Convention to Combat Desertification [UNCCD]). The outcome of the first global stocktake under the Paris Agreement urged countries to tackle the climate and biodiversity crises holistically, and the 28th United Nations Climate Change Conference (COP 28) Joint Statement on Climate, Nature, and People also called for "fostering strong synergies, integration, and alignment in the coherent, synergistic, and holistic planning and implementation of national climate, biodiversity, and land restoration plans and strategies" (COP 28 UAE, 2023; UNFCCC, 2023b). Meanwhile, the Kunming-Montreal Global Biodiversity Framework (GBF) under the CBD features a number of targets directly relevant to climate change and climate action (Tsioumani, 2024, p. 9). Most recently, CBD Decision 16/22 and UNCCD Decision 8/COP.16 invited parties to enhance policy coherence between the Rio Conventions and prioritise holistic and integrated action to tackle climate change, biodiversity loss, desertification, and land degradation (CBD, 2024c; UNCCD, 2024). Outside of the Rio Conventions processes, both the United Nations Environment Assembly (UNEA) and the Bern III Conference have also emphasised the importance of fostering and coordinating an inclusive and collaborative approach to promote synergies, cooperation and collaboration for the national implementation of multilateral environmental agreements (MEAs) (UNEA, 2024, 2025; United Nations Environment Programme, 2024).

These recent developments reaffirm the interdependence of the Rio Conventions and the need to turn synergies (see Box 1) and coherent implementation across climate and biodiversity into practice, including addressing common monitoring and reporting needs. Developing shared frameworks and integrated planning to enable the joint use of information and data for monitoring and reporting is an important element in enhancing synergies.

BOX 1

WHAT ARE SYNERGIES?

Synergies (between the Rio Conventions) are the additional benefits and greater impact achieved when actions for climate, biodiversity and land are planned and implemented together. They mean breaking down operational silos, aligning national strategies, sharing data, harmonising reporting, and designing projects that deliver multiple gains—such as restoring land that also stores carbon, supports species, and improves livelihoods. This integrated approach reduces costs, improves efficiency and attracts more funding (Rio Conventions, n.d.).

Synergies are the result of intentional planning and implementation of national climate and biodiversity commitments and strategies (nationally determined contributions [NDCs], National Adaptation Plans [NAPs], and national biodiversity strategies and action plans [NBSAPs]) at the national level to achieve greater results than if policies had been implemented independently of one another (Qi et al., 2024).

1.1 Why Monitoring and Reporting Synergies Matter

Transparency is a cornerstone of MEAs like the UNFCCC, the Paris Agreement, and the CBD. National monitoring and reporting are essential not only for global accountability but also for learning and adaptive management at the national level. Monitoring provides the evidence needed to assess progress and adjust policies nationally, while reporting shares that evidence internationally, enabling peer learning and an assessment of collective ambition.

Although the reporting requirements, procedures, and schedules of the respective conventions have largely evolved independently from one another, enhancing synergies between monitoring systems at the national level can bring practical advantages, including easing efforts in data collection, facilitating coherent reporting, and minimising duplication. Indeed, the monitoring and reporting frameworks under both the CBD and the Paris Agreement require similar data across overlapping themes such as ecosystems, land use, restoration, and resilience. Streamlining related processes can therefore save resources and improve consistency across submissions. Synergies between monitoring and reporting systems can also enhance policy coherence, generating evidence that bridges sectors and supports integrated decision making. Additionally, synergies strengthen learning and accountability by allowing countries to assess, for example, how ecosystem-based actions contribute to climate resilience and share those lessons internationally.

Countries that align their national monitoring and reporting systems across the UNFCCC, the Paris Agreement, and the CBD will be better positioned to generate robust, credible, and policy-relevant evidence for their reporting – and to demonstrate leadership in addressing climate change and biodiversity loss together.

1.2 Aims and Overview of This Paper

In light of ongoing efforts to strengthen synergies between the Rio Conventions, this thematic paper focuses on opportunities for enhancing synergies in the monitoring and reporting frameworks of the GBF and the Paris Agreement.[1] It aims to help countries engaged in CBD and Paris Agreement processes better understand both the evolving global monitoring and reporting frameworks as well as opportunities for translating these to the national level.

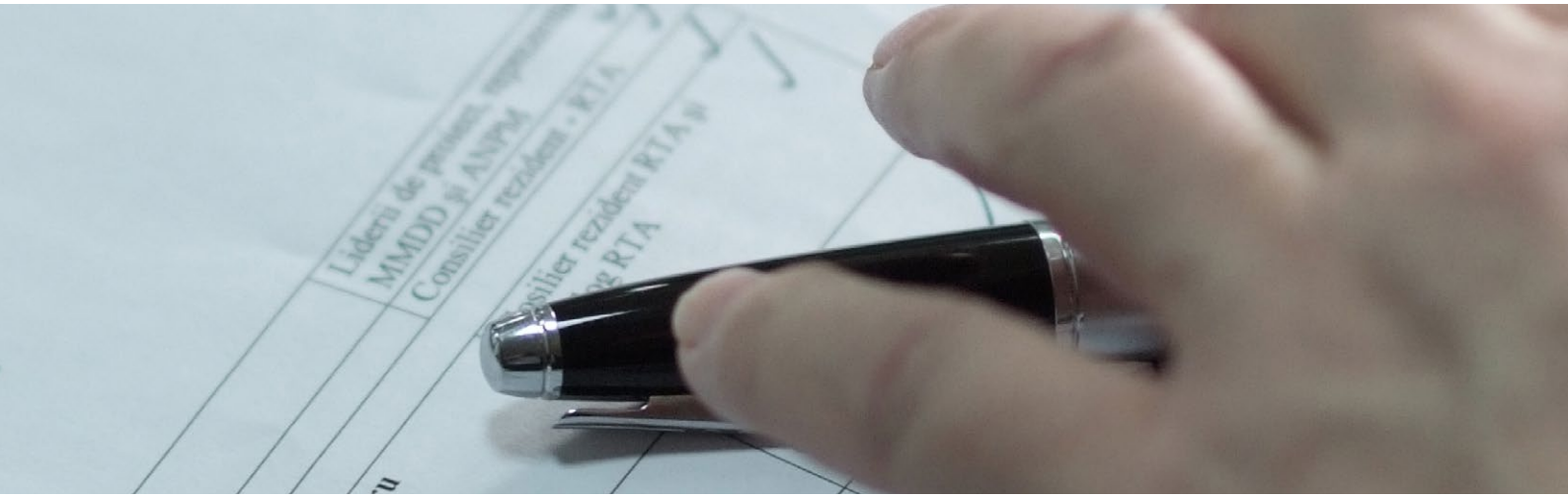
More specifically, the paper provides an overview of the latest decisions and requirements related to monitoring and reporting under both the CBD and the Paris Agreement, along with their implications. It also highlights opportunities to strengthen synergies between these processes at the global level. In addition, it offers concrete recommendations for improving the alignment of national-level monitoring, evaluation, and learning (MEL) systems to enable more effective and coordinated implementation of national biodiversity and climate change strategies.

In providing these good practices and recommendations, the thematic paper focuses specifically on national MEL systems for biodiversity and climate change adaptation. This is because these areas share multiple overlaps in activities and actions, as both are often local in scale and context-specific, and can generate mutually beneficial outcomes for one another. For example, healthy and resilient ecosystems play a crucial role in reducing climate risks and impacts. Likewise, ecosystem based approaches for adaptation can not only enhance human well being and strengthen resilience but also support biodiversity (Lottje et al., 2025; Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ], 2022). The wide range of potential synergies in implementing adaptation and biodiversity strategies further underscores the value of exploring opportunities to align their monitoring and reporting.

Nonetheless, it is important for countries to recognise that synergies exist across all key themes of the Rio Conventions, including climate change mitigation, adaptation, biodiversity, and desertification. Significant opportunities exist to create synergies across all three Rio Conventions (UNFCCC, CBD, and UNCCD) and other MEAs, as well as Agenda 2030 and the Sustainable Development Goals (SDGs).

1 The most updated reporting and transparency requirements for climate actions are primarily outlined in the Paris Agreement.

2 Overview: The GBF, the Paris Agreement, and their Monitoring and Reporting Frameworks



There have been many recent developments in the monitoring and reporting frameworks of the CBD, the UNFCCC, and the Paris Agreement. This landscape continues to evolve, even as countries progress in implementing the respective monitoring and reporting frameworks in line with updates and new requirements, which has made the need for greater alignment increasingly clear. This section provides an overview of how monitoring and reporting are organised under the GBF and the Paris Agreement and highlights key thematic linkages between them. It also presents opportunities for enhancing synergies in moni toring and reporting for biodiversity and climate actions at the global level.

2.1 Monitoring and Reporting Under the GBF

In 2022, parties to the CBD adopted the GBF at the 15th Conference of the Parties (COP 15). It aims to catalyse, enable, and galvanise urgent and transformative action for biodiversity and sets out a roadmap for halting and reversing biodiversity loss and ecosystem degradation by 2030, as well as a long-term vision for 2050 (CBD, 2022a). Countries were also mandated to update their NBSAPs – or at a minimum update their national targets – to align with the global targets of the GBF.

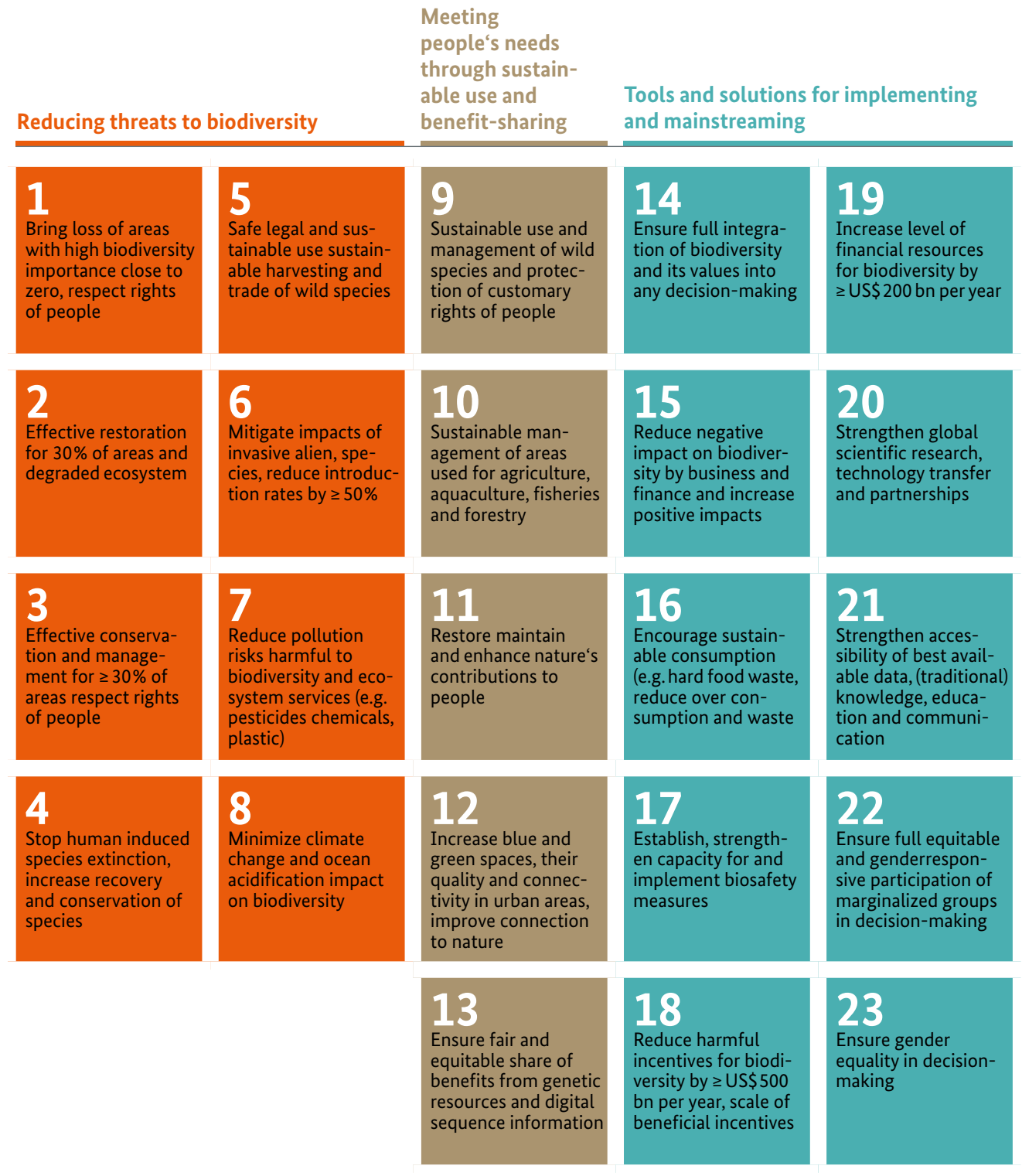
2.1.1 Goals, Targets, and Indicators

The GBF has four long-term goals for 2050, related to the protection and restoration of nature, the sustainable use and management of nature's contribution to people, the fair and equitable sharing of benefits, and the adequate means of implementation. The GBF also sets 23 action-oriented global targets for urgent action from 2022 to 2030[2] (see Figure 1).

2 For a more comprehensive overview of the GBF goals and targets guidance, please see Kunming-Montreal Global Biodiversity Framework 2050 Goals and Kunming-Montreal Global Biodiversity Framework 2030 Targets (with Guidance Notes).

Figure 1. The Kunming-Montreal GBF's 2030 Global Targets

Source: Leibniz Biodiversity Research Network (used under CC-BY-NC-ND license)



The GBF is accompanied by a monitoring framework that aims to provide consistent, standardised, and scalable tracking of progress. It comprises a set of agreed indicators for assessing progress toward achieving the 2050 goals and the 2030 targets at the national, regional, and global levels. The monitoring framework designates four types of indicators for use in NBSAPs and in national reports (CBD, 2022b):

- **headline indicators (mandatory)**: A minimum set of high-level indicators (27 unique indicators), which capture the overall scope of the goals and targets of the GBF. They are nationally, regionally, and globally relevant indicators validated by countries.

- **binary indicators (mandatory):** Global-level indicators (15 binary indicators) collated from responses to binary yes/no questions. They provide a count of the number of countries having undertaken specified activities.

- **component indicators (optional)**: A list of indicators that, together with the headline indicators, cover components of the goals and targets of the GBF. These may apply at the global, regional, national, and subnational levels.

- **complementary indicators (optional)**: A list of indicators for thematic or in-depth analysis of each goal and target, which may be applicable at global, regional, national, and subnational levels.

Together, these sets of indicators aim to strike a balance between the need for global comparability and the need to provide scope for capturing national circumstances. Parties to the CBD may include additional, supplementary national and subnational indicators for use at the national level.

In 2024, the Ad Hoc Technical Expert Group on indicators completed technical refinements to the headline and binary indicators; parties to the CBD adopted these updates and welcomed the guidance on the monitoring framework through Decision 16/31 (CBD, 2024a).

A complete list of the indicators for the GBF as well as their status, definitions, methods, and data sources, can be accessed at https://www.gbf-indicators.org/. The guidance on using the indicators of the GBF monitoring framework prepared by the Ad Hoc Technical Expert Group on indicators can be found in document CBD/COP/16/INF/3/Rev.1.

2.1.2 Monitoring and Reporting Processes

For national reporting to the CBD, Article 26 of the CBD requires all parties to submit national reports on measures taken to implement the CBD and their effectiveness in meeting the Convention's objectives. Decision 15/6 on mechanisms for planning, monitoring, reporting and review provides additional mandates to parties to the CBD on how the monitoring framework for the GBF and its indicators are to be used to foster transparency and accountability. Importantly, Decision 15/6 requests all parties to the CBD to report in their 7th and 8th national reports (due by 28 February 2026 and 30 June 2029, respectively) against the headline and binary indicators of the monitoring framework, supplemented by the optional component and complementary indicators, as appropriate (CBD, 2022c, para. 13). Annex 2 of

Decision 15/6 provides updated guidance for the national reports and Annex 1 of Decision 16/32 provides the revised reporting template for the 7th and 8th national reports (CBD, 2024b).

Including the indicator reporting requirement within the national report marks a significant step-change: unlike previous national reports to the CBD, which were largely descriptive, the 7th and 8th national reports will aim to generate a comparable global data set across multiple dimensions of biodiversity and enable countries to better identify lessons learned, gaps, and capacity needs. For many parties to the CBD, this change will require new investments in data collection, institutional coordination, and monitoring systems. In this regard, the GBF and Decision 15/6 recognise the need for capacity building and support for parties to the CBD to fully operationalise monitoring and reporting at the national level (CBD, 2022c, paras. 27 – 30). Also notably, Decision 15/6 recognises that other MEAs will contribute to the implementation of the GBF and encourages parties to collaborate with other reporting processes as appropriate, including reporting on the achievement of the SDGs (CBD, 2022c, paras. 12, 22).

2.1.3 The Global Review

The GBF recognises that successful implementation and the achievement of its 2050 goals and 2030 targets require an effective review mechanism that is synchronised and cyclical, to provide insights for the iterative planning and implementation of biodiversity actions. Decision 15/6 establishes two mechanisms to enable this cyclical review and improvement of implementation: the global analysis of information (CBD, 2022c, para. 15) and the global review of collective progress (CBD, 2022c, para. 16). The global analysis of information considers the information provided in the revised and updated NBSAPs to assess the parties' collective contribution toward the GBF. The global review of collective progress in the implementation of the GBF, including the means of implementation, will assess the collective progress in achieving the goals and targets of the GBF. The first global review is scheduled to take place at COP 17 in 2026, with a second review at COP 19 in 2030. Both mechanisms will be undertaken in a "facilitative, non-intrusive, non-punitive manner, respecting national sovereignty, and avoiding placing undue burden" (CBD, 2022a, para. 19).

The global review will primarily be based on information provided in the national reports and a global report on collective progress. An Ad Hoc Scientific and Technical Advisory Group has been tasked with preparing the global reports, which will draw upon data and information provided by parties to the CBD (including an analysis of the indicators of the monitoring framework provided in the national reports) and the best available peer-reviewed scientific, technical, and technological information, as well as Traditional Knowledge that the group is given access to with the free, prior, and informed consent of Indigenous Peoples and local communities (CBD, 2024b, para. 15). The global report will provide a concise scientific and technical synthesis of the status of, and trends in, biodiversity; a review of collective progress in the GBF's implementation, including a target-by-target assessment of progress; the status of the provision of means of implementation; an

analysis of progress toward the goals of the GBF; and a concise compilation of examples of contributions of other relevant MEAs toward the GBF's implementation (CBD, 2024b, para. 17).

The CBD's Subsidiary Body on Scientific, Technical and Technological Advice and the Subsidiary Body on Implementation (SBI) will review the global report before submission to the COP. At the COP, parties will then consider the relevant inputs and the recommendation by the SBI and will adopt a decision or decisions, including recommendations to identify and address challenges in collective progress in implementation, including on the means of implementation (CBD, 2024b, para. 7). Parties to the CBD may take the outcome of the global review into account when revising and implementing their NBSAPs in the future, with a view to iteratively and continuously improving national actions and efforts on biodiversity (CBD, 2022c, para. 20).

2.2 Monitoring and Reporting Under the Paris Agreement

In 2015, parties to the UNFCCC adopted the Paris Agreement, which aims to enhance the implementation of the UNFCCC and strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty (UNFCCC, 2015). Parties to the Paris Agreement are required to prepare, communicate, and maintain successive NDCs that reflect their highest possible ambition. Further, they are to strive to formulate and communicate long-term low greenhouse gas emission development strategies (LT-LEDS) and engage in adaptation planning processes and the implementation of adaptation actions.

2.2.1 Goals, Targets, and Indicators

The Paris Agreement sets three long-term goals:

1. "Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change";

2. "Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production"; and

3. "Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development" (UNFCCC, 2015, Art. 2.1).

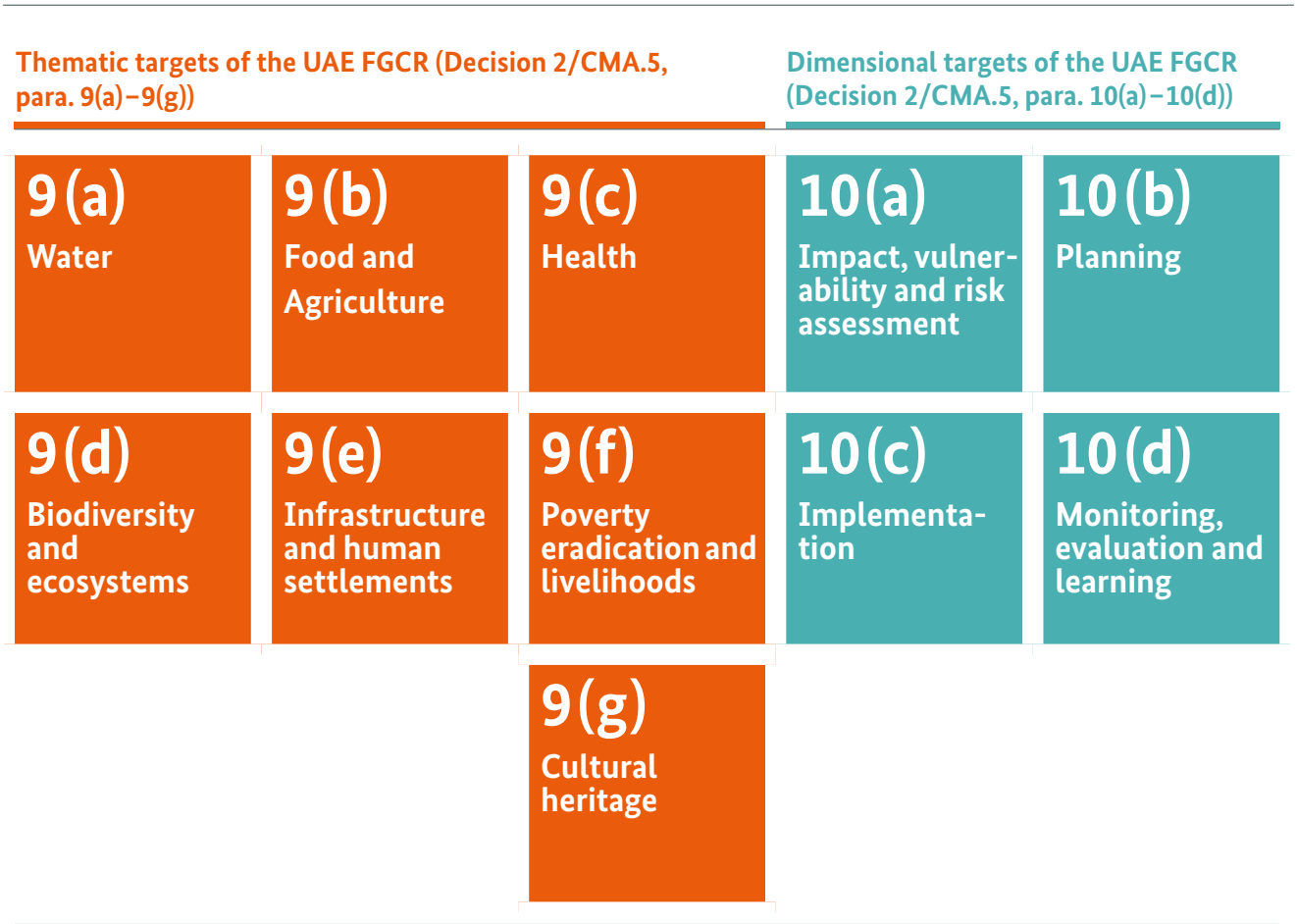
Parties to the Paris Agreement are to set their own goals and targets in a nationally determined manner as contributions to the global response to climate change, in line with the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances (UNFCCC, 2015, Art. 3).

The Paris Agreement also establishes the global goal on adaptation of enhancing adaptive capacity, strengthening resilience, and reducing vulnerability to climate change, in the context of sustainable development and the long-term temperature goal (UNFCCC, 2015, Art. 7.1). At COP 28 in 2023, parties to the Paris Agreement adopted the UAE Framework for Global Climate

Resilience (FGCR), which has the purpose to guide the achievement of the global goal on adaptation and the review of overall progress in achieving it. The UAE FGCR includes 11 global targets for achieving the global goal on adaptation (UNFCCC, 2023a): four targets related to the iterative adaptation cycle and seven thematic targets relevant to adaptation (see Figure 2). At COP 30 in 2025, parties to the Paris Agreement adopted the Belém Adaptation Indicators for tracking global progress towards achieving the targets of the UAE FGCR (UNFCCC, 2025a). The Belém Adaptation Indicators include 21 indicators across the four dimensional targets and 38 across the seven thematic targets of the UAE FGCR.

It is important to note that other related ongoing processes, including the 2025–2027 Belém–Addis Vision on Adaptation, will further refine the indicators, which could include developing methodologies and metadata to enable countries to implement these indicators through their national MEL systems for adaptation (UNFCCC, 2025a).

Figure 2. The UAE FGCR
Source: Beauchamp et al., 2024



2.2.2 Monitoring and Reporting Processes

The Paris Agreement requests that parties submit their national goals and targets related to climate change mitigation in their NDCs and LT-LEDS (UNFCCC, 2015, Art. 4). Decision 4/CMA.1 outlines the guidance related to the information that should be included in parties' NDCs, including information to facilitate clarity, transparency, and understanding (UNFCCC, 2018a). Parties to the Paris Agreement may also include information related to their national adaptation efforts in the adaptation component of NDCs, their national adaptation plans (NAPs), and adaptation communications, as appropriate (UNFCCC, 2015, Art. 7). The appropriate monitoring and evaluation arrangements should be established within these policy instruments to facilitate transparency, accountability, and the reporting of progress in implementation.

The Paris Agreement's enhanced transparency framework (ETF) for action and support aims to build mutual trust and confidence between parties to the Paris Agreement, facilitate the transparent reporting of information, and promote the effective implementation of the Paris Agreement. A major component of the ETF is the biennial transparency reports (BTRs), which serve as the reporting vehicle for parties to communicate information on their progress in implementing the different aspects of the Paris Agreement. These different aspects are covered in five separate chapters of the BTR, some of which are mandatory and some of which are optional:

1. **national inventory report of greenhouse gas emissions:** Mandatory for all parties to include in their BTRs;
2. **progress made in implementing and achieving the NDCs:** Mandatory for all parties to include in their BTRs;
3. **climate change impacts and adaptation efforts:** Optional for all parties to include in their BTRs;
4. **financial, technology transfer, and capacity-building support provided and mobilised:** Mandatory for developed country parties to include in their BTRs, and optional for other parties that provide support; and
5. **financial, technology transfer, and capacity-building support needed and received:** Optional for developing country parties to include in their BTRs (UNFCCC, 2018b).

Decision 18/CMA.1 contains the modalities, procedures, and guidelines for the ETF (UNFCCC, 2018). It is complemented by Decision 5/CMA.3, which provides the common reporting tables for electronic reporting of information in the national inventory reports of greenhouse gas emissions and the common tabular formats and outlines for the other chapters of the BTR (UNFCCC, 2021). All countries, except for Small Island Developing States and least developed countries, which enjoy flexibility under the ETF, were required to submit their first BTR (BTR1) by 31 December, 2024 and every 2 years thereafter. The second BTR (BTR2) is to be submitted by 31 December 2026 and the third (BTR3) by 31 December 2028.

For reporting on progress toward the achievement of the UAE FGCR targets of the global goal on adaptation, Decision 12/CMA.7 on the Belém Adaptation Indicators invites parties to make use of, and integrate, the global goal on adaptation targets and the Belém Adaptation Indicators into their adaptation reporting and planning processes, including their BTRs, adaptation communications, NAPs, and NDCs, as appropriate (UNFCCC, 2025a, para. 12). This means that the BTR2 will be a testing ground for the implementation and further refinement of the Belém Adaptation Indicators for both national reporting and indicator aggregation in the second global stocktake.

2.2.3 The Global Stocktake

The Paris Agreement established the global stocktake process to "periodically take stock of the implementation of [the Paris] Agreement to assess the collective progress towards achieving the purpose of the Agreement and its long-term goals," evaluate gaps in implementation, and collect lessons learned and best practices (UNFCCC, 2015, Art. 14.1). It is an iterative, comprehensive, and facilitative process aimed to inform parties' NDC updates, as well as the formulation and implementation of other climate policy instruments (UNFCCC 2018c). Parties to the Paris Agreement engage in the global stocktake process every 5 years, the first having taken place in 2021–2023, 2 years prior to the 2025 deadline for NDC submissions. The second global stocktake will be initiated at COP 31 in 2026 and conclude at COP 33 in 2028.

The global stocktake's modalities and governance arrangements are outlined in Decision 19/CMA.1 and Decision 3/CMA.7 (UNFCCC, 2018c, 2025b). It consists of different phases: the information collection and preparation phase gathers, compiles, and synthesises relevant information submitted by parties, including their NDCs, NAPs, LT-LEDS, adaptation communications, and BTRs, as well as submissions from parties and non-party stakeholders, the latest assessment reports of the Intergovernmental Panel on Climate Change (IPCC), and reports from constituted bodies and forums under the UNFCCC and the Paris Agreement. The technical assessment phase then provides a forum for parties and non-party stakeholders to assess the information collected and to determine the progress in achieving the long-term goals of the Paris Agreement. Lastly, the consideration of the outputs phase focuses on the implications of the technical assessment findings. It includes a negotiated decision under the Conference of the Parties serving as the meeting of Parties to the Paris Agreement (CMA), with a view to informing parties in updating and enhancing their actions and support.

The outcome of the global stocktake process provides two types of information: backward-looking information ("ex-post reviews") to assess progress made so far and forward-looking information ("ex-ante considerations") to inform future actions (Friedrich, 2017). The backward-looking information includes an assessment of the collective progress in achieving the long-term goals of the Paris Agreement as well as the actions and support already undertaken and provided by parties, while identifying gaps and barriers. The forward-looking information provides recommendations and best practices, as well as further mandates, to inform future decision making, including the update and revision of NDCs and other climate policy instruments.

3 Opportunities at the Global Level for Enhancing Synergies in Monitoring and Reporting

The goals and targets of the GBF and the Paris Agreement are strongly intertwined. Many of the GBF targets recognise the interlinkages between biodiversity and climate change, while provisions of the Paris Agreement, including its long-term goals and the targets for the global goal on adaptation outlined in the UAE FGCR, provide direct entry points for alignment with the 2030 targets of the GBF. This offers great potential not only for aligning actions to synergistically achieve the respective frameworks and provisions but also for enhancing synergies in monitoring and reporting.

The monitoring framework for the GBF, as well as the ETF and the UAE FGCR under the Paris Agreement, all emphasise evidence-based implementation, multidimensional monitoring, iterative learning, and collective assessment of progress. Together, they offer complementary platforms for strengthening global climate-biodiversity linkages. Recent decisions and ongoing processes under the Paris Agreement and the CBD have created tangible opportunities for enhancing coherence between their monitoring and reporting systems, including:

- → cross-referencing reporting, assessment and review outcomes;
- → leveraging commonalities in indicators and methodologies; and
- → expanding joint technical cooperation.

Strengthening global-level linkages between the CBD and the Paris Agreement's monitoring and reporting frameworks can then also help countries translate these into opportunities at the national level for building more integrated systems and maximising efficiencies (see Section 4).

3.1 Cross-Referencing Reporting, Assessment, and Review Outcomes

The period of 2026 to 2030 marks a pivotal time for parties to the CBD and the Paris Agreement to enhance synergies and coherence in national planning, monitoring, and reporting to the respective frameworks and in the assessment of collective progress at the international level (see Figure 3).

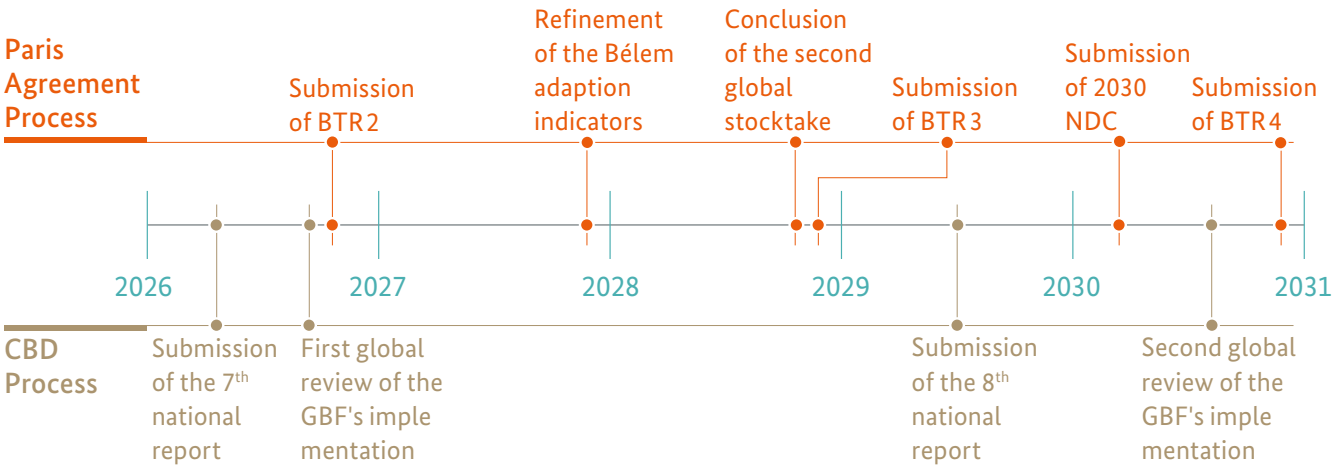
In the latter half of 2026, parties to the Paris Agreement and the CBD have the opportunity to leverage the information provided in their 7th national report under the CBD to develop their BTR2. Further, both the global review under the GBF and the global stocktake under the Paris Agreement have the mandate to assess collective progress in the implementation of actions and to inform parties' iterative improvements to their national policies, actions, and support. The CBD will conclude its first global review at COP 17 (2026) and the second at COP 19 (2030), while the second global stocktake under the Paris Agreement will take place between 2027 and 2028. This timeline provides an opportunity for the second global stocktake's technical assessment phase to reference the global report on collective progress

that will be produced by the Ad Hoc Scientific and Technical Advisory Group under the CBD and for the consideration of outputs phase to cross-reference the outcome of the global review adopted by the CBD COP. The second global review may also draw upon the outputs and outcomes of the second global stocktake.

In 2029, parties to the CBD and the Paris Agreement could leverage the information provided in their BTR3 to develop their 8th national report to the CBD, especially in relation to climate change impacts on biodiversity and ecosystem services and biodiversity actions that provide climate mitigation and adaptation co-benefits, or vice versa. In 2030, parties to the Paris Agreement could align their 2030 NDCs with their NBSAPs, and, in turn, the NDC updates could inform the second global review of the GBF's implementation.

Cross-referencing and synergising these reporting, assessment, and review processes can facilitate information flows between the two frameworks and help countries use a shared evidence base for both reporting streams, thus reducing burden and improving consistency, while also increasing efficiencies in national planning.

Figure 3. Timelines of key reporting deadlines and assessment processes from 2026 to 2030
Source: The authors



3.2 Leveraging Commonalities Between Indicators and Methodologies

The CBD Decision 15/6 on mechanisms for planning, monitoring, reporting, and review encourages parties to collaborate with other reporting processes, including those of the SDGs and of other relevant MEAs, as appropriate, on a voluntary basis (CBD, 2022c, para. 12). At the same time, the outcome of the first global stocktake under the Paris Agreement highlighted the importance of nature-based solutions (NbS) and called on countries to implement "integrated, multi-sectoral solutions" that align climate action with the GBF (UNFCCC, 2023b).

Indeed, parties' reporting to the CBD and the Paris Agreement relies on comparable types of data – including data on ecosystems, land use, water, and resilience – creating scope for defining shared methodologies and indicators. There are many commonalities between the headline indicators of the monitoring framework for the GBF and the Belém Adaptation Indicators (see Table A.1). For instance, the GBF Headline Indicators A.1. Red List of Ecosystems and A.3. Red List Index correspond to the Belém Adaptation Indicators 6.d. "Level of threat status of ecosystems, including as an outcome of adaptation actions where applicable" and 6.e. "Level of threat status of species, including as an outcome of adaptation actions where applicable" under the UAE FGCR Target 9 (d). [3] There are also similarities between other types of indicators, such as the GBF binary indicator 8.b "Number of countries with agreed policies to minimise the impact of climate change and ocean acidification on biodiversity and that minimise negative and foster positive impacts of climate action on biodiversity" and the Belém Adaptation Indicators 12.a. "Extent of implementation of national adaptation plans, policies and strategies relative to planned implementation thereof" or 11.a. "Status of having national adaptation plans, policy instruments, and planning processes and/or strategies in place."

Given that global methodologies or metadata have not yet been defined for the Belém Adaptation Indicators, and the indicators themselves are subject to technical refinement under the Belém–Addis vision on the adaptation process until COP 32 in 2027, this represents a key window of opportunity to harmonise definitions, identify common metadata and methodologies, reduce duplication, and promote data interoperability with the monitoring framework for the GBF. This is especially relevant to those indicators related to biodiversity and ecosystem services and resilience. Efforts to harmonise metadata could also be informed by experiences in operationalising the indicators of the monitoring framework for the GBF.

3.3 Expanding Joint Technical Cooperation

Collaboration between the CBD's Subsidiary Body on Scientific, Technical and Technological Advice and the UNFCCC and the Paris Agreement's Subsidiary Body for Scientific and Technological Advice could offer another avenue for strengthening synergies in monitoring and reporting, including through, for example, joint technical work on NbS, ecosystem resilience, data integration, and indicator comparability and interoperability, to ensure that guidance developed under one convention reinforces the other. Such efforts could build on CBD Decision 16/22 to explore the potential for a joint work programme on climate change and biodiversity loss, and policy coherence between the Rio Conventions (CBD, 2024c), which invites the CBD Secretariat to collaborate with the secretariats of the other Rio Conventions. Deepened collaboration between the respective subsidiary bodies of the conventions and agreements can also capitalise on existing mechanisms, such as the Joint Liaison Group between the three secretariats of the Rio Conventions.

3 "Reducing climate impacts on ecosystems and biodiversity, and accelerating the use of ecosystem-based adaptation and nature-based solutions, including through their management, enhancement, restoration and conservation and the protection of terrestrial, inland water, mountain, marine and coastal ecosystems."

4 Good Practices and Recommendations for Establishing Synergies in Monitoring and Reporting at the National Level

While the global monitoring and reporting frameworks for biodiversity and climate change adaptation are relatively new, countries have been monitoring and reporting on both subjects for a long time. As such, several good practices are already emerging that illustrate how countries and institutions can build synergies between biodiversity and climate transparency frameworks. These practices show that alignment is both possible and beneficial, and they provide useful lessons for others – despite the challenges of responding to two different conventions.

Based on a review of literature, best-practice guidelines, and an analysis of country experiences, seven areas have been identified for countries to address and implement at the national level to build synergistic monitoring and reporting systems (**see summary in Table 1**).

Table 1. Summary of good practices and recommended actions to drive national monitoring and reporting synergies

Good practices	Actions for countries
1. Develop shared national objectives and targets	→ Define joint biodiversity-adaptation objectives → Mandate cross-ministry collaborations for planning, monitoring and reporting → Co-develop targets and related monitoring frameworks
2. Identify overlaps and harmonise definitions and indicators	→ Identify related and/or overlapping indicators → Align national indicator definitions across conventions → Compile shared metadata → Ensure gender-equitable and socially inclusive considerations across processes
3. Establish data agreements to facilitate the flow of data	→ Establish data-sharing protocols and MOUs to clarify mandates and responsibilities → Enable multi-actor collaboration (e.g., ministries, civil society organizations, academia)
4. Share data repositories for continuous monitoring	→ Invest in joint databases, online portals, and data repositories → Involve national statistical offices for data coordination → Standardise data collection, analysis, and visualization

Good practices	Actions for countries
5. Align timelines for reporting and revision of national strategy documents	→ Synchronise CBD and the Paris Agreement national reporting timelines → Plan joint sign-offs on reports to ensure content integration → Sequence NBSAP and NAP updates to align with NDC revisions
6. Conduct capacity-building and knowledge exchange	→ Train staff on multiple conventions → Embed cross-department collaboration in staff job descriptions → Leverage global capacity-building programmes → Promote cross-country peer learning
7. Continuously improve synergistic implementation through evaluation and learning	→ Integrate biodiversity-adaptation synergies in policy evaluations → Develop joint learning and review processes

Source: The authors

4.1 Develop Shared National Objectives and Targets

Developing shared national objectives and targets that state the connections between climate adaptation and biodiversity conservation is an important first step toward aligning monitoring and reporting. Both the CBD and the Paris Agreement call for evidence-based planning built on a clear logic of how actions contribute to national and global goals. However, in most countries, planning instruments for biodiversity (NBSAPs) and for climate (NDCs and NAPs) are prepared separately, often by different institutions. Defining common objectives helps bridge these silos by setting shared theories of change and identifying how integrated actions – such as ecosystem restoration, sustainable land management, or NbS – can jointly advance adaptation, mitigation, and biodiversity outcomes.

In practice, countries can bring together technical experts and ministries working on biodiversity and climate to identify shared objectives, priorities and co-benefits. Institutional connections and coordinated planning, monitoring, and reporting are key ingredients in building more integrated processes between climate adaptation and biodiversity portfolios. Interdisciplinary or interministerial approaches (e.g., joint committees and co-shared decision-making structures) can facilitate cross-coordination among ministries or departments. However, strengthening coordination and joint planning typically necessitates a national or ministry-wide mandate to promote integration and meaningful engagement with relevant departments to effectively foster synergies.

A clearer alignment between biodiversity and climate adaptation objectives can then inform the design of targets and subsequent monitoring frameworks, including relevant indicators and guidelines, through which to track progress against those targets. For example, the co-development of objectives and targets around wetland restoration can lead to multiple outcomes benefiting the different MEAs – from enhancing species diversity to reducing flood risks, increasing carbon storage and improving community livelihoods. Embedding such shared objectives within NBSAPs, NDCs, and NAPs or national development plans not only enhances policy coherence. It also provides an opportunity to identify joint indicators and design aligned monitoring frameworks that strengthen accountability and lay a foundation for more efficient reporting to both the CBD and the Paris Agreement. Over time, this approach can help countries demonstrate stronger, evidence-based outcomes for both adaptation and biodiversity. Panama's Nature Pledge is an example of a national-level framework that recognises the interconnectedness of all three Rio Conventions, and it outlines Panama's efforts to develop unified objectives of the three Conventions that it can then tackle in a coordinated way (see Box 2).

In Aotearoa New Zealand, the government designed an Outcome Monitoring Framework (OMF) to track the objectives and outcomes of the Aotearoa New Zealand Biodiversity Strategy 2020, which has been co-developed using the expertise of multiple government agencies. It also links to strategies of other agencies and bodies, such as the Environment and Climate Research Strategy. The OMF plays an important role not only in achieving the biodiversity strategy's goals, but also in supporting cross-agency alignment in national monitoring and reporting (Department of Conservation of New Zealand, n.d.). The OMF incorporates climate-related intermediate outcomes and objectives within its five core biodiversity outcomes. These include the expectation that biodiversity will function as a nature-based solution to climate change and remain resilient to its impacts, as well as the goal that species populations remain healthy, genetically diverse, and better able to withstand future threats, including those driven by climate change. The framework and its online platform further specify the cross-agency programmes and projects related to achieving those targets as part of its monitoring plan.

While this paper focuses on linkages between biodiversity and climate adaptation, it is important to note that countries should strive for synergies and policy coherence between all three Rio Conventions and other MEAs and sustainable development policies. This means developing a common narrative and shared national objectives and targets for mitigation, adaptation, biodiversity, land degradation neutrality, and the wider sustainable development efforts, wherever appropriate.

BOX 2

PANAMA'S NATURE PLEDGE AND NATIONAL ALIGNMENT BETWEEN THE RIO CONVENTIONS

Panama's Nature Pledge is a national strategic framework that seeks to maximise synergies among the three Rio Conventions through uniting climate, biodiversity, and land restoration under one cohesive implementation plan with measurable outcomes. As part of the pledge, the government of Panama intends to align its international environmental commitments, enhance national coordination, facilitate better mutual understanding among the respective commitments, optimise financial resources, and compile clear and measurable goals that respond to all three Rio Conventions (Government of Panama, 2025). This involves reviewing targets from the NDC, NBSAP, and Land Degradation Neutrality (LDN) frameworks and merging related objectives into a single national goal that reflects all three.

For example, Panama aggregated the number of hectares required for restoration (NDC commitment: 50,000 hectares), reduction of soil degradation (LDN target: 26 % of land degradation), and forest protection and restoration (NBSAP target: 15 % of key areas restored), creating a unified national target and indicator whose achievement would simultaneously fulfill each agreement's respective commitments. The consistent use of hectares as a common unit of measurement has emerged as the clearest data driven point of alignment so far (Government of Panama, 2025).

Insights from the Nature Pledge highlight that one of the strongest opportunities for creating synergies lies in establishing national goals or commitments that cut across sectors and in ensuring that policies addressing climate change and biodiversity are aligned with these integrated objectives.

4.2 Identify Overlaps and Harmonise Definitions and Indicators

Aligning the objectives and targets of national biodiversity and climate strategies creates a strong foundation for then integrating national monitoring frameworks through harmonised definitions and indicators. Although the frameworks for monitoring the GBF and the Paris Agreement (including the UAE FGCR) use different definitions and metrics and have differing reporting requirements (see Box 3), they share areas of thematic overlap that offer practical entry points for creating synergies and streamlining monitoring and reporting processes at the national level. Identifying these synergies requires examining indicator metadata, which outlines the underlying metrics, data collection methodologies, and definitions.

As a first step, countries can review indicators across sectors within their national monitoring and reporting systems alongside the headline indicator metadata from the conventions' monitoring frameworks, with the aim of developing consistent definitions for national use. Such definitions can be formulated in a way to serve the monitoring and reporting requirements of both the GBF and the UAE FGCR, while also accommodating additional country-specific needs. For example, GBF Headline Indicators A.2, 2.1, and B.1 on ecosystem extent, restoration, and nature's contributions to people overlap thematically with indicators for assessing progress of UAE FGCR Target 9d on reducing climate impacts on ecosystems and biodiversity (see Table A.1). Although the metadata of these indicators may differ, countries can harmonise national definitions and identify common data sources, points, and methods for collection and analysis for such thematically related indicators to streamline monitoring efforts nationally while being able to report to the MEAs in line with their requirements.

Countries can also use this process to identify crosscutting priorities for action, particularly in areas where NbS and ecosystem-based adaptation (EbA) are central to achieving the objectives of both conventions. Positioning these themes as shared priorities within monitoring and reporting frameworks will help demonstrate more clearly how biodiversity focused interventions contribute directly to adaptation outcomes and vice versa.

Gender equality and social inclusion also offer important areas of overlap and strong leverage points for integrating monitoring and reporting frameworks across the two conventions at national level. Both the monitoring framework for the GBF and the Paris Agreement emphasise gender-responsive and inclusive approaches. The GBF includes gender-sensitive indicators (for example, on women's participation and equitable access to resources), while the reporting requirements under the ETF and the UAE FGCR stress participatory, gender-responsive adaptation approaches and disaggregated monitoring. Harmonising national definitions and agreeing on common metrics–including consistent gender disaggregation categories–in relation to these requirements enables countries to systematically capture, analyse, and communicate how biodiversity and climate actions address differential vulnerabilities and capacities. This, in turn, strengthens the credibility, visibility, and policy relevance of gender-responsive and socially inclusive action, while reducing duplication and reinforcing coherence between reporting under both MEAs.

BOX 3

HARMONISING DEFINITIONS AND REPORTING METRICS ACROSS THE RIO CONVENTIONS

The three Rio Conventions often share thematic and sectoral overlaps, but different definitions, metrics, and reporting requirements apply across the GBF, the UAE FGCR, and the UNCCD's monitoring and evaluation frameworks. It is therefore important for countries to examine in detail the definitions and indicators from the different conventions to accurately identify the differences, as well as appropriate entry points for harmonising national MEL systems for adaptation, biodiversity, and land actions. For instance, each Rio Convention has targets related to ecosystem restoration; however, the associated indicators are characterised by nuances and differences in their definitions and metrics:

- Under the Paris Agreement, target 9(d) of the UAE FGCR sets a 2030 aim for countries to reduce climate impacts on ecosystems and biodiversity, and accelerate the use of EbA and NbS, including restoration of terrestrial, inland water, mountain, marine, and coastal ecosystems. The Belém Adaptation Indicators include six indicators relevant to this target, including the "proportion of ecosystem areas with adaptation actions implemented towards enhanced resilience and services," "level of resilience of ecosystems," and "level of adaptive capacity, resilience and vulnerability to climate impacts resulting from the implementation of [EbA] actions and [NbS]" (UNFCCC, 2025a).
- Under the GBF, countries agreed to a 2030 target of ensuring "at least 30 per cent of areas of degraded terrestrial, inland water, coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity" (CBD, 2022a). Compared to the Belém Adaptation Indicators, a more specific headline indicator, "area under restoration," was adopted by the parties to the CBD, alongside two component and 14 complementary indicators (CBD, 2024a). Not only do the indicators have detailed metadata, but the CBD Secretariat further developed additional guidance outlining the definitions for the different elements of the target, including definitions for, among others, "restoration," "effective," "degraded ecosystems," and "connectivity and integrity" (CBD, n.d.).
- Under the UNCCD, countries were invited to formulate voluntary targets to achieve LDN and design and implement actions to achieve these targets, including through ecosystem restoration, in order to achieve the strategic objectives of the UNCCD, including "to improve the condition of affected ecosystems" (UNCCD, 2021). The UNCCD's 2018–2030 strategic framework includes 14 progress indicators to track progress toward its five strategic objectives (UNCCD, 2021). Some indicators relevant to land restoration include trends in land cover (using vegetative land cover metrics),

trends in land productivity or functioning of the land (using land productivity dynamics metrics), and trends in carbon stocks above and below ground (using soil organic carbon stock metrics). While these indicators and metrics differ from those of the Belém Adaptation Indicators and the monitoring framework for the GBF, they can inform monitoring and evaluation efforts for both the UAE FGCR and the GBF.

Countries would benefit from harmonising these definitions and metrics at the national level to achieve synergies and coherence, while reducing their reporting burden. For example, through its Nature Pledge framework, Panama is planning to develop a single goal that would respond to all three Rio Conventions in a synergistic and ambitious manner. Panama is committing to reducing its greenhouse gas emissions through conserving and restoring over 50,000 hectares of forest by 2050, preserving and restoring 15% of key forest and biodiversity areas, and achieving LDN by 2030 by increasing forest coverage by 26%. These targets are interlinked and Panama's Nature Pledge[4] plans to harmonise reporting metrics and indicators for soil degradation reduction measures, forest cover and ecosystem restoration activities, and adaptation actions related to ecosystems (Government of Panama, 2025).

4.3 Establish Data Agreements to Facilitate the Flow of Data

Collecting, managing, and analysing data for monitoring and reporting can easily balloon into expensive and time-intensive processes. Given the broad scope of the GBF and the UAE FGCR targets and their corresponding indicators, data collection, management, and analysis are likely to require a whole-of-government and whole-of-society approach. While the ministries of environment are often the focal ministry for CBD and UNFCCC processes, they will inevitably need data that is commonly collected by other line ministries or government agencies (for instance, from the ministry of finance or agencies responsible for agriculture) and beyond, including from the private sector, academia, civil society organizations, and Indigenous and local knowledge holders. Cross-ministerial, cross-sectoral, whole-of-society collaborations are critical for sharing and accessing different data, spreading the burden of data collection and management, and ensuring cohesion and comprehensiveness in MEL efforts.

Further, collaborating with universities, research centres, as well as Indigenous and local knowledge holders, can bring additional benefits, such as enabling long-term data collection and analysis and accessing localised, wider-temporal-range data and information. As an example, Namibia's

4 It must be noted that the Panama's Nature Pledge is currently still a plan and no final version has been released at the time of writing.

government created the MEA Tracking Platform, a national data system designed to consolidate, monitor, and report on environmental metrics tied to the three Rio Conventions, addressing biodiversity, climate change, and land degradation. Through a whole-of-government strategy, the platform integrates data from the Ministry of Environment, Forestry and Tourism alongside information from ministries overseeing fisheries, agriculture, land reform, and planning. By bridging multiple government bodies and agencies, it helps simplify the coordination of conservation efforts, monitors spatial goals, and reduces the burden of international reporting. Not only does the platform bring together different ministries, but it has been designed together with, and is operated by, research and technical partners. A collaborative partnership among the University of Namibia's MEA Monitoring Unit, Colorado State University, and NatureServe, underpins the platform, making it an exemplary model of multi-actor, coordinated, evidence-based environmental oversight. It unites data, institutions, and policy to strengthen coherence across multiple conventions (Fabiano, 2025).

It is also worth noting that Indigenous Peoples and local communities may have their own monitoring systems and knowledge management traditions and practices that, with proper safeguards and informed consent, can contribute to national data collection, management, and analyses. In Colombia, for example, the Community Biodiversity Monitoring Networks of the Amazon are vital participatory initiatives that empower local inhabitants and Indigenous communities. By blending ancestral knowledge of flora and fauna with modern scientific tools, such as camera traps, GPS, and drones, these networks successfully record the tropical rainforest's natural wealth and track the health of its ecosystems. Through national and regional meetings, community members come together to share experiences and standardise environmental data for effective decision making. Operating with the support of research institutes and conservation organizations, such as the Humboldt Institute and World Wide Fund for Nature, these citizen science networks can play a crucial role in collecting biodiversity-related data for national reporting purposes (Mora et al., 2025).

Establishing formal processes for multi-actor collaboration, such as data-sharing protocols and agreements, MOUs, and cross-ministry working groups, task forces, or committees, is crucial for clarifying mandates and responsibilities for different tasks and for establishing comprehensive, accurate, and efficient MEL and reporting. Doing so further encourages social inclusion and co-production of evidence across actors and helps embed transparency responsibilities into existing coordination structures for NBSAPs, NDCs or NAPs, thus enhancing efficiency.

4.4 Share Data Repositories for Continuous Monitoring

Investing in the development of joint databases and repositories is crucial to fostering synergistic monitoring and reporting processes. Joint national databases transform dispersed information and can act as a backbone for integrated climate-biodiversity decision making and actions while reducing overall reporting burden. With such systems in place, it can become easier for ministries and departments to use common definitions, shared indicators, and compatible monitoring methods. Further, they can act as a strategic plan-

ning mechanism, for example, by highlighting where adaptation or mitigation actions deliver co-benefits or where investments can service multiple goals.

Developing a joint database requires a coordinated, multidisciplinary effort, beginning with a clear definition of its purpose and the actors involved. This typically includes forming an interministerial steering committee with statistical offices, sectoral planners, and scientists, then mapping existing data systems, monitoring programs, and reporting obligations to determine the contents of a shared repository. The database can be underpinned by a national data-sharing policy, including provisions for sensitive and Indigenous data.

Environment ministries should work closely with national statistical offices and financial regulatory and supervisory authorities to establish common taxonomies and classification systems, ensuring a shared language for data and consistent operational procedures. This may include standardising species names, ecosystem types, climate hazards, adaptation actions, and drivers of biodiversity loss. Such alignment enables national-level aggregation, cross-sector comparison, and more efficient reporting to global frameworks. Further, standardised data collection and monitoring methods need to be designed, taking into account timing, indicator definitions aligned with global frameworks, reporting templates, and other metadata requirements. Together, these efforts can result in the development of a national data standards manual, harmonised indicators, and clear protocols for data collection, validation, and exchange. In Madagascar, the Ministry of Environment and Sustainable Development has introduced a national information system (Système d'Information de Gestion de l'Environnement), which compiles data and information from across the three Rio Conventions, including indicators, documents, and events. With this information all stored in one place, the responsible ministries are better equipped to manage their data and the cross-referencing of information to facilitate strong synergies in data collection and reporting (Lottje et al., 2025).

In 2022, Panama launched its National Climate Transparency Platform (Plataforma Nacional de Transparencia Climática – PNTC), a portal that brings together information on climate action in Panama across different ministries and agencies (Ministro de Ambiente de Panamá, n.d.). The PNTC aims to strengthen trust and facilitate relationships between government, the private sector, donors, academia, and the general public, and coordinate actions to address climate change. Through this portal, users from organizations and the public can access different sections of the stored modular data sets to understand, monitor, and report on national initiatives. The portal contains information generated by the Climate Change Directorate of the Ministry of Environment, as well as data from studies, projects, and initiatives carried out in Panama by universities, non-governmental organizations, researchers, and others. It helps track Panama's commitments as part of its NDC, including actions related to biodiversity, forests, agriculture, and marine and coastal systems as key sectors of the NDC. This, in turn, facilitates the integration of biodiversity data across the Paris Agreement reporting exercises, such as Panama's first BTR (Ministro de Ambiente de Panamá, 2024a), which includes reporting related to Reducing Emissions from

Deforestation and Forest Degradation, and its adaptation communication contained within its NDC 2.0 (Ministro de Ambiente de Panamá, 2024b).

Once countries have set up joint databases, data visualization can become a powerful tool to turn complex data sets into clear, interactive visuals, unlocking key insights that are otherwise buried in spreadsheets. For example, clear visuals allow policy-makers to see where climate hazards overlap with biodiversity hotspots, where ecosystems are degrading, or where adaptation investments will have the greatest impact. Visualization tools can also help countries easily track and communicate progress toward national and global commitments.

4.5 Align Timelines for Reporting

Aligning timelines for reporting under the CBD and the Paris Agreement can create synergies by enabling information generated through one process to directly inform or complement others. This reduces siloed reporting, improves internal consistency, and strengthens the coherence of biodiversity and climate information reported through CBD national reports and the Paris Agreement BTRs. Such alignment calls for coordinated timing, procedures, and workflows, as well as adequate capacity and resources.

In terms of the mandated timelines for reporting, parties to the CBD are expected to submit their 7th national reports by 28 February 2026, and their 8th national reports by 30 June 2029 (CBD, 2024b); and parties to the Paris Agreement are expected to submit their second BTRs by 31 December 2026, and every 2 years thereafter (UNFCCC, 2018b). The 2026 timeframe offers an opportunity for countries to align the development of their 7th national reports and their second BTRs, while in 2029 countries should consider integrating climate information gathered for their third BTR into their 8th national report. Certain parties that choose not to use their BTR as a vehicle for their National Communication will need to submit a separate National Communication every 4 years, starting in 2026. Parties submitting a separate National Communication in 2030 therefore have an opportunity to leverage their 8th national report for biodiversity-related reporting.

For instance, reporting on actions and progress in achieving Target 8 of the GBF[5] may leverage information collected through the national monitoring and evaluation processes established for implementing the Paris Agreement–including information from national inventory reports of greenhouse gas emissions and from NAPs and adaptation communications. Conversely, parties to the Paris Agreement may draw on information submitted through the 7th and 8th national reports under the CBD to report against relevant targets set for conserving and enhancing carbon sinks and reservoirs and the relevant targets of the UAE FGCR.

Coordinated procedures and workflows are also important for achieving this alignment. Alongside advancing on coordination mechanisms, agreements, data repositories, and harmonised national metrics, countries can map out the

5 Minimising the impacts of climate change and ocean acidification on biodiversity and increasing its resilience through mitigation, adaptation, and disaster risk reduction actions, including through NbS.

reporting objectives, timelines, data requirements, and responsibilities of different ministries, agencies, and stakeholders for both CBD and Paris Agreement reporting. Based on this mapping, they can develop integrated workplans, using harmonised or cross-referenced data reporting templates, and coordinating data collection, analyses, and verification to help reduce administrative burden while enhancing cross-actor collaboration and coherence. Dual sign-off or approval arrangements that allow the responsible institution or official to verify consistency across reports prior to submission can also support these processes.

4.6 Conduct Capacity-Building and Knowledge Exchanges

The formal recognition of monitoring, reporting, and coordination responsibilities among ministries and departments, as well as associated training and capacity building for these responsibilities, is an important enabler for effective, synergistic MEL. Hence, countries should invest in structured, cross departmental training on the MEL frameworks of different MEAs to build a shared understanding of synergies and strengthen relationships among staff in specialised units. Managers and senior leaders can reinforce the importance of MEL and synergistic approaches by embedding monitoring and reporting and cross-departmental collaboration tasks into formal mandates.

Countries can also leverage existing international capacity-building initiatives to support these efforts. Under the Paris Agreement process, countries can explore initiatives and resources provided by the Paris Committee on Capacity-Building, the UNFCCC Secretariat's ETF training programme, the Partnership on Transparency in the Paris Agreement (PATPA), the NDC Partnership, the NAP Global Network, and the Capacity-Building Initiative for Transparency initiative managed by the Green Environment Facility for transparency capacity building on reporting on adaptation. With respect to the CBD, countries can access support from the Green Environment Facility and the NBSAP Accelerator Partnership and training offered by the CBD Secretariat, United Nations Environment Programme-World Conservation Monitoring Centre, and other global initiatives such as the Biodiversity Indicator Partnership. These offer e-learning platforms, technical and scientific support to parties, specialised workshops, and capacity-building programmes. The recent push on synergies can unlock further opportunities and resources on MEL linkages between the Rio Conventions. The Rio Conventions Joint Capacity Building Programme also has the mandate to support parties in enhancing capacity and improving awareness of integrated approaches to MEL for climate and biodiversity actions.

Peer learning and knowledge exchange initiatives can complement formal training by generating practical lessons that can be adapted across contexts and foster collaboration within governments and across regions. In 2021, the GIZ project Strategic Partnerships for the Implementation of the Paris Agreement convened expert dialogues between the European Union and China on joint monitoring and modelling for biodiversity and climate action. These dialogues brought together experts from research institutions and government agencies to share experiences and lessons learned, building mutual understanding of cross sectoral monitoring challenges and potential

solutions. They also created a foundation for continued cross regional cooperation (Climate Cooperation China, 2021).

4.7 Continuously Improve Synergistic Implementation Through Learning

Monitoring and reporting are essential for transparency and accountability, but they are equally important for learning and improving the effectiveness of integrated climate adaptation and biodiversity actions and policies. Systematically evaluating how biodiversity and climate adaptation, as well as mitigation, policies interact delivers multiple benefits. At a minimum, evaluation helps identify and manage potential trade-offs, ensuring that actions designed to advance one objective do not inadvertently undermine the other. Further, it can help to identify duplication of efforts as well as joint actions and opportunities to streamline resources to improve synergistic implementation. For instance, in 2024, the European Union produced a knowledge synthesis and analysis of the links between biodiversity, climate change and energy, and of the related existing policies, projects, and initiatives at the European member state level. The synthesis' conclusion reinforced the need for more integrated, evidence-based assessment rather than sectoral approaches, strengthened coordination between EU governance bodies dealing with climate change and biodiversity, as well as systemic change recognising that biodiversity conservation, climate mitigation and adaptation share interdependent objectives (Prakash & Neuville, 2024).

Evaluation processes are indeed most valuable when their findings drive both continuous learning in policy and adaptive management of implementation. Developing review processes of national biodiversity and adaptation policies and strategies can increase collaboration and mutual learning among different teams and departments. It can also lead to more comprehensive findings and allow for collective efforts to evaluate current modes of operation, communication, and collaboration. Where monitoring reveals that integrated actions such as NbS, EbA, or ecosystem restoration are not delivering expected outcomes across both biodiversity and adaptation objectives, review processes provide a structured opportunity to adjust approaches and strengthen implementation. Such processes can, for example, produce a national progress report identifying important takeaways and recommendations to strengthen implementation of biodiversity, climate adaptation, and mitigation initiatives. This is particularly important for projects or policies where adaptation and biodiversity are inherently connected, such as NbS/EbA or ecosystem restoration initiatives.

5 Conclusion

The convergence of climate change and biodiversity loss demands an unprecedented level of coordination and integrated action, including for monitoring and evaluation. This paper demonstrates that strategic alignment of monitoring and reporting systems under the CBD and the Paris Agreement is not merely a matter of administrative efficiency but is a critical enabler of the transformative climate and nature action urgently needed at both national and global levels. The seven good practices and practical recommendations outlined here provide countries with a concrete roadmap for building integrated MEL systems that deliver measurable benefits: reduced reporting burdens, enhanced data quality, more credible and coherent evidence, and ultimately, more effective climate and biodiversity outcomes.

The strong momentum for synergies in global processes is unmistakable. Recent decisions, including the UAE FGCR (2023), the CBD COP 16 Decision 16/22 on biodiversity andclimate change (2024), and the UNEA resolutions 6/7 and 7/5 on promoting synergies, cooperation, or collaboration for national implementation of MEAs and other relevant environmental instruments (2024/2025), collectively signal an irreversible shift toward integrated approaches. The establishment of the Synergies Collaboration Platform and the commitment of the Joint Liaison Group of the Rio Convention secretariats to joint technical work represent genuine institutional support for coherence (UNFCCC, n.d.). Most critically, 2026 marks a convergence point: countries will simultaneously submit their 7th CBD national reports and second BTRs, opening an opportunity to operationalise the good practices described in this paper. Countries that seize this moment will set a strong precedent for others and deliver more cohesive, integrated environmental reporting for years to come.

Success requires deliberate action at all levels. For countries, the pathway is clear: begin now by establishing interministerial coordination structures, aligning national indicator definitions with those of both global frameworks, and investing in joint data infrastructure. It is important to note that the benefits for countries that can be achieved through coordinating monitoring and reporting systems under the CBD and the Paris Agreement can be extended to other relevant Rio conventions, such as the UNCCD. For the Convention secretariats and technical bodies, this is the moment to co-produce methodological guidance on harmonised indicators, facilitate peer learning on successful national approaches, and ensure that the next global reviews of the GBF and global stocktake of the Paris Agreement reinforce rather than duplicate each other's efforts. For development partners and bilateral donors, supporting national capacity building on integrated MEL approaches should become a priority. Such efforts can help ease reporting burdens, enhance the credibility of global assessments, and demonstrate how biodiversity and climate action reinforce each other in practice. With both transparency frameworks still evolving, this is a pivotal moment for the COPs to the CBD and the Paris Agreement to shape a coherent approach that supports countries in addressing the twin crises of climate change and biodiversity loss–while advancing the broader SDGs.

References

- Beauchamp, E., Leiter, T., Pringle, P., Brooks, N., Masud, S., & Guerdat, P. (2024). *Toolkit for monitoring, evaluation, and learning for National Adaptation Plan processes.* NAP Global Network & Adaptation Committee. International Institute for Sustainable Development. https://napglobalnetwork.org/resource/toolkit-monitoring-evaluation-learning-nap-processes/

- Climate Cooperation China. (2021). *China-EU expert dialogue on joint monitoring and modelling between biodiversity conservation and climate action: Dialogue 1 – Synergies and major challenges in the agriculture sector.* https://climatecooperation.cn/climate/china-eu-expert-dialogue-on-joint-monitoring-and-modelling-between-biodiversity-conservation-and-climate-action-dialogue-1-synergies-and-major-challenges-in-the-agriculture-sector/

- Convention on Biological Diversity. (n.d.). *Kunming-Montreal Global Biodiversity Framework Target 2: Restore 30% of all degraded ecosystems.* Secretariat of the Convention on Biological Diversity. https://www.cbd.int/gbf/targets/2

- Convention on Biological Diversity. (2022a). *Decision adopted by the Conference of the Parties to the Convention on Biological Diversity 15/4: Kunming-Montreal Global Biodiversity Framework* (CBD/COP/DEC/15/4). Secretariat of the Convention on Biological Diversity. https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf

- Convention on Biological Diversity. (2022b). *Decision adopted by the Conference of the Parties to the Convention on Biological Diversity 15/5: Monitoring framework for the Kunming-Montreal Global Biodiversity Framework* (CBD/COP/DEC/15/5). Secretariat of the Convention on Biological Diversity. https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-05-en.pdf

- Convention on Biological Diversity. (2022c). *Decision adopted by the Conference of the Parties to the Convention on Biological Diversity 15/6: Mechanisms for planning, monitoring, reporting and review* (CBD/COP/DEC/15/6). Secretariat of the Convention on Biological Diversity. https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-06-en.pdf

- Convention on Biological Diversity. (2024a). *Decision 16/31: Monitoring framework for the Kunming-Montreal Global Biodiversity Framework. In Decision adopted by the Conference of the Parties to the Convention on Biological Diversity on 27 February 2025* (CBD/COP/DEC/16/31). Secretariat of the Convention on Biological Diversity. https://www.cbd.int/doc/decisions/cop-16/cop-16-dec-31-en.pdf

- Convention on Biological Diversity. (2024b). Decision 16/32: Mechanisms for planning, monitoring, reporting and review, including the global review of collective progress in the implementation of the Kunming-Montreal Global Biodiversity Framework to be conducted at the seventeenth and nineteenth meetings of the Conference of the Parties. In *Decision adopted by the Conference of the Parties to the Convention on Biological Diversity on 27 February 2025* (CBD/COP/DEC/16/32). Secretariat of the Convention on Biological Diversity. https://www.cbd.int/doc/decisions/cop-16/cop-16-dec-32-en.pdf

- Convention on Biological Diversity. (2024c). *Decision 16/22: Biodiversity and climate change. In Decision adopted by the Conference of the Parties to the Convention on Biological Diversity on 1 November 2024* (CBD/COP/DEC/16/22). Secretariat of the Convention on Biological Diversity. https://www.cbd.int/doc/decisions/cop-16/cop-16-dec-22-en.pdf

- COP28 UAE. (2023). *COP28 joint statement on climate, nature and people.* https://www.cop28.com/en/joint-statement-on-climate-nature

- Department of Conservation of New Zealand. (n.d.). *A national outcome monitoring framework for biodiversity (OMF).* New Zealand Government. https://www.doc.govt.nz/nature/biodiversity/te-mana-o-te-taiao-aotearoa-new-zealand-biodiversity-strategy-2020/outcome-monitoring-framework/

- Friedrich, J. (2017). Global stocktake (Article 14). In D. Klein, M. P. Carazo, M. Doelle, J. Bulmer, & A. Higham (Eds.), *The Paris Agreement on climate change: Analysis and commentary* (pp. 319–337). Oxford University Press. https://doi.org/10.1093/law/9780198789338.003.0019

- Deutsche Gesellschaft für Internationale Zusammenarbeit. (2022). *Synergies between adaptation, biodiversity and mitigation – How ecosystem-based adaptation can build bridges between nationally determined contributions and the new Global Biodiversity Framework.* https://www.giz.de/expertise/downloads/giz2024-en-eba-synergies.pdf

- Fabiano, E. C., & Angombe, S. (2025). *From data to decision: Namibia's MEA tracking platform.* University of Namibia. https://www.thegef.org/sites/default/files/documents/2025-11/GEF%20BBL%20Learning%20Series%204%20Nov%202025-Ezequiel%20Fabiano.pdf

- Government of Panama. (2025). *Panama's nature pledge: Climate + biodiversity + desertification.* https://unfccc.int/sites/default/files/resource/Panama_Presentation.pdf

- Intergovernmental Panel on Climate Change. (2022). Climate change 2022: *Impacts, adaptation, and vulnerability.* Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, & B. Rama (Eds.). Cambridge University Press. https://www.ipcc.ch/report/ar6/wg2/

- Lottje, C., Maximova, L., Terton, A., & Qi, J. (2025). *Building synergies between biodiversity and climate: Insights from countries on NBSAP and NDC planning and implementation.* Deutsche Gesellschaft für Internationale Zusammenarbeit. https://nbsapaccelerator.org/new-global-report-highlights-synergies-between-climate-and-biodiversity-action/

- Ministro de Ambiente de Panamá. (n.d.). *Plataforma Nacional de Transparencia Climática.* Government of Panama. https://transparencia-climatica.miambiente.gob.pa/

- Ministro de Ambiente de Panamá. (2024a). *Primer Informe Bienal de Transparencia Climática.* Government of Panama. https://unfccc.int/sites/default/files/resource/2024_1IBT_PA_Resubmission.pdf

- Ministro de Ambiente de Panamá. (2024b). *Segunda Contribución Determinada a Nivel Na cional (CDN2).* Government of Panama. https://unfccc.int/sites/default/files/NDC/2024-06/Segunda%20Contribuci%C3%B3n%20Determinada%20a%20Nivel%20Nacional_CDN2.pdf

- Mora, L., Victoria, M. I., Gómez, J., & Vela, M. (2025). *Fortalecer los territorios de la amazonía a partir del monitoreo comunitario de la biodiversidad.* Instituto Humboldt Colombia. https://www.humboldt.org.co/noticias/fortalecer-los-territorios-de-la-amazonia-a-partir-del-monitoreo-comunitario-de-la-biodiversidad

- Pörtner, H. O., Scholes, R.J., Agard, J., Archer, E., Arneth, A., Bai, X., Barnes, D., Burrows, M., Chan, L., Cheung, W. L., Diamond, S., Donatti, C., Duarte, C., Eisenhauer, N., Foden, W., Gasalla, M. A., Handa, C., Hickler, T., Hoegh-Guldberg, O. ... & Ngo, H. T. (2021). *Scientific outcome of the IPBES-IPCC co-sponsored workshop on biodiversity and climate change.* Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services Secretariat. https://doi.org/10.5281/zenodo.4659158

- Prakash, S., & Neuville, A. (2024). *A knowledge synthesis and analysis of the links between biodiversity, climate change and energy, and the relevant EU policies, projects and initiatives.* Luxembourg: Publications Office of the European Union. http://doi.org/10.2760/755341

- Qi, J., & Beauchamp, E. (2023). *Adaptation in biennial transparency reports: Frequently asked questions (FAQ).* NAP Global Network. International Institute for Sustainable Development. https://napglobalnetwork.org/resource/faq-adaptation-in-biennial-transparency-reports/

- Qi, J., Terton, A., Khan, M., Matheson, S., & Morales, V. (2024). *Effectively delivering on climate and nature: NDCs, NAPs and NBSAPs synergies. A checklist for national policy-makers.* Deutsche Gesellschaft für Internationale Zusammenarbeit. https://www.adaptationcommunity.net/wp-content/uploads/2025/07/Effectively_Delivering_Climate_Nature_Country_cases.pdf

- Rio Conventions. (n.d.). *Rio timeline.* https://rioconventions.org/rio-timeline

- Terton, A., Tsioumani, E., Förster, J., & Morchain, D. (2024). *Synergies between biodiversity- and climate-relevant policy frameworks and their implementation.* Deutsche Gesellschaft für Internationale Zusammenarbeit, International Institute for Sustainable Development, & Helmholtz Centre for Environmental Research. https://www.adaptationcommunity.net/wp-content/uploads/2022/05/00-summary-paper-synergies-biodiv-climate-policies-giz-iisd-ufz.pdf

- Tsioumani, E. (2024). *Linkages and Synergies between International Instruments on Biodiversity and Climate Change.* Deutsche Gesellschaft für Internationale Zusammenarbeit, International Institute for Sustainable Development, & Helmholtz Centre for Environmental Research. https://www.adaptationcommunity.net/wp-content/uploads/2022/05/01-thematic-paper-synergies-biodiv-climate-instruments-giz-iisd-ufz.pdf

- United Nations Convention to Combat Desertification. (2021). *Decision 7/COP.13: The future strategic framework of the Convention* (ICCD/COP(13)/21/Add.1). https://www.unccd.int/sites/default/files/relevant-links/2018-08/cop21add1_SF_EN.pdf

- United Nations Convention to Combat Desertification. (2024). *Decision 8/COP.16 Promotion and strengthening of relationships with other relevant conventions and international organizations, institutions and agencies* (ICCD/COP(16)/24/Add.1). https://www.unccd.int/sites/default/files/2025-03/8-cop16.pdf

- United Nations Environment Assembly. (2024). *Resolution adopted by the United Nations Environment Assembly on 1 March 2024 6/4: Promoting synergies, cooperation or collaboration for national implementation of multilateral environmental agreements and other relevant environmental instruments* (UNEP/EA.6/Res.4). https://docs.un.org/en/UNEP/EA.6/RES.4

- United Nations Environment Assembly. (2025). *Resolution adopted by the United Nations Environment Assembly on 12 December 2025 7/5. Promoting synergies, cooperation or collaboration for national implementation of multilateral environmental agreements and other relevant environmental instruments* (UNEP/EA.7/Res.5). https://docs.un.org/en/UNEP/EA.7/Res.5

- United Nations Environment Programme. (2024). *Report of the Bern III Conference on Cooperation among the biodiversity-related conventions for the implementation of the Kunming-Montreal Global Biodiversity Framework Bern, Switzerland, 23-25 January 2024.* https://wedocs.unep.org/items/51420dde-87c9-41af-b192-2c1a701f1ac3

- United Nations Framework Convention on Climate Change. (n.d.). *The Joint Liaison Group.* https://unfccc.int/about-us/about-the-secretariat/the-joint-liaison-group

- United Nations Framework Convention on Climate Change. (2015). Decision 1/CP.21: Adoption of the Paris Agreement. *In Report of the Conference of the Parties on its Twenty-First Session, Held in Paris from 30 November to 13 December 2015* (FCCC/ CP/2015/10/Add.1). https://unfccc.int/files/home/application/pdf/decision1cp21.pdf

- United Nations Framework Convention on Climate Change. (2018a). Decision 4/CMA.1: Further guidance in relation to the mitigation section of decision 1/CP.21. In *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on the third part of its first session, held in Katowice from 2 to 15 December 2018* (FCCC/PA/CMA/2018/3/Add.1). https://unfccc.int/sites/default/files/resource/cma2018_03a01E.pdf#page=6

- United Nations Framework Convention on Climate Change. (2018b). Decision 18/CMA.1: Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement. In *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on the third part of its first session, held in Katowice from 2 to 15 December 2018* (FCCC/PA/CMA/2018/3/Add.2). https://unfccc.int/sites/default/files/resource/cma2018_3_add2_new_advance.pdf#page=18

- United Nations Framework Convention on Climate Change. (2018c). Decision 19/CMA.1: Matters relating to Article 14 of the Paris Agreement and paragraphs 99–101 of decision 1/CP. 21. In *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on the third part of its first session, held in Katowice from 2 to 15 December 2018* (FCCC/PA/CMA/2018/3/Add.2). https://unfccc.int/sites/default/files/resource/cma2018_3_add2_new_advance.pdf#page=53

- United Nations Framework Convention on Climate Change. (2021). Decision 5/CMA.3: Guidance for operationalizing the modalities, procedures and guidelines for the enhanced transparency framework referred to in Article 13 of the Paris Agreement. In *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its third session, held in Glasgow from 31 October to 13 November 2021* (FCCC/PA/CMA/2021/10/Add.2). https://unfccc.int/sites/default/files/resource/cma2021_10a2_adv.pdf#page=2

- United Nations Framework Convention on Climate Change. (2023a). Decision 2/CMA.5: Global goal on adaptation. In *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its fifth session, held in the United Arab Emirates from 30 November to 13 December 2023* (FCCC/PA/CMA/2023/16/Add.1). https://unfccc.int/sites/default/files/resource/cma2023_16a01_adv_.pdf#page=23

- United Nations Framework Convention on Climate Change. (2023b). Decision 1/CMA.5: Outcome of the first global stocktake. In *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its fifth session, held in the United Arab Emirates from 30 November to 13 December 2023* (FCCC/PA/CMA/2023/16/Add.1). https://unfccc.int/sites/default/files/resource/cma2023_16a01_adv_.pdf#page=2

- United Nations Framework Convention on Climate Change. (2025a). Decision 12/CMA.7: Global goal on adaptation. In *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its seventh session, held in Belém from 10 to 22 November 2025* (FCCC/PA/CMA/2025/19/Add.2). https://unfccc.int/sites/default/files/resource/cma2025_19_a02.pdf#page=2

- United Nations Framework Convention on Climate Change. (2025b). Decision 3/CMA.7: Matters relating to the global stocktake. In *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its seventh session, held in Belém from 10 to 22 November 2025* (FCCC/PA/CMA/2025/19/Add.1). https://unfccc.int/sites/default/files/resource/cma2025_19_a01.pdf#page=15

Annex

Table A.1. Commonalities between indicators

Indicator of the GBF Monitoring Framework	Corresponding GBF goals/ target	Indicator or information under the Paris Agreement	Corresponding target, provision, or decisions under the Paris Agreement
A.1 Red List of Ecosystems	Goal A, Target 1	Belém Adaptation Indicator 6.d. Level of threat status of ecosystems, including as an outcome of adaptation actions where applicable	UAE FGCR Target 9(d)
A.2 Extent of natural ecosystems		Belém Adaptation Indicator 6.b. Proportion of ecosystem areas with adaptation actions implemented towards enhanced resilience and services Belém Adaptation Indicator 6.c. Level of resilience of ecosystems, including as an outcome of adaptation actions where applicable	
A.3 Red List Index	Goal A, Target 4	Belém Adaptation Indicator 6.e. Level of threat status of species, including as an outcome of adaptation actions where applicable	
8.b Number of countries with agreed policies to minimise the impact of climate change and ocean acidification on biodiversity and that minimise negative and foster positive impacts of climate action on biodiversity	Target 8 Cross-cutting; biodiversity	Belém Adaptation Indicator 11.a. Status of having national adaptation plans, policy instruments, and planning processes and/or strategies in place	UAE FGCR Target 10(b)
		Belém Adaptation Indicator 12.a. Extent of implementation of national adaptation plans, policies and strategies relative to planned implementation thereof	UAE FGCR Target 10(c)
		Outline for the BTR: III.D. Adaptation strategies, policies, plans, goals and actions to integrate adaptation into national policies and strategies	Decision 5/ CMA.3, Annex IV (Outline for the BTR)

Indicator of the GBF Monitoring Framework	Corresponding GBF goals/target	Indicator or information under the Paris Agreement	Corresponding target, provision, or decisions under the Paris Agreement
10.1 Proportion of agricultural area under productive and sustainable agriculture	Target 10 Cross-cutting; biodiversity	Belém Adaptation Indicator 4.a. Proportion of area under management for food and agricultural production utilizing practices and technologies relevant to climate change adaptation Belém Adaptation Indicator 4.c. Level of degraded areas that are under management for food and agricultural production, including as an outcome of adaptation actions where applicable	UAE FGCR Target 9(b)
		Belém Adaptation Indicator 4.d. Level of food and agricultural yield in areas that are under management for food and agricultural production, including as an outcome of adaptation actions where applicable	
B.1 Services provided by ecosystems	Goal B, Target 11	Belém Adaptation Indicator 6.a. Proportion of climate-resilient ecosystems that are providing services to populations that depend on them	UAE FGCR Target 9(d)
		Belém Adaptation Indicator 6.b. Proportion of ecosystem areas with adaptation actions implemented towards enhanced resilience and services	
		Belém Adaptation Indicator 6.f. Level of adaptive capacity, resilience and vulnerability to climate impacts resulting from the implementation of ecosystem-based adaptation actions and NbS according to information reported by parties, as appropriate	

Indicator of the GBF Monitoring Framework	Corresponding GBF goals/target	Indicator or information under the Paris Agreement	Corresponding target, provision, or decisions under the Paris Agreement
B.1 Services provided by ecosystems	Goal B, Target 11	4.d.ii. Planning processes: [...] Each Party with a nationally determined contribution under Article 4 of the Paris Agreement that consists of adaptation action and/or economic diversification plans resulting in mitigation co-benefits consistent with Article 4, paragraph 7, of the Paris Agreement to submit information on: [...] Specific projects, measures and activities to be implemented to contribute to mitigation co-benefits, which may cover key sectors, such as energy, resources, water resources, coastal resources, human settlements and urban planning, agriculture and forestry	Decision 4/CMA.1, Annex I (Information necessary for clarity, transparency and understanding)
		Annual anthropogenic emissions by sources and removals by sinks covered by its NDC	Decision 5/CMA.3, Annex II (Common tabular format for national inventory reports)
		Outline for the BTR: II.D. Mitigation policies and measures, actions and plans	Decision 5/CMA.3, Annex IV (Outline for the BTR)
		Outline for the BTR: III.D. Adaptation strategies, policies, plans, goals and actions to integrate adaptation into national policies and strategies	Decision 5/CMA.3, Annex IV (Outline for the BTR)
12.1 Average share of the built-up area of cities that is green/blue space for public use for all	Target 12	Belém Adaptation Indicator 7.a. Proportion of settlement upgrading programmes implemented that include climate change adaptation measures and maintain sustained engagement at the local level	UAE FGCR Target 9(e)

Indicator of the GBF Monitoring Framework	Corresponding GBF goals/target	Indicator or information under the Paris Agreement	Corresponding target, provision, or decisions under the Paris Agreement
14.b Number of countries integrating biodiversity and its multiple values into policies, regulations, planning, development processes, poverty eradication strategies and, as appropriate, national accounts, within and across all levels and across all sectors, and progressively aligning all relevant public and private activities and fiscal and financial flows with the goals and targets of the Framework	Target 14	Belém Adaptation Indicator 11.a. Status of having national adaptation plans, policy instruments, and planning processes and/or strategies in place Belém Adaptation Indicator 12.d. Amount of finance for climate adaptation reported in line with chapters IV, V and VI, as relevant and as appropriate, of the annex to decision 18/CMA.1, disaggregated by the parameters listed in paragraphs 123, 125, 133 and 134, as applicable, of the same decision, which includes the amount of international public finance for climate adaptation provided by developed countries and received by developing countries for the implementation of national adaptation plans, policy instruments, and planning processes and/or strategies	UAE FGCR Target 10(b)
		Outline for the BTR: II.D. Mitigation policies and measures, actions, and plans	Decision 5/CMA.3, Annex IV (Outline for the BTR)
		Outline for the BTR: III.D. Adaptation strategies, policies, plans, goals, and actions to integrate adaptation into national policies and strategies	Decision 5/CMA.3, Annex IV (Outline for the BTR)

Indicator of the GBF Monitoring Framework	Corresponding GBF goals/target	Indicator or information under the Paris Agreement	Corresponding target, provision, or decisions under the Paris Agreement
23.b Number of countries with legal, administrative or policy frameworks, including the Gender Plan of Action, as well as the allocation of specific financial resources to ensure that all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by ensuring women's equal rights and access to land and natural resources	Target 23	IV.D.(c). Each Party should provide the following information, as appropriate: [...] How best available science, gender perspectives and Indigenous, traditional, and local knowledge are integrated into adaptation	Decision 18/CMA.1, Annex IV (MPGs)
		Belém Adaptation Indicator 11.d. Status of having gender-responsive adaptation plans, policy instruments, and planning processes and/or strategies in place	UAE FGCR Target 10(b)

Source: The authors, based on CBD, 2024a and UNFCCC 2018a, 2021, 2025a

Imprint

As a federally owned enterprise, GIZ supports the German Government in achieving its objectives in the field of international cooperation for sustainable development.

Published by:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

Address
Friedrich-Ebert-Allee 32 + 36
53113 Bonn, Germany
T +49 228 4460 – 1791
E info@giz.de
I www.giz.de

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

This publication is part of a thematic paper series on synergies between biodiversity- and climate-relevant policy frameworks and their implementation developed by GIZ, IISD and UFZ, funded under the International Climate Initiative (IKI).

The Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN) supports this initiative on the basis of a decision adopted by the German Bundestag.

On behalf of:
Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety
of the Federal Republic of Germany

IKI INTERNATIONAL CLIMATE INITIATIVE

On behalf of:
Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN)
Berlin and Bonn

GIZ is responsible for the content of this publication.

July 2026

Series of Papers Edited by:
Anika Terton (IISD), Elsa Tsioumani (IISD), Jeffrey Jianfeng Qi (IISD), Johannes Förster (UFZ), Mathias Bertram, Daniel Plugge (GIZ)

Suggested Citation:
Terton, A., Qi, J., Beauchamp, E., Rosentreter, H., Wicander, S. (2026). Synergies for Monitoring and Reporting on Climate and Biodiversity Actions: Global frameworks and national opportunities. In A. Terton, E. Tsioumani, J. Förster, D. Morchain, J. Qi, & M. Hernandez (Eds.), *Synergies between biodiversity- and climate-relevant policy frameworks and their implementation*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), International Institute for Sustainable Development (IISD), Helmholtz Centre for Environmental Research (UFZ).

Suggested Citation for Series of Papers:
Terton, A., Tsioumani, E., Förster, J., Morchain, D., Qi, J., & Hernandez, M. (2026). *Synergies between biodiversity- and climate-relevant policy frameworks and their implementation*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), International Institute for Sustainable Development (IISD), Helmholtz Centre for Environmental Research (UFZ).

Responsible:
Mathias Bertram
E mathias.bertram@giz.de

Design and editing:
now [nau], communicative & visual design, Frankfurt based on the concept of kippconcept gmbh

Photo credits:
Cover: GIZ / Phy-Yen Cay, p. 4: GIZ / Dirk Ostermeier, p. 8: GIZ / Dirk Ostermeier, p. 22: Unsplash / Zdenek Machacek, p. 30: GIZ / Florian Kopp

URL links:
Responsibility for the content of external websites linked in this publication always lies with their respective publishers. IKI expressly dissociates itself from such content.