

United Nations Economic Commission for Africa

# Framework for a national nature strategy

Facilitating the development of national nature strategies that are aligned with the Convention on Biological Diversity

October 2023



# FRAMEWORK FOR A NATIONAL NATURE STRATEGY

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**Disclaimer:** The views expressed in this report do not necessarily reflect the views of the United Nations or its officials or Member States. To the best of the authors' knowledge, this document is up to date as of October 2023.

## Definition of key terms used in this report

Biodiversity <sup>1</sup>	The variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems.
Ecosystem services <sup>2</sup>	Contributions of ecosystems to the benefits that are used in economic and other human activity.
Environmental assets <sup>3</sup>	The naturally occurring living and non-living components of the earth, together constituting the biophysical environment, which may provide benefits to humanity.
Ecosystem assets <sup>4</sup>	Contiguous spaces of a specific ecosystem type characterized by a distinct set of biotic and abiotic components and their interactions.
Nature <sup>5</sup>	The natural world with an emphasis on its living components.
Natural capital <sup>6</sup>	The stock of renewable and non-renewable natural resources (e.g., plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits or "services" to people.

<sup>1</sup> United Nations, *Treaty Series*, vol. 1760, No. 30619.

<sup>2</sup> System of Environmental-Economic Accounting—Ecosystem Accounting (United Nations publication, 2021). Available at: seea.un.org/ecosystem-accounting.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), *glossary* (2021). Available at: www.ipbes.net/glossary-tag/nature. 6 Natural Capital Coalition, (London, 2016). Available at: <u>capitalscoalition.org/capitals-approach/natural-capital-</u>

protocol/?fwp\_filter\_tabs=training\_material.

### **Executive summary**

The economies of African countries, like those of countries in other global regions, are heavily reliant on natural resources. Nature loss and degradation pose significant risks for economic development and well-being. Investments to protect and restore natural environments can help safeguard African and other global regions from risks associated with environmental degradation and unlock new economic opportunities.

A national nature strategy can facilitate countries' efforts to navigate an increasingly complicated normative landscape characterized by numerous compliance obligations and commitments, including those stemming from the Kunming-Montreal Global Biodiversity Framework, national biodiversity strategies and action plans, and countries' nationally determined contributions. National nature strategies can help countries respond to nature-related risks and opportunities, align policies with international, regional and market priorities, and make implementation and reporting more efficient. National nature strategies can also help countries improve climate-related outcomes at the many points where nature interacts with the climate.

In this report, the authors present a framework that can facilitate efforts by African and other countries to draw up and implement national nature strategies. The framework provides start-to-finish guidance and covers the implementation of nature assessments, the establishment of a national vision and related targets, the development of a strategy to deliver on those targets, strategy implementation, the exploitation of nature-related opportunities, the management of nature-related risks, and compliance with international obligations, such as those stemming from the Kunming Montreal Global Biodiversity Framework and from national biodiversity strategies and action plans. The strategy was developed in collaboration with a wide range of stakeholders, including policymakers, nature experts and representatives of non-governmental and multilateral organizations.

The framework comprises four components, namely: (I) Baseline and ambition: reasons for a national nature strategy and outcomes to aim for; (II) Initiatives: actions to take in order to achieve the aforementioned outcomes; (III) Instruments: incentivizing action to achieve desired outcomes; and (IV) Governance and implementation: planning and implementing the strategy and assigning responsibilities.

Four levels of detail are presented:

A. Components and subcomponents: as illustrated in figure I, the framework has four components and 14 subcomponents.

#### Figure I

Components and subcomponents of the framework

	Baseline and	0	•	<b>I</b> Movernance
Components	ambition	Initiatives	Instruments	Implementation
S. S	Assess the state of nature and define a vision for nature outcomes with targets and/or goals	Identify and prioritize initiatives to implement the vision, by sector	Establish a suite of policy and financing instruments	Develop governance arrangements and an implementation plan
Subcomponents	1. Natural capital assessment	4. Impact initiatives	6. Regulatory and voluntary	8. Institutions
Subcomponents	<ol> <li>Public and private case for nature</li> <li>Vision and targets</li> </ol>	5. Cross-cutting initiatives	instruments 7. Economic and financial	9. Stakeholder engagement
			instruments	10. Resource mobilization
				<ol> <li>Political support and alignment</li> </ol>
				12. Measurement
				<ol> <li>Transparency and disclosure</li> </ol>
				14. Implementation

B. Questions, outputs and options: the framework sets out a number of guiding questions that a country should aim to answer when building its nature strategy. The framework also sets out potential responses to key questions and suggests a number of outputs across subcomponents.

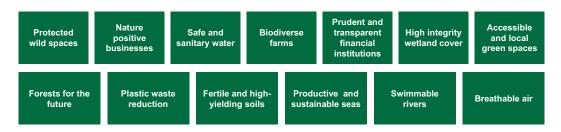
The questions act as a guide, with answers to those questions reflected in outputs, and establish a foundation for a country's national nature strategy. Not all outputs will necessarily be made available in the form of publically-accessible documents. Outputs can be used to communicate relevant information or decisions taken, stimulate discussion and facilitate planning.

For example, for subcomponent 4 (Impact initiatives), an example question included in the framework is "What initiatives could be developed, and where would they be feasible?" The output for that subcomponent is a list of initiatives, each with a narrative statement, objectives and a list of prioritized levers, enablers and supporting activities.

Options are provided in the form of option sets, with one set offered for each of the choices to be made. The options serve as a source of inspiration that can be adapted to reflect the priorities and needs of a particular country. For subcomponent 4 (Impact initiatives), for example, the options given provide a starting point for the development of a range of initiatives (see figure II).

#### **Figure II**

**Options provided under subcomponent 4: Impact initiatives** 



- C. Curated guidance: the framework offers a list of resources to which a country can refer to obtain further information and guidance; and
- D. Exhibits and tools: the framework highlights examples and tools from the curated guidance that might be helpful in answering questions and in building suggested outputs.

The national nature strategy preparation process is dynamic and iterative. In practice, countries are likely to begin that process by focusing on the governance and implementation component, establishing some of the necessary institutional structures and facilitating stakeholder engagement. Thereafter, outputs will go through a process of iteration and improvement.

Section 3 of the present report, on implementation, sets out a work plan and suggests how subcomponents could be sequenced. For example, a country might use a gap assessment to analyse how current coverage compares against a range of criteria, such as Kunming Montreal Global Biodiversity Framework targets or other targets set by the country in question. This could provide a country with an initial indication of the baseline maturity of components that could be incorporated into its nature strategy, and where more or less effort might be required. The section also illustrates how the prioritization of initiatives could be used to establish the sequence with which activities are to be implemented.

The aim of the framework is to accelerate the development of national nature strategies. It has been drafted in line with the provisions of the Kunming Montreal Global Biodiversity Framework and a number of national biodiversity strategies and action plans, and provides systematic guidance that countries may find help-ful when formulating their national nature strategies.

## Introduction

In the present report, the authors present a framework that can facilitate efforts by African and other countries to formulate national nature strategies. The framework provides systematic guidance to help relevant stakeholders formulate and present key questions, gather evidence and identify and implement solutions with a view to safeguarding and restoring countries' national capital.

Efforts have been made to ensure that the framework sets out clear and actionable measures to accelerate the development of national nature strategies. The framework provides start-to-finish guidance and covers the implementation of nature assessments, the establishment of a national vision and related targets, the development of a strategy to deliver on those targets, strategy implementation, the exploitation of nature-related opportunities, the management of nature-related risks, and compliance with international obligations, such as those stemming from the Kunming-Montreal Global Biodiversity Framework and from national biodiversity strategies and action plans. The strategy was developed in collaboration with a wide range of stakeholders, including policymakers, nature experts and representatives of non-governmental and multilateral organizations, and was piloted in collaboration with stakeholders in Ghana, including government representatives.

This framework is aligned with the Kunming-Montreal Global Biodiversity Framework and national biodiversity strategies and action plans, to which it makes reference, and, where relevant, incorporates guidance prescribed in the Convention on Biological Diversity across components and subcomponents. Building on national biodiversity strategies and action plans, the framework provides for the formulation of national nature strategies whose scope extends beyond biodiversity, water and air quality, will facilitate discussions on potential policy initiatives, and will facilitate the development of financing instruments to support strategy formulation and implementation.

The framework comprises four components, namely: (I) Baseline and ambition; (II) Initiatives; (III) Instruments; and (IV) Governance and implementation. The framework provides four levels (layers) of detail: (A) Components and subcomponents; (B) Questions, outputs and options: (C) Curated guidance; and (D) Exhibits and tools. An overview of the components and layers is provided in figure III. The framework transitions in its approach from high-level to detailed in order to suit the needs of a wide variety of stakeholders.

#### **Figure III**

#### The four components and four layers of the framework

## Four components (I to IV)

Components of the framework, including:

- I. Baseline and ambition: Assess the state of nature and define a vision for nature outcomes with targets and/or goals
- **II. Initiatives:** Identify and prioritize initiatives to implement that vision, by sector
- **III. Instruments:** Establish a suite of policy and financing instruments.
- IV. Governance and implementation: Develop governance arrangements and formulate an implementation plan
- Induded in main body of document Four layers (A to D) The different levels of detail included across the framework: A. Components and subcomponents: describes the four components and 14 subcomponents that collectively comprise the national nature strategy B. Questions, outputs and options: focuses on the
- compilation of evidence, analysis and decisions required in the strategy creation process
- C. Curated guidance: maps current frameworks, tools and reports that are relevant to the components and subcomponents of the framework
- D. Exhibits and tools: suggests starting points in the form of exhibits and examples for each subcomponent

This remainder of the present report is structured as follows: in section 1 (Context), the authors describe the need for and benefits of national nature strategies. Section 2 (Framework) presents the structure of the framework, providing an overview of layer A (Components and subcomponents) and layer B (Questions, outputs and options). In section 3 (Implementation), the authors discuss strategy implementation, while section 4 (Annex) provides an overview of the layer C (Curated guidance) and layer D (Exhibits and tools).

## 1. Context

The economies of African countries, like those of countries in other global regions, are heavily dependent on natural resources.7 However, the natural capital of many African countries is declining rapidly. This is of particular concern as some 70 per cent of people in sub-Saharan Africa depend on forests and woodlands for their livelihoods.8 There is diverse and substantial evidence of environmental degradation on the continent: some 25 per cent of African countries are now under water stress, some countries lost as much as 30 per cent of their tree cover between 2001 and 2022, nearly 75 per cent of deserts and drylands are degraded, and some 3 per cent of gross domestic product (GDP) is lost annually from soil and nutrient depletion.9,10·11<sup>1</sup>2

Nature loss and degradation pose significant risks for economic development and well-being. Africa loses approximately \$195 billion in natural capital annually through unsustainable or illicit activities.<sup>13</sup> In the real economy, nature loss can undermine growth in sectors that are particularly reliant on nature, including the agriculture, forestry and fishing sectors, which together generated some 17 per cent of GDP in sub-Saharan Africa in 2022.<sup>14</sup> This translates into risk in the finance sector, where, as illustrated in figure IV, nature-related risks could roughly double expected financing losses in agriculture in some finance portfolios by 2030. Additionally, many tropical West African countries could experience a 30 per cent decrease in marine fishery catches by 2050, resulting in a significant reduction in the dietary protein available to millions of Africans.<sup>15</sup>

<sup>7</sup> World Economic Forum, "Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business a nd the Economy", New Nature Economy series (Geneva, World Economic Forum, 2020). Available at: <u>www3.weforum.org/docs/WEF\_New\_Nature\_Economy\_Report\_2020.pdf</u>.

<sup>8</sup> African Development Bank Group, "African Green Growth Readiness Assessment" (January 2022). Available at: <u>https://www.afdb.org/en/documents/africa-green-growth-readiness-assessment</u>.

<sup>9</sup> Matt Luch, Matt Landis and Francis Gassert, "Aqueduct Water Stress Projections: Decadal Projections of Water Supply and Demand Using CMIP5 GCMs", technical note (Washington D.C., World Resources Institute, 2015). Available at: <u>www.wri.org/</u> <u>research/aqueduct-water-stress-projections-decadal-projections-water-supply-and-demand-using-cmip5</u>. Water stress level based on analysis by Vivid Economics; water stress projections assuming a representative concentration pathway (RCP) of 8.5 (a "business-as-usual" scenario).

<sup>10</sup> Global Forest Watch, "Forest Change" dashboard. Available at: <u>www.globalforestwatch.org/dashboards/global/</u> (accessed on 1 October 2023).

<sup>11</sup> United Nations, Convention to Combat Desertification, Annex I: Africa. Available at: <u>www.unccd.int/convention/regions/</u> annex-i-africa.

<sup>12</sup> World Resources Institute, "African Forest Landscape Restoration Initiative (AFR100): Restoring 100 million hectares of deforested and degraded land in Africa by 2030" (n.d.) Available at: www.wri.org/initiatives/african-forest-landscaperestoration-initiative-afr100.

<sup>13</sup> United Nations Environment Programme (UNEP), "Is Africa's Natural Capital the Gateway to Finance Its Development?" (September 2016). Available at: <u>www.unep.org/news-and-stories/story/africas-natural-capital-gateway-finance-its-</u> <u>development</u>.

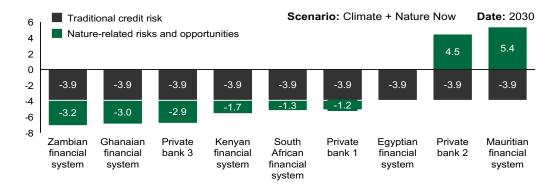
<sup>14</sup> World Bank, "Agriculture, forestry, and fishing, value added (% of GDP) – Sub-Saharan Africa", World Bank Open Data. Available at: <u>data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=ZG&name\_desc=false</u> (accessed on 1 October 2023).

<sup>15</sup> World Bank, Climate Change and Marine Fisheries in Africa: Assessing Vulnerability and Strengthening Adaptation Capacity (Washington, D.C., World Bank Group Publications, 2019). Available at: <u>documents1.worldbank.org/curated/</u> en/280891580715878729/pdf/Climate-Change-and-Marine-Fisheries-in-Africa-Assessing-Vulnerability-and-<u>Strengthening-Adaptation-Capacity.pdf</u>.

#### **Figure IV**

#### Changes in expected loses for lending to agriculture by lender, 2030

(Percentage of loan book value)



Source: Nature and financial institutions in Africa: A first assessment of opportunities and risks (McKinsey & Company, 2022).

Investments to restore and protect nature can unlock new economic opportunities and shield the region from risks. The continent's nature endowment offers African countries a competitive advantage. For example, its vast coastline provides an opportunity for the development of the blue economy, which could generate \$576 billion a year and create 127 million jobs by 2063 through research, innovation, and ecosystem management.<sup>16</sup> As part of the growth of the blue economy, marine and coastal tourism could generate \$100 billion a year in revenue and employ 28 million people by 2030. Overall, a nature-positive transition and efforts to restore and safeguard natural environments have the potential to mobilize \$10 trillion in investments and create 395 million jobs by 2030.<sup>17</sup>

Increasingly, safeguarding nature is viewed as a priority at the national, regional, global and corporate levels. At the national level, 13 countries have drafted legislation on ecocide and codified crimes against the environment,<sup>18</sup> while more than 190 countries have developed national biodiversity strategies and action plans.<sup>19</sup> At the regional level, Agenda 2063: The Africa We Want, of the African Union has established a goal of environmentally sustainable and climate resilient economies. In 2022, the African Ministerial Conference on the Environment recognized that nature underpins the region's economy and reaffirmed its support for efforts to safeguard the environment.<sup>20</sup> At a global level, the Kunming-Montreal Global Biodiversity Framework, which has been endorsed by more than 190 countries, establishes 23 global targets to be achieved by 2030 and four goals to be achieved by 2050. Furthermore, the

<sup>16</sup> UNEP, Africa Environment Outlook for Business: Our Environment Our Wealth (Nairobi, August 2023). Available at: <u>https://doi.org/10.59117/20.500.11822/43127</u>.

<sup>17</sup> Ibid.

<sup>18</sup> Ecocide law, "Ecocide law in national jurisdictions", database. Available at: <u>ecocidelaw.com/existing-ecocide-laws/</u> (accessed on 18 October 2023).

<sup>19</sup> Convention on Biological Diversity, "Search NBSAPs and National reports", database. (accessed on 18 October 2023). Available at: <u>www.cbd.int/nbsap/search/</u>.

<sup>20</sup> UNEP, "About ACMEN" (n.d.). Available at: www.unep.org/regions/africa/african-ministerial-conference-environment/ about-amcen.

17 Sustainable Development Goals set out in the 2030 Agenda for Sustainable Development include Goals pertaining to the protection, restoration and sustainable use of terrestrial ecosystems, the sustainable management of forests, the reversal of land degradation and the prevention of biodiversity loss. At its 2023 summit, the Group of 20 affirmed its commitment to preventing land degradation and managing water resources sustainably, while at the 2023 Group of Seven Ministers' Meeting on Climate, Energy and Environment, ministers agreed on actions to reverse biodiversity loss and made a commitment to increase funding to that end.

At a corporate level, nature-related standards have been established by a number of organizations, including the Taskforce on Nature-related Financial Disclosures, the Science Based Targets Network, the International Sustainability Standards Board of the International Financial Reporting Standards Foundation and the Climate Disclosure Standards Board, prompting some business enterprises to set nature targets that complement their net zero carbon emission commitments. The Taskforce on Nature-related Financial Disclosures, which launched its most recent framework in September 2023, has established standards for nature disclosures, including in connection with risk and impact measurements.16 The Science Based Targets initiative and the Science Based Targets Network lay out standards for climate and nature-related target setting. The Science Based Targets Network released initial guidance in some areas in May 2023 and that initiative is currently in the piloting stage.<sup>21</sup> The International Sustainability Standards Board of the International Financial Reporting Standards Foundation launched its first two sustainability disclosure standards in June 2023,<sup>22</sup> while the Climate Disclosure Standards Board published biodiversity guidance in November 2022.23 About 1,800 companies and financial institutions are already taking action to align their activities with the objectives set out in one or more of those initiatives.

A national nature strategy can facilitate efforts by countries to articulate their national positions and uphold their international commitments, including those made in the context of their national biodiversity strategies and action plans and their nationally determined contributions. National nature strategies can help countries respond to nature-related risks and opportunities, align policies with national priorities, and make implementation and reporting more efficient. National nature strategies can also help countries uphold regional and global commitments and improve climate-related outcomes at the many points where nature interacts with the climate.<sup>24</sup>

<sup>21</sup> Science Based Targets Network, "The first science-based targets for nature". Available at: <u>sciencebasedtargetsnetwork.org/</u> <u>how-it-works/the-first-science-based-targets-for-nature/</u>.

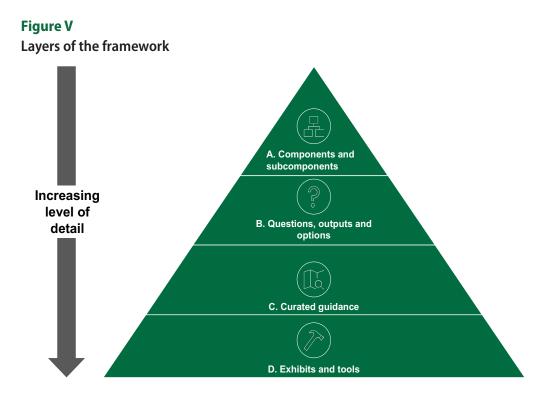
<sup>22</sup> International Financial Reporting Standards, "General Sustainability-related Disclosures". Available at: <u>www.ifrs.org/</u> projects/completed-projects/2023/general-sustainability-related-disclosures/.

<sup>23</sup> Climate Disclosure Standards Board, "CDSB Framework: Application guidance for biodiversity-related disclosures", November 2021. Available at: <a href="https://www.cdsb.net/sites/default/files/biodiversity-application-guidance-single\_disclaimer.pdf">www.cdsb.net/sites/default/files/biodiversity-application-guidance-single\_disclaimer.pdf</a>.

<sup>24</sup> Finance for Biodiversity Initiative, The Climate-Nature Nexus: Implications for the Financial Sector (2021). Available at: https://www.naturefinance.net/resources-tools/the-climate-nature-nexus-1/.

## 2. Framework

The aim of the framework outlined in the present report is to provide systematic guidance that countries might find helpful in the formulation of their national strategies. As illustrated in figure V and as mentioned previously, the framework sets out four layers of detail: (A) Components and subcomponents; (B) Questions, outputs and options: (C) Curated guidance; and (D) Exhibits and tools. Layers A and B are described in the present chapter of the report, while layers C and D are described in the Annex.



#### 2.1 Overview of layers A and B

#### 2.1.1 Layer A: Components and subcomponents

The framework comprises four components, namely: (I) Baseline and ambition: reasons for a national nature strategy and outcomes to aim for; (II) Initiatives: actions to take in order to achieve the aforementioned outcomes; (III) Instruments: incentivizing action to achieve desired outcomes; and (IV) Governance and implementation: planning and implementing the strategy and assigning responsibilities.

The framework includes the following 14 subcomponents:

#### I. Baseline and ambition

- 1. **Natural capital assessment:** Diagnose the current state of the natural environment, assess trends and evaluate pressures on nature;
- 2. Public and private case for nature: Assess the social and economic benefits of protecting and restoring the natural environment, with particular attention given to key sectors;
- **3. Vision and targets:** Articulate desired national outcomes with measurable targets/goals and a timeframe for their achievement;

#### II. Initiatives

- 4. Impact initiatives: Define and select thematic programmes;
- **5. Cross-cutting initiatives:** Provide supportive action, such as building capacity, promoting innovation, establishing nature markets and facilitating the disclosure of information;

#### III. Instruments

- **6. Regulatory and voluntary instruments:** Identify policies that incentivize action;
- **7. Economic and financial instruments:** Identify policies that incentivize the financing of nature recovery and protection initiatives.

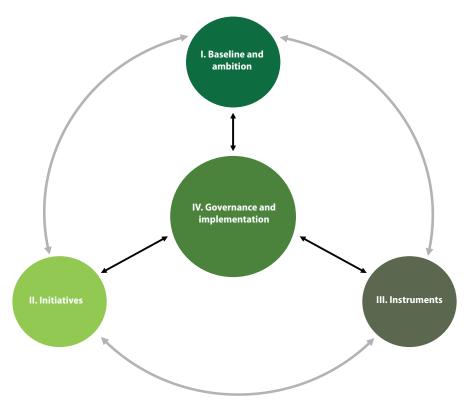
#### IV. Governance and implementation

- **8. Institutions:** Develop institutional structures to implement, monitor and ensure delivery of the nature strategy;
- 9. Stakeholder engagement: Identify and engage with stakeholders;
- **10. Resource mobilization:** Secure funding for implementation of the nature strategy;
- **11. Political support and alignment:** Secure broad political support and ensure that the strategy incorporates key commitments;
- 12. Measurement: Select data and metrics;
- **13. Transparency and disclosure:** Monitor, report and communicate on the strategy and progress made in that regard;
- 14. Implementation: Write a delivery plan.

The national nature strategy preparation process is dynamic and iterative. In practice, countries are likely to begin that process by focusing on the governance and implementation component, establishing some of the necessary institutional structures and facilitating stakeholder engagement. Consequently, and as illustrated in VI, the Governance and implementation component plays a central role. Thereafter, outputs will go through a process of iteration and improvement. For example, countries could begin their national nature strategy development process with an assessment of the state of nature and of pressure on their natural environments, and refine and improve that natural capital assessment as the strategy takes shape. Along the way, an initial set of targets might be proposed which could then be refined and improved through stakeholder engagement. Section 3 of the present report, on implementation, sets out a work plan and suggests how subcomponents could be sequenced.

#### **Figure VI**

Interaction among the components of the framework: a dynamic and iterative process



#### 2.1.2 Layer B: Questions, outputs and options

The following section sets out a series of questions, outputs and options relating to the national nature strategy. Those elements are not prescriptive or exhaustive and could be selected or adapted in line with national circumstances.

#### Box 1: Questions, outputs and options

Questions: Key considerations in the development of a national nature strategy.

*Outputs:* The products of each subcomponent, which incorporate the answers to the questions and facilitate efforts by stakeholders to develop and implement the strategy.

**Options:** A non-exhaustive and adaptable set of choices that can help stakeholders respond to the questions asked.

The questions act as a guide, with answers to those questions reflected in outputs, and establish a foundation for a country's national nature strategy. Not all outputs will necessarily be made available in the form of publically-accessible documents. Outputs can be used to communicate relevant information or decisions taken, stimulate discussion and facilitate planning.

Options are provided in the form of option sets, with one set offered for each of the choices to be made. The options serve as a source of inspiration that can be adapted to reflect the priorities and needs of a particular country.

Below, we set out the questions, outputs and options under each subcomponent.

#### 2.2 Component I: Baseline and ambition

Component I (Baseline and ambition), facilitates efforts by country to assess the state of their natural environments and formulate a vision for nature outcomes with associated targets. Component I comprises three subcomponents, namely natural capital assessment, public and private case for nature, and vision and targets. Table 1 presents a definition for each subcomponent, and a set of questions that can facilitate progress towards prescribed outputs. The authors then set out three sets of options for classification systems on the definition of nature and the scope of natural capital (subcomponent 1), for communicating the public and private case for nature (subcomponent 2) and for setting nature-related targets (subcomponent 3).

#### Table 1

Component I: Baseline and ambition – subcomponents, definitions, questions, outputs and associated layer D exhibits

Sub	ocomponent	Definition	Questions	Outputs	Layer D exhibits (see annex)
1.	Natural cap- ital assess- ment	Diagnose the current state of the natural environment, assess trends and evaluate pressures on nature	<ul> <li>What natural assets does the country have?</li> <li>What is the current state of the natur\al environment, what trends are apparent and where is information lacking?</li> <li>What are the pressures driving nature outcomes?</li> <li>What are the natural assets that are impoverished or in decline? Which assets are particularly important and require urgent action?</li> </ul>	Natural assets and risk register: an assessment of the current state of the natural environ- ment and natural capital trends	Box 3 Box 4 Box 5 Box 6 Box 7 Box 8 Box 9 Box 10 Box 11
2.	Public and private case for nature	Assess the social and economic benefits of protecting and restoring the natural environment, with particular attention given to key econom- ic sectors	<ul> <li>What opportunities for economic growth and improved welfare can enhancement and protection of nature environments bring? Which economic sectors could be developed further?</li> <li>How are the economy and its key sectors dependent on nature? What are the key risks to natural capital?</li> </ul>	case for nature: an assessment of why, where and when to	Box 12 Box 13 Box 14
3.	Vision and targets	Articulate desired national outcomes with measurable targets/goals and a timeframe for their achievement	<ul> <li>What is the desired future state of nature in the country?</li> <li>What are the country's shortand long-term targets?</li> <li>What are the international commitments that the country has made or wishes to make?</li> </ul>	Vision: a vision de- veloped or tested in collaboration with stakeholders Targets: a set of targets developed and tested in collaboration with stakeholders	Box 15 Box 16

#### **Baseline and ambition: Options**

To carry out a natural capital assessment (subcomponent 1), countries must establish the scope and extent of their nature resources and perform a baseline assessment. To that end, they should adopt and make use of a classification system. Five options for classification systems are set out in VII. Countries are free, however, to establish classification systems on the basis of alternative criteria.

#### **Figure VII**

Classification systems that can help countries establish the scope and extent of their natural capital



The goals and targets established in the Kunming-Montreal Global Biodiversity Framework offer one option for classifying natural capital.<sup>25</sup> While the Framework is extensive in scope, its focus is on biodiversity, including the threats to biodiversity posed by pollution, and the importance of protected areas in promoting biodiversity. If a country wishes to embrace a broader definition of nature, the Planetary Boundaries or the Earth System Boundaries frameworks are potential options that provide for national performance to be measured in relation to each boundary.<sup>26,27</sup> Further details on key concepts used in natural capital assessments are provided in boxes 3 to 11 in the present report (see annex).

A country may wish to highlight the rationale for its nature strategy, publicly and/ or privately. The capacity to communicate that rationale clearly can support the development and rollout of the strategy by deepening the engagement and support of stakeholders and facilitating the mobilization of resources.

A number of options pertaining to countries efforts to communicate the public and private case for nature are set out in figure VIII. The relevance of each option will depend on the particular circumstances of the country in question and the stakeholders involved. Further details on ways to communicate the importance of efforts to safeguard nature, both with the general public and in private, are provided in boxes 12 to 14 in the present report (see annex).

<sup>25</sup> Conference to the Parties to the Convention on Biological Diversity, document CBD/COP/DEC/15/4. Available at: <u>www.</u> <u>cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf</u>.

<sup>26</sup> Johan Rockström and others, "A safe operating space for humanity", Nature, vol. 461, pp. 472–475 (September 2009). Available at: www.nature.com/articles/461472a.

<sup>27</sup> Johan Rockström and others, "Safe and just Earth system boundaries: Supplementary information appendix", Nature, 619, pp. 102–111 (May 2023) Available at: <u>https://www.nature.com/articles/s41586-023-06083-8</u>.

#### **Figure VIII**

Options for communicating the public and private case for nature



When designing a set of targets, a country should endeavour to balance ambition and achievability, and might adopt an iterative approach in collaboration with relevant with stakeholders to that end. As illustrated in figure IX, that approach could be based on various standards and targets.

#### **Figure IX**

Options for setting nature-related targets

Align with global targets and standards, such as those developed in the context of the Kunming-Montreal Global Biodiversity Framework or by the World Health Organization

Base national nature targets on those developed by other countries, including in the context of their national biodiversity strategies and action plans Adapt targets aimed at the private sector, such as the targets developed by the Science Based Targets Network or the Taskforce on Nature-related Financial Disclosure

Collaborate with relevant stakeholders to develop unique set of national commitments

A country may wish to set its own framework of targets, which could be developed in collaboration with local stakeholders. In addition or alternatively, it could base its strategy on the goals and targets established in the Kunming-Montreal Global Biodiversity Framework, particularly if it is a party to the Convention on Biological Diversity and will therefore be required to report on its progress towards implementation of the targets established by the Convention. An overview of the targets set out in the Convention is provided in box 16 to the present report (see annex). Countries could also adopt other global targets, such as the air quality targets established by the World Health Organization or targets established by other countries in the context of their national biodiversity strategies and action plans. They could also base their strategies on the targets and objectives adopted by the Science Based Targets Network, the Taskforce on Nature-related Financial Disclosures or other relevant networks or entities.

#### 2.3 Component II: Initiatives

The aim of Component II, Initiatives, is to facilitate efforts by countries to identify and prioritize initiatives that can help them achieve their vision for natural environments. Component II includes two subcomponents, namely impact initiatives and cross-cutting initiatives. Table 12, the authors present a definition for each subcomponent, and a set of questions that can facilitate progress towards prescribed outputs. They also set out options for impact and cross-cutting initiatives (subcomponents 4 and 5, respectively). An impact initiative is a thematic programme of action that facilitates the achievement of targets, while a cross-cutting initiative is a collection of instruments and supporting components that enable multiple initiatives. Box 2 then provides definitions for a number of the terms used in this report, including impact initiatives, cross-cutting initiatives, levers, and instruments, together with relevant examples.

#### Table 2

Component II: Initiatives – subcomponents, definitions, questions, outputs and associated layer D exhibits

Su	bcomponent	Definition	Questions	Outputs	Layer D ex- hibits (see annex)
4.	Impact initiatives	Define and select thematic programmes	<ul> <li>What initiatives could be developed, and where would they be feasible?</li> <li>What are the coun- try's high priority and urgent initiatives?</li> <li>What levers are to be delivered?</li> <li>What are the bene- fits, costs, returns on investment and distri- butional impacts?</li> </ul>	Initiatives: For each, a narra- tive statement should be developed, together with objectives and a list of prior- itized levers, enablers and supporting activities	Box 17 Box 18 Box 19 Box 20 Box 21 Box 22
5.	Cross-cut- ting initia- tives	Provide sup- portive action, such as building capacity, pro- moting innova- tion, establishing nature markets and facilitating the disclosure of information	<ul> <li>What investment in capacity-building and information disclosure support the vision?</li> <li>What opportunities are there for investing in innovation to reduce the cost of strategy implementation?</li> <li>What opportunities are there for creating nature markets or rights of nature?</li> </ul>	- - - - -	Box 23

#### Box 2: Terms used in the present report, together with relevant examples

A vision is a concise, aspirational statement that clearly articulates the outcomes a country wishes to achieve in nature in the future. For example, "nature, now and in the future, is healthy and resilient to threats, understood, and valued".

Targets are quantifiable and, if achieved, imply material progress towards the fulfilment of the vision. For example, "no net forest loss by 2030".

An impact initiative is a programme formulated around a theme that might drive towards one or several targets and can be used in communication with and coordination among parties. For example, "Forests for the future". An initiative can be a collection of levers, instruments and supporting elements.

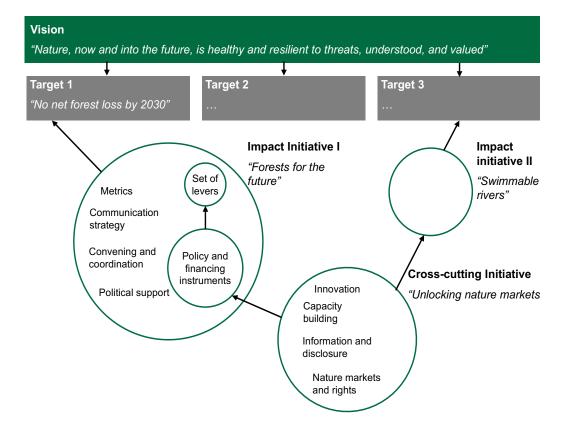
Levers are actions that directly deliver improved nature outcomes. For example, afforestation by planting trees on degraded agricultural land.

Instruments are incentives that stimulate the adoption of levers. For example, specific payments made to incentivize land restoration.

Supporting elements, may include metrics (performance indicators) and a communication strategy to convene and coordinate support.

A cross-cutting initiative is a collection of instruments and supporting components that enable multiple initiatives. For example, the establishment of carbon and/or nature credit markets.

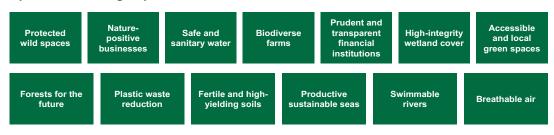
The following figure illustrates the interconnectivity of several of those terms:



#### **Initiatives: Options**

**Impact initiatives** are thematic programmes of actions. They are a package that can be communicated clearly and understood by the public and/or specific individuals or groups who are likely to be affected. Those actions might include multiple levers, instruments and supporting components that, implemented together, can facilitate the achievement of intended outcomes. The options outlined in figure X are offered for inspiration and illustrate the types of impact initiatives that could be formulated.

#### Figure X



#### **Options for setting impact initiatives**

Further details on how countries could select and prioritize initiatives are provided in boxes 17 to 22 in the annex to this report.

**Cross-cutting initiatives** facilitate implementation of impact initiatives through supporting activities, including capacity-building, promoting innovation, and monitoring and enforcement activities. XI illustrates possible cross-cutting initiatives that could be incorporated into a country's national nature strategy. Further information on the types of cross-cutting initiative that countries could consider is provided in box 23 in the annex to this report.

#### **Figure XI**

#### Options for setting cross-cutting initiatives



#### 2.4 **Component III: Instruments**

Component III, Instruments, includes two subcomponents, namely regulatory and voluntary instruments, and economic and financial instruments. In table 3, the authors present a definition for each subcomponent, and a set of questions that can facilitate progress towards prescribed outputs. They also set out options for regulatory and voluntary instruments (subcomponent 6) and economic and financing instruments (subcomponent 7).

#### Table 3

Component III: Instruments - subcomponents, definitions, questions, outputs and associated layer D exhibits

Su	bcomponent	Definition Questions	Outputs	Layer D exhibits (see annex)	
6.	Regulatory and voluntary instruments	Policies that incentivize action	<ul> <li>What policy instruments are already in place?</li> <li>What is the impact of those instruments?</li> <li>How much revenue is generated by existing instruments and where is it spent?</li> <li>What is the full range of possible policy instru- ments, including en- hancements to existing instruments?</li> </ul>	Extensive list of regulatory and vol- untary instruments: An extensive list of potential instruments should be compiled to help achieve progress towards targets Prioritized instru- ments: A shortlist of prioritized and selected instruments, grouped into ini- tiatives, should be compiled	Box 24 Box 25 Box 26 Box 27
7.	Economic and financial instruments	Policies that incentivize the financing of nature recovery and protection initiatives	<ul> <li>What is the current rate of net investment in nature from public and private sources?</li> <li>What economic and financial instruments are already in place?</li> <li>What is the full range of possible economic and financial instruments, including enhancements to existing instruments?</li> <li>What are the prioritization criteria for shortlisting instruments?</li> <li>How could the shortlisted instruments facilitate progress towards the country's priority targets and initiatives?</li> </ul>	Extensive list of fi- nancial instruments: An extensive list should be compiled of potential financial instruments with the potential to drive ac- tion and investment <b>Prioritized instru-</b> <b>ments:</b> A shortlist of prioritized and selected instruments, grouped into ini- tiatives, should be compiled	Box 28 Box 29 Box 30

#### **Instruments: Options**

Once a country has decided which actions to take with regard to nature, it must adopt a range of policy and financial instruments to support implementation of those actions. A non-exhaustive list of options in that regard is provided in figures XII and XIII.

#### Figure XII

#### Options for regulatory and voluntary instruments

Command and control	End of pipe or ambient standards	Rights of nature in law	Licensing	Bans and prohibitions	Permits (including tradeable permits/ quotas)	Land use restrictions	Process regulation
Market-driven	Corporate nature positive alignment	Corporate nature risk disclosure	Supply chain assurance	Nature positive goods and services	Carbon credit codes	Voluntary agreements	
Information	Guidance	Community programmes	Convening	Training	Naming and shaming	Demonstrations	Technical assistance

#### Figure XIII

Options for economic and financial instruments



A range of instruments might be used to drive an outcome. For example, under an initiative entitled "Forests for the Future", instruments could include the introduction of a tax on logging, creating protected areas with land use restrictions, and/or establishing training programmes in sustainable forestry management.

Instruments can be appraised against their expected impact, cost and ease of implementation, including the level of support they receive from stakeholders.

Further details on how countries could select and prioritize instruments are provided in boxes 23 to 30 in the annex to this report.

#### 2.5 Component IV: Governance and implementation

Component IV, Governance and implementation, includes seven subcomponents, namely institutions, stakeholder engagement, resource mobilization, political support and alignment, measurement, transparency and disclosure, and implementation.

In table 4, the authors present a definition for each subcomponent, and a set of questions that can facilitate progress towards prescribed outputs. They also set out options for institutional arrangements (subcomponent 8) and for indicators or indices to help measure progress against established targets (subcomponent 12).

#### Table 4

Component IV: Governance and implementation – subcomponents, definitions, questions, outputs and associated layer D exhibits

Su	bcomponent	Definition	Questions	Outputs	Layer D exhibits (see annex)
8.	Institutions	Develop institutional structures and arrangements to support imple- mentation and oversight of the country's nature strategy	<ul> <li>Who is responsible and accountable?</li> <li>What capacity does the organizational structure have to de- liver on the strategy?</li> <li>How will the orga- nizational structure and practices sup- port diversity, equity and inclusion?</li> </ul>	Governance struc- ture: Organizational structures and key roles and respon- sibilities must be established	Box 31 Box 32
9.	Stakeholder engagement	ldentify and engage with stakeholders	<ul> <li>Who are the stake-holders?</li> <li>What are some best practices for engaging with indigenous people and local communities?</li> <li>How will engagement ensure gender parity and representation of marginalized groups?</li> <li>How will stakeholders be engaged?</li> </ul>	Stakeholder engagement plan: Knowledge should be accumulated, solutions identi- fied and the use of resources coordinat- ed in collaboration with a range of stakeholders Diversity and inclu- sion policy: Policies should be devel- oped to promote di- versity and inclusion in both internal and external teams	Box 33 Box 34

Subcomponent	Definition	Questions	Outputs	Layer D exhibits (see annex)
10. Resource mobilization	Secure funding for imple- mentation of strategy-related initiatives	<ul> <li>How does the current rate of net investment in nature from public and private sources compare to the desired rate in the short, medium and long term?</li> <li>How can investment in initiatives be incentivized?</li> <li>Who will pay and by which means will payment be made?</li> <li>How does the distribution of the funding burden compare with the distribution of adverse impacts (the "polluter pays" principle)?</li> </ul>	Resource mobili- zation plan: A plan should be devel- oped for the mobi- lization of resources for specific public and private sector investments	Box 35
11. Political support and alignment	Secure broad political support and promote long-term com- mitments	<ul> <li>How can broad political support be mobilized?</li> <li>How can commit- ments be upheld in the context of political change (for example, through legislation)?</li> </ul>	<b>Political plan:</b> A long-term com- mitment should be made and long- term accountability ensured	Box 36
12. Measure- ment	Select appro- priate data and metrics	<ul> <li>What metrics should be used to measure progress?</li> <li>What data, tools and infrastructure are needed?</li> <li>How often will prog- ress be measured and reported?</li> <li>Who is responsible for monitoring and reporting progress?</li> </ul>	Set of metrics: A set of tools should be developed in order to measure progress	Box 37 Box 38 Box 39

Subcomponent	Definition	Questions	Outputs	Layer D exhibits (see annex)
13. Transparency and disclo- sure	Monitor, report and communi- cate the strategy and perfor- mance	<ul> <li>Where will the national nature strategy be published?</li> <li>How often will the strategy be updated?</li> <li>To whom will progress be reported?</li> <li>What is the communication plan?</li> <li>How will the private sector be encouraged or compelled to disclose relevant data?</li> </ul>	<b>Communications</b> <b>strategy:</b> A com- munications plan should be devel- oped to explain the strategy and incentivize and coordinate action	Box 40
14. Implementa- tion	Write a delivery plan	<ul> <li>What is the work plan for implement- ing the national nature strategy?</li> <li>How will participants be made part of a learning system?</li> </ul>	Implementation plan: An implemen- tation plan should be formulated; implementation of that plan should be overseen by a programme office <b>Operating cadence:</b> A plan should be developed to ensure that transformative actions maintain momentum	Section 3 (Imple- menta- tion)

#### **Governance and implementation: Options**

Countries may choose a lead institution to oversee implementation of the national nature strategy. That institution could be a ministerial department or public agency. Some non-exhaustive options for that lead institution are given in figure XIV. When choosing a lead organization, countries should ensure that that entity has the political capacity and resources to formulate and implement a national nature strategy. Apart from selecting a lead institution, a country might also map a delivery structure. Figure XIV also sets out options for delivery structures, and box 32 in the annex provides further details on each option.

#### **Figure XIV**

#### **Options for institutional arrangements**

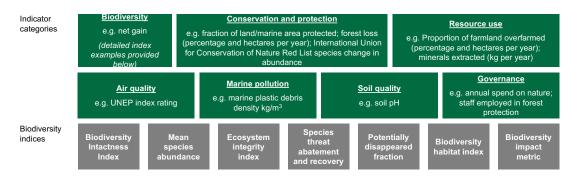


Countries should establish a set of indicators to communicate overall progress. Examples of possible indicators are provided in figure XV. In addition to measuring impacts on natural capital, indicators measuring indirect progress may also be helpful. Those indicators could, for example, include the number of jobs created under a particular initiative or the total annual spend or investment in nature. Figure XV also introduces options on indices to measure biodiversity. Further details on two key indices, namely the Biodiversity Intactness Index and Mean Species Abundance index, are provided in box 37 in the annex.<sup>28,29</sup>

The monitoring framework for the Kunming-Montreal Global Biodiversity Framework sets out indicators that countries should use to report on their compliance with the Convention on Biological Diversity.<sup>30</sup> An overview of those indicators, which could be adopted by countries in the context of their national nature strategies, is provided in box 38 in the annex to the present report.

#### Figure XV

#### Indicator and index options for measuring and assessing progress against targets



<sup>28</sup> Helen Phillips and others, "The Biodiversity Intactness Index – country, region and global-level summaries for the year 1970 to 2050 under various scenarios", data set. Natural History Museum, London. Available at: <u>data.nhm.ac.uk/dataset/biibte</u> (accessed on 18 October 2023).

<sup>29</sup> Aafke Schipper and others, "Projecting terrestrial biodiversity intactness with GLOBIO 4". *Global Change Biology*, 26(2), pp. 760–771 (November 2019). Available at: <u>onlinelibrary.wiley.com/doi/10.1111/gcb.14848</u>.

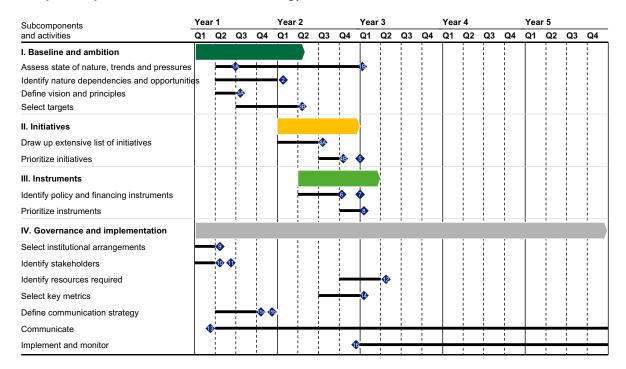
<sup>30</sup> Conference to the Parties to the Convention on Biological Diversity, document CBD/COP/DEC/15/5. Available at: <u>www.cbd.int/doc/decisions/cop-15/cop-15-dec-05-en.pdf</u>.

## 3. Implementation

In this section, the authors provide an overview of how countries can formulate their national nature strategies and implement strategy-related initiatives. While detailed instructions on the long-term delivery of a strategy are outside the scope of the framework, guidance is provided in this section to help countries embark on implementation, illustrating how components could be structured into an illustrative plan, suggesting an approach for initial assessments of current activities, and noting how reporting obligations could be factored in from the outset of the strategy development process.

Figure XVI provides an example of a plan for the creation and implementation of a national nature strategy, shows how subcomponents might be sequenced and lists the potential outputs of each. A country might, for example, begin the strategy development and implementation process by selecting a lead institution, mapping the stakeholders that are likely to be involved in the strategy development and implementation process, and formulating a stakeholder engagement plan.

#### **Figure XVI**



#### Example of a plan for a national nature strategy



Countries may wish to map the current state of their natural environments by analysing current activities in order to identify gaps and priority areas for action. A gap assessment could be used to analyse where a country already has some level of coverage against the elements set out in the national nature strategy framework. Figure XVII illustrates how the current activities of a hypothetical country could be mapped against the subcomponents of that framework. Each subcomponent has been given a score of between 0 and 2, where 0 indicates there are no or limited activities that address the subcomponent and 2 indicates that there are well-established and mature activities already underway. Such an analysis could provide a country with an indication of the baseline maturity of components forming a nature strategy, and where additional efforts may be required. It could also help to inform the timeline or sequencing of the implementation plan.

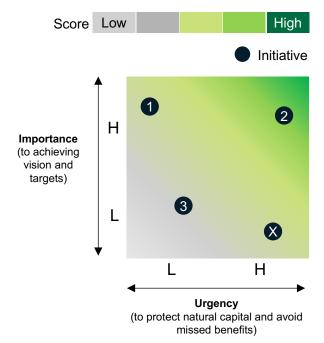
#### **Figure XVII**

Example of a gap analysis output, comparing current initiatives against framework components

Component	Subcomponent	Existing coverage assessment
I. Baseline and ambition	1. Natural capital assessment	0
anionion	2. Public and private case for nature	2
	3. Vision and targets	1
II. Initiatives	4. Impact initiatives	2
	5. Cross-cutting initiatives	0
III.	6. Regulatory and voluntary instruments	2
Instruments	7. Economic and financial instruments	0
IV.	8. Institution	2
Governance and imple-	9. Stakeholder engagement	1
mentation	10. Resource mobilization	0
	11. Political support and alignment	2
	12. Measurement	0
	13. Transparency and disclosure	1
	14. Implementation	1
No or very limited limited	Some coverage, but could scale further	Coverage both well established and at sufficient scale

A gap assessment could also allow stakeholders to gain an initial understanding of the performance of activities against the targets established in the Kunming-Montreal Global Biodiversity Framework, or how different sectors compare in terms of their nature-related activities. Those baseline assessments can be helpful as a starting point when thinking about which initiatives to undertake, as well as for tracking progress relative to an initial starting point. Further examples of outputs can be found in box 21 in the annex to this report.

#### **Figure XVIII**



Example of a prioritization approach for initiatives

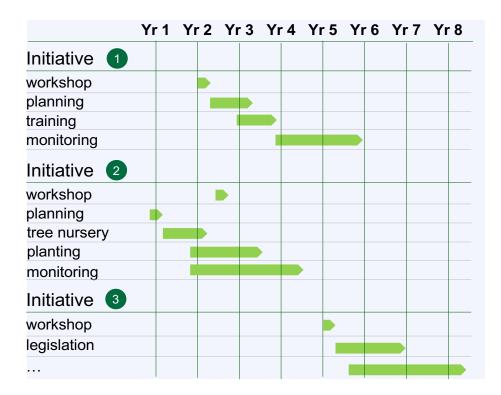
#### **Figure XIX**

Example of a prioritization timeframe for initiatives



#### **Figure XX**

Example of an implementation roadmap for initiatives



A country may also choose to consider their reporting obligations when designing a nature strategy. To streamline that process, countries may wish to design outputs and initiatives, and the overall timeline, so that they also facilitate compliance with their reporting obligations under the Kunming-Montreal Global Biodiversity Framework. In that regard, national reports are due in 2026 and in 2029. Further details on common reporting requirements are provided in box 40 in the annex to this report.

# 4. Annex

# 4.1 Layer C: Curated guidance

In this section, a number of relevant frameworks, tools and reports are mapped against the components and subcomponents of the framework.

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	Detailed process or tools		13. Transparency and disclosure	> • •	
	_	tion	12. Measurement		
	o	ementa	11. Political support and alignment	<b>、</b>	
:e:	guidance	and impl	10. Resource mobi- lization		
Type of guidance:	High-level guidance or target	IV. Governance and implementation	9. Stakeholder engagement	· · · · ·	
Type o	Ś	IV. Gove	8. Institutions	× ×	
		ments	7. Economic and fi- stnəmurtzni lsionsn		
		III. Instruments	6. Regulatory and voluntary instru- sinem		
		ll. Initiatives	5. Cross-cutting initiatives		
		II. Initi	4. Impact initiatives		
		I. Baseline and ambition	3. Vision and targets		•
		line and	2. Public and private case for nature		
		l. Base	1. Natural capital assessment		
				Ensuring Inclusive Societal En- gagement in the Development, Implementation and Updating of National Biodiversity Strategies and Action Plans Getting political support for the National Biodiversity Strategies and Action Plans and financing their implementation Kunming-Montreal Global Biodi- versity Framework Guidelines for Mainstreaming Gender into National Biodiversity Strategies and Action Plans Using the Biodiversity Strategy and Action Plans National Biodiversity Strategy and Action Plan Iraining Module: Communication Strategies and Action Process to Prepare or Update a National Biodiversity Strategy and Action Plan Iraining Module: Communication Strategies and Action Plans Iraining module: Setting national biodiversity targets in line with	the Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiver- sity Targets
				Reneration of the second	
		Component	Subcomponent	Secretariat of the Convention on Biological Diversity	

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Finance for Biodi- versity Pledge Green Finance Institute	Einance (in Beidiversity	Guide on biodiversity measure- ment approaches HIVE Toolkit – Identifying and approaching investors HIVE Toolkit – Identifying and												>		
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International International Union for Conser- vation of Nature (IUCN)	(N)	Environmental and Social Manage- ment System									5				5	
McKinsey & Company Natural Capital	McKinsey & Company	Nature in the balance: what com- panies can do to restore natural capital Natural Capital Protocol		<u> </u>		5		5								
Coalition Natural Capital Committee	COALITION	The State of Natural Capital: Protecting and Improving Natural Capital for Prosperity and Well- being	• >			•			>			>		•		
		and Measuring Changes in Natural Capital	>											•		

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		Legal and Sustainable wildlife														
		trade: Learnings and implications					>									
		for nature market governance														
		<u>Making nature markets work</u>					•	•								
		Soft commodities scoping paper					>									
		The Rights of Nature: Develop-														
		ments and implications for the					•	•								
		governance of nature markets														
Organisation for Economic		Policy Instruments for the Environ- ment (PINE) database					>	2	>							
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Component			I. Baseline and ambition		ll. Initiatives	es III. Instruments	iments	IV. Gove	arnance ;	and imple	IV. Governance and implementation	ion		
Subcomponent			7. Natural capital assessment 2. Public and private case for nature	2. Vision and targets	4. Impact initiatives 5. Cross-cutting	initiatives 6. Regulatory and voluntary instru- ments	7. Economic and fi- nancial instruments	8. Institutions	9. Stakeholder engagement	10. Resource mobi- lization	ז ז. Political support and alignment	12. Measurement	13. Transparency and disclosure	14. lmplementation
The Partnering Initiative		The Partnering Initiative						>						
Taskforce on Nature-related Financial Disclo-	F Pravoud Ondowen	Beta framework v0.4	>	•					•			`		
United Kingdom Environment Agency		Choice of policy instruments for modern regulation				>	>							
United Nations Environment Pro- aramme (UNEP)	C	Prioritising nature-related disclo- sures: Considerations for high-risk sectors	>											
	UNEP	State of Finance for Nature 2022								>				
		Natural Capital Assessments at the National and Sub-national Level: <u>a</u> guide for environmental practi- tioners	•											
World Bank		The Economic Case for Nature	>											
Group	BANK	Unlocking Nature-Smart Develop- ment: An Approach Paper on Bio- diversity and Ecocytom Convisor	>											
World Wildlife Fund for Nature (WWF)	WWF	30X30: A Guide to inclusive. equitable and effective implemen- tation of Target 3 of the Kun- ming-Montreal Global Biodiversity.		•		>	>	`	•					
Herman Brouwer and others	nd others	Framework The MSP Guide: How to design and facilitate multi-stakeholder						>						
Angela Bester and Leon Hermans	eon Hermans	Multi-Stakeholder Partnerships: Implications for Evaluation Prac- tice, Methods and Capacities						>	>					

### 4.2 Layer D: Exhibits and tools

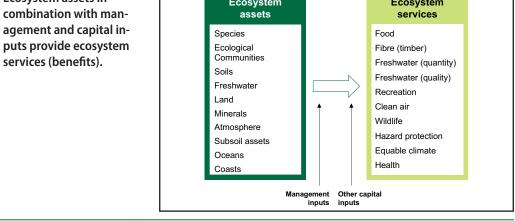
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### 4.2.1. Component I: Baseline and ambition

### Subcomponent 1: Natural capital assessment

### Box 3: Key concepts relevant to the natural capital assessment<sup>31 32 33 34 35 36</sup>

Biodiversity	alia ical	e variability among living organisms from a, terrestrial, marine and other aquatic en complexes of which they are part; this ecies, between species and of ecosystem	cosystems and the ecolor includes diversity within	g-
Ecosystem services		nefits that people obtain from nature, in ng and maintenance, and cultural servio	51 5 5	gu-
Environmental assets	wh	e naturally occurring living and non-livir ich together constitute the biophysical wide benefits to humanity	5 1	
Ecosystem assets		ntiguous spaces of a specific ecosystem tinct set of biotic and abiotic componen		
Nature	The	e natural world with an emphasis on its	living components	
Natural capital	pla	e stock of renewable and non-renewable nts, animals, air, water, soils, minerals) tl penefits to people	-	
Ecosystem assets in combination with man-		Ecosystem assets	Ecosystem services	



<sup>31</sup> United Nations, Treaty Series, vol. 1760, No. 30619.

<sup>32</sup> System of Environmental-Economic Accounting—Ecosystem Accounting (United Nations publication, 2021). Available at: seea.un.org/ecosystem-accounting.

<sup>33</sup> Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), *glossary* (2021). Available at: www.ipbes.net/glossary-tag/nature.

<sup>34</sup> Natural Capital Coalition, (London, 2016). Available at: capitalscoalition.org/capitals-approach/natural-capitalprotocol/?fwp\_filter\_tabs=training\_material.

<sup>35</sup> Natural Capital Committee, *The State of Natural Capital: Protecting and Improving Natural Capital for Prosperity and Wellbeing*, (Natural Capital Committee, London, 2015). Available at: assets.publishing.service.gov.uk/government/uploads/ system/uploads/attachment\_data/file/516725/ncc-state-natural-capital-third-report.pdf.

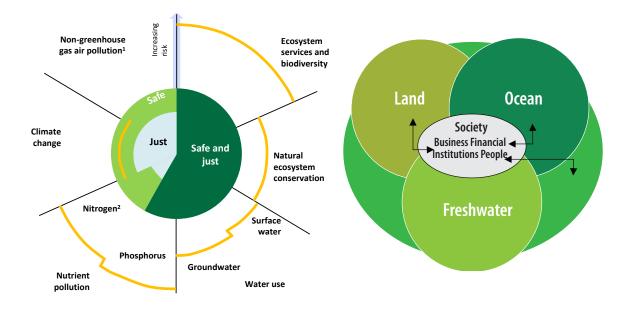
<sup>36</sup> Sandra Díaz and others, "The IPBES Conceptual Framework – connecting nature and people". *Current Opinion in Environmental Sustainability*, vol. 14, pp. 1–16 (June 2015).

The United Nations Environment Programme (UNEP) provides guidance to countries wishing to conduct natural capital assessments. The following table was developed by UNEP to illustrate the relevance of key ecosystem assets to specific economic sectors and beneficiary groups living along the banks of the Sorou River in Burkina Faso.

Ecosystem asset	Ecosystem service	Where does the service provide an input into priority sector activities?	Benefiting prior- ity sector	Vulnerable ben- eficiary groups	Cost of substi- tute for the pro- vided ecosystem service
Agricultural areas along the Sorou River	Regulating soil fertility (nutrients are provided by rich wetland soils)	ldentified agri- cultural areas	Agriculture	Local commu- nities are highly dependent on agricultural production for livelihoods and sustenance	Medium: fertilizer could be used but may have a signifi- cant impact on the provision of other ecosystem services
Sorou River and impoundments of its waters	Provisioning (fishing)	Fishery areas	Fisheries	Local commu- nities are highly dependent on fishing for their livelihoods	Medium: More expensive alternative food sources are available
Areas of acacia woodland on the banks of the Sorou River	Provisioning (tim- ber, fuel wood)	Areas of acacia woodland on the banks of the Sorou River	Forest	Local commu- nities are highly dependent on wood for fuel and construction	High: It is possible but expensive to obtain goods from markets
Sorou Valley wetland areas	Cultural (ani- mals for nature viewing, including hippopotamuses)	Ecotourism areas	Tourism	Revenue from ecotourism is important in supplementing livelihoods in lo- cal communities	High: there are limited opportunities for ecotourism nature viewing in the area

# Box 4: Earth system boundaries and the four realms of nature establish the dimensions of the natural world <sup>37 38 39</sup>

Countries can conduct natural capital assessments across all earth system boundaries or across all four realms of nature. Alternatively, they can choose to select high-priority nature dimensions.



<sup>37</sup> Johan Rockström and others, "Safe and just Earth system boundaries: Supplementary information appendix", Nature, 619, pp. 102–111 (May 2023) Available at: <u>https://www.nature.com/articles/s41586-023-06083-8</u>.

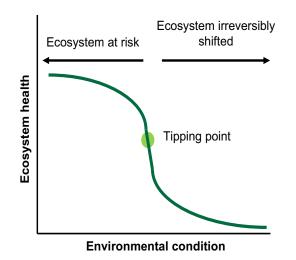
<sup>38</sup> Taskforce on Nature-related Financial Disclosures, The TNFD Nature-Related Risk and Opportunity Management and Disclosure Framework, (London, 2022). Available at: https://framework.tnfd.global/wp-content/uploads/2022/11/TNFD\_ Management\_and\_Disclosure\_Framework\_v0-3\_B.pdf\_

<sup>39</sup> Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. (IPBES secretariat, Bonn, Germany. 2019). Available at: zenodo.org/records/6417333.

# Box 5: Earth system boundaries comprise a widely-used framework that can facilitate discussions about nature<sup>40 41</sup>

### What are earth system boundaries?

- Earth system boundaries are a scientifically-based framework that establishes a "safe operating space for humanity" across nine, interrelated planetary systems
- For each system, scientists have identified control variables to track and estimate a safe threshold, or "boundary" to stay below in order to ensure the stability of earth's systems; some boundaries also include a "zone of uncertainty" that is looser (and riskier) than the boundary
- The boundaries helped lay the foundation for the Sustainable Development Goals, are the basis of emerging targets for nature from the Science Based Targets Network, and have been used by a number of large business corporations, including L'Oréal, IKEA, and H&M



### **Example tipping points**

**Greenland ice sheet disintegration:** Irreversible retreat of the ice sheet caused by rising temperatures.

**Boreal forest shift**: A shift in boreal forests create expansion into tundra to the north and dieback to the south.

**Indian monsoon shift:** Strengthened monsoon caused by rising CO2 emissions or a weakened monsoon caused by high aerosol emissions.

### Why do they matter?

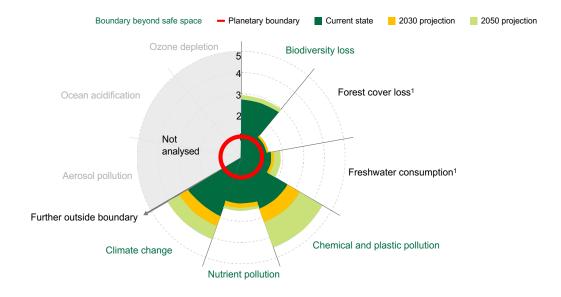
Crossing any boundary increases the risk of crossing a "tipping point," a sudden, significant, and irreversible shift in life-supporting earth systems

<sup>40</sup> Johan Rockström and others, "A safe operating space for humanity", Nature, vol. 461, pp. 472–475 (September 2009). Available at: www.nature.com/articles/461472a.

<sup>41</sup> Will Steffen and others, "Planetary Boundaries: Guiding human development on a changing planet", Science, vol. 347, issue 6223 (January 2015).

# Box 6: The planetary boundary model is one option for defining the scope of a national nature strategy<sup>42</sup>

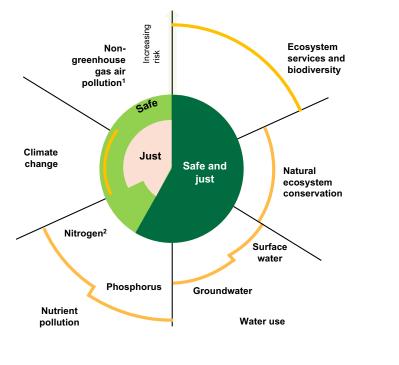
The planetary boundary model can help countries define targets and highlight where priority initiatives might be needed. Global analysis on planetary boundaries suggests that human activity has pushed the planet beyond a "safe operating space" on at least four boundaries:



1. The current impact of human activity for forest cover loss and freshwater consumption is deemed to be in the "zone of uncertainty".

<sup>42</sup> McKinsey & Company, Nature in the balance: What companies can do to restore natural capital (December 2022) Available at: <u>www.mckinsey.com/capabilities/sustainability/our-insights/nature-in-the-balance-what-companies-can-do-to-restore-natural-capital</u>.

# Box 7: The earth system boundary model builds on the planetary boundary model to identify safe and just limits for eight processes that regulate the earth's stability and resilience across biophysical and social justice components<sup>43</sup>



Current state Safe and just boundary: Biophysical earth system stability significant harm to living things

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**Nutrient pollution** 

contaminates water

Ecosystem services and biodiversity

Area's ability to preserve ecosystem services

(e.g., pollination) and biodiversity, measured in amount of natural habitat per square kilometre

Nitrogen and phosphorus: Runoff not absorbed

by plants, which reduces ecosystem oxygen levels (i.e., anoxic events and eutrophication) and

Non-greenhouse gas air pollution Small particles, including from wildfire smoke and

function (e.g., by affecting monsoons)

pollution, in the atmosphere that impact climate

### Natural ecosystem conservation

Amount of critical natural ecosystems preserved or restored

### 00

### Water use

**Groundwater:** Difference between annual water taken from underground aquifers and aquifer recharge

Surface water: Monthly withdrawal from accessible water, including rivers and lakes

### $\triangle$

### Climate change

Changes in atmospheric composition that affect the climate (i.e., carbon dioxide and other greenhouse gases)

### 1. Subglobal goal.

2. Nitrogen surplus can also result in nitrous oxide (N2O) emissions, which contribute to climate change.

<sup>43</sup> Johan Rockström and others, "Safe and just Earth system boundaries: Supplementary information appendix", Nature, 619, pp. 102–111 (May 2023) Available at: <a href="https://www.nature.com/articles/s41586-023-06083-8">www.nature.com/articles/s41586-023-06083-8</a>.

### Box 8: Main drivers of nature loss, as highlighted by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IP-BES)<sup>44</sup>

The following list is provided with a view to helping countries assess the drivers of identified declines in their ecosystem assets:

1	Land-use change	Includes the conversion of land cover, changes in the man- agement of ecosystems or agro-ecosystems, or changes in the spatial configuration of the landscape
2	Pollution	Includes, most notably, the atmospheric deposition of nitro- gen and the use of nitrogen-phosphorus fertilizers
3	Invasive species	Out-compete local and indigenous species for natural resourc- es, with negative implications for biodiversity
4	Climate change	Changes in climate and weather patterns, which impact in situ ecosystem functioning and cause the migration of species and entire ecosystems
6	Natural resource use and exploitation	Anthropogenic exploitation of wildlife, such as fishing

<sup>44</sup> Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), "Models of drivers of biodiversity and ecosystem change". Available at: <u>www.ipbes.net/models-drivers-biodiversity-ecosystem-change</u> (accessed on 17 October 2023).

# Box 9: Using a natural capital assessment to identify key ecosystem assets, evaluate their current state and assess ecosystem trends<sup>45 46</sup>

The aim of a natural capital assessment is to identify the most important ecosystem assets and the ecosystem services they provide

Elements in a natural capital assessment	
Ecosystem assets	State of nature and trends
Which ecosystem assets should the assessment focus on? Where are those assets located? What are the scales that need to be considered for analysis?	What is the state of ecosystem assets and what ecosystem trends are apparent?
Drivers of biodiversity and ecosystem change	Nature-related risks and opportunities
What are the direct pressures (for example, land use change) and indirect pressures (for example, population increase) on ecosystem assets?	What are the most significant risks posed by the degradation of ecosystem assets? What opportunities could stem from maintaining or rehabilitating ecosystem assets?

<sup>45</sup> Convention on Biological Diversity. "Updating National Biodiversity Strategies and Action Plans in line with the Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets: Training Package Module 2 – Using the Biodiversity Planning Process to Prepare or Update a National Biodiversity Strategy and Action Plan" (Montreal, Canada, June 2011). Available at: www.cbd.int/doc/training/nbsap/b2-train-prepare-update-nbsap-revised-en.pdf.

<sup>46</sup> UNEP, "Is Africa's Natural Capital the Gateway to Finance Its Development?" (21 September 2016). Available at: <u>www.unep.</u> org/news-and-stories/story/africas-natural-capital-gateway-finance-its-development.

### Box 10: A natural capital risk register can be used to take stock of priority ecosystem assets<sup>47</sup>

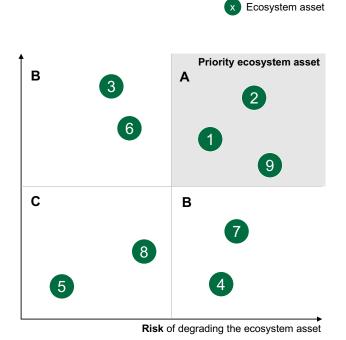
### What is a natural capital risk register?

A comprehensive list of ecosystem assets and the ecosystem services (benefits) they provide, together with an assessment of the risk that the identified benefits will be lost or degraded.

### Why is it a useful tool?

The register can help stakeholders identify the ecosystem assets that provide the largest benefits and those that are at highest risk.

It can also help stakeholders prioritize actions to protect ecosystem assets in line with their importance (level of benefits) and the risk that benefits will be lost or degraded.



<sup>47</sup> Natural Capital Committee, The State of Natural Capital: Protecting and Improving Natural Capital for Prosperity and Wellbeing, (Natural Capital Committee, London, 2015). Available at: assets.publishing.service.gov.uk/government/uploads/ system/uploads/attachment\_data/file/516725/ncc-state-natural-capital-third-report.pdf.

### Box 11: The Taskforce on Nature-related Financial Disclosures provides guidance to help stakeholders prioritize ecosystems according to their integrity and importance <sup>48</sup>

Guidance	Criteria	Description	Tools and databases
T N F D	High-integrity ecosystems	Ecosystems that may pro- vide significant opportuni- ties for safeguarding stocks of environmental assets and maintaining ecosystem service provision	Ecosystem Integrity Index Forest Structural Condition Index Intact Forest Landscapes database
Which biomes and ecosystems do these activ- ities interface with? What is the current integrity	Areas of rapid decline in ecosystem integrity	Areas with declining resil- ience of ecosystem service provision and high exposure to an organization's depen- dency-related risks	International Union for Conservation of Nature Red List of Ecosystems database
and importance of the ecosys- tems at each location?	Areas of high-biodiversity importance	Include, but are not limited to, protected areas or other- wise internationally-recog- nized areas	Global Biodiversity Infor- mation Facility database Global Biodiversity Model for Policy Support mean species abundance data- base. World Wildlife Fund for Nature (WWF) Biodiversity Risk Filter World Database on Protected Areas and world database on other effective area-based conservation measures WWF Priority Ecoregions database
	Areas of water stress	Area where the quality and/ or quantity of available water is deteriorating	WWF Water Risk Filter Aqueduct Water Risk Atlas

<sup>48</sup> Taskforce on Nature-related Financial Disclosures, The TNFD Nature-Related Risk and Opportunity Management and Disclosure Framework (London, 2022).

### Subcomponent 2: Public and private case for nature

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# Box 12: The public case for nature should be based on the economic value at risk, the value of emerging opportunities and wider social benefits 49 50

Countries could, for example, seek to mobilize public support for initiatives to safeguard nature and the country's natural resources by drawing attention to the following:

	Value at ri	sk, exam	ple metrics
Economic benefits	Economy- wide		Annualized savings from flood risk reduction
	Sector analysis	15	Impact on agricultural land values Agricultural output per acre (pollination and where possible precipitation linked to forests)
	Value of n	ew oppor	tunities, example metrics
		stainable fi reases in fi	sh yields and sh yields and look unlocked restoring nature (e.g., ecotourism) Other investment opportunities in the nature-positive transition
Social benefits	Health	$\bigcirc$	Mental health benefits         Air quality benefits         Water quality benefits         Other health benefits such as reducing the risk of zoonotic diseases
	Non-use values		Intrinsic value of Relational or cultural values
Source: Collated from several source	es including McKinsey (		e conservation, IPBES (2022) Summary for policymakers of the methodological

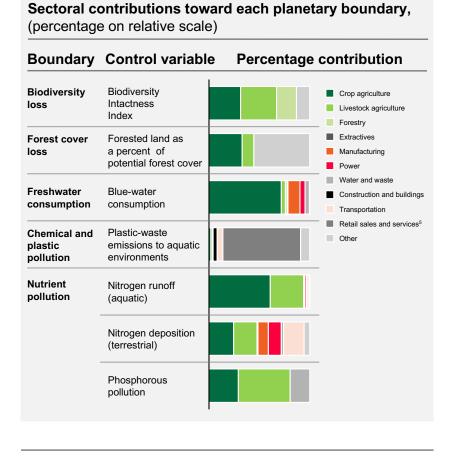
<sup>49</sup> McKinsey & Company, "Valuing nature conservation: a methodology to evaluate where safeguarding natural capital could have the biggest impact on climate, economies and health", (September 2020). Available at: www.mckinsey.com/ capabilities/sustainability/our-insights/valuing-nature-conservation.

<sup>50</sup> IPBES, Methodological Assessment Report on the Diverse Values and Valuation of Nature of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Patricia Balvanera, Unai Pascual, Michael Christie, Baptiste and David González-Jiménez, eds. (IPBES Secretariat, Bonn, Germany, 2022). Available at: <a href="http://www.researchgate.net/">www.researchgate.net/</a> <a href="http://www.researchgate.net/">publication/369138935\_Methodological\_Assessment\_Report\_on\_</a> the\_Diverse\_Values\_and\_Valuation\_of\_Nature\_of\_the\_</a> Intergovernmental\_Science-Policy\_Platform\_on\_Biodiversity\_and\_Ecosystem\_Services\_IPBES.

# Box 13: Making a public case for nature should include an assessment of the economic value at risk in key sectors <sup>51 52 53</sup>

A number of studies have identified the economic sectors that are highly dependent on natural capital and/or have the greatest impact on nature. For example:

A. McKinsey & Company analysed which economic sectors are most responsible for exceeding planetary boundaries. Sectors with a significant impact on nature include crop agriculture, live-stock agriculture, and retail sales and services:



B. UNEP identified sectors that are most dependent and have the largest impact on nature. Those sectors include agriculture, forestry and fisheries, energy and mining:

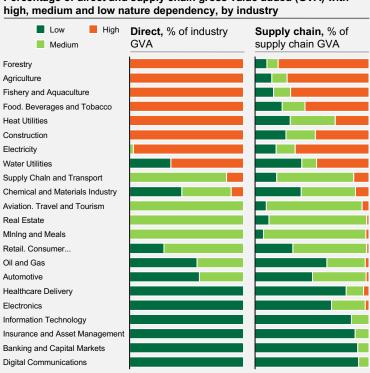
<sup>51</sup> McKinsey & Company, Nature in the balance: What companies can do to restore natural capital (December 2022). Available at: www.mckinsey.com/capabilities/sustainability/our-insights/nature-in-the-balance-what-companies-can-do-to-restore-natural-capital.

<sup>52</sup> United Nations, Environment Programme Finance Initiative, Prioritising nature-related disclosures (April 2022). Available at: <u>www.unepfi.org/publications/prioritising-nature-related-disclosures-considerations-for-high-risk-sectors</u>.

<sup>53</sup> World Economic Forum, "Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy", New Nature Economy series (Geneva, World Economic Forum, 2020). Available at: <u>www3.weforum.org/docs/WEF\_New\_Nature\_Economy\_Report\_2020.pdf</u>.

	Direct imp	oacts				Direct dep	pendencies		
	Land/sea use change	Resource exploit- tation	climate change	Pollution	Invasive species/ other	Direct physical input	Enabling prod- uction	Mitigating direct impacts	Protecting from disruption
Agriculture, orestry and isheries									
Energy									
<i>l</i> ining									
rans- oortation									
ood and everages						•••			
Apparel						••••			
Jtilities						••••			
Chemicals									
/lanu- acturing									
Construction									

C. The World Economic Forum analysed the level of nature dependency by industry and supply chain. Sectors that are most dependent on nature include forestry, agriculture, and fisheries and aquaculture:



Percentage of direct and supply chain gross value added (GVA) with

# Box 14: A sector-level "heatmap" can inform scoping and help stakeholders highlight sectors facing particularly high nature-related risks<sup>54</sup>

		GDP contribution	Direct imp	acts			Direct dep	pendencies	5		
Ran- king	Sector	(% of GDP)	Deforestation	Air pollution	Water pollution	Overfishing	Water scarcity	Pollination	Soil quality	Flood protection	Overall score
1	Mining and quarrying		High	Med	High	Low	High	Low	Low	Med	High
2	Electricity, gas, steam and air conditioning supply		Med	Med	Med	Low	High	Low	Low	Med	High
3	Transport and storage		Med	High	Med	Low	Low	Low	Low	Med	High
4	Real estate activities		Med	Med	Low	Low	Low	Low	Low	High	High
5	Agriculture, forestry and fishing		High	Med	Med	Med	High	Med	Med	Low	Med
6	Water supply		Low	Med	High	Low	High	Low	Med	Med	Med
7	Construction		High	Med	Med	Low	Med	Low	Low	Med	Med
8	Manufacturing		Med	Med	Med	Low	Med	Low	Low	Med	Med
9	Wholesale and retail trade		Med	Low	Med	Low	Low	Low	Low	Med	Med
10	Accommodation and food service activities		Med	Low	Med	Low	Med	Low	Low	Low	Low
11	Professional, scientific and technical activities		Low	Low	Low	Low	Low	Low	Low	Med	Low
12	Information and communication		Low	Low	Low	Low	Low	Low	Low	Low	Low
13	Administrative and support service activities		Low	Low	Low	Low	Low	Low	Low	Low	Low
14	Public administration and social security		Low	Low	Low	Low	Low	Low	Low	Low	Low
15	Education	1	Low	Low	Low	Low	Low	Low	Low	Low	Low
16	Human health services and social work activities		Low	Low	Low	Low	Low	Low	Low	Low	Low
17	Arts, entertainment and recreation		Low	Low	Low	Low	Low	Low	Low	Low	Low

Subcomponent 3: Vision and targets

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### Box 15: Setting out the aspirations of countries: a national vision

A national-level vision can be developed and/or endorsed through collaboration among a range of relevant stakeholders.

Examples of national visions informing national biodiversity strategies:

Q	<b>Angola</b> : By 2025, Angolan biodiversity should be valued, converted, restored and wisely used, maintaining ecosystem services, maintaining a healthy and unpolluted environment, and sharing essential benefits for all people
*	<b>Ghana:</b> By 2030, effective systems will be in place to ensure that biodiversity in Ghana is valued, conserved, restored and wisely used to maintain ecosystem services, and sustain life support services for a healthy planet whiles ensuring continuous and equitable sharing of the costs and benefits arising therefrom, to the well-being, prosperity and security of all Ghanaians
	<b>Nigeria:</b> A Nigeria with healthy living environment where people live in harmony with nature and sustain the gains and benefits of biodiversity, integrating biodiversity into a national programme aimed at reducing poverty and developing a secure future in line with the principle of ecological sustainability and social equity
•	<b>Rwanda:</b> By 2040, national biodiversity will be restored and conserved, contributing to eco- nomic prosperity and human well-being through the delivery of benefits essential for Rwandan society in general

<sup>54</sup> United Nations, Environment Programme Financial Initiative, Prioritising nature-related disclosures.

### Box 16: Countries may select targets in line with established global targets and objectives, such as the 23 targets set out in the Kunming-Montreal Global Biodiversity Framework55

Kunming-Montreal Global Biodiversity Framework targets (summary):

Target 1. Land- and sea-use spatial planning to bring loss of high biodiversity areas close to zero by 2030
Target 2. Thirty per cent of degraded ecosystems under restoration by 2030
Target 3. Thirty per cent of areas effectively conserved and managed by 2030
Target 4. Actions to halt the extinction of, recover and conserve species
Target 5. Sustainable harvest, trade and use of wild species
Target 6. Eliminate, reduce and/or mitigate the impact of invasive alien species
Target 7. Reduce pollution risks by 2030
Target 8. Minimize the impact of climate change: nature-based solutions
Target 9. Sustainable use and benefit-sharing of wild species
Target 10. Sustainable use of agriculture, aquaculture, fisheries and forestry
Target 11. Regulation of air, water, hazards and extreme events
Target 12. Increased access to green and blue spaces in urban areas
Target 13. Access and benefit-sharing from genetic resources
Target 14. Mainstreaming biodiversity into policies, regulations, planning, etc.
Target 15. Encourage sustainable business activity, production and supply chains
Target 16. Encourage sustainable consumption choices
Target 17. Manage biotechnology impacts
Target 18. Eliminate harmful incentives
Target 19. Increase financial resources from all sources
Target 20. Strengthen capacity-building
Target 21. Ensure accessible data, information and knowledge
Target 22. Representation of indigenous people and local communities
Target 23. Gender equality

To set their targets, a country should consider:

- Baseline state of nature: What does the data obtained in the course of the initial assessment tell us about the current state of nature in the country?
- Nature trends: What trends are apparent and what are the main pressures on the country's natural capital and ecosystem services?

<sup>55</sup> Conference to the Parties to the Convention on Biological Diversity, document CBD/COP/DEC/15/4. Available at: <u>www.</u> <u>cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf</u>.

### 4.2.2 Component II : Initiatives

### Subcomponent 4: Impact initiatives

### Box 17: Examples of options for the identification of potential initiatives

Options for the identification of potential initiatives include bottom-up processes with communities, detailed spatial analytics, an analysis of current national or sectoral strategies, and engagement with experts. The following list is illustrative and not exhaustive:



Communities

Identify effective current initiatives through bottom-up processes



Introduce, scale up or exit sectoral initiatives in collaboration with relevant ministries, such as the ministries of the environment, finance, planning and/ or economic development)





Design initiatives by drawing on expertise in other areas or international best practices

Experts

# Box 18: Cost, importance and urgency criteria can help countries select priority initiatives

Component	I. Baseline	and ambition	II. Init	iatives
Subcomponen	t 1. Natural cap	pital assessment	· · ·	nitiatives at high-level initiatives can be made to protect natural capital at risk? unlock nature-related opportunities?
	Select relevant nature dimensions	Select priority ecosystem assets	A. Extensive list of iniatiatives	B. Shortlist of initiatives
Description	Select a <b>guiding structure</b> and identify most relevant nature dimensions	Priority ecosystem assets given their importance in terms of benefits and the risk of losing the ecosystem asset	Marginal abatement cost curves can help visualize initiatives based on costs and mitigation potential	Prioritized according to their importance to achieve targets and the <b>urgency</b> to implement them
Example	Nature's four realms Land Freshwater Cean Atmosphere	Natural capital assets Wetlands Floodplains Open waters 	Extensive list Municipal water supply infrastructure Waste management plant Sustainable agriculture equipment 	Shortlist

# Box 19: Marginal abatement cost curves can help identify the most cost-effective initiatives<sup>56</sup>

### What are marginal abatement cost curves?

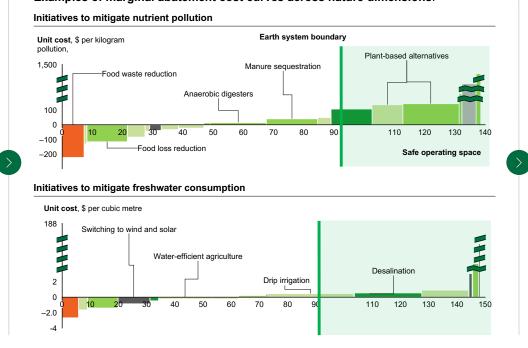
• A marginal abatement cost curve provides a visual overview of initiatives, which are organized from left to right on the curve according to their economic cost

### Why are marginal abatement cost curves useful?

- They facilitate a comparison of a range of initiatives in different locations under one metric
- They help stakeholders visualize initiatives on the basis of their cost and mitigation potential
- They help stakeholders identify the "low hanging fruit", namely the most cost-effective initiatives, which include:
  - Initiatives with a negative cost on the curve (a cost saving)
  - Initiatives with the largest mitigation potential at the lowest cost

### What data are needed to formulate marginal abatement cost curves?

- Total cost per initiative: expenses, including capital expenditure and operating expenses, in addition to financial savings
- While climate marginal abatement cost curves can be based on a single metric, such as carbon, nature marginal abatement curves must be based on different metrics across several dimensions. Given that complexity, one potential approach is to formulate one marginal abatement curve per nature dimension.

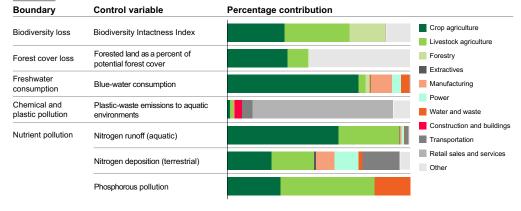


Examples of marginal abatement cost curves across nature dimensions:

<sup>56</sup> McKinsey & Company, Nature in the balance: What companies can do to restore natural capital (December 2022) Available at: <u>www.mckinsey.com/capabilities/sustainability/our-insights/nature-in-the-balance-what-companies-can-do-to-restore-natural-capital</u>.

### Box 20: Understanding the extent of nature losses caused by different economic sectors can help stakeholders select initiatives and determine which levers will be most effective<sup>57</sup>

Global sectoral contributions toward each planetary boundary (percentage on relative scale):



<sup>57</sup> Ibid.

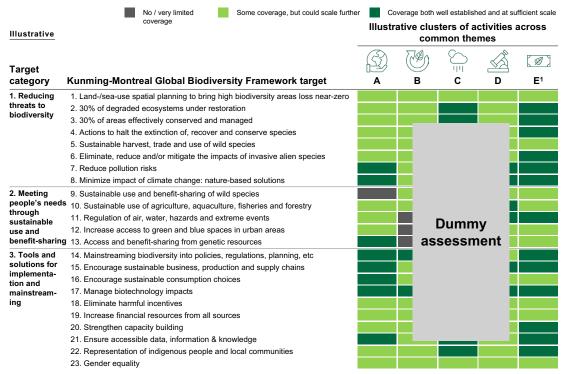
### Box 21: Countries could map their current activities to identify gaps and priority areas

Current coverage could be assessed against different criteria. For example, by:

- Sector
- Targets set out in the Kunming-Montreal Global Biodiversity Framework
- Framework components and subcomponents

The insights thus gained could help countries identify areas that should be strengthened. Countries may, for example, find that:

- There are limited activities addressing nature-issues in the utilities and waste sector
- Activities across clusters could benefit from renewed emphasis on gender equality
- No consistent approach to transparency and disclosure has been adopted across activities



1. A - Biodiversity protection; B - Coastal restoration; C - Nature-climate nexus"; D - Knowledge and innovation; E - Resources and the economy

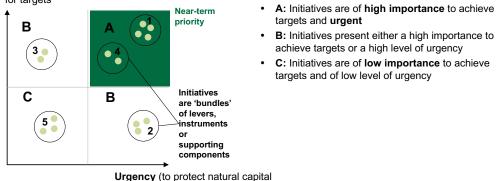
# Box 22: Countries could draw up a shortlist of initiatives that deliver high impact at reasonable cost

### Shortlist of priority initiatives

Initiatives identified as cost-effective, can be sequenced according to their:

- Importance: How important is the initiative in efforts to achieve set targets?
- Urgency: If the initiative is not made:
  - Could significant opportunities for sustainable growth be missed?
  - Is there a significant risk that a natural ecosystem will be degraded or destroyed?

### Importance for targets



and avoid missed benefits)

### Near-term initiatives

Initiatives in quadrant A (important, urgent, and cost-effective); Actions to enable initiatives in quadrant B

### Mid- and long-term initiatives

Initiatives in quadrant B

### **Final output**

A shortlist of three to five priority near-term initiatives should be formulated

### Subcomponent 5: Cross-cutting initiatives

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# Box 23: Cross-cutting initiatives that contribute to an enabling environment may be needed

Countries should consider cross-cutting initiatives that can help foster an enabling environment for nature, including in areas such as capacity-building, information disclosure, innovation, rights of people and nature, and nature markets

	Capacity-building දිරිදි	Innovation	Nature markets
Key question	What investment in capaci- ty-building supports the de- livery of prioritized initiatives (for example, apprenticeship and capacity-building pro- grammes)?	What opportunities are there for investing in innovation to reduce the cost of delivering on the strategy?	What opportunities are there for creating nature markets?
	What knowledge and skills are needed to deliver on direct initiatives (for example, the use of spatial planning tools, effective management of land- and sea-use change)?	In which areas of nature or sectors is it a priority to reduce the cost of delivering on the strategy?	Which sectors or industries can benefit from nature-based solutions, (for example, ecotourism or sustainable agriculture)?
s	What facilities and materials are needed to deliver the investments?	Which technologies have the potential to reduce the cost of investments in nature in these areas?	Are there any opportunities for the creation of incentives or the removal of barriers with a view to developing nature markets further?
Supporting questions	What data and information are needed and how can they be made accessible to decision makers?	What knowledge sharing opportunities are there (for example, through internation- al cooperation or collabora- tion with non-governmental organizations?)	

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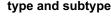
### Subcomponent 6: Regulatory and voluntary instruments

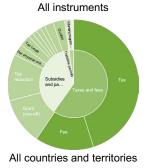
### Box 24: A country should determine which instruments are already in place<sup>58</sup>

The OECD Policy Instruments for the Environment (PINE) database includes data on environmental policy instruments for 134 countries and may be a helpful starting point for countries wishing to determine which instruments are already in place.

- PINE data is collected via a network of more than 450 country experts from government bodies, including ministries of finance and the environment and national statistical institutes, as well as from research institutes and international organizations.
- Country experts are asked to provide updated data once a year using an online data collection platform. Data is collected systematically for the 38 OECD member countries and for countries that have started the process to accede to the organization.
- A growing number of non-member countries also provide data, although that data may be less comprehensive or less frequently updated that the data provided by member countries. It should therefore be supplemented with data obtained through national assessments.

<b>Summary</b> Thirty instruments, of which 28 are active	<b>Instrument types</b> Taxes and fees: 80%, Environmentally- beneficial subsidies and payments: 17%, Tradable permits and offsets: 3%	Environmental domains Most instruments address climate change mitigation: 24.3%, air pollution: 18.9%, energy efficiency: 8.1%, fossil fuels: 8.1%, solid waste: 6.8%, and biodiversity: 6.8%	Environmentally- related tax revenue Revenue from environmentally- related taxes accounted for 2.92% of GDP in 2020.
Policy instrun	•	Instrument Instrum	ont Instrument





Country name	Instrument type	Instrument Type detail	Instrument name
Country X	Environmentally -beneficial subsidies and payments	Grant (one- off)	Environmental treatment and recycling or waste disposal asset allowance
Country X	Taxes and fees	Fee	Custom and excise levy
Country X	Taxes and fees	Тах	General fuel levy

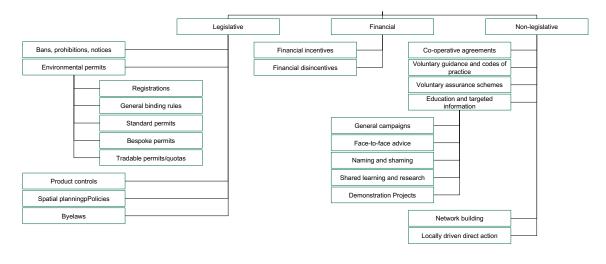
<sup>58</sup> OECD, Policy Instruments for the Environment (PINE) database. Available at: <u>https://t4.oecd.org/environment/indicators-modelling-outlooks/policy-instruments-for-environment-database/</u>. (Accessed on 18 October 2023).

# Box 25: A wide range of instruments can be used to mobilize nature investments

The instruments deployed will depend on the pressures, resources and objectives of the country in question. Examples of those instruments include:

Instrument category	Sub-category	Examples	Lever enabled:
1. Legislation and regulation	A. Laws B. Regulations	1A Make ecocide a criminal offence	Deterrent to individuals/ organizations harming
2. Economic and fiscal	C. Rights of nature           A. Taxes		nature on a mass scale
	B. Fees/charges C. Subsidies/grants D. Deposit-refund schemes	2A Introduce taxes on logging	Reduction in deforestation and creation of revenue for forest restoration
3. Nature markets	E. Public spending A. Trading nature assets B. Credit markets	2C Remove → subsidies for chemical fertilizers	Lower levels of soil pollution
4. Private sector engagement 5. Funding streams	A. Consumer product claims B. Targets C. Reporting and transparency A. Public	4C Mandate reporting and disclosures through the Taskforce on Nature –related Financial Disclosures	Private sector understands risks of not accounting for nature and reduces negative impacts
6. Voluntary and informational measures	B. Private C. Grants/philanthropy A. Non-mandated schemes	6A Community education programme on water consumption	Increased knowledge capital in populations leading to reduced water use

# Box 26: Example of how an environment agency may classify policy instruments<sup>59</sup>



<sup>59</sup> United Kingdom Environment Agency, A choice of policy instruments for modern regulation (London, December 2009). Available at: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment\_data/file/291173/</u> scho1209brrr-e-e.pdf.

# Box 27: One national environment agency suggests that an assessment of a range of attributes should be conducted when appraising instruments<sup>60</sup>

Highlighted boxes provide additional detail that countries may choose to include when assessing and shortlisting instruments: The selection and assessment of policy instruments can be carried out by asking and answering the following questions, all of which are conditional on the special circumstances of the policy objective concerned.

**Environmental effectiveness:** Will the instrument(s) achieve the environmental objective(s) within the specified time span and what degree of certainty can be expected? If the environmental outcome is somewhat uncertain and different instrument levels are needed, how acceptable is deviation from the set goal?

**Cost effectiveness**: Will the instrument(s) achieve the environmental objective(s) at the minimum possible cost to society? The social cost of a policy instrument(s) comprises three elements: (a) abatement or compliance costs; (b) regulatory costs, and (c) transactions costs.

**Flexibility:** Is the instrument(s) flexible enough to adjust to changes in technology, resource scarcity and market conditions?

**Dynamic efficiency:** Does the instrument(s) provide incentives for developing and adopting new environmentally cleaner and economically more efficient technologies? Overall, does it promote the development of environmentally sound infrastructure?

**Equity:** Will the costs and benefits of the instrument(s) be equitably distributed? Who gains and who loses?

**Ease of introduction:** Is the instrument(s) consistent with the legislative framework? If new legislation is necessary, how feasible is it? Does the relevant branch of government have the administrative capacity to issue the necessary regulations and administer the instruments? What is the administrative opportunity cost given limited administrative resources?

Ease of monitoring and enforcement: How difficult or costly will monitoring and enforcement be?

Predictability: Does the instrument(s) combine flexibility and predictability?

**Acceptability:** Is the instrument(s) understandable by the public, acceptable to economic agents and politically sellable? Does the instrument(s) agree with certain moral precepts?

<sup>60</sup> United Kingdom Environment Agency, A choice of policy instruments for modern regulation (London, December 2009). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/ uploads/attachment\_data/file/291173/ scho1209brrr-e-e.pdf.

### Subcomponent 7: Economic and financial instruments

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# Box 28: A country might consider a wide range of financial instruments for nature<sup>61</sup>

Type of financial instrument	Description	Examples
Grant-based instruments	Public funding or private dona- tions seeking a positive impact but not seeking direct financial returns	Domestic government budget allocations, official development assistance, philanthropic grants
Investment-based instruments	Public or private funding seeking financial returns along with a positive social or environmental impact	Crowdfunding, debt-for-nature swaps, project finance for perma- nence, bonds and loans (including blue bonds)
Compensation-based instruments	Voluntary or compulsory compen- sation for negative environmental impacts	Eco-taxes, extractive fees, royalties, permits, carbon offsets including blue carbon, biodiversity offsets
Ecosystem value-based instru- ments	Monetization of sustainable eco- system value	Levy on sustainable use, payment for ecosystem services, insurance premium discounts

OECD has tracked the use of certain finance mechanisms at the global level:

Finance mechanism	Financial resources mobilized	Coverage
Biodiversity-relevant official devel- opment assistance	\$7.8 billion per year commitments (2017–2019 average at constant 2019 prices)	OECD Development Assistance Committee members
Biodiversity-relevant taxes	\$7.7 billion per year in tax revenue in OECD countries	More than 120 countries reporting
	\$8.8 billion per year in all coun- tries (2017–2019 average)	
Biodiversity offsets	\$6.9 billion per year	Global
Payments for ecosystem services	\$10.1 billion per year (2017–2019 average)	Across 10 countries that provided data on finance

<sup>61</sup> OECD, "Tracking economic instruments and finance for biodiversity" (OECD, 2021). Available at: <u>www.oecd.org/</u> <u>environment/resources/biodiversity/tracking-economic-instruments-and-finance-for-biodiversity-2021.pdf</u>.

# Box 29: Countries should select the economic and financial instruments most likely to accelerate action on their nature priorities<sup>62</sup>

The Taskforce on Nature Markets, for example, has analysed the relationship between planetary boundaries and nature markets:

Planetary boundary/description

- 1. **Biosphere integrity:** Units represent measurable protection, regeneration or stewardship outcomes for a species or ecosystem
- 2. Climate change: Units represent 1 ton of CO2 equivalent (CO2e) greenhouse gas emissions removed or reduced from the atmosphere
- Land system change: Partially addressed by unit-based schemes relating to climate change and biosphere integrity (see above)
- 4. Freshwater use: Units represent an entitlement for the use of a defined volume of water from a specified source
- 5. Novel entities, including the release of chemicals, plastics and organisms into the environment
  - (a) Chemicals: Units represent a measurable reduction in chemicals, including pesticides, entering a waterway or catchment area
  - (b) Sediments: Units represent a measurable reduction in sediment entering a waterway/catchment area
  - (c) **Plastics:** Units represent a reduction of 1 ton of plastic waste, which is consequently not released into the biosphere.
- Biogeochemical flows, including phosphorus and nitrogen loading through the overuse of chemical fertilizers. Units represent a measurable reduction in nutrients entering a waterway or catchment area.

Types of unit-base market schemes

**Biodiversity offset schemes:** Globally, a significant number of compliance schemes use biodiversity units to offset direct development impacts.

**Biodiversity credit schemes:** A number of voluntary initiatives and pilot projects relating to unit-based voluntary biodiversity markets have recently been launched or are in development.

Globally, a significant number of national, international and voluntary compliance schemes and standards have been launched.

National and international emissions trading schemes: Examples of wellknown schemes include the European Union and New Zealand emission trading schemes.

Voluntary standards and schemes: Examples of well-known voluntary standards and schemes include the Australian Emissions Reduction Fund, the Verified Carbon Standard and the Gold Standard.

**Emissions trading schemes, including voluntary carbon schemes:** Globally, a significant number of voluntary and other compliance schemes and standards use carbon units created in the context of countries' national biodiversity strategies, with the aim of preventing or curbing the impact of projects leading to deforestation or forest degradation. Carbon credits can, for example, be generated in the context of the Reduction of Emissions from Deforestation and Forest Degradation Plus (REDD+) mechanism, the ART-TREES standard and the national scheme of Australia.

Water allocation and trading schemes: Compliance schemes based on the allocation of water units can be used to regulate freshwater water use. For example, a water allocation framework that would be underpinned by tradeable water "management units" is being considered in the Ruamahanga catchment in New Zealand

Water quality schemes: The voluntary Reef Credit Scheme has been established with the support of the Queensland state government in Australia. Under the scheme, tradeable units (called "Reef Credits") are issued for improvements to water quality achieved as a result of changes in land management practices. Each unit under the scheme represents a specified volume of nutrient, pesticide or sediment prevented from entering the Great Barrier Reef catchment.

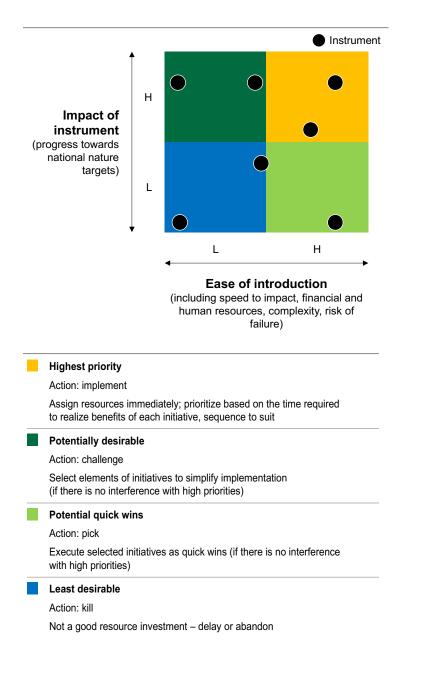
**Plastic reduction schemes:** The voluntary Plastic Waste Reduction Program has been launched by Verra, a non-profit corporation headquartered in Washington, D.C. Under the programme, tradeable units (known as "Plastic Credits") are issued to project proponents for collecting plastics from the environment or for recycling plastics that would otherwise not have been recycled.

Water quality schemes: As mentioned previously, under the Reef Credit Scheme, established with the support of the Queensland state government, "Reef Credits" are issued for a specified volume of nutrient, pesticide or sediment prevented from entering the Great Barrier Reef catchment.

<sup>62</sup> Taskforce for Nature Markets, "Biodiversity Credit Markets: The role of law regulation and policy" (April 2023). Available at: www.naturemarkets.net/publications/biodiversity-credit-markets.

### Box 30: A value-ease matrix is a simple way to assess priority

This matrix is based on the same principles as those underpinning the priority matrix for initiatives, but plots the impact of instruments against ease of introduction instead of risk level.



### Subcomponent 8: Institutions

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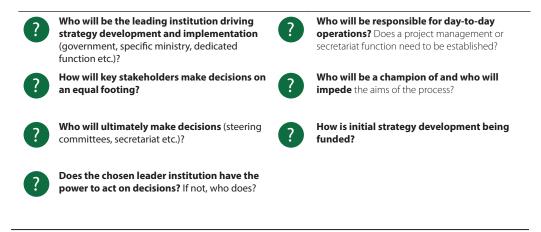
# Box 31: Adoption of a multi-stakeholder partnership approach can support the development and implementation of a national nature strategy<sup>63 64</sup>

According to The Partnering Initiative, a global organization dedicated to multi-stakeholder partnering, multi-stakeholder partnerships involve organizations from different societal sectors working together, sharing risks and combining their unique resources and competencies in ways that can generate and maximize value towards shared partnership and individual partner objectives.

Benefits of a multi-stakeholder partnership approach include:

- Enhanced capacity to address nature issues, which are often highly complex and cannot be addressed effectively by a single institution or entity;
- More harmonized programmes and actions;
- Enhanced mobilization of resources and expertise from a range of sources;
- Enhanced inclusivity, ensuring no one is left behind and promoting transparency and credibility.

Multi-stakeholder partnerships are not one-size-fits-all and can take many forms. Institutions may consider the following questions as they begin the partnership-building process:



<sup>63</sup> Angela Bester and Leon Hermans, "Multi-Stakeholder Partnerships: Implications for Evaluation Practice, Methods and Capacities", National Evaluation Capacities (NEC) conference paper (United Nations Development Programme Independent Evaluation Office, 2017). Available at: https://nec.undp.org/publications/multi-stakeholder-partnerships-implications-evaluation-practice-methods-and-capacities.

<sup>64</sup> Ros Tenyson, The Partnering Toolbook: An essential guide to cross-sector partnering (The Partnering Initiative, 2017) Available at: <u>https://thepartneringinitiative.org/wp-content/uploads/2014/08/Partnering-Toolbook-en-20113.pdf</u>.

# Box 32: Countries may choose from among several institutional arrangements<sup>65</sup>

Management option	Advantages	Disadvantages
Centralized management: man- agement of partnership or project	Maximum efficiency	Too distant from experience or the potential contribution of other
taken on by one partner organiza- tion on behalf of the partnership	Unambiguous decision- making procedures and day-to-day man-	partners
	agement systems	Too much influence or control perceived to be in the hands of
	Familiar/conventional manage- ment approach	one partner
		Too conventional for the flexible
	"One-stop shop" for external agen- cies or individuals	needs of some partnerships
	Rapid response times	May take decisions too rapidly
Decentralized management: lifferent aspects of management	Maximum diversity at operational levels	Greater potential for conflicts of interest
hared among the partner orga- izations	More opportunities for individual leadership	Partners or individuals may feel isolated
	Shared sense of ownership	Cumbersome decision-making processes
	Moving away from conventional	processes
	power bases	Lack of coherence
	Greater freedom of operations	
Nanagement by mandate: specific asks contracted on a case-by-	Those who have most time (or care most about the task) can be given	Tasks need to be clearly defined and allocated appropriately
ase basis to individuals or single	key management roles	Highly dependent on the actions
partner organizations that are inswerable to the partners as a	Highly-flexible approach that can be reviewed and changed as often	and reliability of individuals
jroup	as necessary	Risk of individuals/single partner organizations "doing their own
	Tasks can be easily shared among	thing" without adequate coordina
	partners, promoting a sense of collective responsibility	tion with the partner group

65 Ibid.

### Subcomponent 9: Stakeholder engagement

# Box 33: Guidance on who to involve in strategy development tends to focus on seven key stakeholder groups<sup>66 67 68</sup>

Relevant stakeholders groups in the national nature strategy development process:

### 1. Those with rights related to nature or natural resources

 May include indigenous people and local communities and/or agencies and private sector actors with rights to genetic resources;

### 2. Those directly affected by nature loss

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• May include indigenous people and local communities and/or other stakeholder groups affected by poor water, air or soil quality or by overfishing;

### 3. Those directly affected by potential mitigation actions

• May include populations in protected areas, including individuals and groups directly affected by nature loss and those with a direct or indirect impact on nature;

### 4. Those with a direct or indirect impact on nature

• May include stakeholders in the agriculture, transport, forestry, fisheries, urban development and energy sectors, in addition to financial institutions and regulators;

### 5. Those with responsibility for oversight of natural resources

 May include the ministry of the environment, the national environment agency, coastal/forest/water management agencies and subnational governments and/or city authorities;

### 6. Those who can add value in the planning/implementation process

May include project management offices, steering groups and nature project developers;

### 7. Those with relevant expertise

• May include research institutes, academics, indigenous peoples and local communities, non-governmental organizations focusing on development and/or human rights, international trade unions and training experts.

<sup>66</sup> Secretariat of the Convention on Biological Diversity. "Ensuring Inclusive Societal Engagement in the Development, Implementation and Updating of NBSAPs", Capacity training module B-5 (Revised July 2012) Available at: <u>www.cbd.int/</u> <u>nbsap/training/</u>.

<sup>67</sup> Science Based Targets Network, "The first science-based targets for nature".

<sup>68</sup> Taskforce on Nature-related Financial Disclosures, The TNFD Nature-Related Risk and Opportunity Management and Disclosure Framework (Beta v0.4), Annex 4.9: Draft Guidance on Engagement with Affected Stakeholders (London, 2022). Available at: <u>https://framework.tnfd.global/wp-content/uploads/2023/03/23-23882-TNFD\_v0.4\_Annex\_4.9\_v7-1.pdf</u>.

### Box 34: Sources of guidance on the formulation and implementation of stakeholder strategies <sup>69 70 71 72</sup>

A focus on indigenous people and local communities is a key feature of the following guidelines on stakeholder engagement:

**1. Science Based Targets Network stakeholder guidance:** Guidance is most relevant where stakeholders have been significantly affected by actions; it is crucial to establish clear follow through/feedback, governance and accountability mechanisms, ensuring that long-term stakeholder engagement is integrated into the strategy.

The following figure illustrates the difference between transactional, traditional and transformational stakeholder engagement:

	Transactional	Transitional	Transformational
With a specific group of suppliers With a suppliers With a supply chain / sector With a multi-stakeholder process	Transactional engagement with local social groups or stakeholders is one-way only. This type of engagement is often developed under the corporate social responsibility programmes of companies to address the demands of specific social groups.	Transitional engagement tends to be a one-off engagement that meets both a company need and a need from local social groups or stakeholders but may not necessarily lead to long-term collaboration or relationships	Transformational engagement efforts are those where community or stakeholder decision- making leads the way, where long term alliances with partners are built and where the community engages in collaborative efforts with others

2. Secretariat of the Convention on Biodiversity – training on national biodiversity strategies and action plans: Provides guidance on how to manage multiple stakeholders in a participatory process, including setting up workshops and breaking up parts of the content to delegate to smaller working teams. The training module also provides examples on how this has been achieved in a number of countries and outlines the different degrees of stakeholder involvement in public policy making.

The following figure highlights the different degrees of public participation, as envisaged in the training module:

<sup>69</sup> Science Based Targets Network, "The first science-based targets for nature".

<sup>70</sup> Secretariat of the Convention on Biological Diversity. "Ensuring Inclusive Societal Engagement in the Development, Implementation and Updating of NBSAPs".

<sup>71</sup> Taskforce on Nature-related Financial Disclosures, The TNFD Nature-Related Risk and Opportunity Management and Disclosure Framework (Beta v0.4), Annex 4.9: Draft Guidance on Engagement with Affected Stakeholders.

<sup>72</sup> International Union for Conservation of Nature Environmental and Social Management System, "Stakeholder Engagement in IUCN projects", guidance note (May 2021). Available at: <a href="https://www.iucn.org/sites/default/files/2022-05/esms-stakeholder-engagement-guidance-note.pdf">www.iucn.org/sites/default/files/2022-05/esms-stakeholder-engagement-guidance-note.pdf</a>.

**Informing** – Provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions

Consulting - Obtain public feedback on analysis, alternatives, and/or decisions

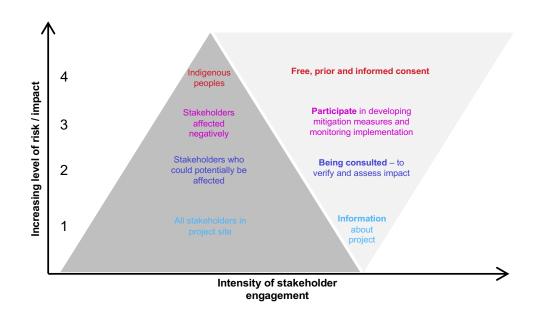
**Engaging** – Work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered

**Collaborating** – Partner with the public in each aspect of the decision, including the development of alternatives and the identification of the preferred solution

Empowering - Place final decision-making authority in the hands of citizens

**3. International Union for Conservation of Nature environmental and social management system:** Provides a methodology for engaging stakeholders throughout project cycle and sets out a number of guiding principles for that process: for example, engagement should begin as early as possible, actions should be targeted to the audience, and sufficient emphasis should be placed on engagement at the local level. The system also provides templates for conducting stakeholder analysis, documenting consultations and building an engagement plan.

The following figure shows that the intensity of stakeholder engagement is correlated with the level of risk/impact for specific groups:



4. Taskforce on Nature-related Financial Disclosures Nature-Related Risk and Opportunity Management and Disclosure Framework (Beta v0.4), Annex 4.9: Provides a set of questions that can be asked during the scoping phase that can inform stakeholder engagement. The questions are targeted at companies but could be adapted to other stakeholder groups. Guidance is also provided on how to prepare for, design, conduct and integrate stakeholder engagement into plans and strategies.

The following table sets out a number of questions that could be asked to facilitate stakeholder engagement:

Scoping the assessment	How does input from affected stakeholders inform scoping decisions?		
	Prepare to respond and report	Informed by stakeholder engagement	
P1 Strategy and resource allocation	What strategy and resource allocation decisions should be made as a result of this analysis?	Does the resource allocation reflect identified needs for meaningful and ongoing stakeholder engagement as part of mitigation and management strategies?	
P2 Performance measurement	How will we set targets and define and measure progress?	Are the targets defined, and is progress measured with input from affected stakeholders?	
P3 Reporting	What will we disclose in line with Taskforce on Nature-related Financial Disclosure recommendations?	What are the affected stakeholders expectations in terms of disclosure?	

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Box 1: To estimate current financial flows, countries could, at the outset,
onsider flows in the following categories <sup>73</sup>

Category	Subcategory	Description			
Public sector	Domestic government	Sustainable agriculture, forestry and fisheries			
	expenditure	Water resource conservation and land management, pollu- tion control and other natural resource management			
		Pollution abatement, wastewater management and enviror mental protection			
		Protection of biodiversity and landscapes			
		Environmental and other policies			
	Bilateral/multilateral flows	Bilateral and multilateral aid in support of sustainability, bio diversity, climate change mitigation and/or desertification			
Private sector	Carbon markets	Transactions in voluntary carbon markets and investments the context of the REDD+ mechanism			
	Biodiversity offsets	Investment in programmes to compensate for unavoida impacts stemming from development projects			
	Sustainable supply chains	Investment in biodiversity conservation in the context of sustainable-certified commodity markets			
	Impact investing	Equity and debt-based investments to generate positive, measurable environmental, social and governance impact and financial returns			
	Payment for ecosystem services	Voluntary financial flows between service users and provid- ers that are conditional on agreed rules of resource manage ment that provide for the generation of ecosystem services			
$\langle \langle \rangle \rangle$	Non-governmental organizations	Expenditures reported by large non-governmental organizations focusing on conservation activities			
임산 Not-for-profit sector	Philanthropic founda- tions	Grants and non-grants reported by philanthropic founda- tions			
International cooperation	Multilateral flows	Private finance leveraged by development finance institu- tions, other agencies striving to promote development and multilateral climate and biodiversity funds			

<sup>73</sup> UNEP, State of Finance for Nature (Nairobi, June 2023). Available at: <u>www.unep.org/resources/report/state-finance-nature</u>.

Box 36: Politica	l support and	l alignment:	key actions, o	questions an	d stakeholders	
		Public sector	Private sector	Academic institutions, think tanks and non-gov- ernmental organizations	Indigenous people and local commu- nities	
How can broad political support be secured? Aligning stakehold- ers, starting with key decision makers in the public sector	Why is their	Decision and policymakers	Can unlock investments	Provide exper- tise, experience, and knowledge	Role in protecting nature and biodi- versity All relevant indig- enous people and local communities across nature di- mensions and iden- tified investments	
	buy-in needed?	Key departments or sectors, including, for example, the environment, finance, agricul- ture and health sectors	Largest impacts and dependen- cies Opportunities	Expertise, tools and know-how		
	How can their support be obtained?	Building a case for nature that demonstrates its public and private economic value	Highlighting the business case for nature and its nature-related risks and oppor- tunities	Bringing these stakeholders into relevant discussions and consultations	Organizing consulta- tion workshops and closely involving these stakeholders in bottom-up pro- cesses to prioritize investments	
	Mechanism	Desci	ription	Example		
How can commit- ments be protected from short-term political change?			lation that facilitates term alignment	Multiyear o budgets	r long-term	
		Coord align term	long-term priorities by same institution			
	Institutional arra	ngement				
			ing for regular revie ler to align long-tern ties	-	Defining a review and revision cycle	
	Review and revis	Deep releva need help o ment	ening the awareness ant stakeholders of t to safeguard fundin ensure that nature in s remain a priority	he awareness g can	r engagement and campaigns	

### • Subcomponent 11: Political support and alignment

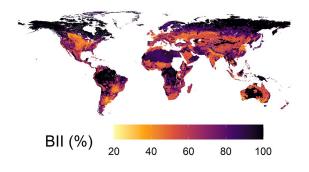
<sup>74</sup> UNEP, Secretariat of the Convention on Biological Diversity and Global Environment Facility, "Getting political support for the NBSAP and financing its implementation" Capacity training module B-6 (July 2007). Available at: <u>www.cbd.int/doc/</u> <u>training/nbsap/b6-train-political-support-finance-nbsap-en.pdf</u>; OECD, "Aligning short-term recovery measures with longer-

### Box 37: A range of indicators and resources are available to facilitate biodiversity assessment and monitoring activities75

The Biodiversity Intactness Index and the mean species abundance indicator developed by Global biodiversity model for policy support (GLOBIO) can facilitate efforts by national governments to assess and monitor biodiversity.

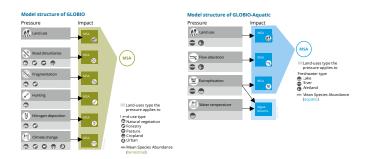


The Biodiversity Intactness Index (BII) summarizes the change in ecological communities in response to human pressures. The Index is an estimated percentage of the original number of species that remain and their abundance in any given area, despite human impacts.



## GLOBIO model (mean species abundance indicator)

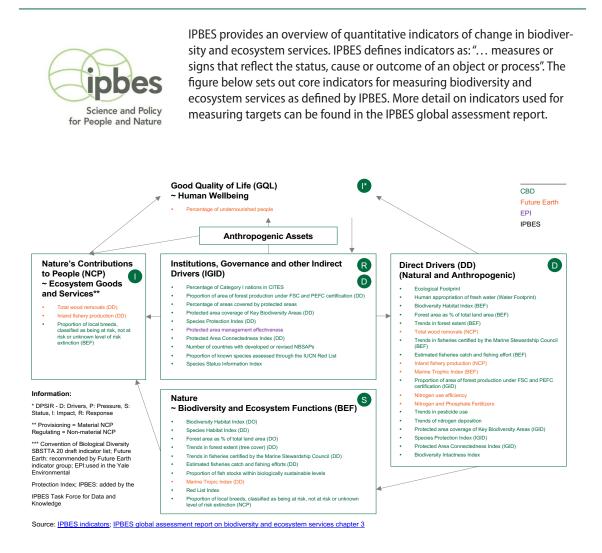
GLOBIO calculates local biodiversity intactness, expressed by the Mean Species Abundance indicator, as a function of human pressures. The GLOBIO–ecosystem services model also calculates the current state, trends and possible future scenarios of ecosystem services globally.



Disclaimer: The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of the Sudan and the Republic of South Sudan has not yet been determined.

term climate and environmental objectives" (2021). Available at: <a href="http://www.oecd.org/g20/topics/climate-sustainability-and-energy/OECD-G20-Aligning-recovery-measures-with-climate-objectives.pdf">www.oecd.org/g20/topics/climate-sustainability-and-energy/OECD-G20-Aligning-recovery-measures-with-climate-objectives.pdf</a>.

<sup>75</sup> Helen Phillips and others, "The Biodiversity Intactness Index – country, region and global-level summaries for the year 1970 to



2050 under various scenarios", data set. Natural History Museum, London. Available at: data.nhm.ac.uk/dataset/bii-bte; Aafke Schipper and others, "Projecting terrestrial biodiversity intactness with GLOBIO 4". Global Change Biology, 26(2), pp. 760–771 (November 2019). Available at: onlinelibrary.wiley.com/doi/10.1111/gcb.14848A; IPBES, "Indicators" (2021). Available at: https://www.ipbes.net/indicators.

# Box 38: The Kunming-Montreal Global Biodiversity Framework provides a list of indicators against each target<sup>76</sup>

Indicators are split into headline, component and complementary at increasing levels of granularity. Some indicators are still under discussion and will be updated in due course in the monitoring framework for the Kunming-Montreal Global Biodiversity Framework.77 Examples of the headline indicators are provided below, and the full list is provided in the monitoring framework.

Target (summary)	Example headline indicator			
Target 1. Land- and sea-use spatial planning to bring loss of high biodiversity areas close to zero by 2030	Red List of Ecosystems; percentage of areas covered by spatial plans			
Target 2. Thirty per cent of degraded ecosystems under resto- ration by 2030	Area under restoration			
Target 3. Thirty per cent of areas effectively conserved and managed by 2030	Coverage of protected areas and other area-based conservation measures			
Target 4. Actions to halt the extinction of, recover and conserve species	Red list index; proportion of populations with population size larger than 500			
Target 5. Sustainable harvest, trade and use of wild species	Proportion of fish stocks within biologically sustainable levels			
Target 6. Eliminate, reduce and/or mitigate the impacts of invasive alien species	Rate of invasive alien species establishment			
Target 7. Reduce pollution risks by 2030	Index of coastal eutrophication potential; Pesticide concentra- tion			
Target 8. Minimize the impact of climate change: nature-based solutions	None provided (examples given at other levels of granularity)			
Target 9. Sustainable use and benefit-sharing of wild species	Benefits from use of wild species; percentage of the populatio in traditional occupations			
Target 10. Sustainable use of agriculture, aquaculture, fisheries and forestry	Proportion of agricultural area under productive and sustainable agriculture			
Target 11. Regulation of air, water, hazards and extreme events	Services provided by ecosystems			
Target 12. Increase access to green and blue spaces in urban areas	Share of built-up area of cities that is green/blue space for public use			
Target 13. Access and benefit-sharing from genetic resources	Indicator on monetary and non-monetary benefits received			
Target 14. Mainstreaming biodiversity into policies, regulations, planning, etc.	Indicator on monetary and non-monetary benefits received			
Target 15. Encourage sustainable business activity, production and supply chains	Number of companies reporting on disclosures on biodiversity			
Target 16. Encourage sustainable consumption choices	None provided (examples given at other levels of granularity)			
Target 17. Manage biotechnology impacts	None provided (examples given at other levels of granularity)			
Target 18. Eliminate harmful incentives	Positive incentives in place to promote biodiversity conservation			
Target 19. Increase financial resources from all sources	International public funding for the conservation and use of biodiversity and ecosystems			
Target 20. Strengthen capacity-building	None provided (examples given at other levels of granularity)			
Target 21. Ensure accessible data, information and knowledge	Indicator on biodiversity information used in the monitoring of compliance with the Kunming-Montreal Global Biodiversity Framework			
Target 22. Representation of indigenous people and local communities	None provided (examples given at other levels of granularity)			
Target 23. Gender equality	None provided (examples given at other levels of granularity)			

<sup>76</sup> Conference to the Parties to the Convention on Biological Diversity, document CBD/COP/DEC/15/4. Available at: <u>www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf</u>.

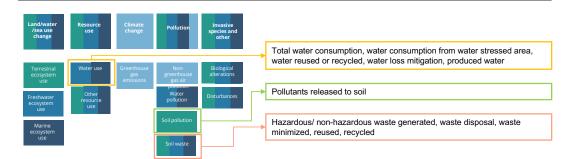
<sup>77</sup> Conference to the Parties to the Convention on Biological Diversity, document CBD/COP/DEC/15/5. Available at: www. cbd.int/doc/decisions/cop-15/cop-15-dec-05-en.pdf.

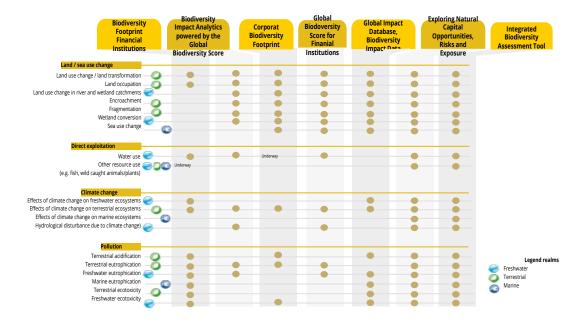
### Box 39: Sources of metrics and tools relating to the state of nature<sup>78</sup>



Finance for Biodiversity

The Taskforce on Nature-related Financial Disclosures has developed a series of indicators and associated framework references that are relevant to different impact drivers. While it also provides example metrics, these are designed with the private sector in mind and would require adaptation to be used by national authorities.





The Finance for Biodiversity Pledge provides a guide on biodiversity measurement approaches, with a summary of each approach. It also provides information on data sources, collection methods and tools for measuring progress.

<sup>78</sup> Taskforce on Nature-related Financial Disclosures, "Recommendations of the Taskforce on Nature-related Financial Disclosures," Annex 2 (September 2023). Available at: tnfd.global/wp-content/uploads/2023/08/Recommendations\_of\_the\_Taskforce\_on\_Nature-related\_ Financial\_Disclosures\_September\_2023.pdf?v=1695118661; Finance for Biodiversity Pledge, "Guide on biodiversity measurement approaches: Annex on Assessing Impact to Pledge Guidance", 2nd edition (October 2022). Available at: www.financeforbiodiversity.org/ wp-content/uploads/Finance-for-Biodiversity\_Guide-on-biodiversity-measurement-approaches\_2nd-edition.pdf.

# Box 40: Countries could streamline the reporting and disclosure process and enhance transparency by making use of a common reporting framework<sup>79</sup>

Reporting frameworks have been formulated by a number of organizations concerned with biodiversity. There include the following:

	CBD	CBD	SDG Actions Platform		CUCN   Contributions for Nature Platform	Other voluntary disclosures
Reporting description	National reports submitted within the context of the Convention on Biological Diversity, which make use of indicators set out in the Kunming-Mon- treal Global Biodi- versity Framework	Updates on national biodi- versity strategies and action plans submitted within the context of the Convention on Bi- ological Diversity, which make use of indicators set out in the Kun- ming-Montreal Global Biodiversity Framework	Sustainable Development Goal (SDG) Actions Platform registry of vol- untary policies, commitments, multi-stakehold- er partnerships and other initiatives	National reports sub- mitted in the context of the Convention on International Trade in Endan- gered Species of Wild Fauna and Flora (CITES)	International Union for Conservation of Nature members can report on their contributions to conservation and restoration actions	
Obligation	Required by parties to the Convention on Biological Diversity	Required by parties to the Convention on Bi- ological Diversity	Voluntary	Required by parties to the Convention on International Trade in Endan- gered Species of Wild Fauna and Flora	Voluntary	Voluntary
Timeline	Next report due in 2026 Subsequent report due in 2029	To be submitted prior to of the Six- teenth Conference of the Parties to the Convention on Biological Di- versity, scheduled to take place in December 2024	No fixed timeline	Annually on 31 October	No fixed timeline	No fixed timeline

<sup>79</sup> United Nations Department of Economic and Social Affairs, "SDG Actions Platform", document CBD/COP/DEC/15/4. Available at: <u>sdgs.un.org/partnerships</u>; Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), "Reporting requirements: annual report". Available at: <u>cites.org/eng/imp/reporting</u> <u>requirements/annual\_report</u>; International Union for Conservation of Nature, "Contributions for Nature Platform". Available at: <u>www.iucncontributionsfornature.org/</u> (accessed on 18 October 2023).

### • Subcomponent 14: Implementation

• For guidance on subcomponent 14, see Section 3: Implementation.

