



नेपाल सरकार

वन तथा वातावरण मन्त्रालय

EX: पो व नं. : ३९८७
सिंहदरबार, काठमाण्डौ

पत्र संख्या :-

चलानी नं. :-

प्राप्त पत्र संख्या र मिति :-

राय सुझावको लागि सूचना प्रकाशित मिति २०८२/०२/२२

वन तथा वातावरण मन्त्रालय र UNDP Nepal को संयुक्त पहलमा तयार भएको NBSAP vision document (2025-2030) सर्वसाधारण तथा विज्ञहरुको जानकारी एवं सो दस्तावेजमा राय सुझावका लागि यो सूचना प्रकाशन गरिएको छ। उक्त दस्तावेजमा राय सुझाव भएमा १० (दश) दिन भित्र निम्नानुसारको ठेगानामा उपलब्ध गराई दिनुहुन सर्वसाधारण एवं विज्ञहरुलाई हार्दिक अनुरोध छ।

राय सुझाव पठाउने ठेगाना

वन तथा वातावरण मन्त्रालय

वातावरण तथा जैविक विविधता महाशाखा

जैविक विविधता शाखा

फोन नं. ०१-४२११५६७, ०१-४२११६३८

फ्याक्स नं. ०१-४२११८६८

Email: Info@mofe.gov.np





Final Draft (Modified 13 May 2025)

Nepal Biodiversity Strategy and Action Plan (NBSAP)

VISION DOCUMENT (2025 – 2030)

National Targets and Indicators (Ver 3)

(Final Draft – For Discussion, not for circulation or reference)

May 2025

Prepared by

Biodiversity and Environment Division
Ministry of Forests and Environment,
Kathmandu, Nepal

[Handwritten signature]
2025/5/20

Abbreviations/Acronyms

ABS	Access and Benefit Sharing
ADS	Agriculture Development Strategy
BIOFIN	Biodiversity Finance Initiative
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COP	Conference of the Parties
DNA	Deoxyribonucleic acid
DSI	Digital Sequence Information
EAS	Early Action Support
FECOFUN	Federation of Community Forestry Users Nepal
FPIC	Free, Prior, and Informed Consent
GDP	Gross Domestic Product
GEF	Global Environment Facility
GRID	Green, Resilient, and Inclusive Development
ha	hectare
HWC	Human Wildlife Conflict
IAS	Invasive Alien Species
ICIMOD	International Centre for Integrated Mountain Development
IPLC	Indigenous Peoples and Local Communities
IUCN	International Union for Conservation of Nature
LMO	Living Modified Organism
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPM	Integrated Pest Management
ISNM	Integrated Soil and Nutrient Management
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
KMGBF	Kunming Montreal Global Biodiversity Framework
MAPs	Medicinal and Aromatic Plants
MEA	Multilateral Environmental Agreement
MNCs	Multi-National Companies
NA	Not applicable
NBSAP	Nepal Biodiversity Strategy and Action Plan
NDC	Nationally Determined Contribution
NEFIN	Nepal Federation of Indigenous Nationalities
NGO	Non-Governmental Organization
NIWF	National Indigenous Women Forum
NTFP	Non-Timber Forest Products
NTNC	National Trust for Nature Conservation
OABCM	Other Area-Based Conservation Measures
OECM	Other Effective Area-Based Conservation Measures
PA	Protected Area
PWD	Person with Disabilities
PES	Payment for Ecosystem Services
RNA	Ribonucleic acid
SDG	Sustainable Development Goals
SEA	Strategic Environmental Assessment
TNFD	Task Force on Nature-related Financial Disclosures
UNDP	United Nations Development Programme
UNCCD	United Nations Convention to Combat Desertification
WWF	World Wildlife Fund
ZSL	Zoological Society of London



Table of Contents

1. BACKGROUND	1
1.1 CONTEXT.....	1
1.2 APPROACH IN PREPARING THE VISION DOCUMENT	2
1.3 GUIDING PRINCIPLES FOR SETTING THE NATIONAL VISION	5
2. BIODIVERSITY VISION 2050 AND STRATEGIC OBJECTIVES FOR 2030.....	7
2.1 VISION 2050.....	7
2.2 MISSION 2030.....	8
2.3 THEORY OF CHANGE.....	8
2.4 STRATEGIC OBJECTIVES	9
2.5 GUIDING PRINCIPLES	13
2.6 STRATEGIES	16
3. ACTION TARGETS 2030 AND PERFORMANCE INDICATORS	19
3.1 INTRODUCTION	19
3.2 CONSERVATION.....	21
3.3 SUSTAINABLE USE	30
3.4 INTEGRATION AND MAINSTREAMING.....	37
3.5 INCLUSIVE AND EQUITABLE MANAGEMENT	42
3.6 INSTITUTIONAL STRENGTHENING	46
3.7 COLLABORATION AND COORDINATION	50
3.8 SUSTAINABLE FINANCE	52
4. WAY FORWARD.....	56
4.1 FUTURE PRIORITY.....	56
5.1 KEY ISSUES AND CHALLENGES	57
5.2 REVISED TIMELINE	57
5. PROPOSED OUTLINE OF NBSAP (TENTATIVE).....	58
ANNEX 1: KMGBF GOALS AND ACTION TARGET.....	61
ANNEX 2: PERSONS AND SERVICE PROVIDERS ENGAGED IN THE NBSAP REVISION PROCESSES	65
ANNEX 3: TIMELINE REGARDING THE PREPARATION OF THE VISION DOCUMENTS	67
ANNEX 4: ALIGNMENT OF NBSAP STRATEGIC OBJECTIVES AND GOALS.....	68
ANNEX 5: TEMPLATE USED FOR DEFINING INDICATORS, INCLUDING COMPUTATION METHODS (SAMPLE).....	77
ANNEX 6: TEMPLATE USED FOR SETTING MILESTONES INCLUDING COMPUTATION OF VALUE	80
ANNEX 7: REVISED TIMELINE FOR NBSAP REVISION	94



Executive Summary

The Ministry of Forests and Environment (MoFE) has prepared this vision document for Nepal's Biodiversity Strategy and Action Plan (NBSAP), including national targets, indicators and identified priority actions. They were produced following consultative and participatory processes, as well as an in-depth desk review of current biodiversity conservation efforts in Nepal and a performance review of the previous NBSAP. Thirty field-level consultative workshops were carried out at the sub-national level, especially in rural municipalities, protected areas and district headquarters, in all seven provinces and three physiographic regions (Tarai, Hills, Mountains), with the participation of rights-holders, Indigenous People and Local Communities (IPLCs), government agencies, the private sector, and political leaders. More than 1200 people actively participated in these consultative workshops and provided their views for making biodiversity conservation effective, inclusive, and responsive. Furthermore, seven provincial-level consultations, covering all provinces and including more than 350 people, were conducted to identify the issues and challenges related to biodiversity conservation in Nepal, especially on inter-sectoral and inter-government coordination, collaboration for a common cause (i.e. biodiversity conservation), leveraging finance and safeguarding the rights of the people, along with ensuring effectiveness. In addition, stakeholders and rights holder groups were consulted at the federal level to ensure their active and meaningful participation, especially for rights holders, IPLCs. National consultative workshops were finally organized to collect comments and suggestions on draft targets and make the policy documents more evidence-based and robust, aiming to develop a shared vision for biodiversity conservation. The draft targets are continuously being revised based on feedback from these consultative processes, especially from conservation partners and IPLCs.

The vision for 2050 is "**Biodiversity for resilience and prosperity**," with a 2030 mission of "**Collectivism for sustainable biodiversity management and green economy**." To achieve the 2030 mission, seven strategic objectives are proposed, focusing on conservation and restoration, sustainable use and management, integration and mainstreaming, equitable and inclusive management, institutional strengthening, coordination and collaboration, and sustainable finance. The NBSAP identifies eight guiding principles, three of which remain uncompromised on: collectivism, green development, and human rights-based approaches. Furthermore, 36 national action targets along with their respective monitoring indicators are proposed, accounting for the country's current state of biodiversity management along with stakeholders' needs and aspirations, especially of IPLCs, women, children, and youth.

The NBSAP is the strategic framework that guides all sectors to *live in harmony with nature* or halt and reverse biodiversity losses, strongly emphasizing green, resilient, and inclusive development and collectively working to achieve the national vision: "Prosperous Nepal, Happy Nepali". It is fully linked with international conventions and treaties, international development goals, national priorities and commitments e.g. in the national periodic development plan, and sectoral policies. The proposed vision, targets, and indicators are aligned with the four goals and 23 action targets of the Kunming-Montreal Global Biodiversity Framework. National targets were then identified by considering national priorities and internal commitments to conserve, restore, and sustainably manage biodiversity and contribute to nature-positive development.

The targets and indicators will be further validated during thematic and other consultative workshops. The collation of baseline values for the monitoring indicators is ongoing and expected to be completed by the end of May 2025. The NBSAP Secretariat will develop the roadmaps for action targets by the end of May and produce a draft NBSAP by mid-July 2025. The draft NBSAP will then be validated in all seven provinces and at the federal level with a wide range of stakeholders, to ensure a shared vision and promote collectivism in its implementation. Finally, the NBSAP will be endorsed by MoFE and submitted to the Government of Nepal by the end of August 2025.

Note: Prepared by the Environment and Biodiversity Division (EBD), Ministry of Forests and Environment, with the Technical Assistance of Early Action Support Project (EAS) of the GEF and Biodiversity Finance Initiative Project of the UNDP, with contributions from UNDP, IUCN, ICIMOD, WWF, ZSL, NTNC, FECOFUN, NIWF/NEFIN.

1. BACKGROUND

1.1 Context

1. The fifteenth meeting of the Conference of the Parties (CoP) to the Convention on Biological Diversity (CBD) adopted the Kunming-Montreal Global Biodiversity Framework (hereafter KMGBF) to guide the global community towards achieving the CBD's 2050 Vision of "Living in Harmony with Nature".¹ The KMGBF is built around a theory of change that recognizes that urgent policy action is required globally, regionally, and nationally to achieve sustainable development, so that the drivers of undesirable change that have exacerbated biodiversity loss are reduced and reversed to allow for the recovery of all ecosystems. It includes four goals and 23 action targets to be achieved by 2030 (see **Annex 1**).
2. The KMGBF is accompanied by a detailed monitoring framework including a set of agreed-upon indicators to track progress towards the KMGBF's goals and targets. The monitoring framework, adopted in decision 15/5,² was updated in decision 16/31³ with refined headline and binary indicators for national, regional, and global monitoring, as well as more detailed components and complementary indicators. All Parties agreed to use the headline and binary indicators, complemented by component and complementary and other national indicators, defined in relevant national planning processes. The monitoring framework is thus a guide for preparing national targets and indicators and reporting progress,⁴ with which the revised/updated National Biodiversity Strategy and Action Plan should be aligned.
3. A National Biodiversity Strategy and Action Plan is the main instrument for translating the CBD vision into action and achieving KMGBF targets at the national level. The CBD Decision 15/6⁵ requests Parties to revise and update their National Biodiversity Strategies and Action Plans in accordance with Article 6 of the Convention, aligning with the KMGBF and its goals and targets including related to means of implementation, and to submit them through the clearing-house mechanism by the sixteenth CoP.
4. The Government of Nepal/Ministry of Forests and Environment (MoFE), with technical assistance from the United Nations Development Programme (UNDP),⁶ initiated the revision of "Nepal's Biodiversity Strategy and Action Plan" (hereafter NBSAP) to align with the KMGBF while addressing underlying drivers of biodiversity loss by a "whole of the government and whole of the society" approach, leaving no one behind. In this regard, the MoFE established, in June 2023, a NBSAP Secretariat under the leadership of the CBD focal point and formed technical and steering committees, to facilitate and oversee the NBSAP revision. The Secretariat prepared a detailed approach paper for this revision in July 2023, by adopting the "5 I" framework, which focuses on setting targets/priorities (identification), mapping indicators (indicators), defining a plan of action (instruments), estimating the financial needs (investment), and implementation arrangements (institutions). It further emphasized an evidence-based approach together with the meaningful engagement of relevant stakeholders. The Ministry approved the approach paper in July 2024.⁷
5. Following this, the Secretariat formally initiated the revision of the NBSAP in July 2024, establishing an office at the Department of Plant Resources, and expected to complete it by December 2024. However, the CBD Secretariat requested that Parties submit their National Biodiversity Strategy and Action Plan before the CoP16 meeting held in October 2024. For Parties that could not provide the fully revised document, the CBD asked to communicate their national targets (related to the KMGBF, including means of implementation) as a standalone submission by 1st of August 2024, using the reporting template provided in annex I (decision 15/6). These Parties were to submit their national targets through the online reporting tool (<https://ort.cbd.int>) to the Convention's clearinghouse mechanism.

¹ CBD Decision 15/4: <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf>

² CBD Decision 15/5: <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-05-en.pdf>

³ CBD Decision 16/31: <https://www.cbd.int/doc/decisions/cop-16/cop-16-dec-31-en.pdf>

⁴ CBD Decision 16/32: <https://www.cbd.int/doc/decisions/cop-16/cop-16-dec-32-en.pdf>

⁵ CBD Decision 15/6: <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-06-en.pdf>

⁶ UNDP Country Office Nepal provided technical assistance for drafting national targets and indicators through the Global Environment Facility's Early Action Support (EAS) project, as well as the Biodiversity Finance Initiative (BIOFIN)

⁷ The 15th 1st September 2023 technical committee meeting, and 21st of April 2024 steering committee meeting endorsed the approach paper for the NBSAP revision

Biodiversity Vision and National Targets:

Final Draft (Work in progress, Not for circulation)

6. The CBD focal point, especially the Environment and Biodiversity Division from MoFE, with support from the NBSAP Secretariat and other stakeholders, drafted a biodiversity vision and provisional national targets, with contributions from conservation partners⁸ and Indigenous People and Local Communities (IPLC) organizations.⁹ The Secretariat organized a national consultative workshop on 26th of July 2024 to solicit feedback on the national targets. The provisional national targets were revised and submitted to the CBD Secretariat on 1st of August 2024 through the CBD's clearinghouse mechanism, with 40 national targets (4 results and 36 targets).¹⁰

7. Following this, consultations were conducted at the subnational and national levels (from June 2024 to March 2025) to validate and revise these provisional national action targets, including on priority areas for biodiversity conservation. Building on those consultations, a review of the current state of knowledge, performance review of NBSAP, and underlying drivers of biodiversity change in the country, this vision document of the NBSAP was prepared. It aligns with the 16th CoP's decision 16/32¹¹ on mechanisms for planning, monitoring, reporting, and review, including the global review of collective progress in implementing the KMGBF that will be conducted for the seventeenth and nineteenth meetings of the Conference of Parties.

8. This vision document was prepared as guided by the above, to be endorsed by the Technical and Steering committees¹² before moving ahead with the NBSAP revision processes. More specifically, this document presents:

- A 2050 Vision, 2030 Mission for biodiversity, strategic objectives, linked strategies, and guiding principles
- Action targets for 2030, including priority working policies for each strategy of the NBSAP
- A revised timeline for the NBSAP preparation

1.2 Approach in Preparing the Vision Document

9. The Environment and Biodiversity Division is leading the development of the vision document with technical support from the UNDP. The UNDP's Early Action Support (EAS) project¹³ recruited more than two dozen experts to support the secretariat in preparing the NBSAP (Annex 2). This national vision, including the national targets, was drafted based on a desk review and consultations. Figure 1.1 presents the sequential steps in drafting this NBSAP. During the vision setting process, nearly 2000 stakeholders from diverse sectors, including IPLCs, Women, Persons with Disabilities (PWD), Dalits, Community Forests Users Groups (CFUGs) and representatives from all 3 tiers of government were involved.¹⁴ The consultations were designed to ensure active and meaningful participation in the processes, especially of rights holders and IPLCs, to develop a shared vision. Table 1.1 presents key milestones of the process (with a detailed timeline in Annex 3).

Table 1.1: Key milestones related to drafting of the National Vision document

SN	Milestones	Due data	Remark
1	Provisional national targets (first draft)	20 July 2024	Completed
2	Validation of provisional national targets	28 July 2024	Completed
3	Submission of Annex 1 document to the CBD	1 August 2024	Completed
4	Draft biodiversity vision and national targets (first draft)	10 January 2025	Completed
5	National and sub-national consultative workshops	25 February 2025	Completed
6	Final draft biodiversity vision and national targets	15 April 2025	Completed
7	Endorsement of the national vision and action targets	30 May 2025	Planned

8 Conservation partners include the National Trust for Nature Conservation (NTNC), the International Union for Nature Conservation (IUCN), the International Centre of Integrated Mountain Development (ICIMOD), the Worldwide Fund for Nature (WWF), and the Zoological Society of London (ZSL);

9 IPLC organizations include the Federation of Community Forestry User Groups Nepal (FECOFN) and the National Indigenous Forum on Biodiversity/Nepal Federation of Indigenous Nationalities (NEFIN).

¹⁰ <https://ort.cbd.int/national-targets?countries=np>

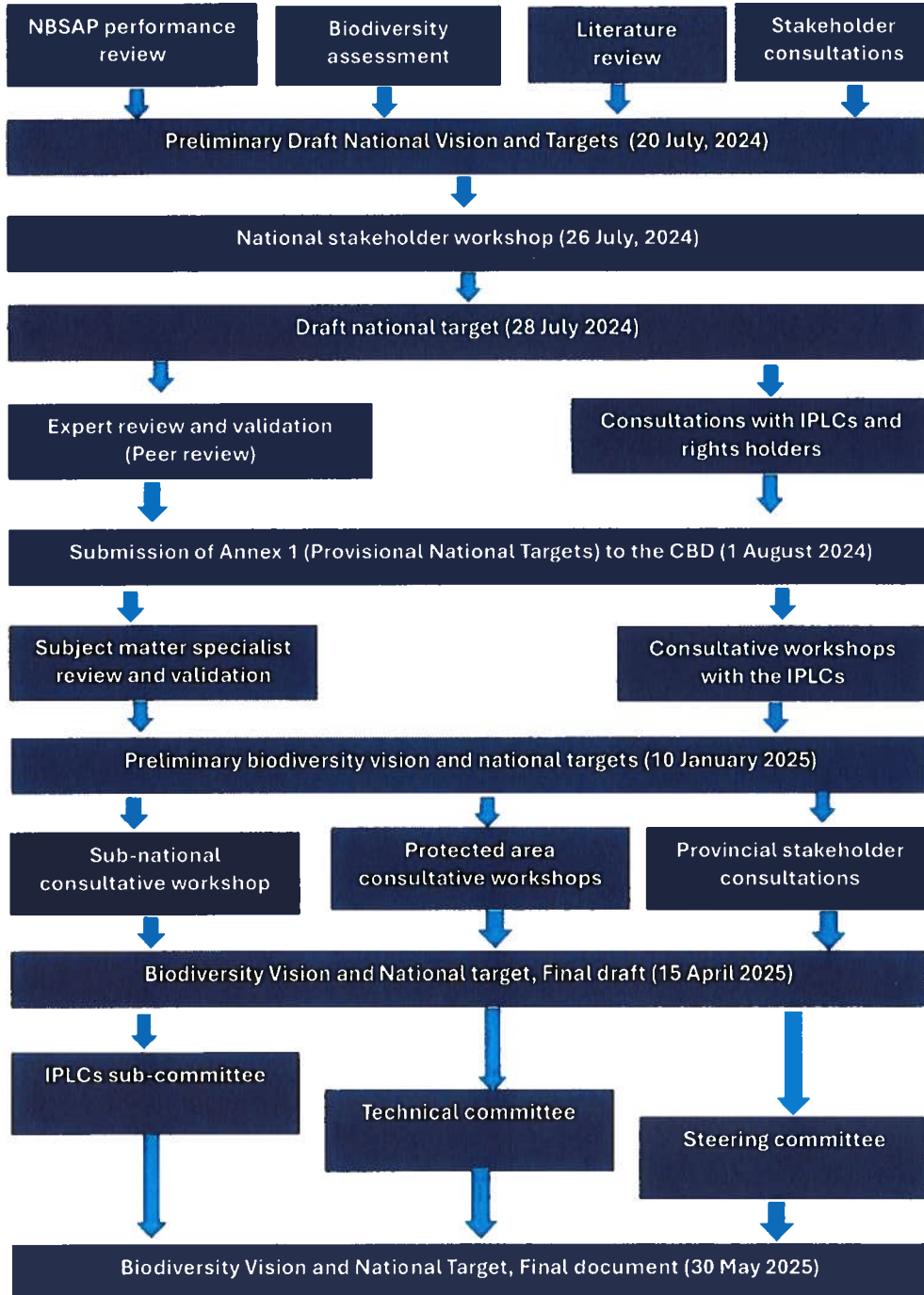
¹¹ <https://www.cbd.int/doc/decisions/cop-16/cop-16-dec-32-en.pdf>

¹² The technical and steering committee shall endorse the NBSAP vision document, especially action targets and monitoring indicators

¹³ EAS provides financial and technical support to 138 nations in their work to align their NBSAPs with the KMGBF

¹⁴ Participants' details are present in the consultation reports in the Annexes

Figure 1.1: Sequential steps followed in drafting the vision and national targets of NBSAP



10. **Provisional national targets:** A desk review of the current knowledge on biodiversity including a performance review of the previous NBSAP implementation and national and international biodiversity-related databases was carried out. Consultations with various actors and stakeholders complemented it to ensure active and meaningful participation in the processes, especially of rights holders and IPLCs to develop a shared vision. The draft targets, including indicators, are continuously revised based on the inputs and suggestions of the conservation partners and IPLCs. The first draft of national targets aligning with the Annex 1 document of the CBD was prepared on the 20th of July 2024.

11. **Validated provisional national targets:** A national consultative workshop was organized on the 26th of July 2024 to solicit comments and suggestions on the draft national targets. More than 60 people representing diverse groups of stakeholders from government agencies, conservation partners, the finance sector, non-government organizations, and IPLCs participated in the workshops. The stakeholders discussed all the proposed national targets and indicators in six thematic groups, focusing on ecosystem management, species and genetic conservation, biodiversity threats, capacity building, mainstreaming biodiversity, and conservation finance. Based on the comments and suggestions, national targets were further revised, and the final draft was produced. The conservation partners and IPLC organizations further discussed and reviewed the draft document the final document was prepared on the 28th of July 2024.

12. **Submission of Annex 1:** As discussed earlier (see paragraph 5), the CBD requested the Parties to communicate national targets, to submit through the online reporting tool (<https://ort.cbd.int>) on the Convention's clearinghouse mechanism by the 1st of August 2024. At this date, the MoFE submitted the validated provisional national targets and indicators in the Annex 1 document for Nepal, through the reporting tool.¹⁵

13. **Draft biodiversity vision and national targets:** After recruiting thematic experts, the NBSAP Secretariat organized round-table meetings to discuss the national targets and priority indicators to monitor the performance of NBSAP with the specialists. The experts revised the national targets and indicators in consultations with various stakeholders, conservation partners, and subject matter specialists. During this period, the experts conducted bilateral and round table meetings, as well as desk reviews of secondary sources of information. Consultations were also carried out with the IPLCs group on the preliminary biodiversity vision and national targets. The initial national vision and action targets were drafted on the 10th of January 2025.

14. **Final draft biodiversity vision and national targets:** Following this, 30 sub-national consultative workshops were organized in all seven provinces, ensuring representation of the physiographic regions and the protected areas systems. For each workshop, the participants were divided into three working groups, where they discussed different issues and challenges related to biodiversity conservation in Nepal. These workshops were instrumental in validating the national vision and targets and enabled the identification of best practices and challenges in the conservation endeavor. Seven provincial-level workshops were also conducted under the leadership of the forest directorate, representing all province-level stakeholders. These workshops enabled the identification of key biodiversity issues at the provincial level and suggested different means and ways for improving coordination on biodiversity conservation at all levels of governance. Following the completion of the field-level consultations, a half-day workshop was organized with the experts to share the findings. The national vision and targets were revised based on the field findings and stakeholders' voices and submitted to the Environment and Biodiversity Division on the 15th of April 2025.

15. **Biodiversity vision and national targets:** The draft national vision will be discussed with the conservation partners, in the IPLC subcommittee, technical committee, and steering committee, and comments and suggestions will be solicited. The proposed targets and indicators will be further revised and finalized based on the committee's feedback and will be finalized accordingly. The final vision document of the NBSAP will be endorsed by the 30th of May 2025.

¹⁵ <https://ort.cbd.int/national-targets?countries=np>



1.3 Guiding Principles for Setting the National Vision

16. The draft biodiversity vision and national targets fully comply with the four KMGBF goals and 23 action targets. Furthermore, these targets are in line with our national priority and commitments to conserve, restore, and sustainably manage biodiversity to halt and reverse biodiversity losses. The guiding principles for setting national targets include:

17. **Adapting the Monitoring framework of the KMGBF (Decision 16/32) to the national context:** In decision 16/32,¹⁶ the Conference of Parties adopted some mechanisms for planning, monitoring, reporting and review, including the global review of collective progress in the implementation of the KMGBF to be conducted at the CoP's seventeenth and nineteenth meetings. Parties can use three categories of indicators for planning and tracking progress, which include:

- **Headline indicators:** a minimum set of mandatory high-level indicators that capture the main elements of each goal and target of the Framework. This also includes binary indicators that use question-based reporting to measure progress.
- **Component indicators** are not mandatory and cover some key components and targets of the KMGBF, which are not well captured by the headline indicators
- **Complementary indicators** are not mandatory and provide a resource of available indicators that could be used to track specific aspects of the goals and targets.
- Each Party to the CBD will report on the above indicators, primarily the headline ones. This will serve as the basis for global analysis and inform the Conference of the Parties when it reviews progress towards implementing the KMGBF. To fulfill this requirement, all headline and binary indicators in the Monitoring Framework for the KMGBF (decision 16/32) are included in this NBSAP. Some of the complementary and component indicators of the KMGBF, subject to the availability of the data at the national level, are also included to translate national actions and priorities.

18. **Integrating national priorities and commitments:** The proposed mission 2030 and seven strategies fully align with the 2050 vision for Nepal's biodiversity: "Biodiversity for resilience and prosperity". The national targets are proposed to address the underlying drivers of biodiversity loss in the country, such as control of encroachment and habitat fragmentation, or to address emerging issues related to biodiversity conservation, such as human-wildlife conflicts. The document is further focused on strengthening pathways towards green, resilient, and inclusive economic development, as well as the wise use of biodiversity resources for human well-being and prosperity, through innovative mechanisms such as nature-related disclosure, or access and benefit sharing.

19. The targets and indicators were built on the national periodic plans (Sixteenth Plan), which include biodiversity conservation, green economic development, and addressing the climate impacts as one of the country's priorities. In addition to this, sectoral policies such as the Agrobiodiversity Policy, 2014; Forest Policy, 2019; Forest Sector Strategy and Action Plan, 2016; Water Resource Policy, 2020; Wetland Policy, 2012; and Rangeland Policy, 2012; Agriculture Development Strategy (2015-2035), International Treaty on Plant Genetic Resources for Food and Agriculture and Multilateral System (ITPGRFA-MLS) Implementation Strategy and Action Plan (IMISAP 2018-2025), were also reviewed to align targets and include indicators. Furthermore, this NBSAP also takes into consideration targets and indicators proposed in the policies, plans, and programs of different sectoral agencies working directly or indirectly on the biodiversity sector within the federal and provincial ministries, such as the MoFE, Ministry of Agriculture and Livestock Development (MoALD), Ministry of Energy, Irrigation and Water Resources (MoEWRI). Integrating the national priority indicators in the NBSAP indeed also enables for cost-effective periodic reporting. The Office of the Auditor General, Economic Survey, and National Census on Agriculture report also informed the target setting process, especially in selecting the best proxy indicators for reporting achievements or success when data is scarce.

¹⁶ <https://www.cbd.int/doc/c/1e13/f20d/81cd8447744640bbd21e008f/cop-16-l-26-rev1-en.pdf>

20. **Respecting rights and recognizing knowledge of IPLCs:**¹⁷ The NBSAP adopts a human rights-based approach, which focuses on respecting, protecting, promoting, and fulfilling human rights, recognizing right-holders rights, and addressing issues of inequity and justice. It aims to ensure meaningful and effective participation, recognize the contribution of IPLCs' knowledge, promote inclusive decision-making and the fair and equitable sharing of benefits, and prohibit conservation measures that forcibly displace IPLCs. The guiding principle of environmental justice will be uncompromised on: promoting justice and accountability, respecting, protecting, and fulfilling environmental rights, and promoting the environmental rule of law.¹⁸ In this regard, targets and indicators are proposed to safeguard the rights of IPLCs, especially focusing on no more displacement from their land or rights to access resources or establishing a mechanism for their active engagement in the processes for meaningful participation along with equitable sharing of benefits arising from the management of biodiversity, including recognition of their knowledge.

21. **Adopting a "whole of the government and whole of the society" approach:** The target-setting processes adopted a whole of the government and whole of the society approach, aiming to involve and facilitate the engagement of all sectors at all levels of government, as well as all stakeholders including IPLCs, women, youth, the private sector, conservation partners and the civil society. This aimed to ensure that targets, actions, and expected outcomes were coordinated, that the concerns of different actors were addressed and that ownership and commitment towards implementation were secured. The approach also considers and recognizes different value systems in the NBSAP processes (government, IPLCs).

22. **Learning from the earlier NBSAP (2014-2020), especially on monitoring, reporting and knowledge management:** The review of the monitoring framework and indicators of the earlier NBSAP (2014-2020) revealed that indicators were largely appropriate and relevant for monitoring performance; however, indicators were poorly defined, targets had poor alignment with the Aichi targets, thus posing challenges for monitoring and reporting progress to the CBD. Furthermore, collecting data and reporting progress is difficult since the policy itself was a target, with little integration of biodiversity considerations elsewhere. Given this, attempts have been made to define national targets fully aligned with the KMGBF while prioritizing Nepal's commitments and challenges. Indicators for each target were chosen considering data availability, with a priority for indicators already included in the progress reports of sectoral agencies or national reports such as economic surveys, reports of the National Statistics Office, or Constitutional bodies, such as the Office of the Auditor General.

23. **Promoting synergetic and collective action with multi-lateral environment agreements (MEA):** The NBSAP will promote synergies with conventions to which Nepal is a Party, such as the United Nations Framework Convention on Climate Change (UNFCCC), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on Wetlands of International Importance (RAMSAR), United Nations Convention to Combat Desertification (UNCCD), Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade to maximize efficiency and coherence. It will further ensure complementarities with other relevant international processes, especially with the Sustainable Development Goals (SDGs), for example tackling sustainable consumption, life on land, and climate adaptation.

¹⁷ IPLCs include people belonging to Indigenous nationalities as per the National Foundation for Development of Indigenous Nationalities Act, 2002 or local communities, women, youth and marginalized people who directly or indirectly depend on nature or biodiversity resources for their livelihoods or are influenced by decisions related to resource governance. This includes individuals, traditional institutions, organizations, and federations from IPLC groups that are involved in advocacy for the rights of IPLCs, especially about biodiversity. It also includes Dalits, Ethnic minority castes, Women, Youth, Girls, Children, and People with disability, including their intersections, who have a stake in biodiversity.

¹⁸ UNDP. (2021). Environmental Justice: Securing our right to a clean, healthy, and sustainable environment. UNDP

2. BIODIVERSITY VISION 2050 AND STRATEGIC OBJECTIVES FOR 2030

Nepal's Biodiversity Strategy and Action Plan (NBSAP) 2025-2030 is an umbrella strategy and a strategic framework that guides biodiversity conservation in the country, aiming to contribute to achieving all three goals of the CBD, i.e. the conservation of biological diversity, the sustainable use of the components of biological diversity, and the fair and equitable sharing of the benefits arising from the utilization of genetic resources, all while strengthening biodiversity inclusiveness and responsiveness in the sectoral, economic and development policies at all levels of the government. The NBSAP has set a 2050 vision, a 2030 mission, and seven strategic objectives strengthening the country's conservation endeavor, to address all biodiversity-related issues. They align with the Kunming-Montreal Global Biodiversity Framework's (KMGBF) vision, four goals, and 23 action targets. The NBSAP also aims to contribute to a nature-positive development and a green, resilient, and inclusive approach, in which biodiversity loss is avoided and biodiversity is mainstreamed across sectors, all while respecting the rights of the people. The NBSAP's overarching vision, objective, and guiding principles are mainly consistent with other international environmental commitments and development goals, such as the Sustainable Development Goals (SDGs) and national development plans and sectoral policies.

2.1 Vision 2050

24. This NBSAP's Vision for 2050 highlights conservation and sustainable use of the country's biodiversity, ensuring its long term health and resilience to climate, social, economic, and environmental changes. It also emphasizes biodiversity's role in supporting livelihoods and economic development, ensuring the associated benefits are shared equitably, as well as a nature-positive development and human well-being.

Vision 2050: Biodiversity for resilience and prosperity

Nepal's biodiversity is conserved and sustainably managed, for healthy and resilient ecosystems, that contribute to nature-positive development and human well-being¹⁹

This vision is aligned with:

- i. The previous NBSAP's Vision for 2050: "Conservation of biodiversity for sound and resilient ecosystems and national prosperity." The present NBSAP's vision remains consistent with the earlier NBSAP, which focused on managing biodiversity for resilience and prosperity with an emphasis on equitable development, maintaining healthy ecosystems, and contributing to a nature-positive development. Nevertheless, as detailed hereunder, it has been expanded to align closely with the changed national and international context.
- ii. Nepal's national policies and targets, that include its Constitution, the long-term vision of "Prosperous Nepal, Happy Nepali" formulated in its successive development plans, and its objective

¹⁹As defined by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES):

- *Biodiversity* refers to the variability among living organisms, ecosystems and ecological complexes of which they are a part. It includes variation in attributes and changes in abundance and distribution over time and space within and among species, biological communities and ecosystems.
- *Sustainably managed* refers to the use of natural resources to meet human needs, while ensuring their long term productive potential and the maintenance of their environmental functions.
- *Healthy ecosystem* refers to an ecosystem that expresses attributes of biodiversity within normal ranges, relative to its ecological stage of development.
- *Resilient ecosystem* refers to the ecosystem's ability to adapt, withstand and respond to disturbances, recover rapidly from their impacts and continue to develop.
- *Well-being* refers to a perspective that comprises access to basic materials, freedom and choice, health and physical well-being, social relations, security, peace of mind, spiritual experience. Well-being implies equitable development, which refers to a development process that ensures fair access to opportunities, resources, and decision-making for all individuals and communities, particularly those that have been historically marginalized or disadvantaged.

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

to graduate from the Least Developed Country status by 2026, achieve the Sustainable Development Goals by 2030, and become a middle-income country.

- iii. The KMGBF's vision: "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people".

2.2 Mission 2030

25. Collective action plays a crucial role in achieving the national vision. The priority will be to engage all sectors, all levels of government and stakeholders (especially IPLCs, women, and youth) in the conservation, management, and restoration of Nepal's biodiversity. The emphasis will be on green and resilient development contributing to no net loss of biodiversity, and its recovery.

Mission 2030: "Collectivism for sustainable biodiversity management and green economy"²⁰

To guide and coordinate collective efforts across all sectors, levels of government, and stakeholders to conserve, restore, and sustainably manage Nepal's biodiversity and contribute to green, resilient, and inclusive development (GRID)²¹

26. The mission is aligned with:

- i. All three CBD objectives: Conservation, Sustainable use, and Equitable benefit sharing with an emphasis on safeguarding the rights of Indigenous peoples and local communities (IPLCs), women, youth, as well as their intersections
- ii. The KMGBF's mission for 2030 to: "take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet by conserving and sustainably using biodiversity and by ensuring the fair and equitable sharing of benefits from the use of genetic resources, while providing the necessary means of implementation".
- iii. The 2030 mission is fully nested within the vision of Nepal's Sixteenth periodic development plan of "Good Governance, Social Justice and Prosperity", by supporting one of the major transformative areas of the plan which focuses on biodiversity conservation, climate change, and green economy.
- iv. Nepal's policies on wetlands, rangelands, agrobiodiversity, and forests including the 16th Plan, Nationally Determined Contribution, Land Degradation Neutrality Targets, National Adaptation Plan, Agriculture Development Strategy, and other specific policies.

2.3 Theory of Change

27. Nepal's biodiversity is highly diverse and is critical for local livelihoods, economic development and cultural identity. Yet, it faces pressures, and its conservation is challenged by financial and institutional factors, which the NBSAP's Vision and Mission aim to address. Key challenges to biodiversity conservation in Nepal are:

- Direct pressures such as habitat loss and fragmentation, invasive alien species, physical infrastructure development, pollution, or climate change threaten Nepal's landscapes, ecosystems, species, and genetic diversity.
- An unsustainable use of biodiversity and natural resources (e.g. forests, domestic and wild plant and animal species) specifically threatens the resilience and long-term health of ecosystems, on which many livelihoods (especially those of IPLCs) depend.

²⁰ According to the United Nations Environment Programme, Green economy development is "improving human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It focuses on reducing carbon emissions and pollution, enhancing energy and resource efficiency, and preventing the loss of biodiversity and ecosystem services while being socially inclusive."

²¹ The Green, Resilient, and Inclusive Development (GRID) approach departs from previous development strategies and promotes an economic growth that goes hand in hand with environmental goals and inclusion



- Limited mainstreaming and integration of biodiversity across national and subnational development and sectoral policies prevents them from addressing some root causes of biodiversity loss related to sectoral activities (e.g., industry, tourism, infrastructure).
- Institutions addressing biodiversity-related issues are fragmented and have capacity and governance gaps,²² therefore a limited efficiency in implementing biodiversity policies.
- Limited coordination of relevant stakeholders across sectors and tiers of government challenges the implementation of integrated approaches.
- Current financial resources allocated to support long-term biodiversity conservation and policies do not match the estimated needs, and perverse incentives persist.
- Biodiversity policies and conservation actions insufficiently address indigenous peoples' and local communities' traditional rights, recognize and integrate their knowledge, and ensure equitable participation (procedural justice) and benefit-sharing (distributional justice).

28. The theory of change is based on the premise that if the country aims to achieve its vision of a "Prosperous Nepal, Happy Nepali", biodiversity should be restored, conserved, and managed sustainably, thereby enhancing its contribution to building resilience, green economy and human well-being. The NBSAP's vision of "Biodiversity for resilience and prosperity" is thus in line with the national vision. It would further contribute to the social and economic transformation and accelerate Nepal's efforts to graduate from a least developed to a developing country. The NBSAP's vision, mission, seven challenges, and seven associated strategic objectives outline its theory of change, which is visualized in Figure 2.1. The NBSAP envisions the protection and restoration of the country's biodiversity, for example through conservation measures, but also by integrating all related issues into national and sectoral development priorities, strengthening institutions and cooperation, and enhancing financing opportunities and economic incentives.

29. This NBSAP is aligned with the KMGBF, which recognizes that "urgent policy action is required globally, regionally and nationally to achieve sustainable development, so that the drivers of undesirable change that have exacerbated biodiversity loss will be reduced and/or reversed to allow for the recovery of all ecosystems and to achieve the Convention's Vision of living in harmony with nature by 2050."

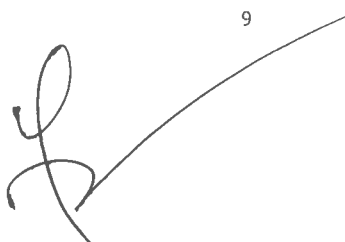
30. The key assumptions behind this theory of change are political stability over time and at all levels of government, as well as continued commitment and willingness to protect and sustainably manage the country's biodiversity from governments, communities, and relevant stakeholders. Political changes and economic pressures are risks that might delay or prevent the country from getting results, which also rely on sufficient and secure funding, effective coordination, and availability of reliable data (all integral parts of the strategy and embedded into the strategic objectives). Achieving the theory of change finally relies on a robust monitoring and evaluation system.

2.4 Strategic Objectives

31. Seven strategic objectives have been identified to address each of the seven identified challenges and realize the NBSAP's vision and mission. They provide a strategic framework for the conservation and sustainable use of biodiversity that supports equitable development and the well-being of communities by devising associated strategies. The objectives are strongly interlinked, in that each one reinforces the others. For example, strong institutions and financing are crucial for effective conservation and mainstreaming, and intersectoral collaboration ensures strong institutions and avoids conflicting mandates. Justice ensures that conservation benefits are distributed equitably. Hence, the NBSAP accords high priority to the ecological, economic, institutional, and social dimensions of biodiversity conservation.

- **Strategic Objective 1 (Conservation):** Protect, conserve and restore biodiversity, addressing the direct threats to biodiversity
- **Strategic Objective 2 (Sustainable use):** Enhance and maintain nature's contributions to people
- **Strategic Objective 3 (Integration):** Integrate biodiversity considerations across all sectors and levels of government

²² As defined by the IPBES, *governance* refers to the way the rules, norms and actions in each organization are structured, sustained, and regulated.



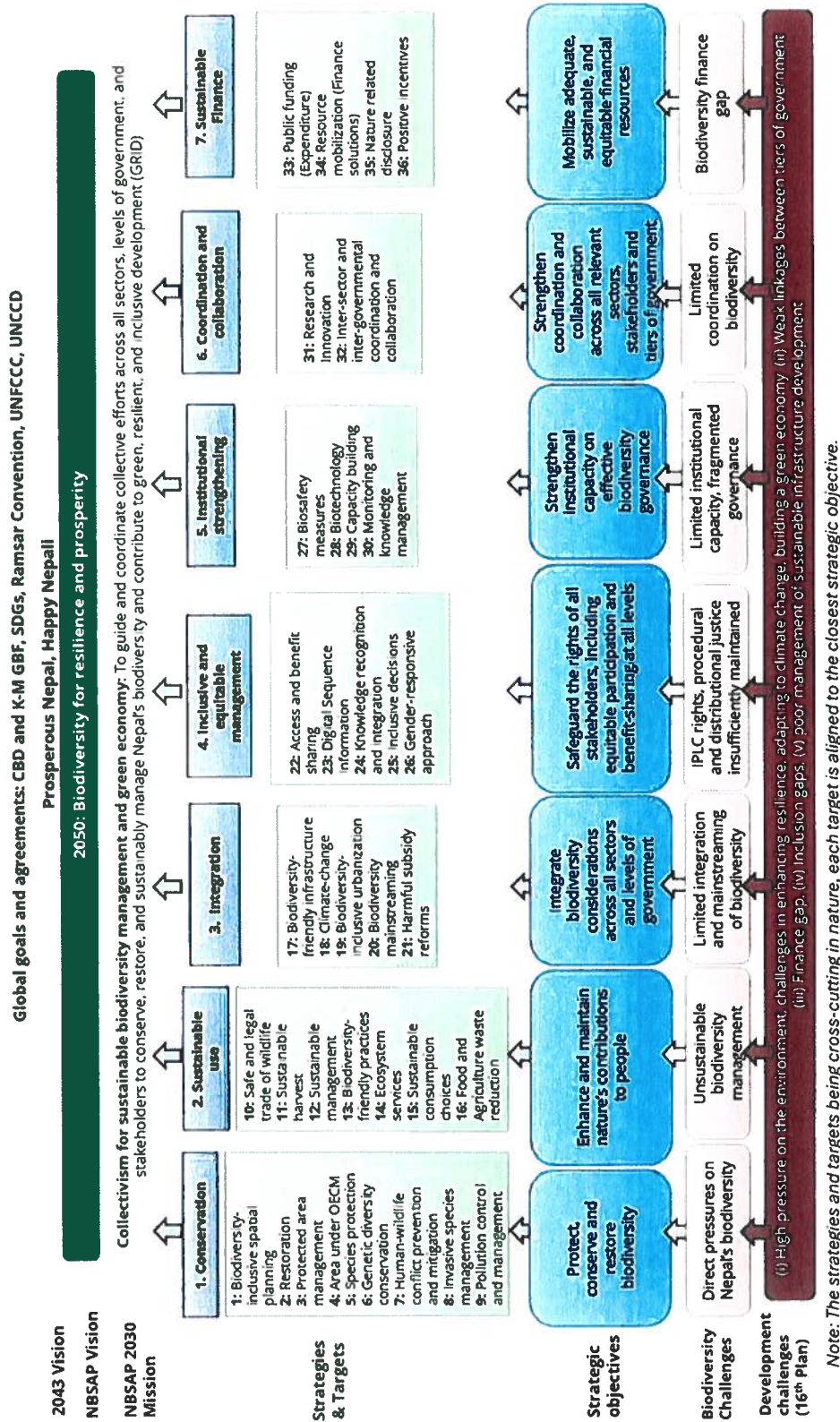
Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

- **Strategic Objective 4 (Inclusive and equitable management):** Safeguard the rights of all stakeholders, particularly IPLCs, women, youth, Dalit and other marginalized, minority groups, including equitable participation and benefit-sharing at all levels
- **Strategic Objective 5 (Institutional strengthening):** Strengthen institutional capacity on effective biodiversity governance
- **Strategic Objective 6 (Coordination and Collaboration):** Strengthen coordination and collaboration across all relevant sectors, stakeholders (including the private sector and IPLCs) and tiers of government
- **Strategic Objective 7 (Sustainable finance):** Mobilize adequate, sustainable, and equitable financial resources

32. These strategic objectives are strongly linked to the KMGBF's four goals for 2050: Strategic Objective 1 mainly with the KMGBF's Goal A (Protect and Restore), Strategic Objective 2 with Goal B (Prosper with Nature), Strategic Objective 3 with Goals A and B, Strategic Objective 4 mainly with Goal C (Share Benefits Fairly), and Strategic Objectives 5, 6 and 7 with Goal D (Invest and Collaborate). The correspondence table between the two frameworks is detailed in **Annex 4** of this document.

Figure 2.1: Theory of Change



Strategic Objective 1 (Conservation): *Protect, conserve and restore biodiversity, addressing the direct threats to biodiversity*

33. Nepal's diverse landscapes are home to unique species and ecosystems, on which local livelihoods are highly dependent. Strengthening the coverage of biodiversity-inclusive spatial planning and protection or conservation measures will help to address the drivers of biodiversity loss and emerging issues and challenges. In addition, efforts to restore degraded lands and specific attention to the country's endangered species will improve their resilience to environmental changes. Both these approaches can help maintain the ecological integrity and resilience of the country's biodiversity, which will continue to provide important ecosystem services for Nepal's population, securing local livelihoods and development.

Strategic Objective 2 (Sustainable use): *Enhance and maintain nature's contributions to people*

34. Nepal's biodiversity is crucial for its people's livelihood, food and nutrition security, culture, and well-being. Forests, wetlands, grasslands, and agroecosystems provide critical ecosystem services to people. However, unsustainable management of the resources threatens these contributions. On the other hand, sustainable practices can enhance biodiversity's long-term value, maintain the ecosystems' productivity, and secure nature's contributions to people. A community-based, sustainable use of biodiversity will ensure limiting some pressures on ecosystems and habitats, and safeguard livelihoods and well-being.

Strategic Objective 3 (Integration): *Integrate biodiversity considerations across all sectors and levels of government*

35. Biodiversity and development are interdependent, in that all drivers of biodiversity loss are linked to human activities which also highly relies on ecosystem services, particularly in Nepal. Biodiversity must then be addressed not only in environmental policies, but in all other sectoral policies and activities that might impact it. This involves including biodiversity considerations in the policies of sectors such as agriculture, infrastructure, tourism, and urban development, especially focusing on assessing biodiversity losses and ensuring the existence of safeguard measures to avoid them, establishing multi-stakeholder mechanisms for deliberate discussion, and avoiding perverse incentives. Thus, mainstreaming creates a policy environment in which biodiversity conservation is not a standalone goal but a necessary condition for a green, resilient, and inclusive development.

Strategic Objective 4 (Inclusive and equitable management): *Safeguard the rights²³ of all stakeholders,²⁴ particularly of IPLCs, women, youth, Dalit and other marginalized, minority groups, including equitable participation and benefit-sharing at all levels*

36. This NBSAP is committed to a Leave No One Behind approach. This means ensuring that the rights of Indigenous peoples and local communities, women, and all stakeholders that biodiversity policies and planning might specifically impact are recognized and adequately safeguarded while elaborating and implementing the policies. Equitable participation in decision-making processes is an important first step in this endeavor, which strengthens the design and implementation of biodiversity policies. Transparent and fair benefit-sharing mechanisms are also key, as they ensure that individuals and communities who provide or steward genetic resources willingly share them and get equitable benefits from their use.

Strategic Objective 5 (Institutional strengthening): *Strengthen institutional capacity on effective biodiversity governance*

37. A robust governance system for biodiversity policymaking would first rely on clear responsibility and mandate definition, accountability, and institutional capacity enhancement at all three levels of government. Capacity-building ensures that technical staff and national and local officials have the tools and knowledge

²³In natural resource governance, Schlager & Ostrom (1992) define a "bundle of rights", which include access (right to enter a resource area), withdrawal (right to extract or harvest resources), management (right to regulate internal use patterns and make improvements), exclusion (right to determine who may access or use the resource), and alienation (right to sell or lease the rights of use or management to others). Each stakeholder holds a combination of one or several of these rights on the resource.

²⁴ Relevant stakeholders identified in this strategy are government agencies with conservation mandates, government agencies impacting or impacted by biodiversity, right-holder groups (including IPLCs, women, youth, minorities), community-based institutions and their federations, political parties, citizens and the general public, the private sector, the media, parliamentarians, conservation partners and right-holder institutions, development partners, scientific communities.



Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

to formulate, implement, and monitor biodiversity policies effectively. Strong and transparent monitoring and evaluation mechanisms and knowledge management mechanisms also ensure evidence-based policymaking, which is one of the guiding principles of this NBSAP. The priority will also be put on technology transfer and innovation in collaboration with developed and other developing countries through joint research. Institutional strengthening would thus provide long-term support for biodiversity initiatives.

Strategic Objective 6 (Coordination and Collaboration): Strengthen coordination and collaboration across all relevant sectors, stakeholders (including the private sector and IPLCs), and tiers of government

38. Mainstreaming biodiversity across sectors, as well as institutional strengthening, require enhanced coordination across government agencies and with various stakeholders, especially IPLCs. Such coordination would improve efficiency in biodiversity conservation, ensure that sectoral activities and policies do not contradict themselves, and develop a shared vision. Collaboration with civil society, private sector stakeholders, and communities is also crucial for keeping economic development and biodiversity targets aligned, reducing resistance to policies, fostering stewardship at the local level, and leveraging resources for biodiversity issues. Fostering dialogue, coordination, and cooperation across stakeholders, levels of government, and sectors is thus essential for an integrated approach to biodiversity.

Strategic Objective 7 (Sustainable finance): Mobilize adequate, sustainable, and equitable financial resources

39. Aligning finance with the NBSAP's Vision and Mission is an essential component for achieving them. First, reforming subsidies and incentives to limit those harmful to biodiversity and increase the positive ones creates necessary economic leverage on relevant stakeholders. Sufficient, reliable funding is also vital for implementing biodiversity measures and requires increased resource mobilization from diversified (international, public, domestic, private) and innovative sources.

2.5 Guiding Principles

40. This NBSAP is based on eight guiding principles presented in Figure 2.2.

Figure 2.2: Key guiding principles of NBSAP



41. They include science-based decision-making, inclusive of traditional knowledge, a whole-of-government and whole-of-society approach (participatory, inclusive, and in line with the federal system and its three tiers of government), the need to mainstream biodiversity issues for a Green Resilient Inclusive Development, and a human rights-based approach that supports sustainable biodiversity management and equitable benefit-sharing. Capacity-building, effective policies, and financing options aligned with the associated needs are also crucial. These guiding principles help to achieve the NBSAP mission. Three principles related to (i) green, inclusive, and resilient development, (ii) human rights-based approaches, and (iii) collectivism are uncompromised on.

Ecosystem and Landscape Approach

42. An ecosystem approach is a strategy that recognizes that humans are an integral part of ecosystems, and that all ecosystem components are interconnected.²⁵ Rather than focusing on specific species or resources, it promotes integrated management and focusing on various associated impacts to ecosystems and society. It supports participatory decision-making and collaborative approaches. As ecosystems are dynamic, strategies within this approach might evolve as new knowledge emerges. The landscape approach shares many similarities with the ecosystem approach, but puts the focus on using the spatial scale, as well as on land uses and their potential competition.²⁶ These two approaches complement each other.

43. This NBSAP recognizes that biodiversity is best conserved using an ecosystem and landscape approach, as it underlines the interconnectedness of species, habitats, and ecological processes. The focus is put on maintaining Nepal's diverse landscapes and ecosystems in a healthy, functioning, connected, and sustainably managed state, by also considering species extinction risks. This approach is, for example, translated into Target 1, which focuses on biodiversity-inclusive spatial planning. Such a principle will ensure that ecological processes are maintained and keep up the contribution of biodiversity and ecosystem services to the population's well-being, livelihood, and development.

Science-Based Decision-Making and Precautionary Principle

44. **Science-based decision-making** is a central approach to international frameworks and institutions, such as the CBD or the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).²⁷ Adopting this approach means using available scientific knowledge and evidence to guide biodiversity governance. The **precautionary principle**, enshrined in global agreements,²⁸ complements it by addressing situations of uncertainty, stating that limited knowledge and lack of fully established evidence and mechanisms should not delay conservation or management measures.

45. Priority-setting, biodiversity policy elaboration and implementation in Nepal shall be informed by the current state of scientific knowledge to ensure robust and relevant strategies. This NBSAP also recognizes traditional knowledge as a valid and complementary form of knowledge. It will therefore integrate traditional knowledge, innovations and practices of indigenous peoples and local communities, recognizing that they play a crucial part in the management of biodiversity. The whole approach makes long-term scientific research, knowledge generation and recognition essential elements of the strategy, as translated in Target 31 on partnerships for technology development and scientific research, or Target 24 on knowledge recognition and integration.

Whole-of-government and whole-of-society approach

46. As highlighted in the CBD and KMGBF, biodiversity policies are led by multiple stakeholders. Using a **whole-of-government and whole-of-society approach** refers to coordinated action across all sectors and

²⁵ Convention on Biological Diversity (CBD). (2004). The Ecosystem Approach (CBD Guidelines). <https://www.cbd.int/doc/publications/ea-text-en.pdf>

²⁶ IPBES (2019). Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. <https://ipbes.net/global-assessment>

²⁷ IPBES (2019). Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services. <https://ipbes.net/global-assessment>

²⁸ United Nations Environment Programme (UNEP). (1992). Rio Declaration on Environment and Development. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf

levels of government, as well as collaboration and engagement of civil society and all relevant stakeholders and rightsholders. It will ensure the involvement and facilitate the engagement of all sectors at all levels of government, as well as all stakeholders, IPLCs, women, youth, the private sector, conservation partners, civil society, to ensure that all stakeholders are not only engaged on the planning but also in the implementation and monitoring of the NBSAP. Likewise, it also considers and recognizes the different value systems in the NBSAP processes (government, Indigenous peoples).

47. The success of this NBSAP's implementation depends on political will and recognition at the highest level of government, but it also relies on technical capacity and full and effective participation from all tiers of government and societal actors such as IPLCs, rights-holders, women, youth, the private sector, academics, and conservation partners. It is thus key to foster shared ownership of biodiversity targets. This NBSAP will ensure transparent, inclusive, and participatory approaches in its implementation, but also in its targets, so that human rights are respected, and biodiversity becomes a business for all, leaving no one behind (see, for example, Target 25 on inclusive decisions).

Harmonizing with federalism

48. The Constitution of Nepal²⁹ indicates authority on biodiversity management at all levels of government: local, provincial, and federal. Accordingly, many institutions and committees already exist at these levels, on which this NBSAP will build its strategy and implementation. This NBSAP thus aims at establishing mechanisms of cooperation, coordination, and collective action across all tiers of government to ensure that the Constitutional provisions are respected. Provincial roadmaps and monitoring frameworks should also flow from the national NBSAP, setting targets and monitoring progress on national indicators at the province level. At the local level, guidelines on mainstreaming, IPLCs' rights, and screening tools can be provided to facilitate the implementation of the NBSAP. An overall goal, as translated for example in Target 29 on capacity building, is to strengthen decentralized governance structures, including provincial and local governments, for more equitable and transparent decision-making.

Green, Resilient, Inclusive Development approach

49. **Green, Resilient, and Inclusive Development (GRID)**³⁰ is a framework that integrates environmental sustainability, social equity, and economic resilience. "Green" refers to low-emissions, nature-positive development, "resilient" refers to the adaptive capacity to economic, societal, and environmental changes, and "inclusive" refers to equitably sharing the benefits of development.

50. This NBSAP recognizes that biodiversity is not just relevant to environmental agencies but a cross-cutting issue, which is an important base for Nepal's development and the population's well-being and livelihoods. On the one hand, it should be integrated into sectoral policies and ministries' agendas with inter-ministerial coordination to ensure development policies are aligned with biodiversity targets, as proposed in the strategic objective on mainstreaming and the associated Target 20. On the other hand, this will ensure that national and local development is not compromised while implementing biodiversity policies. This NBSAP is thus in line with Nepal's broader development strategies such as the 16th plan, as well as international and regional agreements and conventions to which the country is a Party (such as the CBD and its three objectives, SDGs, UNFCCC, UNCCD, Ramsar convention, CITES, the Cartagena Protocol on Biosafety and the Nagoya Protocol on Access and Benefit Sharing, transboundary cooperation on conservation with India and China). It is more specifically aligned with the KMGBF, its vision and principles, but also its monitoring framework.

Adaptive management and monitoring

51. **Adaptive management** refers to a flexible decision-making process that progressively adjusts to uncertainties, outcomes, and changes in the global context. It is particularly relevant for biodiversity as ecosystem and landscape approaches put the focus on complex and evolutive systems. Some of its key

²⁹ Government of Nepal (2015). Constitution of Nepal. https://ag.gov.np/files/Constitution-of-Nepal_2072_Eng_www.molpa.gov_npDate-72_11_16.pdf

³⁰ World Bank (2021). Green, Resilient, and Inclusive Development: A World Bank Group Approach Paper. <https://www.worldbank.org/en/news/infographic/2021/06/02/green-resilient-and-inclusive-development-grid>

components are thus the feedback between knowledge creation and biodiversity governance, and a robust monitoring framework.³¹

52. In the event of new data, changing local conditions, or emerging threats (invasive species, shifting climatic patterns), all management strategies and targets proposed by this NBSAP shall be adjusted in response. The regular monitoring and evaluation proposed in this NBSAP, where all targets have intermediate milestones, but also more specifically in Target 30 about monitoring and knowledge management, and in the KMGBF is thus an important component for Nepal's biodiversity policymaking.

Human rights-based approach and environmental justice

53. **Human rights and environmental justice** are key principles in sustainable development and biodiversity governance. They state that people have a right to a sound environment and to be fairly engaged in decisions that might affect them. They also have a right to equitable access to natural resources, as well as the benefits associated with their use, as mentioned in the Nagoya Protocol under the CBD.³² These principles are fundamental in safeguarding the rights and knowledge of Indigenous Peoples and local communities.

54. The CBD and KMGBF emphasize meaningful participation by IPLCs in the National Biodiversity Strategy and Action Plan processes. This NBSAP recognizes that biodiversity policies should adopt a human rights-based approach, which respects, protects, promotes, and fulfills human rights, recognizes rightsholders' rights, and addresses issues of inequity and justice. The NBSAP thus includes provisions on meaningful and effective participation at several levels, for example in its Target 25 on inclusive decisions, upholding the rights of all relevant right-holders, as well as the fair and equitable sharing of benefits associated with biodiversity, for example in its Target 22 on access and benefit sharing. The guiding principle of environmental justice will be uncompromised on, i.e., promoting justice and accountability, recognizing, respecting, protecting, and fulfilling ecological rights, and promoting the environmental rule of law.

Promoting synergies and collective action with multi-lateral environmental agreements (MEA) and national priorities

55. The NBSAP will promote synergies and collective actions with the multi-lateral environmental agreements to which Nepal is a party, such as the United Nations Framework Convention on Climate Change (UNFCCC), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on Wetlands of International Importance (RAMSAR), United Nations Convention to Combat Desertification (UNCCD), Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade to maximize efficiency and coherence. It will further ensure complementarities with other relevant international processes, especially with the Sustainable Development Goals, related to sustainable consumption, life on land, and climate adaptation.

56. Targets and indicators were built on the national periodic plans (Sixteenth Plan), which includes biodiversity conservation, green economic development, and addressing the climate impacts as one of the country's priorities. In addition to this, sectoral policies such as the Agrobiodiversity Policy, 2014; Forest Policy, 2019; Forest Sector Strategy, 2016; Water Resource Policy, 2020; Wetland Policy, 2012; and Rangeland Policy, 2012; Agriculture Development Strategy (2015-2035), were also reviewed to align targets or include indicators. Furthermore, it also takes into consideration targets and indicators proposed in the policies, plans, and programs of different sectoral agencies working directly or indirectly on the biodiversity sector within the federal and provincial government ministries, such as MoFE, MoALD, MoEWRI. Integrating the national priority indicators in the NBSAP indeed enables cost-effective periodic reporting.

2.6 Strategies

57. This NBSAP proposes 36 strategies that will be implemented simultaneously. Each strategy supports achieving its related strategic objective. Figure 2.1 presents strategies for each strategic objective.

³¹ Williams, B. K., & Brown, E. D. (2014). Adaptive Management: From More Talk to Real Action. *Environmental Management*, 53(2), 465-479. <https://doi.org/10.1007/s00267-013-0205-7>

³² Convention on Biological Diversity (CBD). (2011). Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization. <https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>

2.6.1 Conservation

58. The strategy related to conservation includes:

- Bring terrestrial and aquatic ecosystems under participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes while respecting the rights of IPLCs
- Restore degraded terrestrial and aquatic ecosystems effectively while integrating traditional knowledge and practices of IPLCs
- Ensure and enable ecologically representative, inclusive, equitably governed, and effectively managed protected areas
- Conserve and manage areas of particular importance for biodiversity, ecosystem functions, and services through community-based management, forest conservation areas, biological corridors, conservation landscapes, and other effective area-based conservation measures (OECM) in terrestrial and aquatic ecosystems while recognizing and respecting the rights and practices of the IPLCs
- Reduce the risk of human-induced extinction of known threatened species
- Maintain and restore the genetic diversity of native, wild, and domesticated species
- Manage human-wildlife interactions effectively to address human-wildlife conflict for co-existence
- Reduce the introduction and establishment of known invasive alien species, along with preventing and managing pathways of introduction
- Reduce impacts of pollution from all sources, especially from plastics, pesticides, wastewater, and nutrients, to levels that are not harmful to biodiversity, ecosystem functions, and services, especially in the areas of high importance for biodiversity and ecosystem services

2.6.2 Sustainable use

59. The strategy related to sustainable management includes:

- Ensure that the use, harvesting, and trade of wild species are sustainable, safe, and legal while respecting and protecting the customary sustainable use of IPLCs
- Manage, harvest, and use wild species sustainably while recognizing customary sustainable use practices of IPLCs
- Manage areas sustainably under forestry, agriculture, grasslands, wetlands and watersheds
- Encourage and promote biodiversity-friendly practices in forestry, agriculture, grassland, and wetlands
- Maintain and enhance nature's contributions to people, including ecosystem functions and services
- Develop a supportive, legal or regulatory framework to encourage people to sustainable consumption, including sensitization and education
- Reduce food and agriculture waste

2.6.3 Integration

60. The strategy related to mainstreaming includes:

- Integrate biodiversity considerations into infrastructure development (linear infrastructures), especially in biological corridors/biodiversity-rich areas
- Minimize the Impacts of Climate Change on Biodiversity and Build Resilience
- Mainstream biodiversity considerations in urban and densely populated areas, including biodiversity-inclusive planning
- Initiate policy and administrative measures to reform subsidies and incentives harmful to biodiversity in a fair, effective, and equitable way
- Integrate biodiversity and its values into economic and development processes (policy, plan, and program) across all sectors and all levels of government

2.6.4 Inclusive and equitable management

61. The strategy related to inclusive and equitable management includes:

- Develop effective legal, policy, administrative, and capacity-building measures at all levels to ensure the fair and equitable sharing of benefits from the utilization of genetic resources and associated traditional knowledge

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

- Develop effective legal, policy, administrative, and capacity-building measures at all levels to ensure the fair and equitable sharing of benefits from digital sequence information on genetic resources in accordance with applicable international access and benefit sharing instruments
- Integrate knowledge, innovations, and practices of IPLCs in the management of biodiversity and ecosystems with their free, prior and informed consent
- Ensure the full, equitable, inclusive, effective, and gender-responsive representation and participation in decision-making of IPLCs, Dalits, women and girls, children and youth, persons with disabilities, and other marginalized, minority groups while respecting their cultures and rights over lands, traditional territories, resources, and traditional knowledge, innovations and practices, and protecting environmental human rights defenders
- Ensure a Gender-Responsive Approach in biodiversity actions for women and girls to ensure full, equitable, meaningful, and informed participation and leadership at all levels of action

2.6.5 Institutional strengthening

62. The strategies related to institutional strengthening include

- Take policy, legal, and other precautionary measures to strengthen biosafety measures as set out in Article 8(g) of the CBD
- Strengthen capacity in risk assessment, handling, management, and distribution of benefits from biotechnology equitably as set out in Article 19 of the CBD
- Enhance capacity for biodiversity conservation and management at all levels and sectors
- Strengthen monitoring and knowledge management at all levels and sectors

2.6.6 Collaboration and coordination

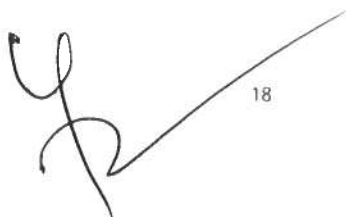
63. The strategies related to collaboration and coordination include

- Foster transboundary collaboration and cooperation on joint scientific research, technical cooperation, and technological innovation, including dissemination and use
- Establish institutional arrangements at all levels of government for inter-sectoral and intra-government communication, coordination, and collaboration for biodiversity management

2.6.7 Sustainable Finance

64. The strategies related to sustainable finance include

- Mobilize finance/expenditure from government, non-government, and international agencies
- Mobilize finance from innovative and sustainable financing solutions
- Take legal, administrative, or policy measures to encourage and enable businesses (industry, especially multinational companies) and the finance sector to assess, disclose, and reduce biodiversity-related risks and negative impacts
- Increase positive incentives (taxes, fees, tradable permits, subsidies, charges, PES, offsets schemes) for biodiversity conservation and sustainable use



3. ACTION TARGETS 2030 AND PERFORMANCE INDICATORS

Building on the seven strategic objectives and strategies, this section presents 36 action targets to be achieved by 2030, that emanate from and complement the 23 global targets (see Annex 4). These action targets are proposed considering the underlying drivers of biodiversity threats, national priorities, and international commitments. In addition, several monitoring indicators are proposed to align with the KMGBF and national priorities and circumstances. These action targets and indicators were revised based on the findings from field-level consultations at the sub-national and national levels, aiming to develop a shared vision for biodiversity conservation in Nepal. All the biodiversity themes (wetlands, rangeland, agrobiodiversity, forest biodiversity, protected area biodiversity, mountain biodiversity and cross-cutting areas) of the earlier NBSAP are integrated within the 36 action targets (as relevant), where sub-indicators are separately defined, with the aim to strengthen and mainstream biodiversity consideration in the policies, plans and programs of the social, economic and development sector.

3.1 Introduction

3.1.1 Action targets

65. To make the NBSAP more result-oriented, 36 action targets are proposed, aligning with the seven strategic objectives. Table 3.1 presents the number of action targets by strategic objective, and **Annex 4** the correspondence between the NBSAP's targets and the KMGBF targets.

Table 3.1: National Strategic Objectives and Targets

Strategic objectives	Number of action targets
1. Conservation: Protect, conserve and restore biodiversity, addressing the direct threats to biodiversity	9
2. Sustainable use: Enhance and maintain nature's contributions to people	7
3. Integration: Integrate biodiversity considerations across all sectors and levels of government	5
4. Inclusive and equitable management: Safeguard the rights of all stakeholders, particularly IPLCs, women, youth, Dalit and other marginalized, minority groups including equitable participation and benefit-sharing at all levels	5
5. Institutional strengthening: Strengthen the institutional capacity on effective biodiversity governance	4
6. Coordination and Collaboration: Strengthen collaboration and coordination across all relevant sectors, stakeholders, and tiers of government	2
7. Sustainable finance: Mobilize adequate, sustainable, and equitable financial resources	4
Total	36

3.1.2 Indicators

66. Indicators for each action target were proposed based on sequential screening, shortlisting, assessing, and validating processes through desk review, stakeholder consultations, and validations. The indicators proposed were chosen based on their relevance for measuring progress, while considering data availability and stakeholders' needs and aspirations for biodiversity conservation. Sequential steps were followed to select indicators for each action target, which include:

- Selecting Indicators (mapping and shortlisting indicators)
- Categorizing them (headline or national)
- Defining indicators (either based on the KMGBF definition or nationally defined, as applicable)
- Measuring indicators (quantitative and qualitative)

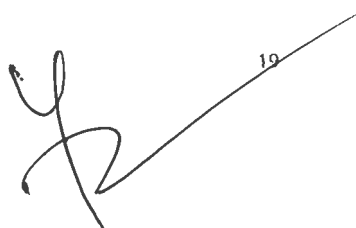
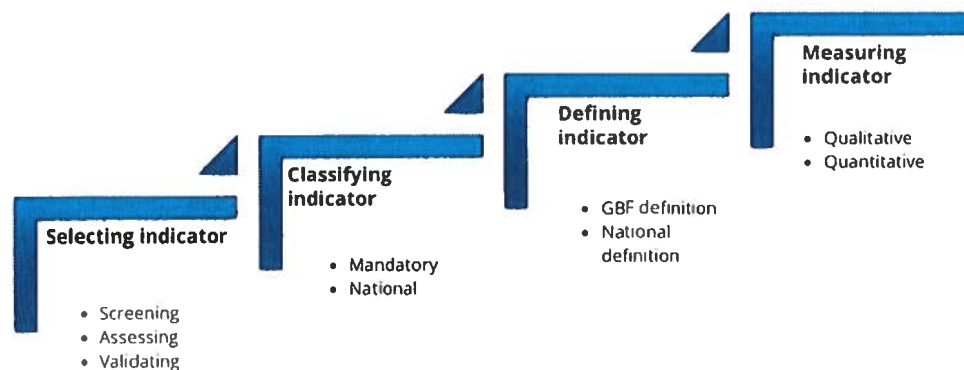


Figure 3.1: Sequential steps followed in defining indicators by target



67. **Selecting Indicators:** The indicators were mainly mapped based on the desk review of the monitoring framework adopted in decisions 15/5 and 16/32 of the CBD CoP. This framework includes headline and binary indicators required for national, regional, and global monitoring, as well as more detailed components and complementary indicators. The KMGBF monitoring framework included three indicator categories: headline, components, and complementary indicators (see para 2). The following methods were adopted in the selection of indicators:

- Headline indicators proposed in the monitoring framework of the KMGBF by each action target are mandatory for all parties to report progress. Hence, all the headlines and binary indicators proposed in the headline or binary targets of **Annex 1** of the CBD 16/32 decision were selected.
- A few components and complementary indicators of KMGBF are included based on their national relevance and information availability.
- A desk review of the periodic plan, sectoral policies, plans, programs, and progress reports of the agencies working in the biodiversity sector or having a custodial role in biodiversity was conducted, aiming to harmonize and integrate the sectoral policies in the NBSAP and thereby promote collective action. These indicators further reflect the existing conservation efforts or national priorities, which complement the achievement of national biodiversity goals and targets.

68. **Classifying indicators:** There are two categories of indicators, which are mandatory and national.

- **Mandatory:** All headlines and binary indicators included in the KMGBF (CBD/16/32) decision are defined as “mandatory” indicators.
- **National:** Other than the headline indicators of the KMGBF, all other indicators, including component and complementary indicators, are classified as national indicators.

69. Based on the desk review, a tentative list of indicators was prepared and further validated with a series of consultative workshops organized with stakeholders in Nepal's biodiversity sector, including IPLCs. In addition, the technical team at the MoFE and Nepal's conservation partners further reviewed and finalized the indicators. Finally, a steering committee endorsed the proposed indicators for result-based planning.

70. **Covering sectors:** Nepal's earlier NBSAP (2014-2020) had grouped strategies into six biodiversity themes: protected areas, forest biodiversity outside protected areas, rangeland biodiversity, wetlands biodiversity, agrobiodiversity, and mountain biodiversity, and 14 cross-cutting themes.³³ However, the relevance of the proposed themes remained a concern due to the poor alignment of sectoral agencies'

³³ MoFE. (2014). National Biodiversity Strategy and Action Plan (2014-2020). Ministry of Forests and Environment, Kathmandu, Nepal

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

programs with the national biodiversity targets and programmatic reforms.³⁴ Likewise, reporting progress to the CBD and measuring results was difficult since the strategy and actions were poorly aligned and mainstreamed within the sectoral agencies' plans and programs. Furthermore, resource allocation among the sectoral ministries is difficult. The integration of the NBSAP was almost non-existent. Hence, all the biodiversity themes of the earlier NBSAP will be integrated within the 36 action targets (as relevant) of this NBSAP, where indicators and strategic actions will be separately defined. For example, spatial planning (Target 1) or restoration (Target 2) will see relevant indicators disaggregated according to at least four dominant land uses, i.e., forests, agricultural lands, wetlands, and grassland/rangelands, where each theme's targets and strategic actions would be defined separately. Hence, a revised NBSAP will focus on the country's seven objectives and 36 action targets to make NBSAP more result-oriented and support preparing the seventh (2026) and the eighth national reports (2029), as per Article 26 of the Convention.

71. Attempts were made to classify the indicators by different sectors (Table 3.2) to ensure representation of the sectors that support conservation or directly or indirectly impact biodiversity conservation. This will provide a whole-of-government and whole-of-society approach in planning and implementing the NBSAP. Likewise, indicators related to gender and social inclusion are included to respect rights and recognize knowledge of the IPLCs, women, youth, including their intersections.

Table 3.2: Sector and area covered by proposed indicators

SN	Areas	Sectors
1	Conservation mandates (biodiversity)	- Forest, Agriculture, Fishery, Wetlands, Grassland - Ecosystems, species or genetic diversity
2	Infrastructure impacting biodiversity, either directly or indirectly	Infrastructure (Energy, Mining, Transport)
3	Economic sector impacting biodiversity	Tourism, business, Finance, Industry
4	Other sectors influencing or influenced by conservation indirectly	- Education, Health, Research, Scientific study - Climate change
5	Gender and socially responsive approach	- Inclusive conservation initiatives' ethos (Protecting rights, recognizing knowledge systems, ensuring representation) - IPLCs, Youth, Women, Persons with Disabilities and other minorities

72. **Measuring Indicator:** Indicators are quantitative, qualitative, or binary variables. While some targets can be reported using quantitative measurements, others need to be reported using qualitative data.

- **Quantitative data:** using indicators derived from measurable continuous data, such as the area under a protected area, the area under spatial planning, etc.
- **Qualitative data:** For outcomes or targets where quantitative measurements would not capture the scope of the target, creating indicators using question-based reporting is a way to measure progress. These indicators are referred to as qualitative data or "binary indicators." Binary indicators also provide a standardized approach to report for primarily action-based targets. They are mostly process-oriented and aim to measure progress.

3.2 Strategic Objective 1: Conservation

73. This aims to protect, conserve, and restore Nepal's biodiversity, while addressing the drivers of biodiversity loss and thereby maintain the country's extent and health of natural ecosystems. The strategy to achieve this objective features nine strategic action targets, which include:

- **Target 1—Biodiversity-inclusive spatial planning:** By 2030, bring all the terrestrial and aquatic ecosystems under participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes while respecting the rights of IPLCs.
- **Target 2 - Restoration:** By 2030, restore 50 % of degraded terrestrial and aquatic ecosystems effectively while integrating traditional knowledge and practices of IPLCs

³⁴ Based on preliminary findings of the desk review and Policy and Institutional Review of the Biodiversity Sector in Nepal carried out by the MoFE as a part for preparing the biodiversity finance plan of the country

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

- **Target 3 - Protected area management:** By 2030, ensure and enable ecologically representative, inclusive, equitably governed, and effectively managed protected areas
- **Target 4 - Area under other effective conservation measures (OECM):** By 2030, conserve and manage 30% of the areas of particular importance for biodiversity, ecosystem functions, and services through forest conservation areas, biological corridors, conservation landscapes, and other effective area based conservation measures (OECM) in terrestrial and aquatic ecosystems while recognizing and respecting the rights and practices of the IPLCs
- **Target 5 - Species protection:** By 2030, reduce the risk of human-induced extinction of known threatened species
- **Target 6 - Genetic diversity conservation:** By 2030, maintain and restore the genetic diversity of native, wild, and domesticated species
- **Target 7 - Human-wildlife conflict prevention and mitigation:** By 2030, manage human-wildlife interactions effectively to address human-wildlife conflict for co-existence
- **Target 8 - Invasive species management:** By 2030, reduce the introduction and establishment of known invasive alien species by 50 %, along with reducing and mitigating impacts of the invasive alien species
- **Target 9 - Pollution control and management:** By 2030, reduce impacts of pollution from all sources, especially from plastics, pesticides, wastewater, and nutrients, to levels that are not harmful to biodiversity, ecosystem functions, and services, especially in the areas of high importance for biodiversity and ecosystem services

74. The following three result indicators will be used to monitor results under this strategic objective (Table 3.3).

Table 3.3. Indicators related to Strategic Objective 1 on conservation

Indicators	Sub-Indicators	Unit
1.A Red List of Ecosystems (<i>Headline A.1</i>)	No	Red list index (0 to 1)
1.B Extent of natural ecosystems (<i>Headline A.2</i>)		%
1.C Red List Index (<i>Headline A.3</i>)		Score (0-1)

3.2.1 Biodiversity inclusive spatial planning

Target 1: By 2030, bring all the terrestrial and aquatic ecosystems under participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes while respecting the rights of IPLCs.

75. *Spatial planning*³⁵ is a process of analyzing and allocating the spatial and temporal distribution of human uses and activities, and is complemented by other *effective management* processes, such as environmental assessments. An *integrated approach* targets intersectoral linkages and relevant sectors, and is *biodiversity-inclusive* when incorporating ecological values, ecosystem services, conservation priorities, and the five main drivers of biodiversity loss identified by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). It is *participatory* when different actors, including IPLCs, are engaged and accounted for during the planning processes.

76. Land-use and land-use change are amongst the most important drivers of biodiversity loss in Nepal.³⁶ Land use change linked with tourism and infrastructure development has caused the degradation of mountainous ecosystems.³⁷ Land conversion due to settlements not only directly disrupts habitats but has also been linked with human-wildlife conflicts in the Tarai region, suggesting that land-use planning is the

³⁵ All definitions are adapted from the CBD guidance on KMGBF targets: <https://www.cbd.int/gbf/targets>

³⁶ MoFE (2020). *Sixth National Report to the Convention on Biological Diversity - Nepal*

³⁷ Xu, J. et al. (2019). Sustaining Biodiversity and Ecosystem Services in the Hindu Kush Himalaya.

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

most effective way to reduce them.³⁸ Integrated and participatory spatial planning is thus crucial to manage land-use-related pressures and other pressures on biodiversity while supporting equitable development. Indeed, it involves identifying and mapping areas of high biodiversity importance. The conservation focus can then be put on these areas while keeping a limited impact on human activities in other areas.

77. This target focuses on (i) managing all areas under biodiversity-inclusive spatial plans (ii) integrating biodiversity inclusive spatial planning, and other effective measures in the sectoral policies, and strategies (iii) involving IPLCs, women, youth, and marginalized communities in biodiversity-inclusive spatial planning and/or effective management. Table 3.4 presents indicators for monitoring progress on biodiversity inclusive spatial planning.

Table 3.4: Indicators related to Target 1 on biodiversity-inclusive spatial planning

Indicator	Sub-Indicators	Unit
1.1 Area covered by biodiversity-inclusive spatial plans (Headline 1.1)	No	%
1.2 Use of participatory, integrated and biodiversity-inclusive spatial planning and/or effective management processes to prevent biodiversity losses or land use changes (Headline 1.b)	No	Rating (No, In process, Partially, Fully)

3.2.2 Restoration

Target 2: By 2030, restore 50 % of degraded terrestrial and aquatic ecosystems effectively while integrating traditional knowledge and practices of IPLCs

78. Degraded ecosystems face a persistent reduced capacity to provide ecosystem services. Restoration refers to the actively planned recovery of a degraded, damaged, or destroyed ecosystem (converting non-natural ecosystems back to a natural state, efforts to increase services and functions of transformed ecosystems), focusing on its *connectivity* and *integrity*. Restoration activities should have adequate resources and a monitoring framework for effective management.

79. Land degradation is one of the major environmental problems that exists in almost every part in Nepal.³⁹ Almost all types of land degradation exist in Nepal, among them soil erosion, landslides and flooding. Some of the reasons contributing to soil erosion in cultivated lands are the non-adoption of proper soil and water conservation measures and inappropriate agricultural practices. Similarly, the loss of vegetation due to deforestation, overharvesting of forest products, unsustainable fuel wood and fodder extraction, shifting cultivation, encroachment into forestland, forest fire and overgrazing are mainly responsible for the degradation of forest lands. As of 2010, the extent of degraded land was estimated at 3.2 million ha in the country.⁴⁰

80. This degradation leads to a decline in biodiversity and ecosystem functions and services that millions of Nepalis rely on and affects the country's resilience and adaptive capacity against natural disasters.⁴¹ Restoring already degraded ecosystems is thus crucial, in addition to addressing the existing pressures on biodiversity and ecosystems. Having long histories of contributing to maintaining resilient ecosystems and landscapes, the traditional knowledge and practices of IPLCs can be critical to ensure that restoration efforts are adapted to the local context, making them relevant, effective and equitable.

81. This target aims to (i) restore degraded areas (including wetlands), (ii) maintain the areas of main land cover types, and (iii) improve the soil organic carbon stock of forest and agricultural soils. Table 3.5 presents indicators for monitoring restoration target. These indicators are adapted from the Land Degradation and Neutrality targets (2018), Agriculture Development Strategy (2015), and Nationally Determined Contribution (2025) of the country.

³⁸ WWF (2008). *Common Ground: Solutions for reducing the human, economic and conservation costs of human wildlife conflict*

³⁹ MoFE (2018). *Final Report of the Land Degradation Neutrality Target Setting Programme in Nepal*

⁴⁰ Government of Nepal (2015). *Agriculture Development Strategy (ADS) 2015 to 2035*

⁴¹ MoFE (2020). *Sixth National Report to the Convention on Biological Diversity – Nepal*

Table 3.5: Indicators related to Target 2 on restoration

Indicator	Sub-Indicators	Unit
2.1 Area under restoration (<i>Headline 2.1</i>)	No	ha
2.2 Country area under different land covers ⁴	Disaggregated in 5 types of land covers: Agriculture, Forests, Wetlands and freshwater ecosystems, Grassland, Others	% of the total land
2.3 Soil organic carbon stock ⁴³	Disaggregated in 2 types of soil: forests, agricultural land	t/ha
2.4 Degraded land area ⁴⁴	No	Million ha
2.5 Wetland Area restored ⁴	No	ha

3.2.3 Protected area management

Target 3: By 2030, ensure and enable ecologically representative, inclusive, equitably governed, and effectively managed protected areas

82. A *protected area* is a geographically defined area, designated, regulated and managed for specific conservation targets (categorized by the IUCN). The protected areas should be (a) *ecologically representative*, i.e. representing the full range of existing ecosystems, ecological processes and regions, (b) *managed effectively* with appropriate objectives and methods, governance systems, resources and monitoring and (c) *governed equitably* by ensuring that relevant actors are fully involved and engaged, that the costs and benefits of such areas are shared equitably, that there is access to justice in conflicting situations, and recognition of the rights and diversity of affected people (especially IPLCs).

83. Nepal's Protected Areas (PAs) network is crucial for the country's biodiversity conservation strategy. Currently, they cover more than 23% of its surface with various ecosystems and landscapes, and include national parks, wildlife reserves, conservation areas, and buffer zones, harboring many wild species of national interest.⁴⁶ However, despite notable successes, the protected areas' management processes are not harmonized and face various challenges related to their governance structures.⁴⁷ Well-governed, effectively and inclusively managed Protected Areas are crucial to protect biodiversity;⁴⁸ strengthening their ecological representativeness, inclusivity, and governance, especially involving IPLCs, is essential to ensure their long-term effectiveness.

84. This target aims to (i) strengthen effective management of protected areas, (ii) involve all relevant rightsholders (including IPLCs) in their management, including safeguarding their rights. Table 3.6 presents indicators for monitoring the management of protected areas. This target is aligned with the Protected Area Management Strategy (2022 - 2030), which focuses on creating climate-resilient ecosystems and self-sustaining protected area management in Nepal by 2030.

⁴² Nationally Determined Contribution (2025)

⁴³ Agriculture Development Strategy (2015)

⁴⁴ Agriculture Development Strategy (2015)

⁴ Nationally Determined Contribution (2025)

⁴ MoFE (2020). *Sixth National Report to the Convention on Biological Diversity – Nepal*

⁴ Gyan P. Nyaupane, Surya Poudel & Abigail York (2020): Governance of protected areas: an institutional analysis of conservation, community livelihood, and tourism outcomes, *Journal of Sustainable Tourism*, DOI: 10.1080/09669582.2020.1858089

⁴ See CBD target 3: <https://www.cbd.int/gbf/targets/3>

Table 3.6: Indicators related to Target 3 on protected area management

Indicator	Sub-indicators	Unit
3.1 Coverage of protected areas (PAs) (<i>Headline 3.1</i>)	Disaggregated in 5 types of protected areas: national park, wildlife reserve, hunting reserve, conservation area and buffer zone	% of the total land
3.2 Revisions of Protected Areas' Management plans based on management effectiveness assessment tools	No	Number
3.3 Administrative mechanisms to safeguard the traditional rights of IPLCs, women, youth or marginalized communities in the management of protected areas/buffer zones	Disaggregated by: Indigenous Peoples, Local Communities, Women, Dalits, Madhesi, Tharu, Muslims, Youth and Children, Other marginalized and minorities	Rating (No, In process, Partially, Fully)

3.2.4 Area under other effective conservation measures (OECM)

Target 4: *By 2030, conserve and manage 30% of the areas of particular importance for biodiversity, ecosystem functions, and services through forest conservation areas, biological corridors, conservation landscapes, and other effective area-based conservation measures (OECM) in terrestrial and aquatic ecosystems while recognizing and respecting the rights and practices of the IPLCs*

85. Areas under other effective conservation measures are areas other than protected areas, governed and managed to achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity. These areas should be governed equitably by ensuring that relevant actors are fully involved and engaged, that the costs and benefits of such areas are shared equitably, that there is access to justice in conflicting situations, and recognition of the rights and diversity of affected people (especially IPLCs). Areas particularly important for biodiversity are the ones which have high importance in ensuring the connectivity of ecosystems or the dispersal of species, cover essential habitats, ecosystems functions and services, and threatened species/biomes.

86. Nepal has accorded high priority to the protection of biodiversity, not just in protected areas but more widely at the scale of ecosystems and landscapes, as shown in this NBSAP using a landscape-based approach. This includes biological corridors to ensure the connectivity between ecosystems and the movement and dispersal of species, but also wetlands and sacred natural sites. All these areas are rich in biodiversity, provide essential ecosystem services to the population, and are sometimes directly managed by IPLCs. Recognizing and supporting other inclusive and flexible conservation models that revolve around sustainable use consistent with the protection of biodiversity, such as OECMs, is thus key to ensure the protection of important biodiversity outside of Protected Areas and would strengthen connectivity for the Protected Areas.

87. This target aims to (i) manage areas under other effective area-based conservation measures, (ii) ensure their effective management, and (iii) involve and safeguard rights of all rightsholders (including IPLCs) in their management. Table 3.7 presents indicators for monitoring area under other effective conservation measures (OECM). This target is aligned with the Protected Area Management Strategy (2022 - 2030), which focuses on managing landscapes and corridors to connect protected areas and other important biodiversity areas.

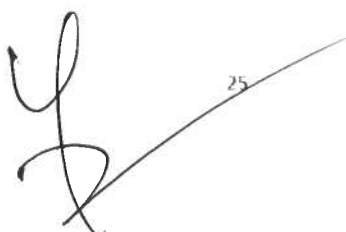
 25

Table 3.7: Indicators related to Target 4 on area under OECM

Indicator	Sub-indicators	Unit
4.1 Area under other effective area-based conservation measures (OECM) (<i>Headline 3.1</i>)	No	% of the total land
4.2. Area under other conservation measures	Disaggregated by: Conservation landscapes, forest conservation area, biological corridor, Ramsar sites	
4.3 Preparation/Revision of Other Area-Based Conservation Measures management plans based on management effectiveness assessment tools	Disaggregated by: Conservation landscapes, forest conservation area, biological corridor, Ramsar sites	Rating (No, In process, Partially, Fully)
4.4 Administrative mechanisms to safeguard the traditional rights of IPLCs, women, youth or marginalized communities in management of OECMs/OABCM	Disaggregated by: Indigenous Peoples, Local Communities, Women, Dalits, Madhesi, Tharu, Muslims, Youth and Children, Other marginalized and Minorities and their intersection	

3.2.5 Species protection

Target 5: By 2030, reduce the risk of human-induced extinction of known threatened species

88. *Known threatened species* are listed in the IUCN's Red List of Threatened Species.⁴⁹ As detailed in Chapter 2, Nepal is home to an important diversity of flora and fauna. However, many of the country's species are threatened. Altogether 2,606 Nepali taxa are listed in the IUCN's Red List, of which 233 are Critically Endangered, Endangered, Vulnerable, and Near Threatened. At the national level, they face pressures from human activities, such as habitat loss due to land use changes, invasive alien species, pollution, climate change, unsustainable use and overexploitation for trade, and human-wildlife conflicts.⁵⁰ Although the population of some species has been increasing in recent years, safeguarding them is essential, as they have ecological, cultural, or economic importance. Management actions focused on the recovery of threatened species include, for example, species reintroductions, recovery actions (e.g., vaccinations, supplementary feeding), and ex-situ conservation.

89. This target aims to (i) maintain and enhance the populations of nationally protected species, (ii) conserve Rare, Endemic, Endangered, and Threatened (REET) wild plant species and other wild plants and (iii) Manage and conserve high-risk local varieties of crops and land races. Table 3.8 presents indicators for monitoring species protection. This target is aligned with the Protected Area Management Strategy (2022–2030), which focuses on protected species following the meta-population approach. It further contributes to achieving the objective of the Agro-biodiversity policy, 2014.

Table 3.8: Indicators related to Target 5 on species protection

Indicator	Sub-indicators	Unit
5.1 Population trend index of nationally protected wild animal species	No	Score (0-1)
5.2 Area coverage of nationally protected plant species, including Rare, Endemic, Endangered, and Threatened (REET) wild plant species and other wild plants of national conservation importance	No	ha
5.3 Area conserved/managed for conserving high-risk local cultivars of crops	No	
5.4 Population trend index of local (Indigenous) breeds of livestock, poultry, and fishes (if any)	Disaggregated by breeds: livestock, poultry, fishes	Score (0-1)

⁴⁹ IUCN Red List: <https://www.iucnredlist.org/>

⁵⁰ Detailed by the IPBES as the main drivers of biodiversity loss

3.2.6 Genetic diversity conservation

Target 6: By 2030, maintain and restore the genetic diversity of native, wild, and domesticated species

90. The genetic diversity of both wild and domesticated species refers to the variation at the level of individual genes, which provides a mechanism for populations to adapt to their ever-changing environment. It is crucial to their long-term survival, adaptation and resilience, as it provides variation essential to maintain ecosystem stability and ensure benefits to people. Genetic diversity is critical for the long-term health and resilience of species and ecosystems and supports the provision of ecosystem services and functions. Although the documentation of genetic diversity for wild species, livestock and crops in Nepal is limited, it is supposedly rich. For example, traditional practices (particularly of IPLCs) have contributed to preserving a high diversity of traditional and local crops or breeds adapted to various environmental conditions, with more than 26 Indigenous animal breeds. Genetic diversity, for example with local rice varieties, has played a crucial role in managing vulnerability, uncertainty, and stresses for resource-poor farmers.⁵¹ However, the diversity of wild and domesticated flora and fauna is increasingly threatened by habitat loss, monoculture farming, hybridization, and overharvesting. Preserving and restoring genetic diversity, in situ and ex-situ, is essential for sustainable agriculture, species conservation, and the IPLCs' traditional knowledge and practices.

91. Management actions for the conservation of genetic resources include ex-situ and in-situ conservation (including on-farm conservation for livestock). This target aims to (i) maintain populations within adequate population size for wild and domesticated species of terrestrial and aquatic ecosystems, (ii) conserve the local crops and livestock, and (iii) strengthen in-situ and ex-situ conservation sites for wild flora and fauna. Table 3.9 presents indicators for monitoring the conservation of genetic diversity. It complements the results of the International Treaty on Plant Genetic Resources for Food and Agriculture and the Multilateral System (ITPGRFA-MLS) Implementation Strategy and Action Plan (2018-2025).

Table 3.9: Indicators related to Target 6 on genetic diversity conservation

Indicator	Sub-indicators	Unit
6.1 The proportion of populations within species with an effective population size > 500 (Headline A.4)	No	%
6.2 Local crops conservation areas (on-farm/sites)	Disaggregated by: in-situ conservation sites, ex-situ conservation sites, community seed banks, gene banks, crop-related research stations, crop-related research farms	Number
6.3 Local livestock breeds conservation sites	Disaggregated by in-situ conservation sites, ex-situ conservation sites, community livestock breeding centers, livestock gene banks, livestock-related research stations, livestock-related research farms	
6.4 In situ and ex-situ conservation sites of wild terrestrial and aquatic flora and fauna	Disaggregated by national zoos/zoological gardens, botanical gardens, breeding seed orchards of tree species, tree seed stands, wildlife species breeding centers	

3.2.7 Human-wildlife conflict prevention and mitigation

Target 7: By 2030, manage human-wildlife interactions effectively to address human-wildlife conflict for co-existence

92. Competition between people and wildlife for sharing limited resources and space results in human-wildlife conflict, adversely affecting human life, health, well-being, and/or livelihoods. Humans may damage or eliminate wildlife, either intentionally (retaliatory killings) or unintentionally. Conflicts can be mitigated or avoided through appropriate planning, management, and compensation measures.

93. Human-wildlife conflict (HWC) is a growing issue in and around protected areas and other natural areas such as biological corridors and Ramsar sites. As the populations of species such as elephants, tigers, and boars increase following conservation and protection activities, and as land use changes lead to habitat

⁵¹ Sthapit, B., Rana, R., Eyzaguirre, P. and Jarvis, D., 2008. The value of plant genetic diversity to resource-poor farmers in Nepal and Vietnam. International journal of agricultural sustainability, 6(2), pp.148-166.

loss and increased proximity between human settlements and wildlife, conflicts become more common. They include human deaths, injuries and distress, damage to crop cultures and livestock, as well as retaliatory killings. For example, in a 2024 study,⁵² 95% of people living in the buffer zones of six lowland protected areas in Nepal reported having experienced physical and psychological harm from 26 wildlife species. This jeopardizes the support of local populations to conservation activities, as well as biodiversity directly: retaliatory killings have been identified as one of the major causes of wildlife mortality in Nepal.⁵³

94. This target aims to prevent and mitigate human-wildlife conflicts by (i) building the capacity of stakeholders, including park and conservation area officials, to respond to human-wildlife conflict issues, (ii) increasing access to preventive measures, and (iii) providing financial protection from the loss associated with wildlife-related losses. Table 3.10 presents indicators for monitoring human-wildlife conflicts. This target aligns with the Protected Area Management Strategy (2022 - 2030), Forest Policy, 2018, and Forest Sector Strategy (2015 - 2025), which promotes co-existence between humans and wildlife.

Table 3.10: Indicators related to Target 7 on human-wildlife conflict prevention and mitigation

Indicator	Sub-Indicators	Unit
7.1 Incidence of human-wildlife conflicts (wildlife-related losses)	Disaggregated by: human deaths and injuries, crop loss, property loss, livestock loss	Number
7.2 Compensation/ relief on wildlife-related damages	Disaggregated by: Relief amount provided by federal, provincial and local governments, from other sources	USD
7.3 Value of risk covered through insurance	No	
7.4 Retaliatory killing of wild animals	No	Number
7.5 Policy and administrative mechanism to monitor and control risks and spread of zoonotic diseases	No	Rating (No, In process, Partially, Fully)

3.2.8 Invasive species management

Target 8: By 2030, reduce the introduction and establishment of known invasive alien species by 50 %, along with reducing and mitigating impacts of the invasive alien species

95. *Invasive alien species (IAS)* are the species introduced outside of their native ranges, where they threaten biological diversity, ecosystem integrity, economic activities, food security, health, and social and cultural values. They are identified as one of the main drivers of biodiversity loss, both at the global scale⁵⁴ and in Nepal.⁵⁵ More than 220 established alien plant species have been documented, of which 30 are considered invasive.⁵⁶ Likewise, among more than 60 alien animal species reported in Nepal, 20 species are considered invasive.⁵⁷ They negatively impact most of the ecosystems including forests, rangelands, wetlands and agroecosystems across all physiographic regions. The IAS compete with native species for resources, predate them, introduce pathogens, and alter the functioning and structure of ecosystems. This affects ecosystem productivity, threatening livelihoods and food security. The accelerated establishment of IAS is linked with increased connectedness through trade and travel at the global scale, and habitat degradation, linear infrastructure development, import-based economy, poor quarantine, and climate change in Nepal.

⁵² GLIS. (2024). Participatory assessment of human-wildlife conflict in and around the lowland protected areas of Nepal. A report submitted to the Zoological Society of London, Nepal, by Global Institute for Interdisciplinary Studies (GLIS), Kathmandu, Nepal.

⁵³ Baral, K., Bhandari, S., Adhikari, B., Kunwar, R. M., Sharma, H. P., Aryal, A., & Ji, W. (2022). Anthropogenic mortality of large mammals and trends of conflict over two decades in Nepal. *Ecology and Evolution*, 12(10), e9381. <https://doi.org/10.1002/ece3.9381>

⁵⁴ IPBES (2019): Summary for policymakers, global assessment report on biodiversity and ecosystem services

⁵⁵ MoFE (2020). *Sixth National Report to the Convention on Biological Diversity - Nepal*

⁵⁶ Shrestha BB, Sharma-Poudel A, Pandey M (2024) Plant invasions in Nepal: What we do not know? In: Rokaya MB, Sigdel SR (eds) *Flora and Vegetation of Nepal*. Plant and Vegetation, volume 19. Springer International Publishing AG, Cham, Switzerland. Pp. 333-3360.

⁵⁷ Budha, P. B. (2015). Current state of knowledge on invasive and alien fauna of Nepal. *Journal of Institute of Science and Technology*, 20(1), 68-81

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

This makes effective prevention, control and strengthening collaboration across sectors and government levels essential. IAS are generally introduced to new environments by human activities, intentionally or accidentally, and preventing introduction through managing pathways is cost-effective compared to eradicating or controlling them after introduction.

96. This target aims to (i) enact legislation, a multi-stakeholder mechanism for their prevention and control, to halt the rate of invasion, (ii) remove and manage areas under invasive species, and (iii) integrate invasive species management in sectoral plans and programs. Table 3.11 presents indicators for monitoring invasive species management. This target is built on the National Invasive Alien Species Strategy and Implementation Plan 2025.

Table 3.11: Indicators related to Target 8 on invasive species management

Indicator	Sub-indicators	Unit
8.1 Rate of invasive alien species establishment (Headline 6.1)	No	No./year
8.2 Enactment of relevant national legislation and adequate resources for the prevention or control of invasive alien species (Headline 6.b)	No	Rating (No, In process, Partially, Fully)
8.3 Area subject to IAS control/management	Disaggregated: Protected Areas, Forests (outside of protected areas), Agriculture, Wetlands and freshwater ecosystems, Grassland	ha
8.4 Integration of IAS management in sectoral plans and programs	Disaggregated by: climate adaptation and mitigation policies, protected areas, forests, agriculture, Wetlands and freshwater ecosystems, grasslands, urban areas, (linear) infrastructures	Rating (No, In process, Partially, Fully)

3.2.9 Pollution control and management

Target 9: *By 2030, reduce impacts of pollution from all sources, especially from plastics, pesticides, wastewater, and nutrients, to levels that are not harmful to biodiversity, ecosystem functions, and services, especially in the areas of high importance for biodiversity and ecosystem services*

97. Pollution is also identified as one of the main direct drivers of biodiversity loss globally⁵⁸ and in Nepal.⁵⁹ It includes water, air, soil, light, and noise pollution caused by, for example, plastics and solid waste, the inappropriate use of pesticides in crop production, chemicals, untreated wastewater, and nutrient runoff. Pollution leads to degraded terrestrial and aquatic ecosystems, contaminated water and soil resources, and directly threatens species, particularly pollinators, amphibians, and aquatic mammals such as dolphins. It is of specific importance in urban-rural transition zones, many of which are areas of high biodiversity importance. Controlling and reducing various forms of pollution is thus critical to protect ecosystem functions and ensure clean water and food systems. The focus is on *the risks and impacts of all pollution (chemical, light, sound, etc.) rather than absolute amounts of pollutants, as their toxicity and cumulative effects vary. Levels that are not harmful to biodiversity and ecosystem functions and services* depend on the type of pollutant considered and the biodiversity it affects. The pollutants include excess nutrients, pesticides, hazardous chemicals, and plastic. Actions to reduce them must consider possible impacts on food security and livelihoods.

98. This target aims to (i) reduce the use of pesticides in agriculture, (ii) enhance wastewater treatment, (iii) control plastic pollution in areas of high biological importance, and (iv) promote the sustainable and balanced use of nutrients. Table 3.12 presents indicators for monitoring pollution control and management.

⁵⁸ IPBES (2019): Summary for policymakers, global assessment report on biodiversity and ecosystem services

⁵⁹ MoFE (2020). *Sixth National Report to the Convention on Biological Diversity - Nepal*



Biodiversity Vision and National Targets:

Final Draft (Work in progress, Not for circulation)

Table 3.12: Indicators related to Target 9 on pollution control and management

Indicator	Sub-indicators	Unit
9.1 Index of coastal eutrophication potential (<i>Headline 7.1</i>)	No	Kg C/km ² /day
9.2 Aggregated Total Applied Toxicity (<i>Headline 7.2</i>)	No	Index
9.3 Average Pesticide use per unit area of cropland	No	Active ingredient grams per ha (a.i./per ha)
9.4 Volume of treated wastewater discharged per day ^a	No	Mill. L/day
9.5 Use of plastics ^{b1}	No	g/day/capita

3.3 Strategic Objective 2: Sustainable Use

99. This strategic objective aims to ensure the sustainable management and use of Nepal's biodiversity, ecosystems, and natural resources and enhance *nature's contributions to people*. The strategy to achieve this objective features seven strategic action targets, which include:

- **Target 10 – Safe and legal trade of wildlife species:** By 2028, ensure that the use, harvesting, and trade of wild species are sustainable, safe, and legal while respecting and protecting the customary sustainable use of IPLCs
- **Target 11 – Sustainable harvest:** By 2030, manage, harvest, and use wild species sustainably while recognizing customary sustainable use practices of IPLCs
- **Target 12 – Sustainable management:** Manage 50% of areas sustainably under forestry, agriculture, grasslands, wetlands, and watersheds by 2030
- **Target 13 – Biodiversity-friendly practices:** By 2030, encourage and promote biodiversity-friendly practices in forestry, agriculture, grassland, and wetlands
- **Target 14 – Ecosystem services:** By 2030, maintain and enhance nature's contributions to people, including ecosystem functions and services
- **Target 15 – Sustainable consumption choices:** By 2028, develop a supportive, legal or regulatory framework to encourage people towards sustainable consumption, including sensitization and education
- **Target 16 – Food and agricultural waste reduction:** By 2030, reduce food and agricultural waste by 10%

100. The following four result indicators will be used to monitor the results under this strategic objective (Table 3.13) related to the type and value of the ecosystem services provided, and policy, institutional, and incentive measures formulated, operationalized, or amended to promote sustainable management.

Table 3.13. Indicators related to Strategic Objective 2 on sustainable use

Indicator	Sub-indicators	Unit
2.A Services provided by ecosystems (<i>Headline B.1</i>)	No	Dashboard
2.B Forest sector contribution to national GDP ^{b2}	No	%
2.C Value of export of biological resources (Medicinal plants and non-wood forest products)	No	Million US\$
2.D Ecological footprint	No	global hectares per person

^{a1} Nationally Determined Contribution (2025)

^{a1} Sustainable Development Goals: Status and Roadmap 2016-2030 (Target 12 – sustainable consumption choices)

^{b2} Nepal's Sixteen periodic development plan

3.3.1 Safe and legal trade of wildlife species

Target 10: By 2028, ensure that the use, harvesting, and trade of wild species are sustainable, safe, and legal while respecting and protecting the customary sustainable use of IPLCs

101. *Wild species* are populations that have not been cultivated or domesticated and survive independently of human intervention. They can often be *harvested* (gathered, caught, or hunted), *used* for food and non-food purposes (including *customary uses* by IPLCs: spiritual, cultural, economic, subsistence), and *traded*, which includes the selling or exchange of live or dead species or derived products. These activities are *sustainable* if they ensure that the renewal capacity limit of species (including non-target species) is not exceeded, are *safe* if risks are appropriately accounted for, and are *legal* when they respect relevant laws.

102. At the global scale, the direct exploitation of the wild population of species is the second largest driver of biodiversity loss in terrestrial and freshwater ecosystems.⁶³ Nepal harbors more than 2,300 species of Medicinal and Aromatic Plants (MAPs),⁶⁴ out of which 300 are traded, and 89% of all traded species are harvested from the wild.⁶⁵ However, due to increased commercialization driven by global markets, unsustainable harvest and trade threaten these species' populations and the ecosystems and habitats of which they are a part. Wild medicinal plant species, fungi, orchids, lichens, and amphibians are of particular concern. Ensuring that their use is legal, traceable, safe, and sustainable is thus key to avoiding biodiversity loss, as framed by the Convention on International Trade in Endangered Species (CITES), which features 766 species from Nepal.

103. This target aims to (i) ensure the sustainability of wild fish capture, (ii) ensure the sustainability of wild harvest and trade, especially of NTFPs/MAPs, (iii) strengthen mechanisms to control illegal harvest and trade of plants and wildlife regulate the hunting of wildlife species, and (iv) protect the customary use rights of IPLCs. Table 3.14 presents indicators for monitoring wild harvest and trade.

Table 3.14: Indicators related to Target 10 on safe and legal trade of wild species

Indicator	Sub-Indicators	Unit
10.1 Proportion of fish stocks within biologically sustainable levels (Headline 5.1)	No	%
10.2 Legal instruments or other policy frameworks for regulating trade in wild species (Headline 5.b)	No	Rating (No, In process, Partially, Fully)
10.3 Proportion of total fish production obtained from capture fisheries	No	%
10.4 Sustainable Harvest Index value of highly commercialized NTFPs/Wild MAPs	No	Score (0-1)
10.5 Policy, legal, and administrative mechanisms for protecting the traditional rights of IPLCs on wild harvest and grazing	Disaggregated by: forests (including NTFPs), grasslands (grazing), wetlands (fishing)	Rating (No, In process, Partially, Fully)
10.6 Institutional mechanisms at the national, subnational, and regional levels to control illegal harvest and trade of plants and wildlife	Disaggregated by: national, provincial, regional	

⁶³ IPBES (2019): Summary for policymakers, global assessment report on biodiversity and ecosystem services

⁶⁴ Rokaya, M.B., Munzbergová, Z., Shrestha, M.R. and Timsina, B., 2012. Distribution patterns of medicinal plants along an elevational gradient in central Himalaya, Nepal. *Journal of Mountain Science*, 9, pp.201-213.

⁶⁵ Pyakurel, D., Smith-Hall, C., Bhattarai-Sharma, I. and Ghimire, S.K., 2019. Trade and conservation of Nepalese medicinal plants, fungi, and lichen. *Economic Botany*, 73, pp.505-521.

3.3.2 Sustainable harvest

Target 11: By 2030, manage, harvest, and use wild species sustainably while recognizing customary sustainable use practices of IPLCs

104. Wild species are a critical resource for Nepal's people, particularly rural communities and IPLCs. They are often a basis for food security, health, livelihoods, or cultural identity. More than 267 wild medicinal species are currently used for trade,⁶⁶ in addition to traditional practices.⁶⁷ Food and medicinal purposes also drive the use of lichen, amphibians⁶⁸ and fungi, while orchids are also traded for ornamental purposes,⁶⁹ generating additional income for the populations.

105. This target aims to ensure that the sustainable management of these wild species also considers the social, economic, cultural, and environmental benefits provided to people, particularly to vulnerable communities and individuals, and in line with the country's 2043 Vision. Customary practices of IPLCs have existed with the sustainable use of wild resources for generations and integrating them into wild species use strategies is essential for aligning conservation goals with the well-being of communities.

106. This target aims to (i) enhance the benefits of using wild species, especially for IPLCs, and (ii) strengthen the sustainable use of wild species, including commercial farming and domestication. Table 3.15 presents indicators for monitoring sustainable harvest.

Table 3.15: Indicators related to Target 11 on sustainable harvest

Indicator	Sub-indicators	Unit
11.1 Benefits from sustainable use of wild species (<i>Headline 9.1</i>)	No	\$ million
11.2 Percentage of the population in traditional occupations (<i>Headline 9.2</i>)	No	%
11.3 Enactment of policies to manage the use of wild species sustainably, providing social, economic, and environmental benefits for people, and to protect and encourage customary sustainable use by indigenous peoples and local communities (<i>Headline 9.b</i>)	No	Rating (No, In process, Partially, Fully)
11.4 Area under sustainable management of wild plant species	No	Ha

3.3.3 Sustainable management

Target 12: Manage 50% of areas sustainably under forestry, agriculture, grasslands, wetlands, and watersheds by 2030

107. The *sustainable use* of biodiversity is one of the main focuses of the CBD, which defines it as the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.

108. Forests, grasslands, agricultural lands, and wetlands are production systems that support Nepal's economy, food security, livelihoods, biodiversity, and resilience. Forests cover 46% of the country, provide timber, fuelwood, and medicinal plants, and are locally governed by more than 23,000 Community Forest

⁶⁶ Pyakurel, D., Smith Hall, C., Bhattarai-Sharma, I. and Ghimire, S.K., 2019. Trade and conservation of Nepalese medicinal plants, fungi, and lichen. *Economic Botany*, 73, pp 505-521.

⁶⁷ Atreya, K., Pyakurel, D., Thagunna, K.S., Bhatta, L.D., Yadav, U., Kotru, R., Oli, B.N., Rimal, S., Chaudhary, R.P. (2017). Traditional agricultural and medicinal practices in the Kailash Sacred Landscape, Nepal. ICIMOD Working Paper 2017/12. Kathmandu: ICIMOD.

⁶⁸ Khatiwada, J. R., Zhao, T., Chen, Y., Wang, B., Xie, F., Carriatella, D. C., & Jiang, J. (2019). Amphibian community structure along elevation gradients in eastern Nepal Himalaya. *BMC Ecology*, 19, 1–11.

⁶⁹ Bashyal, R., Paudel, K., Hinsley, A., & Phelps, J. (2023). Making sense of domestic wildlife and CITES legislation: The example of Nepal's orchids. *Biological Conservation*, 280, 109951.

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

User Groups.⁷⁰ Agricultural lands are mainly used to cultivate crops such as rice, maize, and wheat, thus contributing to employment and food security. They also harbor a variety of genetic resources, with more than 6,000 species in Nepal being agricultural.⁷¹ Rangelands provide, inter alia, food, forage for grazing animals, fuel, and building materials,⁷² but also a significant habitat for Nepal's fauna and flora. Approximately 11% of Nepal's population depends on wetlands for their livelihoods,⁷³ more specifically for fishing, grazing, irrigation, or plant harvesting.

109. However, unsustainable management of these main ecosystems, such as overgrazing or deforestation, has led to their degradation and declining productivity, as highlighted in Nepal's Land Degradation Neutrality Target Report.⁷⁴ Transitioning to a sustainable management of these areas is thus needed both for conservation purposes and to avoid negative impacts on local populations and their resilience. The NDC 3.0 also accords high priority to biodiversity through the sustainable management of forests, watersheds and agriculture.⁷⁵

110. This target aims to (i) manage agricultural lands, forests, wetlands, and grasslands and (ii) strengthen the sustainable management of watersheds. Table 3.16 presents indicators for monitoring sustainable management. The action targets are built on the Forest Sector Strategy 2015, the Agriculture Development Strategy 2015, and the Nepal Large Scale Watershed Management Strategy 2025.

Table 3.16: Indicators related to Target 12 on sustainable management

Indicator	Sub-indicators	Unit
12.1 Proportion of agricultural area under productive and sustainable agriculture (Headline 10.1)	No	%
12.2 Progress towards sustainable forest management (Headline 10.2)	5 sub-indicators as per guidelines	Dashboard
12.3 Area of sustainably managed forest ⁷⁶	No	Ha
12.4 Area under sustainable management of wetlands and freshwater ecosystems	No	
12.5 Area under sustainable management of grassland	No	
12.6 Area under sustainable /integrated management of watersheds	No	

3.3.4 Biodiversity-friendly practices

Target 13: By 2030, encourage and promote biodiversity-friendly practices in forestry, agriculture, grassland, and wetlands

111. Conventional production system management practices, such as shifting cultivation, monoculture or chemical-intensive farming (both in terms of pesticides and of nutrients), can lead to habitat degradation and pollution, which are the main drivers of biodiversity loss and a decline in ecosystem services. *Biodiversity-friendly practices* help increase the positive effects and reduce the negative impacts of production practices on biodiversity and are specific to each production system. They include, inter alia, (i) *Integrated Pest Management (IPM)*, that combines multiple strategies instead of relying solely on chemical pesticides, which maintains productivity while minimizing harm to people and other organisms; (ii) *Integrated Soil and Nutrient Management (ISNM)*, which optimizes the nutrient supply to crops while maintaining soil health and long-term productivity; (iii) *agroforestry*, which combines trees and crops/livestock on the same area to create ecological synergies, and (iv) *organic farming*, which avoids intensive chemical and synthetic inputs.

⁷⁰ As of April 2025, source: Federation of Community Forestry Users in Nepal, <https://fecofun.org.np/>

⁷¹ Joshi, B. K. (2017). Conservation and utilization of agro-biodiversity advanced from 1937 to 2017 in Nepal. In F. Devkota (Ed.), *Krishi Sanchar Smarika* (pp. 181–208). Agricultural Information and Communication Center (AICC), Ministry of Agricultural Development (MoAD), Khumaltar, Nepal.

⁷² ICIMOD (2013) - Rangeland Ecosystem Services in the Hindu Kush Himalaya

⁷³ Siwakoti, M. and Karki, J.B. 2009. Conservation status of Ramsar sites of Nepal Tarai: an overview. *Botanica Orientalis – Journal of Plant Science* (2009) 6: 76–84.

⁷⁴ MoFE (2018). *Final Report of the Land Degradation Neutrality Target Setting Programme In Nepal*

⁷⁵ GoN (2025), Nationally Determined Contribution (NDC) 3.0 (Draft)

⁷⁶ Nationally Determined Contribution (2025)

112. Nepal is home to various traditional and biodiversity-friendly agricultural practices. Promoting these specific practices is essential to ensuring sustainable development and promoting the sustainable use of ecosystems (tackled in Target 12). This can be done through certification, which offers structured, third-party verification systems that ensure practices are biodiversity-friendly and sustainable. Certification systems in Nepal include forest management practices, such as the Forest Stewardship Council certification,⁷⁷ organic farming or sustainable harvest. Nepal's Agriculture Development Strategy (2015-2035)⁷⁸ also notes that certification standards, including organic branding, can potentially increase the country's value-added and trade competitiveness.

113. This target aims to (i) promote biodiversity friendly practices and (ii) strengthen policy and administrative mechanisms on biodiversity-friendly practices. Table 3.17 presents indicators for monitoring biodiversity-friendly practices.

Table 3.17: Indicators related to Target 13 on biodiversity-friendly practices

Indicator	Sub-Indicators	Unit
13.1 Area under certified management practices	Disaggregated by forest, agriculture, grasslands, aquatic, and wetlands	Ha
13.2 Area under agroforestry practices ⁷⁹	No	
13.3 Area under organic farming ⁸⁰	No	
13.4 Farmers reporting chemical degradation of soil	No	%

3.3.5 Ecosystem services

Target 14: By 2030, maintain and enhance nature's contributions to people, including ecosystem functions and services

114. *Nature-based solutions* protect, conserve, restore, sustainably use, and manage ecosystems. They address social, economic, and environmental challenges while simultaneously providing human well-being, ecosystem services (which are the benefits people obtain from ecosystems), and functions (which include, for example, biomass production, trophic transfer through plants and animals, nutrient cycling, water dynamics, and heat transfer). *Nature's contributions to people* are similar to ecosystem services and refer to all the contributions from biodiversity to people's well-being or quality of life (material contributions, regulating contributions, non-material contributions including spiritual and cultural).

115. As ecosystems are increasingly affected at the global and national scale by drivers of biodiversity loss,⁸¹ this translates into degraded ecosystem services and functions,⁸² which Nepal is highly dependent on.⁸³ This includes degraded air, water, soil, pollination, resilience to climate change and related events, and the loss of cultural and spiritual identity, particularly affecting rural communities, vulnerable populations, and IPLCs. Safeguarding and enhancing nature's contributions to people, ecosystem services and functions is not only a conservation goal; it is essential to reducing poverty, enhancing food security, resilience to natural disasters, and more generally, sustainable development.

116. This target aims to (i) enhance ecosystem services and nature's contributions to people, and (ii) enhance income and employment in the biodiversity sector. Table 3.18 presents indicators for monitoring ecosystem services.

⁷⁷ WWF Nepal (2020), *Sustainable Forest Management Resource Book*

⁷⁸ Government of Nepal (2015). *Agriculture Development Strategy (ADS) 2015 to 2035*

⁷⁹ Nationally Determined Contribution (2025)

⁸⁰ *Agriculture Development Strategy (ADS) 2015 to 2035*

⁸¹ IPBES (2019): Summary for policymakers, global assessment report on biodiversity and ecosystem services

⁸² Bhatta, L.D., van Oort, B. E. H., Stork, N. E., and Baral, H. (2015). Ecosystem services and livelihoods in a changing climate: Understanding local adaptations in the Upper Koshi, Nepal. *International Journal of Biodiversity Science, Ecosystem Services & Management*, 11(2): 145-155.

⁸³ Lamsal, P., Kumar, L., Atreya, K. and Pant, K.P. (2018). Forest ecosystem services in Nepal: a retrospective synthesis, research gaps and implications in the context of climate change. *International Forestry Review*, 20(4): 506-537.

Table 3.18: Indicators related to Target 14 on ecosystem services

Indicator	Sub-indicators	Unit
14.1 Value of ecosystem services	Disaggregated by forests, agriculture, grasslands, and wetlands	\$ billion yr ⁻¹
14.2 Economic contribution of the forestry sector (revenue generated from forests and biodiversity)	Disaggregated by forests, from Protected Areas, and the freely grazing livestock	\$ million
14.3 Employment	Disaggregated by forests, agriculture, grasslands, and wetlands	Mill. Days

3.3.6 Sustainable consumption choices

Target 15: By 2028, develop a supportive, legal or regulatory framework to encourage people towards sustainable consumption, including sensitization and education

117. Overconsumption and unsustainable consumption, which are driven by urbanization, market expansion, or lifestyle changes, are major underlying causes of biodiversity loss. Indeed, an increased demand in wild plant species, forest products, wild meat or any natural resource can lead to overharvesting and other unsustainable production practices such as pollution, increased use of chemical nutrients and pesticides, ultimately leading to habitat and ecosystem degradation.

118. In Nepal, the unsustainable harvesting of several species of non-timber forest products has been linked to global markets, which have also encouraged introducing exotic species such as the carp that threaten the wetlands' native biodiversity.⁸⁴ The loss of agricultural diversity is also driven by a high demand in a select number of known local varieties,⁸⁵ threatening other traditional crop varieties.⁸⁶ Addressing the drivers of biodiversity loss will thus also require a shift towards more sustainable consumption patterns, which is the main subject of Sustainable Development Goal 12. Nepal's SDG Status and Roadmap⁸⁷ proposes several targets on the issue, that this NBSAP draw from. In promoting sustainable consumption, it is essential to tackle the lack of public awareness and information and propose relevant policy incentives and access to eco-friendly options.

119. This target aims to encourage people to make more sustainable consumption choices: (i) promote the sustainable consumption of wood and water resources, and (ii) reduce citizens' ecological and material footprints. Table 3.19 presents indicators for monitoring sustainable consumption choices.

⁸⁴ Siwakoti, M., & Karki, J. B. (2010). Conservation status of Ramsar sites of Nepal Tarai: an overview. *Botanica Orientalis: Journal of Plant Science*, 6, 76-84. <https://doi.org/10.3126/botor.v6i0.2914>

⁸⁵ Chaudhary, P., Bhatta, S., Aryal, K., Joshi, B. K., & Gauchan, D. (2020). Threats, drivers, and conservation imperative of agrobiodiversity. *The Journal of Agriculture and Environment*, 21, 44-61.

⁸⁶ Aryal, K., Poudel, S., Chaudhary, P., Chaudhary, R. P., Ghimire, K. H., Shrestha, D. S., & Joshi, B. K. (2020). Agro-morphological diversity of high-altitude bean landraces in the Kailash Sacred Landscape of Nepal. *Journal of Nepal Agricultural Research Council*, 6, 1-13.

⁸⁷ GoN (2017), Sustainable Development Goals: Status and Roadmap 2016-2030

Table 3.19: Indicators related to Target 15 on sustainable consumption choices

Indicator	Sub-indicators	Unit
15.1 Development, adoption, or implementation of policy instruments aimed at supporting the shift to sustainable consumption and production (<i>Headline 16.b</i>)	No	Rating - No - In process - Partially - Fully
15.2 Consumption of wood ⁸⁸	No	Cubic meter per capita
15.3 Total water resources used ⁸⁹	No	%
15.4 Land use for agricultural production ⁹⁰	No	
15.5 Material consumption per capita ⁹¹	No	Mt/person/year

3.3.7 Food and agricultural waste reduction

Target 16: By 2030, reduce food and agriculture waste by 10%

120. Food loss and waste (FLW) refers to the amount of food produced but not ultimately consumed. It includes post-harvest loss, which is the degradation of a food product between harvest and consumption, as well as on-farm losses and losses related to transporting, storing, conditioning, and manufacturing the product. Overall, higher food loss and waste reflect poor management of agri-food systems. It affects their sustainability by wasting resources (land, water, energy, labor) consumed for the product, creating greenhouse gas emissions associated with decomposing/burning waste.

121. Although current data on the subject is scarce in Nepal, food and agricultural waste is a growing concern, with losses across the value chain of products. Based on data from the Nepal Agriculture Research Council, post-harvest loss is estimated at about 10% in the country.⁹² Food waste is also frequent at the household level, especially in urban areas, due to over-purchasing, poor planning, and limited awareness about food preservation: around 93 kg of food per capita is wasted every year at the household level in the country.⁹³

122. Reducing food waste and loss is thus necessary to reduce the environmental footprint and pressure on ecosystems related to human consumption, while maintaining food security and production. This can be done by finding and promoting efficiencies in production processes, encouraging lower levels of consumption, and encouraging the use of waste materials.

123. This target aims to (i) reduce food waste, overconsumption, and waste generation, and (ii) reduce post-harvest loss. Table 3.20 presents indicators for monitoring food and agricultural waste reduction. It considers several targets proposed under SDG 12 in Nepal's SDG Status and Roadmap,⁹⁴ as well as the NDC 3.0, which aims to reduce post-harvest loss to 15% by 2035.⁹⁵

⁸⁸ Sustainable Development Goals: Status and Roadmap 2016-2030 (Target 12 – sustainable consumption choices)

⁸⁹ Sustainable Development Goals: Status and Roadmap 2016-2030 (Target 12 – sustainable consumption choices)

⁹⁰ Sustainable Development Goals: Status and Roadmap 2016-2030 (Target 12 – sustainable consumption choices)

⁹¹ Sustainable Development Goals: Status and Roadmap 2016-2030 (Target 12 – sustainable consumption choices)

⁹² GoN (2017), Sustainable Development Goals: Status and Roadmap 2016-2030

⁹³ United Nations Environment Programme (2024). *Food Waste Index Report 2024. Think Eat Save. Tracking Progress to Halve Global Food Waste*. <https://wedocs.unep.org/20.500.11822/45230>

⁹⁴ GoN (2017), Sustainable Development Goals: Status and Roadmap 2016-2030

⁹⁵ GoN (2025), Nationally Determined Contribution (NDC) 3.0 (Draft)

Biodiversity Vision and National Targets:

Final Draft (Work in progress, Not for circulation)

Table 3.20: Indicators related to Target 16 on food and agricultural waste reduction

Indicator	Sub-indicators	Unit
16.1 Development, adoption, or implementation of policy instruments aimed at reducing food waste, overconsumption, and waste generation (<i>Headline 16.b</i>)	No	Rating • No • In process • Partially • Fully
16.2 Food waste per capita ⁹⁶	No	Kg/person/year
16.3 Post-harvest loss ⁹⁷	No	%
16.4 Food loss index ⁹⁸	No	
16.5 Adoption of agricultural waste management practices	No	

3.4 Strategic Objective 3: Integration

124. This strategic objective is to mainstream and integrate biodiversity considerations across all sectors and levels of government. The strategy to achieve this objective features five strategic action targets, which include:

- **Target 17 - Biodiversity-friendly infrastructure:** By 2026, integrate biodiversity considerations into infrastructure development (linear infrastructures), especially in biological corridors/biodiversity-rich areas
- **Target 18 - Climate change:** By 2030, minimize the impacts of climate change on biodiversity and build resilience
- **Target 19 - Biodiversity-inclusive urbanization:** By 2030, mainstream biodiversity considerations in urban and densely populated areas, including biodiversity-inclusive planning
- **Target 20 - Biodiversity mainstreaming:** By 2030, integrate biodiversity and its values into economic and development processes (policy, plan, and program) across all sectors and all levels of government
- **Target 21 - Harmful subsidies reforms:** By 2030, initiate policy and administrative measures to reform subsidies and incentives harmful to biodiversity in a fair, effective, and equitable way

125. The following indicators (Table 3.21) will be used to monitor the results under the action targets, including (a) mainstreaming biodiversity considerations in climate and sectoral policies and (b) integrating ecosystem values/green accounting in investment and development decisions.

Table 3.21. Indicators related to Objective 3 on integration

Indicator	Sub-indicators	Unit
3.A An integration of biodiversity values into policies, regulations, planning, development processes, poverty reduction strategies and accounts at all levels, ensuring that biodiversity values are mainstreamed across all sectors and integrated into assessments of environmental impacts (<i>Headline 14.b</i>)	Disaggregated by agriculture, fisheries, forestry, aquaculture, finance, tourism, health, infrastructure, energy, mining, manufacturing and processing, others	Rating • No • In process • Partially • Fully
3.B Value of subsidies (Direct and indirect) and other incentives harmful to biodiversity (<i>Headline 18.2</i>)	Disaggregated by: Agriculture, Forests, Wetlands and freshwater ecosystems, Grassland, Urban area	\$ million
3.C Integration of the ecosystem values/green accounting in investment and development decisions	No	Rating • No • In process • Partially • Fully

⁹⁶ Sustainable Development Goals: Status and Roadmap 2016-2030 (Target 12 – sustainable consumption choices)

⁹⁷ Nationally Determined Contribution (2025)

⁹⁸ Sustainable Development Goals: Status and Roadmap 2016-2030 (Target 12 – sustainable consumption choices)

3.4.1 Biodiversity-friendly infrastructure

Target 17: By 2026, integrate biodiversity considerations into infrastructure development (linear infrastructures), especially in biological corridors/biodiversity-rich areas

126. Linear infrastructures are civil engineering works with linear geometry, such as roads, irrigation canals, pipelines, or transmission lines, whereas nonlinear infrastructures cover, for example, buildings and water reservoirs. A biological *corridor* is a geographically defined area that allows species to move between landscapes, ecosystems, and habitats, and is intended to ensure the maintenance of biodiversity and ecological and evolutionary processes. A *biodiversity-rich area* is an area high in species richness or endemism.

127. As is the case at the global scale, Nepal's development of infrastructure has created significant economic benefits but also growing threats to biodiversity. Linear infrastructure fragments habitats, disrupts wildlife movement, and can lead to pollution and habitat degradation. Current and future projects, if not properly planned, could undermine conservation successes. Habitat quality in the Tarai region, home to several flagship endangered species, could be reduced by up to 40% due to planned infrastructure projects.⁹⁹ In Chitwan National Park, existing and proposed linear infrastructure could increase tiger mortality.¹⁰⁰ Integrating biodiversity considerations into infrastructure design and planning is thus crucial to prevent and minimize negative impacts on biodiversity.

128. This target aims to (i) integrate biodiversity considerations into infrastructure development and (ii) strengthen the monitoring of the environmental flow in the major river systems. Table 3.22 presents indicators for monitoring biodiversity-friendly infrastructure.

Table 3.22: Indicators related to Target 17 on biodiversity-friendly infrastructure

Indicator	Sub-indicators	Unit
17.1 Policy, legal, and operational framework for mainstreaming biodiversity considerations into infrastructure development	No	Rating (No, In process, Partially, Fully)
17.2 Death of wildlife due to linear infrastructure (road, irrigation canal, and transmission line)	No	Number
17.3 Mechanism to monitor environmental flow in major river systems	No	Rating (No, In process, Partially, Fully)

3.4.2 Climate change

Target 18: By 2030, minimize the impacts of climate change on biodiversity and build resilience

129. Climate change is one of the main drivers of biodiversity loss, is associated with long-term shifts of mean temperature trends and precipitation patterns, causes the retreat of glaciers, and increases the frequency of extreme weather events. Its effects disrupt species' habitats, migration, distribution, and behaviors.¹⁰¹ It also exacerbates the impact of other drivers. Nepal is highly vulnerable to climate change, particularly in its mountain ecosystems, which harbor many endemic species with limited geographical ranges. Climate change, impacts the geographical range of plant species,¹⁰² and increases the vulnerability of wild mammals and fish.¹⁰³ Shifts in seasonal patterns have also disrupted the greenness and cropping calendars. Nepal's NDC has integrated forests, biodiversity, and watershed conservation issues and

⁹⁹ Sharma, R., Rimal, B., Stork, N., Baral, H. and Dhakal, M., 2018. Spatial assessment of the potential impact of infrastructure development on biodiversity conservation in lowland Nepal. *ISPRS International Journal of Geo-Information*, 7(9), p.365.

¹⁰⁰ Carter, N. H., Pradhan, N., Hengaju, K., Sonawane, C., Sage, A. H., & Grimm, V. (2022). Forecasting effects of transport infrastructure on endangered tigers: A tool for conservation planning. *PeerJ*, 10, e13472. <https://doi.org/10.7717/peerj.13472>

¹⁰¹ IPCC, 2022: Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Loschke, V. Moller, A. Okem, doi:10.1017/9781009325844.001.

¹⁰² Kattel, G. R. (2022). Climate warming in the Himalayas threatens biodiversity, ecosystem functioning and ecosystem services in the 21st century: is there a better solution?. *Biodiversity and Conservation*, 31(8), 2017-2044.

¹⁰³ Gillette, D. P., Edds, D. R., Jha, B. R., & Mishra, B. (2022). Thirty years of environmental change reduces local, but not regional, diversity of riverine fish assemblages in a Himalayan biodiversity hotspot. *Biological Conservation*, 265, 109427.

prioritizes fair and equitable benefits-sharing with IPLCs.¹⁰⁴ It specifically gives priority to increasing the carbon sink, reducing fire incidence, and promoting greenery

130. Minimizing the impact of climate change and climate action on biodiversity is essential and requires both reducing greenhouse gas emissions and mainstreaming the two issues. *Nature-based solutions* target ecosystems while addressing social, economic, and environmental challenges, providing human well-being, ecosystem services, resilience, and biodiversity benefits. *Ecosystem-based approaches* use biodiversity and ecosystem services as part of an overall strategy to help address the adverse effects of climate change.

131. This target aims to (i) ensure the integration of biodiversity issues in key climate-related policies and of climate change in key biodiversity-related policies, (ii) integrate nature-based solutions and ecosystem-based approaches in plans and programs, and (iii) reduce greenhouse gas emissions. Table 3.23 presents indicators for the integration of climate action.

Table 3.23: Indicators related to Target 18 on climate change

Indicator	Sub-indicators	Unit
18.1 Policies to minimize the impact of climate change and ocean acidification on biodiversity and to minimize negative and foster positive impacts of climate action on biodiversity (<i>Headline 8.b</i>)	No	Rating (No, In process, Partially, Fully)
18.2 Integration of biodiversity in climate-related policies such as Nationally Determined Contributions, Long-Term Strategy for Net Zero Emissions, National Adaptation Plan, and adaptation communications	Disaggregated by: National Adaptation Plan, Nationally Determined Contribution, Long-Term Strategy for net-zero emissions	
18.3 Integration of climate action in biodiversity-related policies and strategies ¹⁰⁵	Disaggregated by: Agriculture, Forests, Wetlands and freshwater ecosystems, Grassland, protected areas	
18.4 Integration of nature-based solutions and ecosystem-based adaptation for climate risk reduction in plans and programs	Disaggregated by: Agriculture including agrobiodiversity, Forests and protected areas, Water resources including irrigation and hydropower, Grassland and Rangelands, Disaster Risk Reduction	
18.5 Greenhouse gas emissions from agriculture, forestry, and other land use ¹⁰⁶	Disaggregated by: Agriculture, Land Use Land Use Change, and Forestry	MT CO ₂ eq

3.4.3 Biodiversity-inclusive urbanization

Target 19: By 2030, mainstream biodiversity considerations in urban and densely populated areas, including biodiversity-inclusive planning

132. This target calls for mainstreaming biodiversity in the context of green and blue spaces and *biodiversity-inclusive urban planning* (the technical and political process for managing the use of urban spaces). *Green and blue spaces* are areas of vegetation, inland and coastal waters, generally in or near urban areas and other densely populated areas.

133. Nepal ranks amongst the fastest urbanizing countries in the world. In recent decades, unplanned urbanization has increased built-up areas in major cities at the expense of vegetation and agricultural land.¹⁰⁷ As cities expand, they often encroach upon the surrounding ecosystems, a form of land use change and a leading cause of biodiversity loss. The absence of planned green and blue spaces in cities can lead to habitat loss and fragmentation and is a missed opportunity to mitigate urban heat island effects. All these effects harm biodiversity, but also the inhabitants of urban areas, as green and blue spaces have a range of positive

¹⁰⁴ GoN (2025). Nationally Determined Contribution, NDC

¹⁰⁵ Sustainable Development Goals: Status and Roadmap 2016-2030 (Target 12 – sustainable consumption choices)

¹⁰⁶ Nationally Determined Contribution, NDC

¹⁰⁷ Praval Devkota et al (2023). Land use land cover changes in the major cities of Nepal from 1990 to 2020, Environmental and Sustainability Indicators

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

effects on human physical and mental well-being. They can provide important habitat for species, improve habitat connectivity, provide ecosystem services, and improve resilience to extreme events. Ensuring the availability and accessibility of such areas is thus particularly important: mainstreaming biodiversity into urban spatial planning and development ensures that cities contribute to a nature-positive development.

134. The target aims to (i) ensure biodiversity-inclusive urban planning, and (ii) promote nature-based solutions and ecosystem adaptation practices. Table 3.24 presents indicators for monitoring biodiversity-inclusive urbanization.

Table 3.24: Indicators related to Target 20 on biodiversity-inclusive urbanization

Indicator	Sub-indicators	Unit
20.1 The average share of the built-up area of cities that is green/blue space for public use for all (<i>Headline 12.1</i>)	No	%
20.2 Administrative mechanism for development of urban sustainability plans referring to green and/or blue spatial management (<i>Headline 12.b</i>)	No	Rating (No, In process, Partially, Fully)
20.3 Urban Area managed for biodiversity and ecosystem services	Disaggregated by: urban areas designated for protecting and restoring biodiversity, urban green spaces managed for ecosystem services, and urban blue spaces managed for ecosystem services	ha

3.4.4 Biodiversity mainstreaming

Target 20: By 2030, integrate biodiversity and its values into economic and development processes (policy, plan, and program) across all sectors and all levels of government

135. *Biodiversity mainstreaming* integrates biodiversity and ecosystem considerations into policies, plans, programs, and decision-making across all sectors and levels of governance relevant to the subject (agriculture, infrastructure, finance, tourism, etc.), instead of tackling them through environmental institutions and policies only. It implies considering the *multiple values* of biodiversity, from an intrinsic value to an economic value through its support to growth, food production systems, and human well-being. Biodiversity mainstreaming primarily focuses on (a) promoting conservation and sustainable use, (b) ensuring safeguard measures to avoid biodiversity loss, (c) providing positive incentives, (d) reducing perverse incentives, and (e) establishing multi-stakeholder mechanisms.

136. As detailed throughout this NBSAP, biodiversity underpins Nepal's economic development, food security, public health, and climate resilience, yet it is often overlooked in development planning and financial decision-making. Drivers of biodiversity loss, such as land cover changes, habitat degradation and fragmentation, climate change, or pollution, result from diverse sectoral activities, key sectors being agriculture, energy, infrastructure, tourism, and industry. Without mainstreaming, development can thus lead to habitat degradation and the loss of species and ecosystem services. As article 6(b) of the CBD mentions, mainstreaming the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programs, and policies is thus essential in ensuring sustainable development.

137. This target aims to (i) integrate biodiversity considerations in all relevant sectors and levels of government, and (ii) operationalize environment and social safeguard measures, especially in areas of high biodiversity importance. Table 3.25 presents indicators related to biodiversity mainstreaming.

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

Table 3.25: Indicators related to Target 20 on biodiversity mainstreaming

Indicator	Sub-indicators	Unit
20.1 Integration of biodiversity in all relevant sectoral, economic, and development policies	Disaggregated by: agriculture, fisheries, forestry, aquaculture, finance, tourism, health, infrastructure, energy, mining, manufacturing and processing, others	Rating (No, In process, Partially, Fully)
20.2 Operationalization of Strategic Environmental assessment (SEA) on the policies, plans, and programs of development of the economic sector		
20.3 Environment auditing of development projects/infrastructure located within the protected areas/biodiversity rich	Disaggregated by types of infrastructure: road, railway, electric transmission line, hydropower, irrigation	

3.4.5 Harmful subsidies reform

Target 21 By 2030, initiate policy and administrative measures to reform subsidies and incentives harmful to biodiversity in a fair, effective, and equitable way

138. Biodiversity mainstreaming is also crucial in public finance, especially as many public subsidies and incentives can contribute to biodiversity loss. *Harmful incentives* generally emanate as unanticipated and unintended side effects of policies or programmes designed to achieve other objectives, such as economic growth or social welfare in various sectors. Types of possibly harmful incentives include, for example, production subsidies and/or consumer subsidies. Identifying them is not trivial, as the form of incentives can vary, and their harmful effect may not be easily detectable. Indeed, as stated by the OECD, “Impacts can be immediate (e.g. land conversion, road build, oil spills), arise over time (e.g. pollution loading leading to critical ecological thresholds being passed in due course, eutrophication events), and/or spread over many years (e.g. fisheries capacity growth, increased fossil fuel consumption) and felt acutely only by subsequent generations. Impacts can occur locally (e.g. subsidies for road building), regionally (e.g. subsidy for hydrological power generation using dams on rivers), nationally (e.g. peatland conversion leading to loss of habitats, ecosystems or species of national importance), internationally (e.g. resource extraction impacts, or water subsidies in water stressed cross border river basins), and globally (e.g. climate change)”.¹⁰⁸

139. Some public subsidies and incentives in Nepal can unintentionally contribute to biodiversity loss and environmental degradation. This is the case for subsidies on chemical fertilizers and pesticides, fuel subsidies and infrastructure incentives, or support to commercial livestock. Substantial and progressive elimination, phasing out, and reforms to subsidies and other incentives that are harmful to biodiversity are required to ensure sustainable development. This is compatible with Article 11 of the CBD, which calls for economically and socially sound measures that incentivize biodiversity conservation and sustainable use. However, such a process must be proportionate, just, fair, and effective: these incentives can be deemed necessary for other societal objectives, or specific communities might depend on them. In some cases, the elimination must be progressive; in others, a complete elimination might not be desirable.

140. This target aims to initiate policy and administrative measures to reform subsidies and incentives that harm biodiversity. Table 3.26 presents indicators related to harmful subsidies.

Table 3.26: Indicators related to Target 21 on harmful subsidies reforms

Indicator	Sub-indicators	Unit
21.1 Policy and administrative measures to reform subsidies and incentives harmful to biodiversity	Disaggregated by: agriculture, fisheries, forestry, aquaculture, finance, tourism, health, infrastructure, energy, mining, manufacturing and processing, others	Rating (No, In process, Partially, Fully)
21.2 Mapping and prioritization of the subsidies for reforming, including their finance value		

¹⁰⁸ Matthews, A. and K. Karousakis (2022), “Identifying and assessing subsidies and other incentives harmful to biodiversity: A comparative review of existing national-level assessments and insights for good practice”, OECD Environment Working Papers, No. 206, OECD Publishing, Paris, <https://doi.org/10.1787/3e9118d3-en>.

3.5 Strategic Objective 4: Inclusive and equitable management

141. This aims to safeguard human rights and ensure procedural and distributional justice in all biodiversity-related processes, especially for vulnerable groups and IPLCs. The strategy to achieve this objective features five strategic action targets, which include:

- **Target 22 – Access and benefit sharing:** By 2028, develop effective legal, policy, administrative, and capacity-building measures at all levels to ensure the fair and equitable sharing of benefits from the utilization of genetic resources and associated traditional knowledge
- **Target 23 – Digital sequence information (DSI):** By 2030, develop effective legal, policy, administrative, and capacity-building measures at all levels to ensure the fair and equitable sharing of benefits from digital sequence information on genetic resources in accordance with applicable international access and benefit sharing instruments
- **Target 24 – Knowledge recognition and integration:** By 2030, integrate knowledge, innovations, and practices of IPLCs in the management of biodiversity and ecosystems with their free and prior informed consent
- **Target 25 – Inclusive decisions:** By 2030, ensure the full, equitable, inclusive, effective, and gender-responsive representation and participation in decision-making of IPLCs, Dalits, women and girls, children and youth, persons with disabilities, and other marginalized, minority groups while respecting their cultures and rights over lands, traditional territories, resources, and traditional knowledge, innovations and practices, and protecting environmental human rights defenders
- **Target 26 – Gender responsive approach:** By 2030, ensure a Gender-Responsive Approach in biodiversity actions for women and girls to ensure full, equitable, meaningful, and informed participation and leadership at all levels of actions

142. The following indicators (Table 3.27) will be used to monitor the results under the action targets.

Table 3.27. Indicators related to Objective 4 on inclusive and equitable management

Indicator	Sub-indicators	Unit
4.A Monetary benefits received in accordance with applicable internationally agreed Access and Benefit-sharing instruments (<i>Headline C.1</i>)	No	\$ million
4.B Non-monetary benefits arising from applicable international Access and Benefit-sharing instruments (<i>Headline C.1</i>)		Number
4.C Proportion of benefits shared with the IPLCs from the ABS system	No	%

3.5.1 Access and benefit sharing

Target 22: By 2028, develop effective legal, policy, administrative, and capacity-building measures at all levels to ensure the fair and equitable sharing of benefits from the utilization of genetic resources and associated traditional knowledge

143. The access and sharing of benefits (ABS) arising from the utilization of genetic resources and traditional knowledge is a main CBD objective, aiming to avoid biopiracy. *Biopiracy* is the effect of obtaining access to genetic resources without appropriate authority, unauthorized commercialization, or failure to provide for equitable benefit-sharing.¹⁰⁹ It often involves companies, researchers, or institutions accessing genetic resources or traditional knowledge (such as medicinal plants, seeds) and commercializing them without sharing the benefits with the communities that conserved or developed the resource or knowledge over generations, typically IPLCs. Protecting their rights and ensuring their *Free, Prior and Informed Consent*

¹⁰⁹ CBD Secretariat (2006), Ad hoc open-ended working group on ABS, Analysis of options for implementing disclosure of origin requirements in intellectual property applications

(FPIC) thus promotes equity, incentivizes conservation, and recognizes the critical role of traditional knowledge. The Nagoya Protocol on Access and Benefit Sharing (ABS) was adopted to coordinate on the issue.¹¹⁰ It establishes the *clearing house mechanism*, an international platform for exchanging information on access and benefit-sharing.

144. A wide variety of genetic resources and associated traditional knowledge exist in Nepal, much of them stewarded by IPLCs over generations. They have played an important role in preserving Nepal's biodiversity: many crops and livestock breeds adapted to local environments, wild species and micro-organisms have been preserved, as well as knowledge on medicinal plants and wild genetic material. However, a national ABS legal framework has yet to be fully implemented in the country.

145. This target aims to (i) strengthen legal, policy, and administrative measures on ABS and (ii) establish a mechanism for Free and Prior Informed Consent (FPIC) for the trading of genetic resources and traditional knowledge. It is complemented by Target 23 on digital sequence information, which will be treated in this NBSAP as a separate issue from other genetic resources. Table 3.28 presents indicators related to access and benefit sharing.

Table 3.28 Indicators related to Target 22 on access and benefit sharing

Indicator	Sub-Indicators	Unit
22.1 Legislative, administrative, or policy frameworks related to access and benefit sharing from the utilization of genetic resources, and equitable, inclusive, effective, and gender-responsive approaches (Headline 13.b)	No	Rating (No, In process, Partially, Fully)
22.2 Genetic resources and traditional knowledge for commercial use or research under the ABS mechanisms (number of agreements on benefit sharing)	No	Number
22.3 Internationally recognized certificates published in the ABS Clearing-House	No	Number
22.4 Administrative mechanism for Free, Prior and Informed Consent (FPIC) of IPLCs for the trading of genetic resources and traditional knowledge, innovations and practices, including research and development	No	Rating (No, In process, Partially, Fully)

3.5.2 Digital Sequence Information

Target 23 *By 2030, develop effective legal, policy, administrative, and capacity-building measures at all levels to ensure the fair and equitable sharing of benefits from digital sequence information on genetic resources in accordance with applicable international access and benefit sharing instruments*

146. *Digital Sequence Information (DSI)* is genetic data on biological resources (such as DNA, RNA, or protein sequences) that is stored and shared digitally, often through global databases. It is important for conservation, but mainly for research and innovation in agriculture or medicine, as it provides crucial information without the need to access physical genetic material. This also implies that it could potentially bypass ABS regulations defined in Target 22 and the Nagoya Protocol, and a specific mechanism is needed to tackle it. At CoP 15 in December 2022, Parties thus agreed to develop a solution for sharing benefits arising from the use of digital sequence information (DSI) on genetic resources.

147. This target complements Target 22 by (i) developing legal, policy, and administrative measures on DSI access and benefit sharing and (ii) strengthening the capacity of the stakeholders on DSI. Table 3.29 presents indicators related to digital sequence information.

¹¹⁰ KP Oli (2009) Access and benefit sharing from biological resources and associated traditional knowledge in the HKH region - protecting community interests, *International Journal of Biodiversity and Conservation*



Table 3.29 Indicators related to Target 23 on Digital sequence information (DSI)

Indicator	Sub-Indicators	Unit
23.1 Legislative, administrative, or policy frameworks related to access and benefit sharing from the utilization of DSI information from genetic resources, and equitable, inclusive, effective, and gender-responsive approaches (<i>Headline 13.b</i>)	No	Rating (No, In process, Partially, Fully)
23.2 DSI related information submitted to the global database	No	Number
23.3 Value of funds received from DSI information on genetic resources (Access to Cali fund)	No	US\$

3.5.3 Knowledge recognition and integration

Target 24: By 2030, integrate knowledge, innovations, and practices of IPLCs in the management of biodiversity and ecosystems with their free, prior and informed consent

148. Indigenous Peoples' and Local Communities (IPLCs) are ethnic groups and communities who are the original inhabitants of a given region. They are usually described as indigenous when they maintain traditions or other aspects of an early culture that is associated with the area.

149. Many indigenous peoples and local communities are holders of unique traditional biodiversity knowledge. Similarly, many have developed innovations, practices and technologies relevant to the conservation and sustainable use of biodiversity. In Nepal, the numerous IPLCs have developed their own indigenous knowledge systems relating to the role of plants, animal and micro-organisms in food, clothing, shelter, health care and their spiritual needs.¹¹¹ They have stewarded all main types of productive systems (forests, grasslands, wetlands, and agroecosystems) using their knowledge, cultural norms, and customary practices, within biocultural community protocols. These practices have proven to be adaptive, resilient, and often highly compatible with biodiversity conservation and ecosystem restoration goals. However, IPLCs' knowledge across countries is frequently overlooked or undervalued in formal conservation and development planning.

150. Science-based decision-making is one of the guiding principles of this NBSAP. As mentioned in Chapter 4, this NBSAP recognizes traditional knowledge as a valid and complementary form of knowledge. Thus, Traditional knowledge has been used in several research endeavors in the country.¹¹² This knowledge and these innovations, practices, and technologies should only be accessed with the free, prior and informed consent (FPIC) of IPLCs, which will ensure the legitimacy and relevance of their use.

151. This target aims to (i) develop policy, legal, and institutional mechanisms for the documentation, recognition, and protection of traditional knowledge, (ii) integrate knowledge, practices, and innovations of the IPLCs in collective biodiversity management with their FPIC. Table 3.30 presents indicators related to knowledge recognition and integration.

Table 3.30: Indicators related to Target 24 on knowledge recognition and integration

Indicator	Sub-Indicators	Unit
24.1 Policy, legal and institutional mechanism for the documentation, recognition, and protection of knowledge, practices, and innovations of IPLCs	Disaggregated by: Indigenous Peoples, Local Communities, Women, Dalits, Madhesi, Tharu, Muslims, Youth and Children, Other marginalized and Minorities	Rating (No, In process, Partially, Fully)
24.2 Integration of knowledge, practices, and innovations of the IPLCs in biodiversity management such as invasive alien species, pollution control, climate adaptation, ecosystem management and governance, rangeland management, and biosafety		

¹¹¹ Raybhandari, S. and Winkler, D. (2015). Ethnobotany. In: Nepal: An introduction to the natural history, ecology and human environment of the Himalayas (Eds: G. Miehe, C. Pendry and R. Chaudhary). Royal Botanic Garden, Edinburgh, pp. 271-286.

¹¹² MoFE (2018), NEPAL'S SIXTH NATIONAL REPORT TO THE CONVENTION ON BIOLOGICAL DIVERSITY

3.5.4 Inclusive decisions

Target 25: *By 2030, ensure the full, equitable, inclusive, effective, and gender-responsive representation and participation in decision-making of IPLCs, Dalits, women and girls, children and youth, persons with disabilities, and other marginalized, minority groups while respecting their cultures and rights over lands, traditional territories, resources, and traditional knowledge, innovations and practices, and protecting environmental human rights defenders*

152. Equitable and inclusive biodiversity governance is fundamental to ensuring social justice, environmental sustainability, and long-term conservation success. *Indigenous Peoples and Local Communities* (IPLCs) are rights holders and guardian ethnic groups and communities who are the original inhabitants of a given region, usually maintain traditions, customary systems associated with the area. They depend directly on biodiversity and its customary sustainable use and management for their livelihoods, resilience, cultures and spiritualities. They are therefore well placed to sustainably manage ecosystems and natural resources, developing conservation initiatives, an indigenous conservation ethos that integrates cultural and spiritual values, and traditional or customary governance and knowledge systems. This also implies that they are directly affected by environmental changes and policies.¹¹³

153. IPLCs in Nepal mainly live in and near areas of high biodiversity importance, and part of their traditional territories is now Protected Areas.¹¹⁴ Along with Dalits, women and girls, youth, persons with disabilities, indigenous minorities and other marginalized groups, they often face barriers to participation in environmental decision-making, despite being among the most directly affected. The differences across IPLCs and their intersectionality are also not always fully acknowledged, which leads to a lack of contextualization of management measures, resulting in various degrees of success, for example, with community forestry.¹¹⁵ Aligning with the CBD and KMGBF, this NBSAP emphasizes meaningful collective participation by IPLCs and other vulnerable communities in the NBSAP processes.

154. This target aims to (i) ensure the full, equitable, and inclusive representation and full and effective participation of Indigenous Peoples and local communities in decision-making processes related to biodiversity and (ii) involve Indigenous Peoples and local communities, women, youth, minorities and persons with disabilities in the planning, implementation, monitoring and reporting of this NBSAP. Table 3.31 presents indicators related to inclusive decision-making.

Table 3.31: Indicators related to Target 25 on Inclusive decisions

Indicator	Sub-indicators	Unit
25.1 Land-use change and land tenure in the traditional territories of Indigenous peoples and local communities (<i>Headline 22.1</i>)	No	%
25.2 Recognition of the Legal Rights of Indigenous Peoples and local communities, environmental human rights defenders, women, youth, and persons with disabilities with respect to their traditional cultures, and practices (<i>Headline 22.b</i>)	Disaggregated by: Indigenous Peoples, Local Communities, Women, Dalits, Madhesi, Tharu, Muslims, Youth and Children, Other marginalized and Minorities	Rating (No, In process, Partially, Fully)
25.3 Full and effective participation, collective involvement of Indigenous Peoples and local communities, women, youth, minorities, marginalized and persons with disabilities and their intersectionality in the implementation and monitoring, reporting of NBSAP		
25.4 Institutional mechanism for handling grievance on NBSAP Implementation	No	
25.5 Administrative mechanism to ensure the full, equitable, meaningful and informed participation and leadership of IPLCs, women, youth, minorities and marginalized communities at all levels of action, engagement, policy, and decision-making processes of community-based and customary institutions (e.g. spatial planning, protected areas/buffer zones or OECM areas management)	Disaggregated by: Indigenous Peoples, Local Communities, Women, Dalits, Madhesi, Tharu, Muslims, Youth and Children, Other marginalized and Minorities	

¹¹³ MoFE (2018), NEPAL'S SIXTH NATIONAL REPORT TO THE CONVENTION ON BIOLOGICAL DIVERSITY

¹¹⁴ Bajracharya et al. (2005) *Effectiveness of community involvement in delivering conservation benefits to the Annapurna Conservation Area, Nepal*, Environmental Conservation

¹¹⁵ Ojha et al. (2016) *Delocalizing Communities: Changing Forms of Community Engagement in Natural Resources Governance*, World Development

3.4.5 Gender responsive approach

Target 26: By 2030, ensure a Gender-Responsive Approach in biodiversity actions for women and girls to ensure full, equitable, meaningful, and informed participation and leadership at all levels of actions

155. A gender-responsive approach to biodiversity is essential for progressing towards equity and enhancing conservation and sustainable use. Indeed, gender roles influence biodiversity action by impacting the ability of women (and intersectionalities) to participate in decision-making, and by affecting their access to and control of land, biological resources, and other productive assets, as well as their access to finance.¹¹⁶ Yet, globally and in Nepal, women and their intersections with other groups play a central role in sectors deeply rooted and connected to biodiversity, such as agriculture, water, community forest management, and other natural resources.

156. This target thus focuses on ensuring gender equality in biodiversity through a gender-responsive approach. Gender-responsiveness ensures that programmes, policies, and institutions consider people's different needs and experiences based on their gender identity. It aims to create a society that is responsive to the diverse needs and realities of people, including those who may face discrimination or disadvantages because of their gender and intersectionalities.

157. This target aims to (i) ensure equal opportunities, capacity, rights, and access to land for women and (ii) strengthen gender responsiveness in planning, implementing, monitoring and reporting on NBSAP. This includes ensuring that women are represented in policy-making bodies, community meetings, and other decision-making forums. Table 3.32 presents indicators related to a gender-responsive approach.

Table 3.32: Indicators related to Target 26 on a gender-responsive approach

Indicator	Sub-Indicators	Unit
26.1 Legal, administrative or policy framework, inter alia, to implement the Gender Plan of Action (2023–2030), to ensure that all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by ensuring women's equal rights and access to land and natural resources (<i>Headline 23.b</i>)	No	Rating (No, In process, Partially, Fully)
26.2 Participation of women, girls and their intersectional identities at all levels of implementation, monitoring and reporting of NBSAP	Disaggregated by: Indigenous Peoples, Local Communities, Dalits, Madhesi, Tharu, Muslims, Other marginalized and Minorities	
26.3 Institutional mechanism for handling grievances on NBSAP Implementation	No	

3.6 Strategic Objective 5: Institutional strengthening

158. This aims to build and strengthen the institutional capacity on biodiversity governance. The strategy to achieve this objective features four strategic action targets, which include:

- **Target 27 Biosafety measures:** By 2030, take policy, legal, and other precautionary measures to strengthen biosafety measures as set out in Article 8(g) of the CBD
- **Target 28 – Biotechnology:** By 2030, strengthen capacity in risk assessment, handling, management, and distribution of benefits from biotechnology equitably as set out in Article 19 of the CBD
- **Target 29 – Capacity-building:** By 2028, enhance capacity for biodiversity conservation and management at all levels and sectors
- **Target 30 – Monitoring and knowledge management:** Strengthen monitoring and knowledge management at all levels and sectors

¹¹⁶ IPBES (2019): Summary for policymakers, global assessment report on biodiversity and ecosystem services

159. The following indicators (Table 3.33) are used to monitor the results under the action targets, which include (i) actions related to capacity building and policy development, and (ii) joint review on the implementation of the NBSAP.

Table 3.33. Indicators related to Objective 5 on Institutional strengthening

Indicator	Sub-Indicators	Unit
5.A Action to strengthen capacity-building, development, and access to and transfer of technology and to promote the development of and access to innovation and technical and scientific cooperation (Headline 20.b)	No	Rating (No, In process, Partially, Fully)
5.B Multi-sectoral and multi-stakeholder mechanism to review performance and facilitate the implementation of the NBSAP at the Federal Level (Joint Review Mechanism)	No	

3.6.1 Biosafety measures

Target 27: *By 2030, take policy, legal, and other precautionary measures to strengthen biosafety measures as set out in Article 8(g) of the CBD*

160. Biotechnology, especially related to genetic engineering, which involves directly modifying organisms' DNA, RNA or any genetic material, is being used increasingly¹¹⁷ and globally for medical research, and to develop crops that display targeted characteristics: specific pest resistance, drought tolerance, and faster growth.¹¹⁸ While these innovations can bring benefits, they also raise concerns about how they might affect nature and human health. Countries face growing opportunities, challenges, and risks related to the use and transboundary movement of living modified organisms (LMOs). Indeed, there is a risk that they could potentially spread into wild ecosystems or harm species.

161. *Biosafety measures* regulate, manage and control the risks associated with the use and release of living modified organisms deriving from biotechnology. These are thus crucial to ensure that LMOs are handled and used with the necessary safety precautions, in line with the precautionary principle employed in this NBSAP. The IPBES Global Assessment further stresses the importance of precautionary approaches to biotechnology, especially where indigenous knowledge systems, agroecological diversity, and ecological resilience are at risk.¹¹⁹ *Article 8 (g)* of the CBD calls for establishing measures to regulate, manage, or control the risks associated with LMOs, including through biosafety legislation, risk assessment, public participation, and precautionary approaches. The Cartagena Protocol on Biosafety under the CBD coordinates global action on biotechnologies. However, many countries lack the legislation, labs, or trained experts to monitor or control these technologies fully.

162. This target aims to (i) strengthen policy, legal, and administrative measures regarding biosafety and (ii) develop capacity for effective operation and monitoring of biosafety measures, including risk assessment, handling, and management mechanisms. Table 3.34 presents indicators related to biosafety measures. The targets are aligned with the Biosafety Framework, 2006, which aims to protect biodiversity, human health, and the environment from the adverse effects of research and development activities of modern biotechnology.

¹¹⁷ IPBES (2019) – Global Assessment Report on Biodiversity and Ecosystem Services

¹¹⁸ Joshi, B. K. (2017) Biotechnology for Conservation and Utilization of Agricultural Plant Genetic Resources in Nepal. Journal of Nepal Agricultural Research Council, 3(1), 49–59. <https://doi.org/10.3126/jnarc.v3i1.17276>

¹¹⁹ IPBES (2019): Summary for policymakers, global assessment report on biodiversity and ecosystem services

Table 3.34: Indicators related to Target 27 on biosafety measures

Indicator	Sub-indicators	Unit
27.1 Policy, legal, and administrative mechanisms for biosafety measures as set out in Article 8(g) of the Convention (<i>Headline 17.b</i>)	No	Rating (No, In process, Partially, Fully)
27.2 Administrative mechanism for effective operation and monitoring of biosafety measures, including national designated National Laboratory systems, checkpoints, quarantine, and phytosanitary measures	No	
27.3 Development and operationalization of a risk assessment, handling, transportation and management mechanism for the introduction of living modified organisms into the environment	No	

3.6.2 Biotechnology

Target 28: By 2030, strengthen capacity in risk assessment, handling, management, and distribution of benefits from biotechnology equitably as set out in Article 19 of the CBD

163. While biotechnology is associated with risks (presented in Target 27), the use of LMOs is also associated with many benefits. At the international level, equitable access to the results and benefits of biotechnologies based on genetic resources provided by Nepal would enable the country to benefit from technological advances based on genetic resources, providing a powerful incentive for conservation. This is also the case at the national level, as developed in Target 22 on ABS. Article 19 of the CBD thus calls on countries to manage biotechnology responsibly and to ensure the equitable sharing of benefits that arise from its use, particularly in developing countries.

164. This target aims to ensure the equitable distribution of biotechnology-related benefits through (i) the development of policy, legal, and administrative mechanisms for handling biotechnology and (ii) strengthening collaboration on biotechnology-related research. Table 3.35 presents indicators related to biotechnology. The target aligns with the Biotechnology policy 2006, which aims to increase production and productivity using research and development of biotechnology and the transfer of technology.

Table 3.35: Indicators related to Target 28 on biotechnology

Indicator	Sub-Indicators	Unit
28.1 Policy, legal and administrative mechanisms for the handling of biotechnology and the distribution of its benefits as set out in Article 19 (<i>Headline 17.b</i>)	No	Rating (No, In process, Partially, Fully)
28.2 Number of biotechnology-related products or processes commercialized in collaboration with the private sectors and industries (national and international)	No	Number
28.3 National Clearing House mechanism for risk assessment, handling, and management on the release of new products/technology	No	Rating (No, In process, Partially, Fully)

3.6.3 Capacity building

Target 29: By 2028, enhance capacity for biodiversity conservation and management at all levels and sectors

165. Effective biodiversity conservation requires not only policies and funding but also the knowledge, skills, tools, and institutional readiness to implement them. To achieve the goals and targets of both the Kunming-Montreal Global Biodiversity Framework and this NBSAP, stakeholders need to have the relevant expertise (including both technical and functional capacities) to effectively prioritize, plan, mobilize resources, and implement and monitor relevant strategies, programmes, and activities. Capacity development is thus crucial for enhancing the abilities, resilience, and effectiveness of individuals, institutions, and systems at various levels.¹²⁰

¹²⁰ IPBES (2019) – Global Assessment Report on Biodiversity and Ecosystem Services

Biodiversity Vision and National Targets:*Final Draft (Work in progress; Not for circulation)*

166. *Capacity building* refers to fostering an effective enabling environment and strengthening the ability of individuals and institutions to contribute successfully to realizing the NBSAP's Mission. This can be achieved by (i) improving the knowledge, skills, and competencies of rights-holders and students and (ii) developing competent human resources for the biodiversity sector at all levels. Table 3.36 presents indicators related to capacity building.

Table 3.36: Indicators related to Target 29 on Capacity-building

Indicator	Sub-indicators	Unit
29.1 Mechanism for building capacities of rights holders on biodiversity management, specifically IPLCs, Women, Youth, girls and PWDs	Disaggregated by: Indigenous Peoples, Local Communities, Women, Dalits, Madhesi, Tharu, Muslims, Youth and Children, Other marginalized and Minorities	Rating (No, In process, Partially, Fully)
29.2 Integration of biodiversity in school curricula at the secondary and higher secondary levels	No	
29.3 Government officials at all tiers (federal, provincial, and local government) having completed higher studies on biodiversity-related subjects in National and International institutions	Disaggregated by levels of government: Federal, Provincial, Local	
29.4 Government officials at all tiers (federal, provincial, and local government) having completed long-term training (above 30 days) on biodiversity-related subjects in National and International institutions		

3.6.4 Monitoring and knowledge management**Target 30: Strengthen monitoring and knowledge management at all levels and sectors**

167. Among the key principles of this NBSAP is adaptive management, which is helpful in progressively adjusting the strategy to uncertainties, outcomes, and changes in the global and national context. Adaptive management requires feedback between knowledge creation and biodiversity governance, and a robust monitoring framework.¹²¹ Decision-makers, practitioners, and the general public should indeed be able to access relevant data, information, and knowledge.

168. Effective monitoring, including the use of indicators aligned with the Global Framework, depends on the availability of good-quality data, information, and knowledge. The IPBES stresses that biodiversity monitoring systems worldwide are usually insufficient and fragmented, and many countries lack standardized, long-term biodiversity monitoring programs.¹²² *Knowledge management* refers to the processes for creating, discovering, collecting, organizing, curating, storing, sharing, and using relevant knowledge, information, and data. Such accessible biodiversity-related data, information, and knowledge are indeed critical for creating baselines, regularly assessing progress, and taking necessary action. This issue is cross-cutting, with implications for all the goals and targets of this NBSAP.

169. This target aims to ensure (i) the operationalized monitoring system at all levels of government and (ii) establish mechanisms of periodic review of NBSAP implementation at the national and sub-national levels. Table 3.37 presents indicators related to monitoring and knowledge management.

¹²¹ Williams, B. K., & Brown, E. D. (2014). Adaptive Management: From More Talk to Real Action. *Environmental Management*, 53(2), 465–479. <https://doi.org/10.1007/s00267-013-0205-7>

¹²² IPBES (2019) – Global Assessment Report on Biodiversity and Ecosystem Services

Table 3.37: Indicators related to Target 30 on Monitoring and knowledge management

Indicator	Sub-Indicators	Unit
30.1 Indicators on biodiversity information for monitoring the Kunming Montreal Global biodiversity framework (Number of headline indicators used) (<i>Headline 21.1</i>)	No	Number
30.2 Operationalization of the National Biodiversity Information Management System at all levels of government	No	Rating (No, In process, Partially, Fully)
30.3 Multi-sectoral and multi-stakeholder mechanism to review performance and facilitate the implementation of the NBSAP at the Federal Level (Joint Review Mechanism)	No	

3.7 Strategic Objective 6: Collaboration and Coordination

170. This aims to strengthen collaboration across actors, sectors, and levels of government, where conservation priorities are consistent with national and sub-national development goals. The strategy to achieve this objective features two strategic action targets, which include:

- **Target 31 - Research and Innovation:** *By 2030, foster transboundary collaboration and cooperation on joint scientific research, technical cooperation, and technological innovation, including dissemination and use*
- **Target 32 - Inter-sector and Inter-government coordination and collaboration:** *By 2026, establish institutional arrangements at all levels of government for inter-sectoral and intra-government communication, coordination, and collaboration for biodiversity management*

171. The following indicators (Table 3.38) are used to monitor the results under the action targets, which include (i) Partnerships to foster joint technology development and joint scientific research, and (ii) Institutional mechanisms for inter-government and inter-sector collaboration and coordination.

Table 3.38. Indicators related to Strategic Objective 6 on Collaboration and Coordination

Indicator	Sub-Indicators	Unit
6.A Transboundary collaboration on joint scientific research, technical cooperation, and technological innovation (South-South, North-South, and triangular cooperation)	No	Rating (No, In process, Partially, Fully)
6.B Institutional mechanism for inter-government and inter-sector collaboration at all levels of government		

3.7.1 Research and Innovation

Target 31: *By 2030, foster transboundary collaboration and cooperation on joint scientific research, technical cooperation, and technological innovation, including dissemination and use*

172. Knowledge generation on biodiversity is important in updating existing data and improving the science policy dialogue necessary for science-based and adaptive management. Biodiversity challenges are increasingly transboundary: climate change is a global issue, some species' populations are transboundary, as are Invasive Alien Species. Studying and tackling them thus requires cross-sectoral and cross-border scientific and technical cooperation.¹²³ For Nepal, collaboration with neighboring countries and global partners is crucial for managing shared ecosystems and species in the Himalayas.

173. Access to technologies that can be useful to address biodiversity issues (e.g., geospatial technologies for spatial planning, technologies to monitor biodiversity, early warning systems, Indigenous knowledge) is still a challenge for many developing countries, including Nepal, because of financial constraints, limited institutional frameworks, limited capacity, and intellectual property barriers.¹²⁴ New opportunities to

¹²³ IPBES (2019) - Global Assessment Report on Biodiversity and Ecosystem Services - Chapter 5 on future pathways and innovations.

¹²⁴ MoFE (2020). Sixth National Report to the Convention on Biological Diversity - Nepal

strengthen biodiversity conservation should be explored through technical and social *innovation*, harnessing emerging technologies such as artificial intelligence and traditional practices obtained with the free, prior, and informed consent of IPLCs. Finally, scientific and technical cooperation can take various forms and offers opportunities for co-creation and/or exchange of knowledge, expertise, data, and resources.¹²⁵

174. This target aims to (i) encourage South-South, North-South, and triangular cooperation and (ii) operate multistakeholder and multisectoral institutional mechanisms for defining research priorities. Table 3.39 presents indicators related to research and innovation.

Table 3.39: Indicators related to Target 31 on research and innovation

Indicator	Sub-Indicators	Unit
31.1 Partnerships to foster joint technology development and joint scientific research programs for biodiversity conservation and sustainable use, and strengthening scientific research and monitoring capabilities, including through South-South, North-South, and triangular cooperation (<i>Headline 20.b</i>)	No	Number
31.2 Multistakeholder and Multisectoral institutional mechanisms for identifying knowledge gaps and identifying research priorities	No	Rating (No, In process, Partially, Fully)
31.3 Funds allocated for biodiversity-related long-term (more than 3 years) scientific research and technological innovation from the government	No	\$ million

3.7.2 Inter-sector and Inter-government coordination and collaboration

Target 32: *By 2026, establish institutional arrangements at all levels of government for inter-sectoral and intra-government communication, coordination, and collaboration for biodiversity management*

175. Effective biodiversity conservation and management require coordinated efforts across multiple sectors and levels of government. Integration of biodiversity issues across sectoral policies is essential for biodiversity conservation. However, institutional silos and lack of coordination often lead to overlapping mandates, an inefficient use of resources, and even policy conflicts and inconsistencies, as is for example the case in Nepal for the Payment for Ecosystem Services scheme.¹²⁶ Establishing institutional arrangements for inter-sectoral and intra-governmental collaboration will thus improve policy coherence, facilitate the mainstreaming of biodiversity across sectors, and enhance the effectiveness, and sustainability of biodiversity actions.

176. Moreover, as stated in the guiding principle on harmonizing with federalism, the Constitution of Nepal indicates authority on biodiversity management at all levels of the government: local, provincial, and federal. Accordingly, many institutions and committees already exist at these levels, on which this NBSAP will build its strategy and implementation. This NBSAP thus aims to establish mechanisms of cooperation, coordination, and collective action across all tiers of government to ensure that the Constitutional provisions are respected. Provincial roadmaps and monitoring frameworks should also flow from the national NBSAP, setting targets and monitoring progress on national indicators at the provincial level.

177. This target aims to (i) operationalize institutional mechanisms for monitoring and reporting progress on NBSAP and (ii) develop administrative and institutional mechanisms to mainstream biodiversity at the local level. Table 3.40 presents indicators related to inter-sector and inter-government coordination and collaboration.

¹²⁵ Johnson et al. (2021). More than an academic exercise: Structuring international partnerships to build research and professional capacity for conservation impact, *Conservation Science and Practice*

¹²⁶ Bhatta, L. D., Van Oort, B. E. H., Rucevska, I., & Baral, H. (2014). Payment for ecosystem services: Possible instrument for managing ecosystem services in Nepal. *International Journal of Biodiversity Science, Ecosystem Services & Management*, 10(4), 289–299. <https://doi.org/10.1080/21513732.2014.973908>

Table 3.40: Indicators related to Target 32 on inter-sector and inter-government coordination and collaboration

Indicator	Sub-indicators	Unit
32.1 Institutional mechanism for inter-government, inter-sector collaboration, and coordination at all levels and sector	Disaggregated by: Federal and provincial	Rating (No, In process, Partially, Fully)
32.2 Institutional mechanisms for monitoring and reporting progress on NBSAP at the provincial level	No	
32.3 Administrative and institutional mechanisms to mainstream biodiversity at the local level	No	

3.8 Strategic Objective 7: Sustainable finance

178. This aims to mobilize adequate, sustainable, and equitable financial resources aligned with NBSAP's mission. The strategy to achieve this objective features four strategic action targets, which include:

- **Target 33 – Public funding (Expenditure):** *By 2030, Mobilize (finance/expenditure) US\$ 150 million per year from government, non-government, and international agencies*
- **Target 34 – Resource mobilization (Finance solutions):** *By 2030, mobilize US\$ 100 million from innovative and sustainable financing solutions*
- **Target 35 – Nature related disclosure:** *By 2027, take legal, administrative, or policy measures to encourage and enable businesses (industry, especially multinational companies) and the finance sector to assess, disclose, and reduce biodiversity-related risks and negative impacts*
- **Target 36 – Positive incentives:** *By 2030, increase positive incentives (taxes, fees, tradable permits, subsidies, charges, PES, offsets schemes) for biodiversity conservation and sustainable use by 5% annually*

179. The following indicators (Table 3.41) are used to monitor the results under the action targets, which include (a) internal public funding, (b) domestic public funding, and (c) private funding

Table 3.41. Indicators related to Objective 7 on Sustainable Finance

Indicator	Sub-indicators	Unit
7.A Finance gap for biodiversity	No	\$ million
7.B Extent of finance gap reduced by implementing finance solutions	No	
7.C % of finance solutions specially targeting women and youth, IPLCs and other marginalized minorities, PWDs on biodiversity	Disaggregated by stakeholders: Indigenous People, Local Communities, Girls, Youth, Women, other marginalized minorities and Persons with disabilities	%

3.8.1 Public funding (Expenditure)

Target 33: *By 2030, Mobilize (finance/expenditure) US\$ 150 million per year from government, non-government, and international agencies*

180. The successful implementation of Nepal's NBSAP will require substantial and sustained investment over the implementation period. Without sufficient and relevant funding, critical actions such as ecosystem restoration, protected area management, community conservation, invasive species control, and capacity building cannot be scaled or sustained. There has, however, been a disconnect between the identified priority sectors and the national budget allocation, which is also seen in donor-supported projects and creates a financing gap. As an example, the cost of implementing the previous NBSAP was estimated at US\$673 million,¹²⁷ of which 51% would be supported by the government, 25% by donors, and 10% by NGOs.¹²⁸ This

¹²⁷ MoFSC – Ministry of Forests and Soil Conservation (2014) Nepal National Biodiversity Strategy and Action Plan 2014–2020. Kathmandu. (www.cbd.int/doc/world/np/np-nbsap-v2-en.pdf)

¹²⁸ Ibid

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

is far from the biodiversity expenditure achieved during the period (2014-2020), which was US\$171 million (25.4%).¹²⁹

181. As proposed by the KM-GBF, the goal of the strategy to finance the NBSAP is thus to “substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans including by: (a) Increasing total biodiversity related international financial resources from developed countries, including official development assistance (b) Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances”. Nepal has thus created a Biodiversity Finance Plan for 2022–2030.

182. This target aims to reach a public biodiversity expenditure of US\$150 million annually by 2030 by (i) increasing public funding for biodiversity and (ii) building capacity to access international finance. Table 3.42 presents indicators related to biodiversity expenditure.

Table 3.42: Indicators related to Target 33 on Public funding (Expenditure)

Indicator	Sub-Indicators	Unit
33.1 Total international public funding, including official development assistance for conservation and sustainable use of biodiversity and ecosystems (Headline D.1)	Disaggregated by sources of funding: international agencies on budget, on treasury expense, and bilateral agencies off treasury expense	\$ million
33.2 Total domestic public funding for conservation and sustainable use of biodiversity and ecosystems (Headline D.2)	Disaggregated by sources of funding: federal government agencies, provincial government agencies, local government agencies, and national non-governmental organizations	
33.3 Program-related biodiversity expenditure	Disaggregated by: federal government agencies, provincial government agencies, local government agencies, international agencies, bilateral agencies, national non-governmental organizations	

3.8.2 Resource mobilization (Finance solutions)

Target 34: By 2030, mobilize US\$ 100 million from innovative and sustainable financing solutions

183. Another possible source of financing is innovative and sustainable financing solutions, as mentioned in the KM-GBF guidelines to increase the level of financial resources by “(c) leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments; (d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, benefit-sharing mechanisms, with environmental and social safeguards”.

184. Indeed, public expenditure is insufficient to cover the entirety of biodiversity finance needs and is vulnerable to shifting priorities. Innovative and private financing solutions can thus help diversify the sources of financing. They include mechanisms such as biodiversity offsets, green bonds, trust funds, conservation finance, nature-based tourism revenues, public-private partnerships, payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms.¹³⁰

185. This target aims to reduce the finance gap for biodiversity by designing and implementing finance solutions in collaboration with private sector, community-based organization, conservation partners and government agencies, where it focuses on (i) developing a comprehensive biodiversity finance plan and (ii) leveraging finance resources for biodiversity purposes. Table 3.43 presents indicators related to resource mobilization.

¹²⁹ BIOFIN. (2023) Biodiversity Finance Plan, The Biodiversity Finance Initiative (BIOFIN)

¹³⁰ Chhetri et al (2024). Biodiversity finance in Nepal. ODI country study

Table 3.43: Indicators related to Target 34 on Resource mobilization (Finance solutions)

Indicator	Sub-Indicators	Unit
34.1 Private funding (domestic and international) on conservation and sustainable use of biodiversity (Headline D.3)	Disaggregated by sectors: national private sector, communities, government, and international private sector	\$ million
34.2 Number of finance solutions implemented	No	Number
34.3 Payment for ecosystem services ¹³¹	No	\$ million
34.3 Issuance of green bonds (climate) ¹³²	No	

3.8.3 Nature related disclosure

Target 35: By 2027, take legal, administrative, or policy measures to encourage and enable businesses (industry, especially multinational companies) and the finance sector to assess, disclose, and reduce biodiversity-related risks and negative impacts

186. As detailed throughout this NBSAP, Nepal's economy is highly dependent on biodiversity, natural resources, and ecosystem services, and biodiversity-dependent sectors account for a high share of employment in the country. This means that the loss of biodiversity presents a risk for businesses, which has been recognized by central banks worldwide.¹³³

187. In line with this observation, the KM-GBF aims to "Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions: (a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity;" This target thus aims to encourage and enable business and financial institutions, particularly large and transnational companies, to identify and disclose their dependencies and impacts on biodiversity, and to report on these and other information. Large and transnational companies and financial institutions are particularly targeted due to their size and areas of operation, supply and value chains, and portfolios, which often have large net impacts on biodiversity.

188. This target aims to (i) formulate legal, administrative, or policy measures on nature related disclosure and (ii) enhance investment in biodiversity/green sector as per Nepal's green taxonomy. Table 3.44 presents indicators related to nature-related disclosure.

Table 3.44: Indicators related to Target 35 on Nature-related disclosure

Indicator	Sub-Indicators	Unit
35.1 Number of companies disclosing their biodiversity-related risks, dependencies, and impacts (Headline 15.1)	Disaggregated by sectors: financial sector, transnational companies, large industries (including stock exchange-listed companies)	Number
35.2 Formulation of Legal, administrative, or policy measures on nature-related disclosure targeting the finance sector, transnational companies, and large industries (Headline 15.b)		Rating (No, In process, Partially, Fully)
35.3 Proportion of finance sector investment in biodiversity/green sector as per the green taxonomy of Nepal (Low carbon pathway, pollution control)	No	%

3.8.4 Positive incentives

Target 36: By 2030, increase positive incentives (taxes, fees, tradable permits, subsidies, charges, PES, offsets schemes) for biodiversity conservation and sustainable use by 5% annually

189. Positive incentives are economic, legal, or institutional measures designed to encourage activities beneficial to biodiversity (e.g. subsidies for sustainable practices, payments for ecosystem services (PES),

¹³¹ Sixteenth Development Plan, Nepal

¹³² Sixteenth Development Plan, Nepal

¹³³ BIOFIN TNFD report (tbc)

Biodiversity Vision and National Targets:*Final Draft (Work in progress; Not for circulation)*

biodiversity offsets, green taxes, tradable permits). They are thus essential tools to change human/institutional behaviors towards biodiversity. In Nepal, such mechanisms remain underutilized, fragmented, or small in scale, and can be overshadowed by incentives that harm biodiversity (tackled in Strategic Objective 3 on Integration).

190. Article 11 of the CBD calls on Parties to adopt, as far as possible and as appropriate, economically and socially sound measures that act as incentives for biodiversity conservation and sustainable use.

191. This target thus aims to monitor and scale up the value of all different types of positive incentives for biodiversity, across various sectoral activities by (i) increasing positive incentives for biodiversity, (ii) sharing income equitably among stakeholders, and (iii) handing over management responsibilities of forests to local communities. Table 3.45 presents indicators related to the positive incentives.

Table 3.45: Indicators related to Target 36 on Positive Incentives

Indicator	Sub-indicators	Unit
36.1 Positive incentives in place to promote biodiversity conservation and sustainable use (<i>Headline 18.1</i>)	Disaggregated in 9 incentives: taxes (royalties from timber and non-timber forest products), fees (protected areas' royalty income), taxes (provincial governmental fees), subsidies (financial incentives and grants provided to communities), offset schemes (forest development fund), environmental pollution tax, income from selling carbon, income from ecosystem services other than carbon, subsidies on insurance premium and loans on green and biodiversity-friendly activities	\$ million
36.2 Income from biodiversity sources shared with local communities	Disaggregated in 5 areas: Agriculture, Forests, Wetlands and freshwater ecosystems, Grassland, protected areas	
36.3 Types and value of indirect subsidies and incentives by sector (Tax exemption, reduction and concession, soft loan/interests' subsidy, tariffs reduction/imposition)	Disaggregated in 13 sectors: agriculture, fisheries, forestry, aquaculture, finance, tourism, health, infrastructure, energy, mining, manufacturing and processing, grasslands, wetlands	
36.4 Management of conservation areas and community-based forests by local communities, provincial, local government, or institutions entrusted by the act	Disaggregated by areas: community forests, collaborative forests, religious forests, leasehold forests, conservation areas and, public land forest managed by people	ha



4. WAY FORWARD

4.1 Future Priorities

1. Preparation of the road map of the NBSAP

192. As agreed, the NBSAP duration will be six years from the date of endorsement, from 2025 to 2030.¹³⁴ The baseline for reporting progress will be 2020 (as applicable), and the status for 2024 will be collated. After endorsement of the vision paper from the MoFE, the NBSAP Secretariat will prepare a road map for the finalization of the NBSAP, which comprises the indicators, baseline values (2020), status (2024), targets for 2028 and 2030, a financial plan and implementation plan. Attempts will be made to establish the baseline value of all indicators. The secretariat will assess the data availability and devise a strategy accordingly. The following activities will be carried out while preparing the road map and baseline value:

- **Defining Indicators:** Indicators are adopted from the KMGBF Monitoring Framework or nationally defined to support their measurement. Defining them implies explaining, elaborating, or identifying keywords required to measure the indicator. **Annex 5** presents a sample case or template used for defining indicators.
- **Data Source:** Data is mainly collected from a desk review and collating secondary sources of information, especially from content analysis of policies, plans, programs, and strategies. Stakeholder consultations should be carried out to validate information collected from the desk review. National-level reports and peer-reviewed publications covering the national-level study should only be used for measuring results. However, cross-sectional studies and peer-reviewed journals focusing on the small geographical areas of the country can be used to explain buildings (as relevant). All the information collected from the desk review will be validated nationally and with the respective thematic groups.
- **Setting quantitative targets for 2028 and 2030:** The targets for 2028 and 2030 will be defined based on the baseline values and the national action targets, which will be validated during the thematic workshops. The table below presents the template, and **Annex 6** presents a sample for computing one of the action targets.

SN	Indicators	Unit	Baseline (2020)	Status (2024)	Milestones		Responsible agency
					2028	2030	
1	Indicator (overall)						
1.1	Sub-indicator (sector)						
1.1	Sub-indicator (sector)						
1.2	Sub-indicator (sector)						
2	Indicator (overall)						
2.1	Sub-indicator (sector)						

2. Drafting of NBSAP

193. **Thematic working group meetings:** The sub-national and national-level field consultations were completed in March 2025 to collect field-level information. All the hired experts have submitted a draft report based on the provisional national targets. The secretariat is now integrating these reports and consolidating the findings to produce the draft NBSAP. Following the approval of the vision document, the secretariat will prepare the NBSAP and organize thematic group meetings to (a) validate the field findings and results, especially baseline values (c) agree on the targets for 2028 and 2030 and (c) validate the prioritized actions till 2030, including financial need for achieving the targets and the identification of the responsible institution for reporting. Following the validation of the NBSAP by thematic group meetings, the draft NBSAP will be revised.

3. Final NBSAP

194. **Provincial and national validations:** Following the revision of the NBSAP, integrating the suggestions from the thematic workshops, a provincial and national validation of the NBSAP will be carried out, together with the peer-review by national and international experts. Based on the results, the final draft

¹³⁴ As per the Minister level decision of the MOFE (June 2024)

Biodiversity Vision and National Targets:

Final Draft (Work in progress, Not for circulation)

of the NBSAP will be produced and shared with the technical and steering committee members. The provincial and national validation is expected to be completed by July 2025.

195. **Final NBSAP submission to the Ministry.** The draft NBSAP will be shared with the technical and steering committee members and on the MoFE's website for feedback. Based on the input from the NBSAP Technical and Steering Committees, it will be revised and submitted to the ministry for endorsement.

5.2 Key Issues and Challenges

196. Some of the issues and challenges that pushed the deadline for NBSAP revision include:

- **Consultative processes demanding more time:** Consultative processes demanded more time than expected, affecting the planned report submission timeline.
- **Challenges in ensuring coherence and consistency:** The NBSAP secretariat works with nearly 30 experts in their field. Ensuring consistency and coherence in analysis was difficult since the experts came from different knowledge systems. Hence, series of meetings conducted with the experts to develop a shared vision, consuming more time than planned.
- **Data and knowledge gap:** Limited information was available for the proposed indicators. Likewise, an extensive review of the policy and database needs to be conducted for competing values. There is no accepted definition for all indicators. Hence, the secretariat had to work with the experts to define the indicators, which also consumed substantial time.

5.2 Revised Timeline

197. The table below summarizes the timeline for submission of the NBSAP with a detailed action plan in Annex 7.

Phase	Expected results	Due date	Remark
Planning	Endorsement of the approach paper for NBSAP revision	3 July 2024	Completed
Situation Analysis	• National Vision Document for Biodiversity • Revised timeline	15 April 2025	Draft report
Draft NBSAP	Draft NBSAP for validation	10 July 2025	On-going
Final NBSAP	Validated NBSAP	31 August 2025	Planned



5. PROPOSED OUTLINE OF NBSAP (Tentative)

Message from the Prime Minister
Foreword from the Minister, MOFE
Statement from the state minister, MOFE
A few words from the Secretary, MOFE
Message from the UNDP
Acknowledgement from the Chief, EBD, MOFE
Abbreviations and Acronyms
List of Tables, Figures and Maps

CHAPTER 1: INTRODUCTION

- 1.1 Background
- 1.2 Purpose of NBSAP
- 1.3 Approach and Methods
- 1.4 Structure of NBSAP
- 1.5 Limitations

CHAPTER 2: STATE OF NEPAL'S BIODIVERSITY (Status, Trend, Emerging Issues)

- 2.1 Country Background
 - 2.1.1 Geography
 - 2.1.2 Biophysical setting and
 - 2.1.4 Bioclimate
- 2.2 Land Use/Land Cover
- 2.3 Biodiversity status
 - 2.3.1 Ecosystem Diversity
 - 2.3.1.1 Forest ecosystem
 - 2.3.1.2 Agriculture ecosystem
 - 2.3.1.3 Rangeland /grassland ecosystem
 - 2.3.1.4 Freshwater and wetland ecosystem
 - 2.3.1.5 Urban landscape
 - 2.3.2 Species diversity
 - 2.3.2.1 Wild flora
 - 2.3.2.2 Wild fauna
 - 2.3.2.3 Crops
 - 2.3.2.4 Livestock (animals, birds and poultry, fishery)
 - 2.3.2.5 Microorganisms
 - 2.3.3 Genetic diversity
 - 2.3.3.1 Forest
 - 2.3.3.2 Wildlife
 - 2.3.3.3 Crops and Horticulture
 - 2.3.3.4 Livestock genetic resources (wild and domesticated)
- 2.4 Policy, Legislative, and Institutional Environment
 - 2.4.1 Constitutional provisions (2 para)
 - 2.4.2 Policy and strategies (Biodiversity related, social, economic, and infrastructure)
 - 2.4.3 Legislation (Biodiversity related)
 - 2.4.4 Institutional roles and responsibilities
- 2.5 Management regimes
 - 2.5.1 Protected area management
 - 2.5.2 Government-managed Forest
 - 2.5.3 Community-based Forest management
 - 2.5.4 Forest conservation areas
 - 2.5.5 Other area-based conservation
 - 2.5.6 Agrobiodiversity management
 - 2.5.7 Wetland management
 - 2.5.8 Grassland management
- 2.6 People and Biodiversity

- 2.6.1 Demography pattern
- 2.6.2 Ethnicity
- 2.6.3 Gender issues in Biodiversity
- 2.6.4 Conservation culture and ethos
- 2.6.5 Resource dependency

2.7 Biodiversity and Economy

- 2.7.1 Gross Domestic Product (GDP)
- 2.7.2 Economic value
- 2.7.3 Sectoral dependency and interlinkages

2.8 Emerging trends and patterns of biodiversity change

- 2.8.1 Positive
- 2.8.2 Negative

2.9 Drivers of Biodiversity Change

- 2.9.1 Direct drivers
- 2.9.2 Indirect drivers

2.10 Problems, issues and challenges

2.11 Key lessons (Areas of improvement)

CHAPTER 3: PERFORMANCE REVIEW NBSAP (2014-2020)

3.1 Achievements

- 3.1.1 Achievements by Aichi Biodiversity Targets
- 3.1.2 Achievements by National Biodiversity Targets
- 3.1.3 Achievement by Thematic Area
- 3.1.4 Cross-cutting areas

3.2 Coordination and collaboration

3.3 Expenditure Review (NSAP 2014-2020)

3.4 Factors supporting and hindering in achieving results

3.5 Lessons learned

3.6 Way forward (priorities)

CHAPTER 4: BIODIVERSITY VISION AND OBJECTIVES

4.1 Vision 2050

4.2 Mission 2030

4.3 Theory of Change

4.4 Strategic Objectives

4.5 Guiding Principles

4.6 Strategies

CHAPTER 5: Targets and Action Plans

5.1 Conservation

- 5.1.1 Biodiversity inclusive spatial planning
- 5.1.2 Restoration
- 5.1.3 Protected area management
- 5.1.4 Other areas prioritized for conservation
- 5.1.5 Species protection
- 5.1.6 Genetic diversity
- 5.1.7 Human-wildlife conflict
- 5.1.8 Invasive species management
- 5.1.9 Pollution control

5.2 Sustainable Management

- 5.2.1 Wild harvest and trade
- 5.2.2 Sustainable use
- 5.2.3 Sustainable management
- 5.2.4 Biodiversity-friendly practices
- 5.2.5 Human Well-being
- 5.2.6 Sustainable consumption

5.2.7 Food and agriculture waste reduction

5.3 Mainstreaming

5.3.1 Biodiverse-friendly infrastructure

5.3.2 Climate change

5.3.3 Biodiversity inclusive urbanization

5.3.4 Biodiversity mainstreaming

5.7.5 Harmful subsidy reforms

5.4 Inclusive and equitable management

5.4.1 Access and benefit sharing

5.4.2 Digital sequence information

5.4.3 Knowledge recognition and integration

5.4.4 Inclusive decisions

5.4.5 Gender responsive approach

5.5 Institutional Strengthening

5.5.1 Biosafety measures

5.5.2 Biotechnology

5.5.3 Capacity building

5.5.4 Monitoring and knowledge management

5.6 Coordination and collaboration

5.6.1 Partnership for technology development and collaboration

5.6.2 Inter-sector coordination and collaboration

5.7 Sustainable finance

5.7.1 Public biodiversity expenditure

5.7.2 Resource mobilization

5.7.3 Nature disclosure framework

5.7.4 Positive incentives

CHAPTER 6: IMPLEMENTATION ARRANGEMENTS

6.1 Roles and Responsibilities (federal, provincial, and local)

6.2 Coordination committee (federal, provincial, and local)

6.3 Implementation Committee (Institutional structure, roles and responsibilities)

6.4 Implementation Support Unit/Secretariat

6.5 Biodiversity integration at the Provincial level

6.6 Biodiversity integration at the Local level

CHAPTER 7: MONITORING AND REPORTING

7.1 Monitoring framework

7.2 Annual progress review

7.3 Periodic Report (Seventh and Eighth National Report)

7.4 Independent evaluation

CHAPTER 8: FINANCE PLAN

8.1 Expenditure projection

8.2 Finance needs assessment

8.3 Finance gap analysis

8.4 Finance plan

8.5 Prioritized finance solutions

CHAPTER 9: RISK AND MITIGATION MEASURES

9.1 Likely risks (likelihood of occurrence)

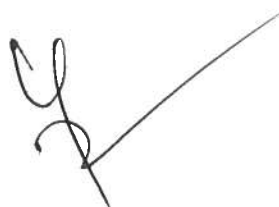
9.2 Finance needs assessment

CHAPTER 10: WAY FORWARD

10.1 Stakeholders' commitment and collaboration

10.2 Transformative/Flagship projects

10.3 Living document



REFERENCES and ANNEX

Annex 1: KMGBF goals and action target

The GBF has 23 action-oriented global targets for urgent action over the decade to 2030. The actions set out in each target need to be initiated immediately and completed by 2030. Together, the results will enable the achievement of outcome-oriented goals for 2050. Actions to reach these targets should be implemented consistently and in harmony with the Convention on Biological Diversity and its Protocols and other relevant international obligations, considering national circumstances, priorities, and socioeconomic conditions.

A. Reducing threats to biodiversity

TARGET 1: Ensure that all areas are under participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes addressing land and sea use change to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.

TARGET 2: Ensure that by 2030, at least 30 percent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

TARGET 3: Ensure and enable that by 2030, at least 30 per cent of terrestrial and inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

TARGET 4: Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.

TARGET 5: Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spill-over, applying the ecosystem approach while respecting and protecting customary sustainable use by indigenous peoples and local communities.

TARGET 6: Eliminate, minimize, reduce, and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent by 2030, and eradicating or controlling invasive alien species especially in priority sites, such as islands.

TARGET 7: Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: reducing excess nutrients lost to the environment by at least half including through more efficient nutrient cycling and use; reducing the overall risk from pesticides and highly hazardous chemicals by at least half including through integrated pest management, based on science, taking into account food security and livelihoods; and also preventing, reducing, and working towards eliminating plastic pollution.

Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

TARGET 8: Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.

B. Meeting people's needs through sustainable use and benefit-sharing

TARGET 9: Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.

TARGET 10: Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches, contributing to the resilience and long-term efficiency and productivity of these production systems and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.

TARGET 11: Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.

TARGET 12: Significantly increase the area and quality and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature and contributing to inclusive and sustainable urbanization and the provision of ecosystem functions and services.

TARGET 13: Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030 facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.

C. Tools and solutions for implementation and mainstreaming

TARGET 14: Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, fiscal and financial flows with the goals and targets of this framework.

TARGET 15: Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions:

- Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains and portfolios.
- Provide information needed to consumers to promote sustainable consumption patterns.
- Report on compliance with access and benefit-sharing regulations and measures, as applicable.



Biodiversity Vision and National Targets:

Final Draft (Work in progress; Not for circulation)

in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.

TARGET 16: Ensure that people are encouraged and enabled to make sustainable consumption choices, including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030 reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.

TARGET 17: Establish, strengthen capacity for, and implement in all countries, biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.

TARGET 18: Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least 500 billion United States dollars per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.

TARGET 19: Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, by 2030 mobilizing at least 200 billion United States dollars per year, including by:

- (a) Increasing total biodiversity related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, to at least US\$ 20 billion per year by 2025, and to at least US\$ 30 billion per year by 2030.
- (b) Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances.
- (c) Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments.
- (d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards.
- (e) Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises.
- (f) Enhancing the role of collective actions, including by indigenous peoples and local communities, Mother Earth centric actions¹³⁵ and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity.
- (g) Enhancing the effectiveness, efficiency and transparency of resource provision and use.

TARGET 20 : Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening

¹³⁵ Mother Earth Centric Actions: Ecocentric and rights based approach enabling the implementation of actions towards harmonic and complementary relationships between peoples and nature, promoting the continuity of all living beings and their communities and ensuring the non commodification of environmental functions of Mother Earth.

scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the framework.

TARGET 21: Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent,¹³⁶ in accordance with national legislation.

TARGET 22: Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.

TARGET 23: Ensure gender equality in the implementation of the framework through a gender-responsive approach where all women and girls have equal opportunity and capacity to contribute to the three objectives of the convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.

¹³⁶ Free, prior and informed consent refers to the tripartite terminology of “prior and informed consent” or “free, prior and informed consent” or “approval and involvement.”

Annex 2: Persons and Service providers engaged in the NBSAP revision processes

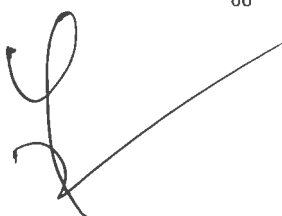
A. Quality assurance and technical backstopping	
i.	Dr. Deepak Kumar Kharal, Secretary, MOFE
ii.	Dr. Govinda Sharma Poudel (then Secretary, MOFE)
iii.	Dr. Rewati Raman Poudel (then Secretary, MOFE)
iv.	Mr. Megh Nath Kafle, Joint Secretary, MOFE
v.	Dr. Ram Chandra Kandel, Joint Secretary, MOFE
vi.	Dr. Sanjeev Rai, Joint Secretary, MOFE
vii.	Dr. Rajendra KC, Joint Secretary, MOFE
viii.	Mr. Dharendra Kumar Pradhan, Joint Secretary, MOFE
ix.	Mr. Rajendra Dhungana, Under Secretary, MOFE
x.	Mr. Gyanendra Kayastha, Forest Officer, MOFE
xi.	Ms. Anu Shrestha, Scientific Officer, MOFE
xii.	Mr. Vijaya Prasad Singh, Assistant Representative, UNDP
xiii.	Mr. Pragyajan Yalamber Rai, Portfolio Manager, UNDP
B. Technical Experts/Subject Matter Specialist	
i.	Mr. Bijendra Basnyat, PhD (Technical lead/Biodiversity and Finance Analyst), BIOFIN/UNDP Nepal
ii.	Dr. Krishna Chandra Paudel, Team Leader, EAS/UNDP
iii.	Ms. Auriane Meilland, PhD (Policy Specialist, UNDP Nepal)
iv.	Mr. Dipesh Joshi, Technical Coordination, EAS/UNDP Nepal
v.	Dr. Govinda Bahadur Basnet, Biodiversity Policy and Institutional Expert, EAS/UNDP
vi.	Dr. Ambika Gautam, Terrestrial Biodiversity, EAS/UNDP Nepal,
vii.	Dr. Uttam Babu Shrestha, Rangelands, EAS/UNDP Nepal
viii.	Mr. Shailendra Kumar Pokharel, Wetlands, EAS/UNDP Nepal
ix.	Mr. Anil Kumar Acharya, Agrobiodiversity, EAS/UNDP Nepal
x.	Dr. Smriti Gurung, Aquatic Biodiversity, EAS/UNDP Nepal
xi.	Dr. Yadav Upreti, Access, Benefit Sharing and Biosafety, EAS/UNDP Nepal
xii.	Dr. Bharat Babu Shrestha, Invasive Species Management, EAS/UNDP Nepal
xiii.	Dr. Nani Raut, Agriculture Pollution and Waste Management, EAS/UNDP Nepal
xiv.	Dr. Ripu Kunwar, Climate Change, EAS/UNDP Nepal
xv.	Dr. Dipesh Pyakurel, NTFP and Wild harvest, EAS/UNDP Nepal
xvi.	Mr. Keshav Khanal, Ecosystem Services, EAS/UNDP Nepal
xvii.	Mr. Prakash Lamsal, Policy Expert, EAS/UNDP Nepal
xviii.	Dr. Deependra Nath Joshi, Knowledge Management & Institutional Development, EAS/UNDP Nepal
xix.	Mr. Sanjib Subba, Private Sector Engagement, EAS/UNDP Nepal
xx.	Ms. Sunaina Sharma, Gender Equality and Social Inclusion, EAS/UNDP Nepal

Biodiversity Vision and National Targets:*Final Draft (Work in progress; Not for circulation)*

- | | |
|---------|--|
| xxi. | Mr. Kamal Rai, Indigenous People and Ethnic Minority, EAS/UNDP Nepal |
| xxii. | Mr. Sushil Khadka, GIS Specialist, EAS/UNDP Nepal |
| xxiii. | Mr. Shreyashi Bista, Forestry and Gender, EAS/UNDP Nepal |
| xxiv. | Mr. Ayush Raj Regmi, Forest and Biodiversity, EAS/UNDP Nepal |
| xxv. | Mr. Bibek Jung Thakuri, Forestry, EAS/UNDP Nepal |
| xxvi. | Mr. Saurav Shrestha, Stakeholder engagement facilitator, Natural Resources Conservation Services |
| xxvii. | Mr. Hari Thalang, Workshop Facilitator, Nepal Federation of indigenous Nationalities |
| xxviii. | Ms. Sovita Pariyar, Workshop Facilitator, Community Based Forestry Supporters' Network, Nepal |
| xxix. | Mr. Deepak Pariyar, Workshop Facilitator, Green Foundation Nepal |

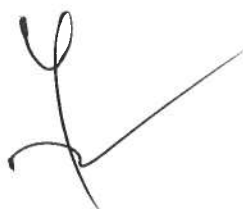
C. Peer reviewers/Knowledge partners

- | | |
|-------|--|
| i. | Mr. Kamal Sampang Rai, NIWF |
| ii. | Mr. Dil Raj Khanal, FECOFUN |
| iii. | Dr. Chiran Kumar Pokharel, NTNC |
| iv. | Mr. Bharat Kumar Gotame, ILAM project, WWF |
| v. | Dr. Narendra Pradhan, IUCN |
| vi. | Dr. Sunita Chaudhary, ICIMOD |
| vii. | Mr. Ek Raj Sigdel, WWF |
| viii. | Dr. Dinesh Neupane, ZSL |



Biodiversity Vision and National Targets:*Final Draft (Work in progress; Not for circulation)***Annex 3: Timeline regarding the preparation of the vision documents**

SN	Activities	Due date	Participants
1	Preparation of the draft national target	20 July 2024	
2	National workshop to discuss national targets	26 July 2024	60
3	Submission of Annex 1 document to the CBD Secretariat	1 August 2024	
4	Expert validation workshop on national targets	25 and 30 September, 2024	40
5	Preliminary vision (National vision and targets)	12 December 2024	29
6	Field consultations, planning, and review workshop	30 December 2024	28
7	Stakeholder consultative workshops with different stakeholders, including experts (more than 12 events)	15 September to 2 January 2025	40
8	Workshop with the IPLCs, women, and youth	2 January 2025	62
9	Preliminary national vision on biodiversity and targets	10 January	
10	30 sub-national level workshops (25 districts/Palika, five protected areas), representing all provinces, physiographic regions, and protected areas (30 events)	16 Jan 2024– 10 February 2025	1206
11	Seven provincial-level workshops	16 Jan 2024– 10 February 2025	383
12	Field finding sharing for the integration of biodiversity vision	3 March 2025	
13	National biodiversity vision and targets	15 April 2025	
14	Technical committee		
15	Revised national biodiversity vision and targets		
16	Steering committee		
17	Final national biodiversity vision and targets		



Annex 4: Alignment of NBSAP strategic objectives and goals

1. Alignment between NBSAP Strategic Objectives and Global Goals

KM_GBF Goal	Strategic Objectives	Alignment
☒ Global Goal A The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050 Human-induced extinction of known threatened species is halted, and by 2050, the extinction rate and risk of all species will be reduced tenfold. The abundance of native wild species will also increase to healthy and resilient levels. The genetic diversity within wild and domesticated species populations is maintained, safeguarding their adaptive potential.	1. Conservation <i>Protect, conserve and restore biodiversity, addressing the direct threats to biodiversity.</i>	☒ High: covers all elements of the global goal. Halt loss and restore nature
	2. Sustainable use <i>Enhance and maintain nature's contributions to people</i>	
	3. Integration: <i>Integrate biodiversity considerations across all sectors and levels of government</i>	
☒ Global Goal B Biodiversity is sustainably used and managed, and nature's contributions to people, including ecosystem functions and services, are valued, maintained, and enhanced. Those currently in decline are being restored, supporting sustainable development for the benefit of present and future generations by 2050.	1. Conservation <i>Protect, conserve and restore biodiversity, addressing the direct threats to biodiversity.</i>	☒ High: covers all elements of the global goal Manage and use land and sea sustainably
	2. Sustainable use <i>Enhance and maintain nature's contributions to people</i>	
	3. Integration: <i>Integrate biodiversity considerations across all sectors and levels of government</i>	
☒ Global Goal C The monetary and non-monetary benefits from the utilization of genetic resources, digital sequence information on genetic resources, and of traditional knowledge associated with genetic resources, as applicable, are shared fairly and equitably, including, as appropriate, with Indigenous peoples and local communities, and substantially increased by 2050, while ensuring traditional knowledge associated with genetic resources is appropriately protected, thereby contributing to the conservation and sustainable use of biodiversity, in accordance with internationally agreed access and benefit-sharing instruments	4. Inclusive and equitable management: <i>Safeguard the rights of all stakeholders, particularly of IPLCs, women, youth, Dalit and other marginalized, minority groups, including equitable participation and benefit-sharing at all levels</i>	☒ High: covers all elements of the global goal Share benefits and services equitably

Vision Document: National targets and indicators

(Work in progress, not for circulation)

KM_GBF Goal	Strategic Objectives	Alignment
☑ Global Goal D Adequate means of implementation, including financial resources, capacity-building, technical and scientific cooperation, and access to and transfer of technology to fully implement the Kunming-Montreal global biodiversity framework are secured and equitably accessible to all Parties, especially developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, progressively closing the biodiversity finance gap of 700 billion dollars per year, and aligning financial flows with the Kunming-Montreal Global Biodiversity Framework and the 2050 Vision for Biodiversity.	3. Integration: <i>Integrate biodiversity considerations across all sectors and levels of government</i>	☑ High: covers all elements of the global goal Mobilize resources adequately
	4. Inclusive and equitable management: <i>Safeguard the rights of all stakeholders, particularly of IPLCs, women, youth, Dalit and other marginalized, minority groups, including equitable participation and benefit-sharing at all levels</i>	
	5. Institutional strengthening: <i>Strengthen institutional capacity on effective biodiversity governance.</i>	
	6. Coordination and Collaboration: <i>Strengthen coordination and collaboration across all relevant sectors, stakeholders (including the private sector and IPLCs), and tiers of government</i>	
	7. Sustainable Finance: <i>Mobilize adequate, sustainable, and equitable financial resources</i>	

2. Alignment between NBSAP Targets and KM-GBF Targets

Global Targets	National Targets (for 2030)	Alignment
TARGET 1: Ensure that all areas are under <i>participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes</i> addressing land and sea use change to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of <i>Indigenous peoples and local communities</i>.	Target 1: By 2030, bring all the terrestrial and aquatic ecosystems under participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes while respecting the rights of IPLCs.	1: Plan and manage all areas to reduce biodiversity loss to close to zero by 2030 <i>Alignment: High</i>
TARGET 2: Ensure that by 2030, at least 30 percent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.	Target 2: By 2030, restore 50 % of degraded terrestrial and aquatic ecosystems effectively while integrating traditional knowledge and practices of IPLCs	2: Restore 30% of degraded ecosystems <i>Alignment: High</i>

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Global Targets	National Targets (for 2030)	Alignment
TARGET 3: Ensure and enable that by 2030, at least 30 per cent of terrestrial and inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.	Target 3: By 2030, ensure and enable ecologically representative, inclusive, equitably governed, and effectively managed protected areas Target 4: By 2030, conserve and manage 30% of the areas of particular importance for biodiversity, ecosystem functions, and services through forest conservation areas, biological corridors, conservation landscapes, and other effective area-based conservation measures (OECM) in terrestrial and aquatic ecosystems while recognizing and respecting the rights and practices of the IPLCs	3: Conserve 30% of Land, Waters and Seas effectively <i>Alignment: High</i>
TARGET 4: Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.	Target 5: By 2030, reduce the risk of human-induced extinction of known threatened species Target 6: By 2030, maintain and restore the genetic diversity of native, wild, and domesticated species Target 7: By 2030, manage human-wildlife interactions effectively to address human-wildlife conflict for co-existence Target 17: By 2026, integrate biodiversity considerations into infrastructure development (linear infrastructures), especially in biological corridors/biodiversity-rich areas	4: Halt Species Extinction, Protect Genetic Diversity and Manage Human-Wildlife Conflicts <i>Alignment: High</i>
TARGET 5: Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spill-over, applying the ecosystem approach while respecting and protecting customary sustainable use by indigenous peoples and local communities.	Target 10: By 2028, ensure that the use, harvesting, and trade of wild species are sustainable, safe, and legal while respecting and protecting the customary sustainable use of IPLCs	5: Ensure Sustainable, Safe and Legal Harvesting and Trade of Wild Species <i>Alignment: High</i>
TARGET 6: Eliminate, minimize, reduce, and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent by 2030, and eradicating or controlling	Target 8: By 2030, reduce the introduction and establishment of known invasive alien species by 50 %, along with reducing and mitigating impacts of the invasive alien species	6: Reduce the Introduction of Invasive Alien Species by 50% and Minimize Their Impact <i>Alignment: High</i>

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Global Targets	National Targets (for 2030)	Alignment
invasive alien species especially in priority sites, such as islands.		
TARGET 7: Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: reducing excess nutrients lost to the environment by at least half including through more efficient nutrient cycling and use; reducing the overall risk from pesticides and highly hazardous chemicals by at least half including through integrated pest management, based on science, taking into account food security and livelihoods; and also preventing, reducing, and working towards eliminating plastic pollution.	Target 9: By 2030, reduce impacts of pollution from all sources, especially from plastics, pesticides, wastewater, and nutrients, to levels that are not harmful to biodiversity, ecosystem functions, and services, especially in the areas of high importance for biodiversity and ecosystem services	7: Reduce Pollution to Levels That Are Not Harmful to Biodiversity <i>Alignment: High</i>
TARGET 8: Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.	Target 18: By 2030, minimize the impacts of climate change on biodiversity and build resilience	8: Minimize the Impacts of Climate Change on Biodiversity and Build Resilience <i>Alignment: High</i>
TARGET 9: Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.	Target 11: By 2030, manage, harvest, and use wild species sustainably while recognizing customary sustainable use practices of IPLCs	9: Manage Wild Species Sustainably to Benefit People <i>Alignment: High</i>
TARGET 10: Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity-friendly practices, such as sustainable intensification, agroecological and other innovative approaches, contributing to the resilience and long-term efficiency and productivity of these production systems and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.	Target 12: Manage 50% of areas sustainably under forestry, agriculture, grasslands, wetlands, and watersheds by 2030 Target 13: By 2030, encourage and promote biodiversity-friendly practices in forestry, agriculture, grassland, and wetlands	10: Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries, and Forestry <i>Alignment: High</i>
TARGET 11: Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions	Target 14: By 2030, maintain and enhance nature's contributions to people, including ecosystem functions and services	11: Restore, Maintain and Enhance Nature's Contributions to People <i>Alignment: High</i>

Vision Document: National targets and indicators

(Work in progress, not for circulation)

Global Targets	National Targets (for 2030)	Alignment
and/or ecosystem based approaches for the benefit of all people and nature.		
TARGET 12: Significantly increase the area and quality and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature and contributing to inclusive and sustainable urbanization and the provision of ecosystem functions and services.	Target 19: By 2030, mainstream biodiversity considerations in urban and densely populated areas, including biodiversity-inclusive planning	12: Restore, Maintain and Enhance Nature's Contributions to People <i>Alignment: High</i>
TARGET 13: Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030 facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.	Target 22: By 2028, develop effective legal, policy, administrative, and capacity-building measures at all levels to ensure the fair and equitable sharing of benefits from the utilization of genetic resources and associated traditional knowledge Target 23: By 2030, develop effective legal, policy, administrative, and capacity-building measures at all levels to ensure the fair and equitable sharing of benefits from digital sequence information on genetic resources in accordance with applicable international access and benefit sharing instruments	13: Increase the Sharing of Benefits from Genetic Resources, Digital Sequence Information and Traditional Knowledge <i>Alignment: High</i>
TARGET 14: Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, fiscal and financial flows with the goals and targets of this framework.	Target 20: By 2030, integrate biodiversity and its values into economic and development processes (policy, plan, and program) across all sectors and all levels of government	14: Integrate Biodiversity in Decision-Making at Every Level <i>Alignment: High</i>
TARGET 15: Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions: Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains and portfolios.	Target 35: By 2027, take legal, administrative, or policy measures to encourage and enable businesses (industry, especially multinational companies) and the finance sector to assess, disclose, and reduce biodiversity-related risks and negative impacts	15: Businesses Assess, Disclose and Reduce Biodiversity-Related Risks and Negative Impacts <i>Alignment: High</i>

Vision Document: National targets and indicators

(Work in progress, not for circulation)

Global Targets	National Targets (for 2030)	Alignment
- Provide information needed to consumers to promote sustainable consumption patterns. - Report on compliance with access and benefit-sharing regulations and measures, as applicable. in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.		
TARGET 16: Ensure that people are encouraged and enabled to make sustainable consumption choices, including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030 reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.	Target 15: By 2028, develop a supportive, legal or regulatory framework to encourage people towards sustainable consumption, including sensitization and education Target 16: By 2030, reduce food and agricultural waste by 10%	16: Enable Sustainable Consumption Choices to Reduce Waste and Overconsumption <i>Alignment: High</i>
TARGET 17: Establish, strengthen capacity for, and implement in all countries, biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.	Target 27: By 2030, take policy, legal, and other precautionary measures to strengthen biosafety measures as set out in Article 8(g) of the CBD Target 28: By 2030, strengthen capacity in risk assessment, handling, management, and distribution of benefits from biotechnology equitably as set out in Article 19 of the CBD	17: Strengthen Biosafety and Distribute the Benefits of Biotechnology <i>Alignment: High</i>
TARGET 18: Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least 500 billion United States dollars per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.	Target 21: By 2030, initiate policy and administrative measures to reform subsidies and incentives harmful to biodiversity in a fair, effective, and equitable way Target 36: By 2030, increase positive incentives (taxes, fees, tradable permits, subsidies, charges, PES, offsets schemes) for biodiversity conservation and sustainable use by 5% annually	18: Reduce Harmful Incentives and Scale Up Positive Incentives for Biodiversity <i>Alignment: High</i>
TARGET 19: Substantially and progressively increase the level of financial resources from all sources in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, by 2030 mobilizing at least 200 billion United States dollars per year, including by:	Target 33: By 2030, Mobilize (finance/expenditure) US\$ 150 million per year from government, non-government, and international agencies Target 34: By 2030, mobilize US\$ 100 million from innovative and sustainable financing solutions	19: Mobilize for Biodiversity From all Sources, Including International Finance <i>Alignment: High</i>

Vision Document: National targets and indicators

(Work in progress, not for circulation)

Global Targets	National Targets (for 2030)	Alignment
(a) Increasing total biodiversity-related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, to at least US\$ 20 billion per year by 2025, and to at least US\$ 30 billion per year by 2030. (b) Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances. (c) Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments. (d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards. (e) Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises. (f) Enhancing the role of collective actions, including by indigenous peoples and local communities, Mother Earth centric actions¹³⁷ and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity. (g) Enhancing the effectiveness, efficiency and transparency of resource provision and use.		
TARGET 20 : <i>Strengthen capacity-building and development</i>, access to and transfer of technology, and promote development of and access to innovation and technical and scientific	Target 29: By 2028, enhance capacity for biodiversity conservation and management at all levels and sectors	20: Strengthen Capacity-Building, Technology

¹³⁷ Mother Earth Centric Actions: Ecocentric and rights-based approach enabling the implementation of actions towards harmonic and complementary relationships between peoples and nature, promoting the continuity of all living beings and their communities and ensuring the non-commodification of environmental functions of Mother Earth.

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Global Targets	National Targets (for 2030)	Alignment
cooperation, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the framework.	Target 31: By 2030, foster transboundary collaboration and cooperation on joint scientific research, technical cooperation, and technological innovation, including dissemination and use	Transfer, and Scientific and Technical Cooperation for Biodiversity <i>Alignment: High</i>
TARGET 21: Ensure that the best available data, information and knowledge are accessible to decision-makers , practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of Indigenous peoples and local communities should only be accessed with their free, prior and informed consent, ¹³⁸ in accordance with national legislation.	Target 24: By 2030, integrate knowledge, innovations, and practices of IPLCs in the management of biodiversity and ecosystems with their free, prior and informed consent	21: Ensure That Knowledge Is Available and Accessible to Guide Biodiversity Action <i>Alignment: High</i>
	Target 30: Strengthen monitoring and knowledge management at all levels and sectors	
TARGET 22: Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making and access to justice and information related to biodiversity by Indigenous peoples and local communities, respecting their cultures and their rights overlands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.	Target 32: By 2026, establish institutional arrangements at all levels of government for inter-sectoral and intra-government communication, coordination, and collaboration for biodiversity management	22: Ensure Participation in Decision-Making and Access to Justice and Information Related to Biodiversity for all <i>Alignment: High</i>
	Target 25: By 2030, ensure the full, equitable, inclusive, effective, and gender-responsive representation and participation in decision-making of IPLCs, Dalits, women and girls, children and youth, persons with disabilities, and other marginalized and minorities while respecting their cultures and rights over lands, resources, and traditional knowledge and protecting environmental human rights defenders	
TARGET 23: Ensure gender equality in the implementation of the framework through a gender-responsive approach where all women and girls have equal opportunity and capacity to contribute to the three objectives of the convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful	Target 26: By 2030, ensure a Gender-Responsive Approach in biodiversity actions for women and girls to ensure full, equitable, meaningful, and informed participation and leadership at all levels of actions	23: Ensure Gender Equality and a Gender-Responsive Approach for Biodiversity

¹³⁸ Free, prior and informed consent refers to the tripartite terminology of "prior and informed consent", "free, prior and informed consent", or "approval and involvement".

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Global Targets	National Targets (for 2030)	Alignment
<i>and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.</i>		Action Alignment: High

A handwritten signature in black ink, consisting of a stylized 'G' followed by a long, sweeping diagonal line.

Annex 5: Template used for defining indicators, including computation methods (Sample)
Target 1 - Biodiversity-inclusive spatial planning: By 2030, bring 75% of the terrestrial and aquatic ecosystems under participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes while respecting the rights of IPLCs

Proposed Indicators	Sub-indicators/ Sector	Methods of computation	Unit	Interpretation (for Nepal)	Remark
1.1 Red List of Ecosystems (Headline)		The data will come from the Red List of Ecosystems assessments. The indicator assesses risk status across ecosystem types based on the proportion of ecosystems in each Red List risk category (Rowland et al., 2020).	0 to 1	0 – 1, where values closer to zero indicate that most ecosystems are critically endangered	Need to conduct assessment at the national level aligning with the IUCN red list category
1.2 Extent of natural ecosystems (Headline)		The extent of natural and semi-natural ecosystems as a proportion of the country's total area Collated at the national level based on SESA framework & IUCN GET classification	%	The extent of natural ecosystems is maintained at the aggregate level	ARIES for SESA
1.3 Area covered by biodiversity-inclusive spatial plans (Headline)		The ratio of total land under biodiversity-inclusive spatial plans to total land of the country. This includes the spatial level plans that are prepared at the landscape level, biological corridors, protected areas, forests conservation areas and Ramsar sites which have integrated biodiversity considerations in managing these areas. Overlapping areas are removed to prevent double counting. (Need to work with GIS for producing final map and computation of the area)	%		Need to compute from the study report Conservation Landscapes of Nepal ¹³⁹ This data will be computed based on the landscape level mapping study done by the MOFE, which has prioritized landscape for conservation
1.4. Use of participatory, integrated and biodiversity-inclusive spatial planning and/or effective management processes to prevent biodiversity losses or land use changes (Headline)		This indicator is compiled from two information: Areas under preparation of biodiversity inclusive spatial plans and/or effective management processes to prevent biodiversity losses or land use changes and Adoption of participatory and inclusive processes in preparation of the plans Review of spatial level plans that are prepared at the national level (land use policy) and landscape level, biological corridors, protection forests and Ramsar sites plan. (TBC)	Rating	No: No spatial plan or absence of biodiversity In process: Mechanism developed but yet to be implemented Partially: Progress Fully: All areas under biodiversity inclusive spatial planning or effective management	

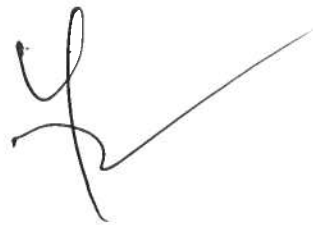
¹³⁹ chrome-extension://efaidnbmnnnibpcepjglelindmkaj/https://d2ouvy59p0d56k.cloudfront.net/downloads/conservation_landscapes_of_nepal.pdf

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Proposed Indicators	Sub-indicators/ Sector	Methods of computation	Unit	Interpretation (for Nepal)	Remark
1.5 Preparation of participatory, integrated and biodiversity inclusive spatial planning and/or effective management processes to prevent biodiversity losses or land use changes by sector	1.5.1 Agriculture (sector)	Review of sector wide Policies, Strategies and Plans at the federal scale, checking that for each sector, at least one of them has addressed the drivers of the land use/land cover changes and identified areas of high biodiversity importance (considering threats indexes or species of high national and international biodiversity importance) (The highest value among the plans prevails at the sector level and the lowest value among the sectors will prevail at the aggregate level) Cross sectoral Strategies and Acts - Protected Area Management Strategy: 2022-2030 - Land Use Policy - Forest Act-2019 - National Parks and Wildlife Conservation Act-1973	Rating	No: Nothing included In process: inclusive plan preparation under way Partially: Some drivers are included but spatial elements are lacking Fully: Spatial plans showing areas of high biodiversity importance	In order to compute Baseline Agriculture Sector: National Agriculture Policy-2004, Agriculture Development Strategy (2015-2035) Agrobiodiversity Policy-2019 Forests (Sector): National Forest Policy-2019 Forest Sector Strategy-2015-2025 Water bodies (Sector): National Water Resources Policy-2020 Water Resources National Water Plan-2002-2027 National Wetland Policy-2012 Grassland (sector): As Grassland has no specific policy, refer National Rangeland Policy-2012 Urban (Sector): National Urban Policy-2024 National Urban Development Strategy-2017
	1.5.2 Forests (sector)				
	1.5.3 Water bodies, including riverbed (water sector)				
	1.5.4 Grassland (sector)				
	1.5.5 Urban area (sector)				
1.6 Administrative mechanism engaging and involving IPLCs, women, youth, and marginalized communities in spatial plan preparation processes	1.6.1 Indigenous Peoples (Nationalities) 1.6.2 Local Communities 1.6.3 Women	Such an administrative mechanism involves the formation of committees or working groups and their involvement in approval processes of the spatial plan. In the absence of such structures, a partial mechanism would involve consulting the targeted groups. Documents that contribute to achieving the "in process", "partially" and "Fully" values of indicator 1.5 (including a spatial component) will be reviewed.		For each plan/policy: No: No mechanism in place, or not clearly specified in policy documents In process: Mechanism developed but yet to be implemented	

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Proposed Indicators	Sub-indicators/ Sector	Methods of computation	Unit	Interpretation (for Nepal)	Remark
	1.6.4 Dalits	For each sub-indicator (social group), one document per sector is kept and the lowest value among the sectors will prevail. At the aggregate level, the lowest value among sub-indicators will prevail.		Partially: Involved in consultation processes but not on decision making structures Fully: Involved in decision making structures such as committees or working groups	



Annex 6: Template used for setting milestones including computation of value

Target 1 - Biodiversity-inclusive spatial planning: By 2030, Bring 90% of the terrestrial and aquatic ecosystems under participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes while respecting the rights of IPLCs.

Proposed Indicators	Unit	Status 2020	Milestones		Responsible agency	Remark
			2024	2028	2030	
1.1 Red List of Ecosystems (Headline)	Red list index	NA	NA	TBG	TBG	Not available
1.2 Extent of natural ecosystems (Headline)	%	70.6	70.7	70.7	70.7	FRTC /MOFE
1.3 Area covered by biodiversity-inclusive spatial plans (Headline)	%	0	79.9	NA	90	MOFE
1.4 Use of participatory, integrated and biodiversity inclusive spatial planning and/or effective management processes to prevent biodiversity losses or land use changes (Headline)	Rating • No • In process • Partially • Fully	Partially	Partially	Partially	Fully	MOFE
1.5 Preparation of participatory, integrated and biodiversity inclusive spatial planning and/or effective management processes to prevent biodiversity losses or land use changes by sector	Rating • No • In process • Partially • Fully	Partially	Partially	Partially	Fully	MOFE
1.5.1 Agriculture (Sector)	Rating • No • In process • Partially • Fully	Partially	Partially	Partially	Fully	DOA/MOALD
1.5.2 Forests (Sector)	Rating • No • In process • Partially • Fully	Partially	Partially	Partially	Fully	FRTC/MOFE
1.5.3 Water bodies, including riverbed (water sector)	Rating • No • In process • Partially • Fully	Partially	Partially	Partially	Fully	DWR/MOEWRI
1.5.4 Grassland (Sector)	Rating • No • In process • Partially • Fully	Partially	Partially	Partially	Fully	DOLS/MOALD
1.5.5 Urban area (Sector)	Rating • No • In process • Partially • Fully	Partially	Partially	Partially	Fully	DUDBC/MOUD
1.6 Administrative mechanism engaging and involving IPLCs, women, youth, and marginalized communities in spatial plan preparation processes	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	
1.6.1 Indigenous Peoples (Nationalities)	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	DOA/MOALD
1.6.2 Local Communities	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	FRTC/MOFE
1.6.3 Women	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	DWR/MOEWRI
1.6.4 Dalits	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	DOLS/MOALD
1.6.5 Madhesi	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	DUDBC/MOUD
1.6.6 Tharu	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	
1.6.7 Muslims	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	
1.6.8 Youth, Children	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	
1.6.9 Other Minorities	Rating • No • In process • Partially • Fully	Partially	Partially	Fully	Fully	

Attachment 1: Summary value for Indicator 1.5

S.N	Sector	Biodiversity Inclusive Spatial Plan	Processes to prevent biodiversity losses or land use changes				Rating	Remark
			Identify the drivers of biodiversity loss and the actions proposed	Environmental Risk Assessment and Safeguard Measures taking biodiversity into account in place	Mechanisms and actions proposed to control land use changes	Scores for Drivers of biodiversity losses		
1	Agriculture	No	Yes	Yes	Yes	Yes	Partially	Table 1
2	Forestry	No	Yes	Yes	Yes	Yes	Partially	Table 2
3	Grasslands	No	Yes	Yes	Yes	Yes	Partially	Table 3
4	Urban	No	Yes	Yes	Yes	Yes	Partially	Table 4
5	Waterbodies including riverbeds	No	Yes	Yes	Yes	Yes	Partially	Table 5
	Overall	No	Yes	Yes	Yes	Yes	Partially	
	Remarks	Sector rating: Partial; spatial Elements are missing, but drivers of biodiversity loss are integrated. Overall rating: Partially because it is the lowest among the sectors						

Table 1: Computation of Indicator 1.5 for the agriculture sector

Parameters Reviewed	Rating	Status as per Agriculture Policies Reviewed					Overall Rating (highest among the policies)
		Agriculture Sector: National Agriculture Policy-2004	Justification	Agriculture Development Strategy (2015-2035)	Justification	Agrobiodiversity Policy-2019	
Biodiversity Inclusive spatial plan	Rating and Justification: No In process Yes	No	No spatial planning proposed	No	No Spatial planning proposed	No	No
Processes to prevent biodiversity losses or land use changes	Identify the drivers of biodiversity loss and actions proposed No In process Yes	Yes	Drivers of Biodiversity loss: i. inappropriate use and calamities (Land use land cover change) ii. use of agro chemicals (Pollution) Control the erosion of soil; management of watershed; conservation-oriented farming proposed	Yes	Drivers of Biodiversity losses: i. Rapid Urbanization; land plotting and loss of fertile agricultural land (land use land cover change) ii. GMOs iii. Zoonotic diseases Proposed actions like: i. restriction in the import, production and use of Genetically Modified Organism (Seed, crops and livestock) except for research to avoid negative impact on biodiversity, genetic resources, and human heal ii. Initiate a system of	Drivers of Biodiversity losses: i. soil erosion, urbanization, forest degradation (LULC change) ii. overpopulation (Demographic Change) iii. Invasive species Proposed Actions: through scientific land management and forest conservation techniques. reduce the spread of invasive species, pg 8	Yes

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Parameters Reviewed	Rating	Status as per Agriculture Policies Reviewed					Overall Rating (highest among the policies)
		Agriculture Sector: National Agriculture Policy-2004	Justification	Agriculture Development Strategy (2015-2035)	Justification	Agrobiodiversity Policy-2019	
					registration of agro-biodiversity iii. Develop regulation for the research and experimentation of Nepalese Biodiversity and Genetic Resources		
	Environmental Risk Assessment and Safeguard Measures taking biodiversity into account in place No In process Yes	Yes	The negative impact from agrochemicals on the soil and environment shall be minimized. Encourage the use of organic fertilizers.	Yes	Long term productivity of agriculture will be ensured through minimizing the subsidy and adopting the improved technology and sustainable practices	Yes	Yes
	Mechanisms and actions proposed to control land use changes No In process Yes	Yes	Fragmentation of cultivable land and scientific management of such land will be done by ensuring cooperation with the local bodies	Yes	Land issues related to fragmentation, degradation and tenancy will be resolved through the participation of farmer's organization, cooperatives and private sectors	No	Yes

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Parameters Reviewed	Rating	Status as per Agriculture Policies Reviewed					Overall Rating (highest among the policies)
		Agriculture Sector: National Agriculture Policy-2004	Justification	Agriculture Development Strategy (2015-2035)	Justification	Agrobiodiversity Policy-2019	
						Overall Ratings	No: Nothing included In process: Inclusive plan preparation under way Partially: Some drivers are included but spatial elements are lacking Fully: Spatial plans showing areas of high biodiversity importance Partially

Table 2: Computation of Indicator 1.5 for the forestry sector

Status as per the forest sector policies reviewed										Overall Rating (highest among the policies)
Parameters Reviewed	Rating	National Forest Policy- 2019	Justification	Forest Sector Strategy- (2015-2025)	Justification	Integrated Strategic Plan of National forestry (2081-2100)	Justification			
Biodiversity Inclusive spatial plan	Rating and Justification: No In process Yes	No	*No detail about land cover changes and identified areas of high biodiversity importance	No	No detail spatial plan proposed	No	Though the plan has categorized forests into different types and proposed management practices, there is no area specific mapping that includes spatial plans	No		
Processes to prevent biodiversity losses or land use changes	Identify the drivers of biodiversity loss and actions proposed No In process Yes	Yes	Chapter 8: 8.1: In strategy and action plan: Forest Restoration or afforestation in the area where forests are lost or for compensation 8.2 Sustainability and efficacy in forest products collection 8.3 To reduce carbon emissions, the production and efficient use of timber will be increased. 8.4 In-situ and ex-situ management of rare, endangered and protected species, human-wildlife conflict mitigation 8.5: Wetland area conservation, management and sustainable use	Yes	* The chapter 3.2.1: Managing forests, Justification: Deforestation 3.2.2: Managing ecosystem and conserving biodiversity issues like human-wildlife conflict, poaching 3.2.3 and 3.2.4 Responding to Climate change	Yes	Chapter 6 (P14) has proposed the actions for biodiversity conservation 1) Ecological functions, biodiversity and wildlife conservation 2) Invasive alien species management 3) Forest Fire management 4) Poaching 5) Human-wildlife conflict management	Yes		

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Parameters Reviewed	Rating	Status as per the forest sector policies reviewed					Overall Rating (highest among the policies)	
		National Forest Policy- 2019	Justification	Forest Sector Strategy- (2015-2025)	Justification	Integrated Strategic Plan of National forestry (2081-2100)		Justification
	Environmental Risk Assessment and Safeguard Measures taking biodiversity into account in place No In process Yes	No	*No Specific clause for Environment risk assessment	Yes	Chapter 3.2.2 * identifies strategy for environment risk assessment through DNA bar coding, botanical identification, chemical analysis and pest risk assessment	Yes	Has documented environmental risk-taking biodiversity into considered and proposed safeguard measures (P15)	Yes
	Mechanisms and actions proposed to control land use changes No In process Yes	No	No specific mechanisms and actions proposed for Land use changes	Yes	For 2025 aims to At least 175 land use development and management plan are prepared and implemented at different levels	Yes	Yes, Has proposed actions for controlling land use changes like controlling encroachments, controlling invasive species, over grazing.	Yes
						Overall Ratings	No: Nothing included In process: Inclusive plan preparation under way Partially: Some drivers are included but spatial elements are lacking Fully: Spatial plans showing areas of	Partially

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Parameters Reviewed	Rating	Status as per the forest sector policies reviewed					Overall Rating (highest among the policies)
		National Forest Policy- 2019	Justification	Forest Sector Strategy- (2015-2025)	Justification	Integrated Strategic Plan of National forestry (2081- 2100)	
							high biodiversity importance

Table 3: Computation of Indicator 1.5 for the water resources

Parameters Reviewed	Rating	Status as per Water Resources policies reviewed				Overall Rating (highest among the policies)
		National Water Resources Policy-2020	Justification	National Water Plan-2022-2027	Justification	National Wetland Policy-2012
Biodiversity Inclusive spatial plan	Rating and Justification: No In process Yes	No	No biodiversity inclusive spatial plan proposed	No	Though the action programme has proposed identification of important, critical and prioritized watersheds and aquatic ecosystems based on the latest land use map; there is no biodiversity inclusive spatial plan proposed as such	No No biodiversity inclusive spatial plan proposed
Processes to prevent biodiversity losses or land use changes	Identify the drivers of biodiversity loss and actions proposed No In process Yes	Yes	In page 3, identified drivers of biodiversity losses like i. urbanization (LULC Change) ii. increasing population (Demographic Changes) iii. commercial utilization of water (Resource Extraction) iv. Climate change Different actions has been proposed to address drivers of biodiversity losses like i. data collection and management of these drivers (strategy 5) ii. Intergovernmental coordination iii. Management using Basin approach	Yes	Drivers of Biodiversity losses Identified: (Chapter 4.2.1.2) i. Mismanagement and overexploitation of natural resources (Resource Extraction) ii. growing population (Demographic Changes) iii. Encroachment and deforestation (LULC Change) iv. Pesticide and Chemical Pollution v. Flash flood, landslide, erosion, (GLOF and Flood) In the action plan, has suggested i. implementation of nationally important Watersheds and Aquatic Ecosystems Protection, ii. Rehabilitation and Management Programmes iii. full scale environment management and protection	Has identified drivers of biodiversity losses like i. invasive species ii. development activities (Economic Activities) iii. pollution, etc. Has also proposed actions like i. classification of wetlands based on its importance ii. pollution control.

)

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Parameters Reviewed	Rating	Status as per Water Resources policies reviewed					Overall Rating (highest among the policies)	
		National Water Resources Policy-2020	Justification	National Water Plan-2002-2027	Justification	National Wetland Policy-2012		Justification
							high biodiversity importance	

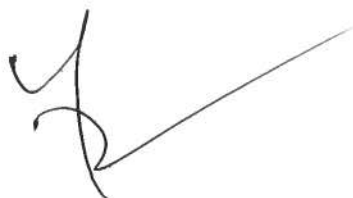


Table 4: Computation of Indicator 1.5 for the grassland

Grassland					
Parameters Reviewed		Rating	National Rangeland Policy-2012	Justification	
Processes to prevent biodiversity losses or land use changes		Rating and Justification: No In process Yes	No	No spatial Plan proposed, but there is pg 5: Provision of mapping and identifying the area and productivity of rangeland mentioned.	
		Identify the drivers of biodiversity loss and actions proposed No In process Yes	Yes	Identified Drivers: i. Irregulated Grazing, over harvesting of NTFPs (Resource extraction) ii. Unmanaged Tourism (Economic Factors) iii. Forest fire: Slash and burn agriculture iv. Invasive species Actions Proposed: There is a provision to allocate grazing area based on the rangeland productivity. Pg-6, conservation, promotion and sustainable use of rangeland. Provision of In situ and ex situ conservation of genetic resources	
		Environmental Risk Assessment and Safeguard Measures taking biodiversity into account in place No In process Yes	Yes	pg 6, regular update and documentation of biological and genetic diversity of the rangeland. Pg 8: control of invasive species	
		Mechanisms and actions proposed to control land use changes No In process Yes	Yes	pg 6, reduce the human pressure on area near to protected area	
		Overall Ratings	No: Nothing included In process: inclusive plan preparation under way Partially: Some drivers are included but spatial elements are lacking Fully: Spatial plans showing areas of high biodiversity importance		Partially

Table 5: Computation of Indicator 1.5 for the urban

Parameter Reviewed	Rating and Justification:	Status as per Urban Policies Reviewed				Overall Ratings (Highest among Policies)
		National Urban Policy-2024	Justification	National Urban Development Strategy-2017	Justification	
Biodiversity Inclusive spatial plan	Rating and Justification: No In process Yes	No	No any biodiversity inclusive spatial plan	No		No
Processes to prevent biodiversity losses or land use changes	Identify the drivers of biodiversity loss and actions proposed No In process Yes	Yes	Policy 2.3: pg: 12. Integrating Disaster risk reduction and climate adaptation measures to develop environment friendly and sustainable infrastructure;	Yes	Promotion of multi hazard approach in dealing with disaster and climate change through the identification of high-risk areas and preparing multi hazard map. pg 20.	Yes
	Environmental Risk Assessment and Safeguard Measures taking biodiversity into account in place No In process Yes	Yes	Improvement of settlement area for clean and safe environment pg: 11. Urban water management for minimizing the risk of floods, pg: 11. Conservation of water, forests, agriculture area and native agricultural crops; pg 9. Accessibility to green fund and investment into green sector pg: 14	Yes	Implementation of Urban Environment Management Guideline to comply with the set standard of pollution, pg 21. Promotion or mandatory implementation of reduce, reuse and recycle concept pg 17. Protection and sustainable management of fresh water source and watersheds pg 16. Assure Nepal water standard in place through regular testing of water samples, pg 16	Yes

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Parameter Reviewed	Rating	Status as per Urban Policies Reviewed				Overall Ratings (Highest among Policies)
		National Urban Policy-2024	Justification	National Urban Development Strategy-2017	Justification	
	Mechanisms and actions proposed to control land use changes No In process Yes	Yes	Urban expansion planning to prevent uncontrolled urban sprawl, pg. 10. Promotion of green economy, reduction of carbon footprints, and adoption of adaptation practice for climate change pg. 12.	Yes	Discourage the encroachment of public land by its proper monitoring and mapping, pg. 19. Preservation of critical agriculture land through discouraging agriculture land subdivision and fragmentation pg. 30.	Yes
				Overall Ratings	No: Nothing included In process: Inclusive plan preparation under way Partially: Some drivers are included but spatial elements are lacking Fully: Spatial plans showing areas of high biodiversity importance	Partially

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Annex 7: Revised timeline for NBSAP revision

Phases	Activities	Milestones (Completion date)	Present Status	Remark
Planning	Draft approach paper for NBSAP revision	15 June 2023	Completed	
	First Technical Committee meeting to provide feedback on NBSAP revision approaches	15 September 2023	Completed	
	First Steering Committee meeting on NBSAP revision approaches	21 April 2024	Completed	
	Submission of final approach paper to MoFE addressing the steering committee feedback	15 May 2024	Completed	
	Endorsement of the approach paper for NBSAP revision	3 July 2024	Completed	Minister-level decision
Situation Analysis	Mapping of monitoring indicators for KM-GBF targets (Road map of NBSAP) - A road map for the NBSAP (2024-2030) – Annex 1 to CBD	1 August 2024	Submitted to the CBD	Completed
	Revised version – National biodiversity targets (Draft)	15 August 2024	Completed	
	Updating biodiversity expenditure review (2014-2022)	30 April 2025	Work in progress	
	Assessing NBSAP (2014-2020) performance and defining priority areas	15 December 2024	Completed	At Ministry (Dr Govind Basnet)
	Reviewing the current state of biodiversity in Nepal, including the underlying drivers of biodiversity threats	15 February 2025	Completed	(Dr Uttam Shrestha)
	Stakeholders' Needs and Aspirations for Biodiversity	15 March 2024	Draft report	
	Existing and potential finance for biodiversity, including perverse incentives: A desk review will be carried out to document	30 November 2024	Draft report	Integrated in thematic consultants' ToR
	Thematic reports from the consultants	26 February 2025	Draft report	
	National vision for biodiversity	15 April 2025	Draft report	
	Second Technical Committee meeting	30 May 2025		
	Second Steering Committee meeting to endorse national targets	30 May 2025		
Draft NBSAP	Road map for NBSAP	7 May 2025	Work in progress	
	Detailed plan of action for each target (focusing on national targets)	15-May-25	Work in progress	
	Thematic workshops	20-Jun-25		
	Draft NBSAP	10-Jul-25	Work in progress	
Validating NBSAP	Provincial validation workshops	24-Jul-25		February onwards
	Peer review (National and International)	24-Jul-25		
	National validation workshops	26-Jul-25		
	Technical committee meeting	7 August 2025		
	Steering committee meeting	21 August 2025		
	Final draft NBSAP	21 August 2025		

Vision Document: National targets and indicators
(Work in progress, not for circulation)

Phases	Activities	Milestones (Completion date)	Present Status	Remark
Planning	Draft approach paper for NBSAP revision	15 June 2023	Completed	
	First Technical Committee meeting to provide feedback on NBSAP revision approaches	15 September 2023	Completed	
	First Steering Committee meeting on NBSAP revision approaches	21 April 2024	Completed	
	Submission of final approach paper to MoFE addressing the steering committee feedback	15 May 2024	Completed	
	Endorsement of the approach paper for NBSAP revision	3 July 2024	Completed	Minister-level decision
	Final draft (Approved from MoFE)			
	Updated Biodiversity Finance Plan	October 2025	Work in progress	
	Monitoring framework	October 2025	Work in progress	
	Policy coherence and action plan	October 2025	Work in progress	