

STRENGTHENING CIVIL SOCIETY CAPACITY TO ADVOCATE FOR

MAINSTREAMING BIODIVERSITY

PART 1 **REFERENCE MANUAL:**
**MAINSTREAMING THROUGH CONVENTIONS,
POLICY PROCESSES AND SECTOR-SPECIFIC ADVICE**

FOR THE BIRDLIFE PARTNERSHIP





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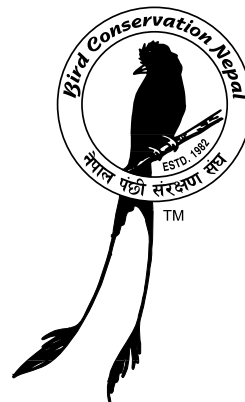
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ACKNOWLEDGEMENTS

This manual was compiled by Judit Szabo, Dena Cator, Cate Noble, Nikki de Landmeter, Olivia Adhiambo, Noëlle Kümpel and Melanie Heath of BirdLife International.

Our thanks go to all those who provided comments and case studies, including Charlotte Mathiassen, Thomas Lehmborg, Ishana Tshapa, Dianah Nalwanga, Serah Munguti, Kiragu Mwangi, Hum Gurung, Ken Mwathe, Carolina Hazin, Nick Phillips, Billy Fairburn and Iain Dickson, and the 25 BirdLife Partners who provided invaluable perspectives and insights during associated training workshops in Singapore and Nairobi in October and November 2017 respectively.

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LIST OF ABBREVIATIONS

AES – Agri-Environment Schemes

APAWG – Africa Policy and Advocacy Working Group

ASAP – Asian Species Action Partnership

ASCET – African Sites Casework on Emerging Threats Taskforce

AZE – Alliance for Zero Extinction

BATNA – Best Alternative to a Negotiated Agreement

CAF – Central Asian Flyway

CAP – Council for African Partnership

CBD – Convention on Biological Diversity

CBRM – Community-based Resource Management

CFM – Community Forest Management

CFUG – Community Forest User Group

CIA – Cumulative Impact Assessment

CITES – Convention on International Trade in Endangered Species of Wild Fauna and Flora

CMS – Convention on the Conservation of Migratory Species of Wild Animals, commonly abbreviated as the Convention on Migratory Species

CSO – Civil Society Organisation

DLG – District Local Government

EAAF – East Asian-Australasian Flyway

EIA – Environmental Impact Assessment

FAO – Food and Agricultural Organization

FERI – Forest and Ecosystem Restoration Initiative

FPIC – Free, Prior and Informed Consent

GEF – Global Environment Facility

GNP – Gross National Product

HCV – High Conservation Value

IAS – Invasive Alien Species

IBA – Important Bird and Biodiversity Area

IBAT – Integrated Biodiversity Assessment Tool

IGO – Inter-governmental Organisation

IPLC – Indigenous Peoples and Local Communities

ISA – International Seabed Authority

ITTO – International Tropical Timber Organisation

IUCN – International Union for the Conservation of Nature

IUCN SSC – Species Survival Commission of the International Union for the Conservation of Nature

IWMI – International Water Management Institute

KBA – Key Biodiversity Area

MDG – Millennium Development Goal

MEA – Multilateral Environmental Agreement

MoC – Memorandum of Cooperation

MoU – Memorandum of Understanding

MSB – Migratory Soaring Birds

NBSAP – National Biodiversity Strategy and Action Plan

NDC – Nationally Determined Commitments

NGO – Non-governmental Organisation

NTFP – Non-timber Forest Products

PFM – Participatory Forest Management

PPN – People Partner with Nature Programme

PRISM – Practical Impact Assessment Methods for Small and Medium-sized Conservation Projects impact of projects

REDD+ – Reducing Emissions from Deforestation and forest Degradation

RLI – Red List Index

RSIS – Ramsar Site Information Service

SCP – Sustainable Consumption and Production

SIA – Strategic Impact Assessment

SBI – Subsidiary Body on Implementation

SBSSTA – Subsidiary Body on Scientific, Technical and Technological Advice

SDG – Sustainable Development Goal

SFM – Sustainable Forest Management

SOI – Sustainable Ocean Initiative

SPA – Special Protection Area

TESSA – Toolkit for Ecosystem Service Site-Based Assessment

UNCCD – United Nations Convention to Combat Desertification

UNDP – United Nations Development Programme

UNEP-WCMC – United Nations Environment World Conservation Monitoring Centre

UNFCCC – United Nations Framework Convention on Climate Change

WI – Wetlands International

WHI – World Heritage Convention

WMBD – World Migratory Bird Day

WWF – World Wide Fund for Nature

WWT – Wildlife and Wetlands Trust

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EXECUTIVE SUMMARY

Strengthening Civil Society Capacity to Advocate for Mainstreaming Biodiversity: The CAMB project

06

This manual is one of the main outcomes of the Strengthening Civil Society Capacity to Advocate for Mainstreaming Biodiversity (CAMB) project - a joint collaboration between Dansk Ornitologisk Forening – DOF; BirdLife in Denmark) and BirdLife International. The Ministry of Foreign Affairs of Denmark (Danida) Climate and Environmental Fund provided support to DOF for this work, which involved the BirdLife Global Secretariat, Asia and Africa Regional Secretariats, three key BirdLife Partners (Nature Kenya, NatureUganda and Bird Conservation Nepal) as well as 22 other Partners across Africa and Asia. The aim was to build the capacity of BirdLife Partners in these regions to enhance their engagement in Convention on Biological Diversity (CBD) processes as well as advocate for the mainstreaming of biodiversity in various sectors at the national level.

‘Mainstreaming’ of biodiversity means the integration of the conservation and sustainable use of biodiversity in cross-sectoral policies, plans and operations such as sustainable development, poverty reduction and climate change adaptation/ mitigation, as well as in sector-specific plans such as for agriculture, fisheries, forestry, mining and energy. One of the key challenges in stopping biodiversity loss is finding ways to combat the issue where it originates, among others, in different economic sectors. It is thus essential to ensure that biodiversity conservation is prioritised by all parts of society, including across government agencies, the private sector and organisations. Biodiversity mainstreaming is an integral component of achieving BirdLife’s mission and vision, the CBD’s Strategic Plan and

the work of the broader conservation community. The CBD is a framework convention, meaning that it establishes guidelines and principles that countries can use to develop their own policies for the mainstreaming of biodiversity conservation.

BirdLife International has written this reference and training manual with input from DOF and the three key CAMB BirdLife Partners for the use of the CAMB project partners, as a part of the project’s training package. To enable wider outreach, it will be made available more broadly to the BirdLife Partnership and may be adapted at a later stage to share with other interested organisations and agencies. We therefore welcome feedback on how best to use and potentially revisit it in future.

Part 1 of the manual provides a general introduction to the CBD and other international policy processes that focus on and enable the mainstreaming of biodiversity into sectors such as energy, forestry and agriculture. Part 2 is a practical section on how to plan and carry out advocacy for mainstreaming of biodiversity. Both parts of the manual highlight case studies, mostly from the BirdLife Partnership, to illustrate how scientific information and practical experience can form the basis upon which to advocate for improved conservation outcomes through international convention processes.

Parts 1 and 2 of the manual are available as separate documents or can be used together.

The manual

Part 1 of the manual introduces international policy processes and explains their role in the mainstreaming of biodiversity. It outlines some of the key international conventions or Multilateral Environmental Agreements (MEAs) that have been created to facilitate and enhance biodiversity conservation at the global level, and how these MEAs can be used to mainstream biodiversity through both the creation of policies and implementation of activities on the ground that encourage governments, companies and others to conserve biodiversity. As most countries in the world are Party to one or more MEAs, these global agreements facilitate proactive collaboration, provide guidance and incentive for action on mainstreaming biodiversity and serve as a benchmark to measure progress at the national level.

The Convention on Biological Diversity (CBD) in particular has an explicit focus on mainstreaming of biodiversity. As a key component of the Strategic Plan on Biodiversity 2011–2020, cross-sectoral and sector-specific mainstreaming of biodiversity has been high on the agenda for the 13th and 14th CBD Conferences of the Parties (COP13 in Mexico in 2016 and COP14 in Egypt in 2018). Mainstreaming biodiversity will also be key to an effective and transformational post-2020 global biodiversity framework. The CBD requires Parties to have a National Biodiversity Strategy and Action Plan (NBSAP), which sets out plans to conserve and sustainably use biological diversity at the national level. NBSAPs must guide the planning and activities of all sectors that impact upon biodiversity and thus are a key way to facilitate mainstreaming.

Other global conventions that focus on biodiversity conservation are the Convention on Wetlands of International Importance (Ramsar Convention), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the World Heritage Convention and the Convention on the Conservation of Migratory Species of Wild Animals (CMS). Discussion of the United Nations Framework Convention on Climate Change (UNFCCC) and UN Sustainable Development Goals (SDGs) are also included. Part 1 of the manual outlines what these conventions are, how they relate to each other, how they work and

the processes and mechanisms within each that can be used to mainstream biodiversity into various sectors.

Part 2 of the manual provides practical guidance on how to advocate for the mainstreaming of biodiversity to support countries' commitments to the CBD and other MEAs and policy processes. This includes a description of the processes, tools and skills needed to develop and implement advocacy strategies that can be used to promote mainstreaming with governments, businesses and other stakeholders. It is crucial to develop science and evidence-based advocacy strategies that target the appropriate people to take action and address the key issues in a particular country or sector.

The process of advocacy planning entails problem-setting, identifying what to advocate for and how as well as whom to work with and whom to target to generate change. It is also important to know which aspects of the policy process to engage with in order to exert the greatest influence and how to fundraise for work on policy change. Monitoring and evaluation are used to track achievements and the success of different actions and approaches.

Additional resources

Additional resources and information relating to this project and BirdLife's wider work on mainstreaming biodiversity can be found on the BirdLife Extranet at: <https://extranet.birdlife.org/display/SCSCTAFMB/CAMB+Project+-+Create+Strengthening+Civil+Society+Capacity+to+Advocate+for+Mainstreaming+Biodiversity+Home>

A series of webinars that accompany this manual have also been produced, which can be found on the BirdLife Extranet at: <https://extranet.birdlife.org/display/SCSCTAFMB/Training+Resources>.

These include:

1. Reviewing advocacy plans
2. Development of the post-2020 global biodiversity framework
3. Mainstreaming biodiversity in the energy sector
4. Mainstreaming biodiversity in the forestry sector

PART 1

REFERENCE MANUAL:
THE CONVENTION ON BIOLOGICAL DIVERSITY,
OTHER KEY CONVENTIONS AND POLICY
PROCESSES, AND MAINSTREAMING



INTRODUCTION TO PART 1

A number of international conventions exist to address the decreasing state of global biodiversity and find solutions to sustain healthy populations of plant and animal species as well as ecosystems, including through integrating or mainstreaming biodiversity into production sectors. These Multilateral Environmental Agreements (MEAs) are important policy mechanisms in that most countries in the world are Party to one or more of them (so commit to implementing them), and provide: opportunities for proactive collaboration among nations, guidance for national policies, action and monitoring of progress as well as a forum to elevate national-level issues to the global level. An exhaustive list of all relevant treaties has not been provided as it is not possible within the scope of this document but key conventions focusing on biodiversity are covered.

This first part of this manual introduces and develops a basic understanding of some of these MEAs – note that throughout, we have summarised main points about the conventions but for more detailed information, please visit their respective websites as per the links provided. In particular, the Convention on Biological Diversity (CBD) will be highlighted as it focuses specifically on what countries can do to mainstream biodiversity into sectors such as agriculture, fisheries, forestry and energy. Part 1 of the manual also explains national policy obligations to conserve biodiversity, including through the development of National Biodiversity Strategies and Action Plans (NBSAPs).

This section also introduces other MEAs that provide opportunities for mainstreaming: the United Nations Framework Convention on Climate Change (UNFCCC), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on the Conservation of Migratory Species of Wild Animals (CMS), Convention on Wetlands (Ramsar), and World Heritage Convention, as well as the UN Sustainable Development Goals (SDGs). In addition, we showcase the importance of and how to mainstream biodiversity in case studies from different sectors and countries.

1.1

Section 1.1

Introduction to the Convention on Biological Diversity and the contribution of Civil Society



Section 1.1

Introduction to the Convention on Biological Diversity and the contribution of Civil Society

Objectives

In this section, we introduce the Convention on Biological Diversity and the role that Civil Society can play in achieving the goals of the Convention.

1.1.1 Introduction to the Convention on Biological Diversity

The Convention on Biological Diversity,¹ or CBD, is a United Nations treaty that addresses the conservation of biological diversity. It originated from the Rio Earth Summit in 1992.² As of 2018, the CBD has been ratified by 196 Parties – most countries of the world and also the European Union. The only countries that have not ratified the CBD are The Holy See (Vatican City State) and the United States.³

The three overall aims of the Convention are to:⁴

- Conserve biological diversity
- Sustainably use the components of biological diversity
- Share the benefits arising from the utilisation of genetic resources in a fair and equitable manner

The CBD is considered to be a framework Convention in that it establishes guidelines and principles that countries can use to develop their own policies for action to conserve biological diversity.

Box 1.1

Multilateral Environmental Agreements (MEAs)

MEAs are international agreements that focus on environmental issues and are subject to rules of international law that govern treaties. As a treaty, an MEA creates binding international obligations between Parties, however decisions may be taken that do not result in legal obligations, for example by taking the form of 'invitations' which is the basis for how the Convention on Biological Diversity (CBD) works.

The first generation of MEAs focused on sector-specific agreements, primarily on addressing the exploitation of and maintaining the economic value of natural resources, rather than protection for intrinsic reasons.

Today there are hundreds of MEAs, many of which are regional agreements. The majority were adopted after the UN Conference on the Human Environment held in Stockholm in 1972, which was an important milestone showing that industrialisation and economic development are ever-increasing threats to the global environment. The Convention on International Trade in Endangered Species of Fauna and Flora (CITES), for example, entered into force in 1973.

The UN Conference on Environment and Development (the Rio Earth Summit) in 1992 catalysed a second generation of MEAs – the CBD, the United Nations Convention to Combat Desertification (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC).

For some additional information on MEAs, see:

https://unfccc.int/resource/docs/publications/negotiators_handbook.pdf

CBD decisions are agreed by consensus, meaning that Parties need to reach agreement on the wording of decisions which become the framework for countries to develop national policies on biodiversity conservation. As a framework Convention, it is up to Parties to determine how agreed goals, targets, guidelines and decisions should be implemented at the national level.

1.1.2 The Convention, Strategic Plan for Biodiversity and Aichi Targets

The text of the Convention

The text of the CBD stresses that biodiversity is of critical importance and covers all ecosystems, species and genetic resources. It sets up principles for the fair and equitable sharing of the benefits of genetic resources, and also addresses biotechnology, technological development and biosafety.⁵ The text also has provisions for funding mechanisms.

In addition, the CBD text stresses that nations have sovereign rights over their individual biological resources, and will have to consider economic and social development, including poverty eradication, when managing them.

The Strategic Plan for Biodiversity 2011–2020 and the Aichi Targets

At CBD COP10, which was held in Nagoya, Japan, a long-term biodiversity vision for 2050 was developed and Parties to the Convention adopted a ‘Strategic Plan for Biodiversity 2011–2020’ with the purpose of inspiring broad-based action in support of biodiversity by all countries and stakeholders.⁶

The stated vision of the Strategic Plan is that *“by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people”*.⁷

The mission of the plan is to *“take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet’s variety of life, and contributing to human well-being and poverty eradication”*.

To ensure this, pressures on biodiversity should be reduced, ecosystems restored, biological resources sustainably used and benefits arising out of the utilisation of genetic resources shared in a fair and equitable manner.

The 2011–2020 Strategic Plan is the largest intergovernmental plan for conserving nature and nature’s benefits towards 2020. It provides an overarching biodiversity framework for countries as well as the entire United Nations system, in terms of guiding the plans of other Conventions. The Strategic Plan is also strategically linked to the UN Sustainable Development Goals (SDGs) (discussed in section 1.3.2), which are 17 global goals to end poverty and encourage sustainable use of the land and oceans. Governments are working to implement both the Strategic Plan and SDGs as they are mutually supportive and reinforcing – implementing one contributes to the achievement of the other.

The 2011–2020 Strategic Plan is comprised of 5 goals and 20 targets, known as the 2020 Targets or Aichi Targets (Figure 1), named after Aichi Prefecture, Japan, which was the location of CBD COP10 in 2010.⁸ The goals and targets focus on addressing specific issues related to biodiversity conservation, such as protected areas, species extinctions, climate change, invasive species and others. These topics are discussed at the various meetings of the CBD – the Conference of the Parties (COP), Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) and Subsidiary Body on Implementation (SBI) – which are further described in section 1.1.3.


The Strategic Plan also calls for the provision of adequate financial resources, enhancing capacities, mainstreaming of biodiversity issues and values, effective implementation of appropriate policies, decision-making based on sound science and use of the precautionary approach, which is a strategy to cope with possible risks where scientific understanding is as yet incomplete.


The Aichi Biodiversity Targets


Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society


-  By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.
-  By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.
-  By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.
-  By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.


Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use


-  By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

-  By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.


-  By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

-  By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.


-  By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.


-  By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

Strategic Goal C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity


-  By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems


of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascapes.


-  By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

-  By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.


Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services.


-  By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.


-  By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.


-  By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

-  By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

-  By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

-  By 2020, knowledge, the science base and technologies relating to biodiversity, its values functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

-  By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan 2011-2020 from all sources and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resources needs assessments to be developed and reported by Parties.

Please feel free to use the Aichi Biodiversity Targets icons in your own materials. More details at www.cbd.int/sp

Figure 1. The 20 Aichi Biodiversity Targets

The Strategic Plan is implemented mostly nationally and sub-nationally through countries developing and implementing National Biodiversity Strategies and Action Plans (NBSAPs),⁹ as well as by other national and international activities and support from the CBD Secretariat. Parties inform the COP of their national targets and commitments, and any progress made through national reporting. Progress is further evaluated by the COP and SBI¹⁰

The post-2020 global biodiversity framework

The current Aichi Targets will expire in 2020 when it is envisaged that a new Strategic Plan will be adopted in China at CBD COP15. The process in the lead up to 2020 will take the form of:

- 2018 – Establishing the process for agreeing a post-2020 biodiversity framework (CBD COP14)
- 2019 – Parties and observers submitting their views on the content of the post-2020 framework via regional and sectoral consultation workshops (updated targets)
- 2020 – Completing the draft post-2020 framework through making it available for review, holding leaders' summits, Parties considering the final draft of the post-2020 framework at CBD COP15.

Box 1.2

Birds as Aichi Target Indicators

Each Aichi Target has its own indicator(s) recommended by the CBD. Many of these are informed by bird and habitat data available from national BirdLife Partners and BirdLife International globally.

For instance, in the case of Aichi Target 1 "*People are aware of the values of biodiversity ...*", BirdLife Partners can report on the number of people who count birds, conserve them or engage in activities that celebrate birds. Also, for Aichi Target 12 "*the extinction of known threatened species has been prevented ...*", the Red List Index for birds, which is developed from BirdLife data, is a key indicator tracking progress towards implementation.

For more information on CBD indicators, see: <https://www.cbd.int/sp/indicators>
For case studies on how birds can be used to set targets at the national level, see: www.birdlife.org/datazone/sowb



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1.1.3 Participation in the CBD and Civil Society

Conference of the Parties (COP)

The Conference of the Parties (COP)¹¹ is the highest and main governing body of the CBD and consists of all governments that have ratified the treaty. The COP convenes meetings once every two years, or as needed, where decisions about commitments to conserve biodiversity are made. During the COP, Parties make decisions through consensus and are supported by the CBD Secretariat regarding rules of procedure.

There are three core groups of actors in the CBD:

1. Parties are countries that have ratified the treaty, possessing full voting rights in all processes. Parties are committed to implementing the Convention nationally.
2. Non-Parties are countries that have not ratified the CBD. They do not have voting power and unless stated otherwise, they will be treated as an observer to the process.
3. Observers lack voting rights in the CBD process but can participate in most meetings (e.g. COP meetings) and provide input on topics of discussion. Observers can be Civil Society Organisations (CSOs), Intergovernmental Organisations (IGOs), Non-governmental Organisations (NGOs), business and the private sector, Indigenous Peoples and Local Communities (IPLCs), UN organisations, as well as others.

CSOs, which include NGOs and institutions that represent citizens, are a global network that possess diverse experience, expertise and capacity and, as such, are welcomed to support and help implement the CBD. CSOs can apply for observer status with the CBD Secretariat and obtain the right to attend meetings. While they are not allowed to vote, they can participate in most sessions and hold side events, among other activities. Engaging with businesses and the private sector has become a priority for the CBD in the last years; for example, there are business and biodiversity summits at every COP.

Box 1.3

The contribution of BirdLife to CBD

The CBD is a major focus for BirdLife's work at local, national and international levels. The BirdLife 2013–2020 Strategy is aligned to the CBD Strategic Plan for Biodiversity. Proper implementation of the Convention contributes to the achievement of BirdLife's goals.

BirdLife has been working with the CBD for many years and has a Memorandum of Understanding with the Convention, as a platform to support achievement of the Aichi Targets. BirdLife engages with CBD processes through activities such as contributing scientific data, information and expertise as well as participating in negotiations and meetings. BirdLife Partners work closely with their governments to implement the convention, in particular via their CBD National Focal Points (<https://www.cbd.int/information/nfp.shtml>).

For example, BirdLife Partners have been contributing to discussions on mainstreaming biodiversity in various sectors and the development / implementation of National Biodiversity Strategies and Action Plans (NBSAPs) by providing expertise and data, in the latter case to help set targets at the national level, focus action to meet these targets, and monitor success.

Globally, BirdLife is the CBD Thematic Focal point for birds for the Clearing-House Mechanism, through which information relevant to decision-making and implementation of the CBD is channeled.

This support is manifested through actions such as:

1. Providing information on critical sites for biodiversity through the Important Bird and Biodiversity Area (IBA) – Key Biodiversity Area (KBA) network: <http://www.birdlife.org/worldwide/programmes/sites-habitats-ibas-and-kbas>
2. Providing information on species, as BirdLife is the global authority for birds on the IUCN Red List: <https://www.birdlife.org/sowb2018>

BirdLife will also be contributing to discussions on the post-2020 biodiversity framework.

The role that CSOs can play during COP meetings (for CBD and other Multilateral Environmental Agreements) includes:

1. Contributing to agendas: Alerting governments of issues to put on their agendas, for example through awareness-raising and advocacy.
2. Negotiating outcomes: Proposing solutions, initiatives and language that Parties may be unable to propose but are willing to support. In addition, CSOs can encourage implementation of the CBD at the national level through the supporting actions of their members and partners.
3. Provision of data and expertise: CSOs can contribute their own unique data, information and expertise to CBD discussions, helping to make decisions more robust and representative, which will increase the likelihood of biodiversity conservation success on the ground. CSOs can be influential in garnering widespread public support for actions, which is often a means of legitimising environmental initiatives.
4. Implementing solutions: CSOs are a critical partner needed for implementing the outcomes of multilateral agreements at national, regional and local levels.

Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA)

Much work for the CBD takes place between COP meetings, either through the CBD Secretariat sending out key documents electronically for review or through meetings taking place. One of these is the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA),¹² which makes recommendations to the COP on scientific and technical issues. SBSTTA meetings take place generally every year and are where Parties and observers discuss scientific and technical issues related to previous COP decisions as well as make recommendations for upcoming COP meetings, for example on topics such as protected areas, climate change and marine biodiversity.

Subsidiary Body on Implementation (SBI)

Another meeting that takes place between COP meetings is the Subsidiary Body on Implementation (SBI),¹³ which discusses implementation of the CBD. The SBI is attended by both Parties

and observers and takes place generally the same year as the COP. The SBI reviews progress on implementing the convention, for example related to NBSAPs and mainstreaming, and makes recommendations for consideration at upcoming COP meetings.

1.1.4 NBSAPs

Each Party to the CBD is expected to develop a National Biodiversity Strategy and Action Plan or NBSAP¹⁴ that needs to be in line with the 2011–2020 Strategic Plan. This sets an expectation for Parties to plan biodiversity conservation measures nationally, mainstream biodiversity across sectors and develop actions to fulfil the Convention's objectives. NBSAPs are one of the strongest means of implementation the CBD has. The NBSAP process produces two complementary documents: the Country Study (or Biodiversity Assessment) sets out a detailed analysis of the current status of biodiversity in a nation and factors affecting it, while the NBSAP sets out a plan of action for the protection of biodiversity in that country.

NBSAPs are developed to provide an integrated framework for actions to improve the status of biodiversity in a country, over a wide range of sectors. NBSAPs are developed through adapting a standard biodiversity planning approach, aiming to involve broad, cross-sectoral participation, and harness wide-ranging opinions regarding future priorities for biodiversity conservation.

The final products from NBSAP development are policies relating to biodiversity, which should be adopted by the appropriate ministry with full government endorsement to follow. The policies set out principles and strategies for the protection of biodiversity and propose specific and cost-calculated actions to do this over a set timescale. NBSAPs reflect the priorities of each country to achieve the objectives of the CBD. NBSAPs are also used to implement other MEAs.

Parties to the CBD must also regularly submit national reports¹⁵ on measures taken to conserve biodiversity. These reports are public and a core way to monitor implementation of the CBD by Parties.

To implement the Strategic Plan for Biodiversity 2011–2020, Parties are expected to:

- Review, and as appropriate, update and revise their NBSAPs in line with the Strategic Plan for Biodiversity 2011–2020;
- Develop national targets using the Strategic Plan and its Aichi Biodiversity Targets and integrate these national targets into their updated NBSAP;
- Use the NBSAP to integrate / mainstream biodiversity into national development, accounting and planning processes; and
- Monitor and review implementation of NBSAPs national targets, using indicators.

Each NBSAP may include reference to a range of elements, such as scientific research agendas, programmes and projects, communication plans, education and public awareness activities as well as forums for inter-ministerial and multi-stakeholder dialogues.

NBSAPs aim to take an ecosystem approach, highlighting the importance of biodiversity and ecosystem services, promoting sustainability within development, assessing threats to biodiversity and establishing targets for the implementation of conservation measures. As such, implementation of NBSAPs can have multi-level and interdisciplinary effects. NBSAPs are now seen as the lead tool in an ecosystem-approach to both biodiversity and conservation management.¹⁶

Case Study 1.1

Canada's Biodiversity Working Group and Advisory Group

In Canada, provincial and territorial governments as well as the federal government share responsibility to conserve biodiversity and ensure that biological resources are used sustainably. Therefore, an intergovernmental Biodiversity Working Group has been established to develop the Canadian Biodiversity Strategy.

The Working Group has representatives from every jurisdiction in Canada and also includes members who are private property owners and indigenous peoples. Members from businesses, conservation organisations, research institutions, foundations and other groups are also included, as they play an essential role in conserving biodiversity and sustainably using biological resources. A national non-governmental Biodiversity Advisory Group has also been established to provide advice to the Working Group.

Source:

<http://www.biodivcanada.ca/default.asp?lang=En&n=560ED58E-1>

Case Study 1.2

Philippine forests and the NBSAP

A 2005 study indicated that the Philippines lost an average of 150,000 hectares of forest cover per year over the previous 100 years. The main threats causing deforestation have included illegal cutting of trees for timber, mining, slash and burn methods, infrastructural developments, unregulated collection of non-timber forest products (NTFPs), hunting for trade and subsistence, land tenure insecurity, migration and insurgency. The Philippines, in response to this and many other environmental threats, developed the Philippine Biodiversity Strategy and Action Plan (PBSAP 2015–2028). The PBSAP 2015–2028 Vision is that “by 2028, biodiversity is restored and rehabilitated, valued, effectively managed and secured, maintaining ecosystem services to sustain healthy, resilient Filipino communities and delivering benefits to all”.

The Haribon Foundation, BirdLife Partner in the Philippines, was instrumental in developing the 2015–2028 NBSAP strategy. As an organisation and stakeholder with a keen interest in biodiversity conservation, as well as a BirdLife Partner, it was able to play a key role in the NBSAP consultation process. Along with the Philippine government and other organisations (such as UNDP and GEF), Haribon was co-responsible for uniting different stakeholders in the Philippines to co-author the NBSAP plan. Haribon’s vision for 2015–2028 is to transform every individual into a biodiversity champion. As such, Haribon has a Community-Based Resource Management Framework (CBRM), which seeks to encourage participation in natural resource management, help communities organise tools for conservation and foster sustainable livelihoods. This is anticipated to translate into empowered and organised communities, a healthy and equitable local economy as well as healthy and balanced ecosystems.

Read more: <https://www.cbd.int/doc/world/ph/ph-nbsap-v3-en.pdf> and <http://www.haribon.org.ph>

Box 1.4

How BirdLife and birds can contribute to NBSAPs

BirdLife and BirdLife Partners can assist governments meet their obligations for the CBD, for example by contributing to the development and implementation of NBSAPs. Partners should consider not only the overlap of projects with proposed actions in NBSAPs, but ways that projects may link with the broader objectives of the strategy.

For CBD COP11 in India, BirdLife launched a booklet that provides examples of how birds can help to set targets at the national level for 18 of the Aichi Targets, focus actions to meet these targets, and provide data to monitor success. Detailed case studies that demonstrate how each target can be successfully achieved are provided.

For example, in 1997, BirdLife representatives in the Seychelles were contracted by IUCN and the Seychelles government to produce a National Biodiversity Assessment, National Biodiversity Strategy and Action Plan (NBSAP) and National Report as partial fulfilment of the government’s commitments to CBD. The report included Important Bird and Biodiversity Area (IBA) projects, action plans for globally threatened birds, research on two endemic and Critically Endangered bird species, as well as education projects in support of children.

Read more:

<http://datazone.birdlife.org/info/CBD%20Support>

<http://seychellesbiodiversitychm.sc/wp-content/uploads/2014/03/1st-NR.pdf>

The process of developing and reviewing an NBSAP is driven by government ministries/ bodies, most often an environmental ministry or agency that is charged with implementing the CBD. The information and expertise needed to develop, review or update these plans often does not lie with one single entity because implementation of the Convention must take place across different sectors and geographic scales for each country¹⁷. Thus for BirdLife partners working to support governments on NBSAPs and implementation of the CBD, a strong relationship with the CBD focal point and government itself will be necessary.

Finally, and most importantly, there are no sanctions for non-compliance with CBD decisions. National-level implementation relies on political will in each country. This may also rely on available human, financial and temporal resources. If a country does not or is not able to prioritise biodiversity conservation, the NBSAP can become an ineffective policy tool. This is where civil society has an opportunity to both contribute to the development and implementation of NBSAPs and to hold governments accountable for their commitments to biodiversity conservation.

1.1.5 Further reading

United Nations Information Portal on Multilateral Environmental Agreements (InforMEA) CBD course: <https://elearning.informea.org/course/view.php?id=12>

Negotiating and Implementing Multilateral Environmental Agreements (MEAs): A Manual for NGOs. <https://www.cbd.int/doc/guidelines/MEAs-negotiation-manual-ngo-en.pdf>

<https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

NBSAP training modules: <https://www.cbd.int/nbsap/training/>

A list of completed NBSAPs: <https://www.cbd.int/nbsap/>

Global Youth Biodiversity Network (2016) CBD in a Nutshell. Global Youth Biodiversity Network. Germany <https://gybn.org/resources/guidebook/>

Stuart, S. N., and B. Collen (2013) Conserving Biodiversity in a Target-Driven World. Pages 421-438. in B. Collen, N. Pettorelli, J. E. M. Baillie, and S. M. Durant, editors. *Biodiversity Monitoring and Conservation: Bridging the Gap between Global Commitment and Local Action*. John Wiley & Sons, Ltd.

Community-based conservation: <https://www.rare.org/>, including theory of behavioural change: https://www.rare.org/sites/default/files/ToC_Booklet_Final_Rare.pdf

Rodrigues, A. S. L., J. D. Pilgrim, J. F. Lamoreux, M. Hoffmann, and T. M. Brooks (2006) *The value of the IUCN Red List for conservation*. *TRENDS in Ecology and Evolution* 21:71–76.

Bennun, L. A., E. C. Regan, J. P. Bird, J.-W. van Bochove, V. Katariya, S. R. Livingstone, R. Mitchell, C. Savy, M. Starkey, H. J. Temple, and J. D. Pilgrim (2018) *The Value of the IUCN Red List for Business Decision-Making*. *Conservation Letters* 11:1–8.

BirdLife International (2012) *Developing and implementing National Biodiversity Strategies and Action Plans: How to set, meet and track the Aichi Biodiversity Targets*. Cambridge, UK: BirdLife International <http://datazone.birdlife.org/info/CBD%20Support>

References

¹ <https://www.cbd.int/>

² <http://www.un.org/geninfo/bp/enviro.html>

³ <https://www.cbd.int/information/parties.shtml>

⁴ <https://www.cbd.int/intro/>

⁵ The full text of the Convention on Biological Diversity can be downloaded from <https://www.cbd.int/convention/text/>

⁶ <https://www.cbd.int/sp/>

⁷ <https://www.cbd.int/doc/strategic-plan/2011-2020/Aichi-Targets-EN.pdf>

⁸ <https://www.cbd.int/sp/targets/>

⁹ <https://www.cbd.int/nbsap/>

¹⁰ <https://www.cbd.int/sbi/>

¹¹ <https://www.cbd.int/cop/>

¹² <https://www.cbd.int/sbstta/>

¹³ <https://www.cbd.int/sbi/>

¹⁴ <https://www.cbd.int/nbsap/>

¹⁵ <https://www.cbd.int/reports/national.shtml>

¹⁶ <https://www.cbd.int/nbsap/about/latest/default.shtml>

¹⁷ Secretariat of the Convention on Biological Diversity (2011) NBSAP training modules version 2.2 – Module 2. Using the Biodiversity Planning Process to Prepare or Update a National Biodiversity Strategy and Action Plans. Montreal, June 2011.

1.2

Section 1.2

The CBD and mainstreaming biodiversity



Section 1.2

The CBD and mainstreaming biodiversity

Objectives

This section will outline what biodiversity mainstreaming is, why we should do it and how it can be done.

While there are numerous definitions of biodiversity mainstreaming, there are some core elements among them:

- Biodiversity interests are incorporated into different sectors and different levels of government
- Development and environment goals are the objectives of the mainstreaming process
- The process is targeted: it focuses on specific issues and outcomes.¹⁹

1.2.1 Mainstreaming of biodiversity

What is biodiversity mainstreaming?

According to the CBD definition,¹⁸ “Mainstreaming means integrating or including actions related to conservation and sustainable use of biodiversity in strategies relating to production sectors, such as agriculture, fisheries, forestry, tourism and mining. Mainstreaming might also refer to including biodiversity considerations in poverty reduction plans and national sustainable development plans. By mainstreaming biodiversity into sectoral strategies, plans and programmes, we recognize the crucial role that biodiversity has for human well-being.”

Mainstreaming is a popular concept used in policy agendas and programmes. It involves taking a specific objective from one domain and stating that it should be integrated into another. The concept, in the context of policy, was first introduced by the European Union as a term reflecting the principle of integration.

On a broad level, mainstreaming refers to integrating biodiversity considerations into productive sectors, such as agriculture, forestry and energy as well as into social and economic frameworks. By integrating biodiversity concerns into decisions and institutions that drive policies, programmes, investments and action, biodiversity will be mainstreamed.

Why should we mainstream biodiversity?

Biodiversity mainstreaming has emerged as a critical component of conservation work.²⁰ Achieving long-term sustainability will require fundamental changes in the operation of several primary sectors of the global economy: principally agriculture, forestry, fisheries, energy, and water and sanitation. These sectors use natural resources and consequently exert significant direct pressures on biodiversity, yet they also underpin national development strategies of many (especially developing) countries. One of the key difficulties in stopping the loss of biodiversity is addressing the root cause(s) (e.g. how to stop land degradation).

Loss of biodiversity and ecosystem services harms production sectors and economies in different ways but often incurs costs and requires changes in means of operations. To ensure long-term sustainability, it is critical to work with stakeholders to embed biodiversity concerns within sectors. This is more likely to succeed when biodiversity is aligned with the core values and interests of primary producers and other actors in the value chain. This in turn requires sectors to recognise the opportunities that biodiversity provides, such as improved availability of fish and timber, improved soils for agricultural production and cost-effective, nature-based solutions for addressing environmental and societal challenges.²¹

How to mainstream biodiversity?

In 2010, the need for mainstreaming biodiversity was formally recognised by the CBD, and stated in two of five of its Strategic Goals (see section 1.2.2).

Biodiversity mainstreaming can be done in a number of ways. The CBD has developed a training package that introduces ways to mainstream biodiversity into national, sectorial and cross-sectorial strategies, policies, plans and programmes.²²

The traditional approach to mainstreaming involves building awareness of biodiversity considerations and establishing effective relationships between the project / programme and sector agencies. It also necessitates advocacy at high political levels to gain sector entry, and then build sufficient capacity and technical knowledge to ensure a shift in sector policy and practice.²³

There are four broad approaches to mainstreaming biodiversity:

- Mainstreaming of biodiversity into specific sectors, such as agriculture, tourism, fisheries, health or energy
- Mainstreaming into cross-sectorial policies and strategies, such as a five-year national plan or national expenditure review and budget
- Mainstreaming into spatial planning²⁴
- Mainstreaming into specific major financial investments.²⁵

The underpinning rationale for mainstreaming biodiversity in economic sectors is that even with perfect conservation policies that are optimally implemented, the actual impact on biodiversity loss may be limited. In addition to conservation approaches, there is an urgent need to change the practices of production sectors, particularly for those that cause biodiversity loss such as agriculture, aquaculture, fisheries, mining, water management and energy.

Industry needs to participate in the process of creating biodiversity policies that will directly influence their practices. If they are included

in this process and feel that the policies consider their interests and needs, they will be more likely to comply. Moreover, the policies need to be rooted in the reality of the industry and how it works to increase uptake when implemented.

Biodiversity will have been successfully mainstreamed into development if objectives such as economic growth and poverty reduction are able to also support the conservation and sustainable use of biodiversity. This is especially important for sectors that are dependent on biodiversity or vulnerable to its degradation.²⁶

Some of the tools outlined by the CBD that can be used to mainstream biodiversity include:

- Integration into planning processes such as National Biodiversity Strategies and Action Plans
- Area-based planning
- Environmental assessments: Environmental Impact Assessments (EIAs) and Strategic Environmental Assessments (SEAs)
- Natural capital accounting, such as payments for ecosystem services
- No-go and no-development scenarios, including industry initiatives such as the commitment by International Council on Mining and Metals member companies not to explore in World Heritage sites
- Risk-based approaches
- Mitigation hierarchy and net gain outcomes
- Revenue management for sustainable development – the Extractives Industry Transparency Initiative and other programmes
- Green finance.

1.2.2 The CBD and biodiversity mainstreaming

The consideration of biodiversity in production and development sectors is not new, but is seeing increased traction globally and at the highest levels of international policy. Other factors driving the increase of biodiversity mainstreaming include market-based mechanisms (e.g. eco-friendly standards and certification schemes) and new economic tools such as full-cost accounting and payments for ecosystem services.²⁷

For the purpose of this manual, we focus primarily on mainstreaming through mechanisms and tools via the Convention on Biological Diversity but also via other MEAs that focus on the conservation of biodiversity.

In 2010, the CBD captured the need for biodiversity mainstreaming in the Strategic Plan for Biological Diversity 2011–2020. Two of five strategic goals refer to mainstreaming:

- Strategic Goal A: Address the underlying cause of biodiversity loss by mainstreaming biodiversity across government and society.
- Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use.

The CBD asks Parties to develop National Biodiversity Strategies and Action Plans (NBSAPs) to facilitate biodiversity conservation and sustainability at the national level. Ideally, NBSAPs will facilitate integration of biodiversity into appropriate sectorial policies, plans and programmes at the national and regional level.²⁸

National strategies should:

- Reduce the negative impacts of a sector on biodiversity and enhance the positive impacts
- Enhance or restore biodiversity and ecosystem services
- Secure and promote local communities' access to and benefits from the use of biodiversity and enable their participation in the design and implementation of biodiversity management and practices.

The CBD has developed voluntary guidelines to assist countries to incorporate biodiversity-related issues into environmental impact assessment and strategic environmental assessment legislation and procedures.²⁹

In December 2016, at the 13th meeting of the CBD (COP13), 190 countries pledged to increase efforts to integrate biodiversity into the policies of different sectors in what became known as the Cancun Declaration.³⁰ This means that policy on biodiversity needs to be included in not just environmental ministries but also other ministries and economic sectors.

The declaration moves towards enhanced implementation of the Strategic Plan for Biodiversity 2011–2020 and its Aichi Biodiversity Targets (in particular Targets 1–4), by mainstreaming biodiversity in productive sectors.

The Cancun Declaration sets out a number of cross-cutting mainstreaming commitments (including integration of biodiversity values into sectorial policies, plans, programmes, legislation and budgetary decisions), together with sector-specific guidance for the agriculture, forestry, fisheries and tourism sectors.

During the CBD COP13 meeting, discussions focused on biodiversity underpinning these sectors and mainstreaming within them reducing loss of biodiversity. CBD Parties requested countries and companies to mainstream biodiversity in sectorial policies and management. An undercurrent throughout these discussions was that by

Box 1.5

The Aichi Targets relevant to mainstreaming

Some of the key Aichi Targets that require mainstreaming of biodiversity include:

Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.

Target 4: By 2020, at the latest, governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

mainstreaming biodiversity across various production sectors, the Aichi Targets, Sustainable Development Goals³¹ as well as tenets of other MEAs such as the Paris Climate Agreement³² could be addressed.

Following extended negotiation, CBD COP13 unanimously adopted a number of decisions on biodiversity mainstreaming with a particular focus on the agriculture, forestry, fisheries and tourism sectors, to:

- Call on governments to phase out harmful agricultural subsidies and use regulation and incentives to reduce habitat loss, increase water efficiency and prevent inappropriate use of fertiliser and pesticides
- Welcome private sector efforts to eliminate deforestation from commodity supply chains, and call on governments to expand networks of protected forests, promote sustainable forest management and combat illegal logging
- Reinforce existing international commitments to sustainably manage marine ecosystems, effectively regulate fishing and prohibit harmful fisheries subsidies.

According to Braulio Ferreira de Souza Dias, who was the Executive Secretary of the CBD at the time, *“The Cancun Declaration, and the powerful commitments made here, sends a strong signal that countries are ready to achieve the Aichi targets.”*³³ Example pledges from the Cancun Declaration include:

- 11 European countries pledging to protect pollinators crucial for food security
- France pledging to reduce micro bead plastic pollution
- Peru, Mexico, Ecuador and Guatemala with the Food and Agriculture Organization (FAO) and Darwin Initiative starting a coalition for the preservation of genetic diversity and safeguarding of native crops.

Mainstreaming biodiversity will continue to be a major theme for upcoming CBD discussions and COPs. At CBD COP14 in Egypt in 2018, the Convention will focus on mainstreaming biodiversity in the energy and mining, infrastructure, manufacturing and processing, and health sectors.

Additionally, preparations are already starting for the creation of a post-2020 biodiversity framework which also needs to incorporate mainstreaming. A new framework will be designed based on progress made on the 2011–2020 Strategic Plan and actions still needed to achieve it. Governments, civil society, businesses and other groups have already been invited to submit inputs on a post-2020 framework.



Case Study 1.3

Mainstreaming biodiversity in Zimbabwe

Objective

BirdLife Zimbabwe aimed to integrate Zimbabwe's CBD obligations into its national development and sectoral planning frameworks. It aimed to do this through its NBSAP, in line with global guidance contained in the 2011–2020 Strategic Plan.

Major products

Zimbabwe's NBSAP: <https://www.cbd.int/doc/world/zw/zw-nbsap-v2-en.pdf>

Maps of protected areas and key biodiversity areas: <https://biodiversity.unglobalpulse.net/zimbabwe>

Issues

There had been poor integration of biodiversity policy, land use systems and mainstreaming of biodiversity into Zimbabwe's NBSAP planning process – there was a need to place biodiversity at the centre of Zimbabwe's development agenda.

Challenges

Integration of biodiversity in extractive industry sectors (mining, energy, development) has not been easy. Though the country has sound environmental legislation, there is a perception that economically productive sectors can infringe on the environment.

Opportunities

BirdLife Zimbabwe collaborated with various stakeholders and other organisations on this, empowering communities and providing them with an opportunity to influence policy.

The result

- BirdLife Zimbabwe's work with the government, industry and other stakeholders has resulted in programmes to conserve natural resources, comply with applicable obligations and mitigate negative environmental impacts.
- Environmental management is integrated into all aspects of business in Zimbabwe with the aim of achieving world-class environmental performance in a sustainable manner.
- Environmental awareness is now more than a just social responsibility and is a business imperative.

Case Study 1.4

Mainstreaming biodiversity in Uganda

As part of a project with BirdLife International and Dansk Ornitologisk Forening (DOF – BirdLife Partner in Denmark), Nature Uganda (BirdLife Partner in Uganda) carried out stakeholder consultations for mainstreaming biodiversity near Echuya Forest Reserve in Rubanda District and Kasyoha Kitomi Forest Reserve in Rubirizi District. Nature Uganda works at these sites on implementation of the Danida-funded People Partner with Nature (PPN) Programme <http://www.natureuganda.org/Bamboo%20PPN%20Echuya%20KK%202017.html>

Strategy

The project aims to advocate for the inclusion of biodiversity considerations in district development plans, utilising lessons from existing initiatives. Nature Uganda is working on this with local governments in all relevant sectors, such as production, energy, agriculture, fisheries, forestry and finance. Civil Society Organisations and the Ministry of Environment are also involved in the process.

Process

The project started with stakeholder mapping, followed by consultative meetings with members of relevant sectors to determine synergies between biodiversity and development. Workshops for legislators at the district level were conducted, followed by a workshop for national-level legislators. In addition, CBD and other MEA focal points were consulted.

Nature Uganda and local community groups now participate in district Council meetings at both Kasyoha Kitomi and Echuya. Results are already being seen, for example in Kasyoha Kitomi, one local community group proposed a site for ecotourism for their area and an agreement is underway. In Echuya, biodiversity conservation measures have been included in district development plans for Rubanda and Kabale districts.

Nature Uganda is providing information for biodiversity reports, for example The State of Biodiversity report, together with the National Biodiversity Databank, Wildlife Conservation Society, Uganda Wildlife Authority, National Environment Management Authority (NEMA) and National Forestry Authority.

Synergies

An MoU between Nature Uganda and NEMA has been drafted but is yet to be signed and agreed upon. Nature Uganda is part of the project management committee for NEMA projects such as the CONNECT project (www.connectbiodiversity.com) and is also involved in strengthening capacity for CBD implementation (<http://nema.go.ug/media/nema-undp-launch-project-harmonize-reporting-implementation-rio-conventions-uganda>). Nature Uganda has also been a part of national delegations to CBD.

Achievements

Nature Uganda has undertaken capacity building with six Community Forest Management (CFM) groups on lobbying and advocacy. Leaders of these CFM groups at Kasyoha Kitomi and Echuya have become empowered to participate in local planning processes: conservation practices such as tree planting and wetland restoration have been integrated into sub-county development plans. Alternative livelihood enhancement activities have also been developed as part of reducing pressure on natural resources (forests and wetlands). Joint locally-based monitoring and forest patrols have been set up for forest protection with teams consisting of CFM members, the National Forestry Authority, local governments and Nature Uganda. Nature Uganda has a Memorandum of Understanding with site support groups at Kasyoha Kitomi and Echuya, to mainstream conservation and development activities at the local level.

For more information, see: <http://www.natureuganda.org/>

Case Study 1.5

Developing a conservation plan for the Wallacea hotspot

The Wallacea hotspot is an area of thousands of small islands in Indonesia. Historically, the islands were covered in forests and other vegetation, but recently much has been cleared for agriculture, mining and other development.

Key Biodiversity Areas have been identified in Wallacea by the Critical Ecosystem Partnership Fund as sites of importance and potential funding. Consultation workshops with scientists and stakeholders such as communities, businesses and Civil Society Organisations have been organised, as well as meetings with government and conservation agencies, to discuss conservation threats and actions needed at each site. A management plan for the area has also been developed.

Read more: Ecosystem Profile for the Wallacea Hotspot (2014)
<https://www.cepf.net/our-work/biodiversity-hotspots/wallacea>

Box 1.6

Strategic Impact Assessments and Cumulative Impact Assessments

One way that governments and companies can mainstream biodiversity into their operations is to utilise environmental assessments that should be conducted prior to a project, development or programme being carried out. There are different types of assessments that can be undertaken.

The role of a Strategic Impact Assessment (SIA) is to identify mechanisms to avoid, mitigate and offset impacts at a much broader scale than can be observed through project-based assessments.

A Cumulative Impact Assessments (CIA) is a process for analysing, evaluating, and predicting cumulative environmental change over time and across the spatial extent of the receiving environment in a systematic manner. A CIA requires information on the:

- relative magnitude and impact of pressures across the receiving environment
- spatio-temporal distribution of pressures and environmental features
- additive, synergistic, or antagonistic interactions between multiple pressures.

Interactions include pressures from one action (e.g. coal mining) in combination with past actions (e.g. pollution from land-based activities such as mining) as well as present (e.g. coastal development) and future (e.g. climate change) impacts.

Read more: Grech, A., R. L. Pressey, and J. C. Day. 2016. *Coal, Cumulative Impacts, and the Great Barrier Reef*. *Conservation Letters* 9:200–207.

1.2.3 Further reading

On biodiversity mainstreaming

Biodiversity mainstreaming in practice (GEF, 2016): https://www.thegef.org/sites/default/files/publications/GEF_MainstreamingBiod_11.28.16.pdf

The 3rd Science for Biodiversity forum in Cancun: <http://sdg.iisd.org/events/3rd-science-for-biodiversity-forum/>

International Institute for Environment and Development mainstreaming: <https://www.iied.org/mainstreaming-biodiversity-development>

Inter-American Development Bank: http://www.wri.org/sites/default/files/pdf/enviro_mainstreaming.pdf

Guidance Note on Mainstreaming Environment into National Development Planning (UNDP-UNEP Poverty-Environment Facility, 2009): <https://www.cbd.int/doc/meetings/nbsap/nbsapcbw-seasi-01/other/nbsapcbw-seasi-01-undp-unesp-guide-en.pdf>

Ten steps to biodiversity mainstreaming. Tips for NBSAPs 2.0 and beyond (2012) <http://pubs.iied.org/pdfs/14625IIED.pdf>

IIED and UNEP-WCMC (2015) *Stories of change: mainstreaming biodiversity and development*. IIED, London. <https://www.iied.org/stories-change-mainstreaming-biodiversity-development>

Putting biodiversity at the center of development: a checklist for reviewing the mainstreaming potential of a country's NBSAP <http://pubs.iied.org/17572IIED/>

IIED and UNEP-WCMC (2016) *Mainstreaming biodiversity. A guide to selecting strategic development targets*. IIED, London. <http://pubs.iied.org/17586IIED/?a=IIED>

Biodiversity mainstreaming toolbox for land use planning and development: http://biodiversityadvisor.sanbi.org/wp-content/uploads/2014/12/Gauteng-Biodiversity-Mainstreaming-Toolbox_final.pdf

Biodiversity and Development Mainstreaming: A State of Knowledge Review – Discussion Paper <http://pubs.iied.org/pdfs/G03673.pdf>

A Rapid Diagnostic Tool: Biodiversity Mainstreaming – Integrating Biodiversity, Development and Poverty Reduction <http://pubs.iied.org/G03694/>

<http://www.environmental-mainstreaming.org/Environment%20Inside/Chapter%201/chapter1-3.html>

Mainstreaming biodiversity into national sectoral and cross-sectoral strategies, policies, plans and programmes (CBD, NBSAP Training Package. Version 2.1., 2011): <https://www.cbd.int/doc/training/nbsap/b3-train-mainstream-revised-en.pdf>

Workshop summary report by IIED, CBD, UNEP-WCMC *Mainstreaming Biodiversity in Development and Sustainable Development Goals: Sharing and developing workable solutions* (2016): <http://pubs.iied.org/pdfs/G04168.pdf>

The importance of mainstreaming for bird conservation

<http://www.birdlife.org/middle-east/news/birdlife-projects-flying-high-unesp-gef-top-twenty>

<http://datazone.birdlife.org/info/CBD%20Support>

http://www.birdlife.org/sites/default/files/attachments/01-36_low.pdf

Lee, J. K., O.-S. Chung, J. Y. Park, H.-J. Kim, W.-H. Hur, S.-H. Kim, and J.-H. Kim. (2018, in press) *Effects of the Saemangeum Reclamation Project on migratory shorebird staging in the Saemangeum and Geum Estuaries, South Korea*. Bird Conservation International.

www.rspb.org.uk/Images/birdlifewindfarmposition_tcm9-241919.pdf

http://www.naturalcapitalproject.org/tanzania_prim.html

References

¹⁸ <https://www.cbd.int/doc/training/nbsap/b3-train-mainstream-en.pdf>

¹⁹ Biodiversity and developing mainstreaming. A state of knowledge review: Discussion page (2014). UNEP-WCMC. Page 8.

²⁰ Redford, Kent H., Huntley, Brian J., Roe, Dilys, Hammond, Tom, Zimsky, Mark, Lovejoy, Thomas E., da Fonseca, Gustavo A. B., Rodriguez, Carlos M., Cowling, Richard M. (2015) *Mainstreaming Biodiversity: Conservation for the Twenty-First Century*, *Frontiers in Ecology and Evolution*, Volume 3.

²¹ GBO4, page 36, <https://www.cbd.int/gbo/gbo4/publication/gbo4-en.pdf>

²² <https://www.cbd.int/doc/training/nbsap/b3-train-mainstream-en.pdf>

²³ *Mainstreaming Conservation of Migratory Soaring Birds into Key Productive Sectors along the Rift Valley/Red Sea Flyway project: Strategic Communication as a tool for MSB Mainstreaming*.

²⁴ <http://pubs.iied.org/pdfs/G03673.pdf> (page 16)

²⁵ <http://pubs.iied.org/pdfs/17586IIED.pdf> (page 2)

²⁶ <http://pubs.iied.org/pdfs/17586IIED.pdf>

²⁷ <http://pubs.iied.org/pdfs/G03673.pdf> (page 9)

²⁸ <http://datazone.birdlife.org/info/mainstream>

²⁹ A publication containing these guidelines is available in English at <http://www.biodiv.org/doc/publications/imp-bio-eia-and-sea.pdf>

³⁰ <https://www.cbd.int/cop/cop-13/hls/in-session/cancun-declaration-draft-dec-03-2016-pm-en.pdf>

³¹ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

³² <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

³³ <http://www.un.org/sustainabledevelopment/blog/2016/12/cancun-declaration/>

1.3

Section 1.3

Other Multilateral Environmental Agreements and policy processes



Section 1.3

Other Multilateral Environmental Agreements and policy processes

30

Objectives

In this section, we will describe other Conventions and international agreements focusing on biodiversity conservation, mainstreaming, and the involvement of Civil Society.

Mainstreaming biodiversity across government and various sectors is often discussed within the context of the Convention on Biological Diversity, but a number of other international treaties focus on the conservation of biodiversity and thus can also facilitate and support mainstreaming work (in addition to working outside of MEAs).

1.3.1 United Nations Framework Convention on Climate Change (UNFCCC)

The United Nations Framework Convention on Climate Change (UNFCCC)³⁴ is another international policy mechanism that resulted from the 1992 Rio Summit. UNFCCC is a framework for intergovernmental cooperation to combat climate change by limiting average global temperature increases and resulting climate change, as well as coping with the impacts. UNFCCC aims to stabilise and reduce greenhouse gas levels and halt climate change in a timeframe that allows for society and ecosystems to adapt naturally to changes.

With 197 Parties (countries and the European Union), the UNFCCC is nearly universal in membership and represents the key global body

for climate change-related policy work. Each Member State determines, plans and regularly reports its own contributions to mitigating climate change.

The Paris Agreement

In 2015, the 21st Conference of the Parties (COP21) to the UNFCCC took place in Paris, France. Countries gathered to determine the actions needed to tackle climate change globally and discuss what commitments would be needed for the future – a seminal agreement called the Paris Agreement was reached at the meeting.³⁵

The Paris Agreement requires Parties to (among other actions):

- Limit global temperature rise to 2 degrees Celsius above pre-industrial levels, or ideally 1.5 degrees Celsius
- Contribute to climate change mitigation, for example through use of cleaner energy
- Increase efforts to adapt and be more resilient to climate change
- Prepare and communicate post-2020 climate actions, known as Nationally Determined Contributions (NDCs)

To achieve these objectives, funding, technological development and capacity building will be needed. As a result, another aspect of the Paris Agreement is for developed countries to support developing countries, often most at risk from climate change, to build clean, climate-resilient futures. Recognising the difference in development rates of countries, developed countries are encouraged to lead the way in reducing emissions throughout their economies while developing countries are expected to follow their lead over time.

Box 1.7

BirdLife's work in regard to climate change

BirdLife's work on climate change supports UNFCCC goals and the effective implementation of NDCs. The biodiversity and ecosystems that BirdLife seeks to protect are directly affected by climate change. In turn, conserving ecosystems, habitats and species can play a role in mitigating climate change. BirdLife is engaged in a number of climate-related initiatives, including participating in UNFCCC negotiations, and also managing a climate change programme and projects.

Read more: <http://www.birdlife.org/worldwide/programmes/climate-change>

2015 Birdlife International climate change position: http://www.birdlife.org/sites/default/files/attachments/birdlife_climate_change_position_lores-november-2015.pdf

The Messengers: What birds tell us about threats from climate change and solutions for nature and people: http://climatechange.birdlife.org/assets/THE_MESSENGERS_FINAL_WEB.pdf

Nationally Determined Contributions are the way in which countries pledge and outline their approach to reducing emissions nationally and the ways that they will adapt to climate change. The information communicated in NDCs includes the range of projects and programmes to be implemented, the rational and methodology for them and the time frame for implementation.

NDCs can only be successful if reduction of carbon emissions and climate change adaptation are integrated across development sectors, especially carbon-intensive sectors, and national economic development planning.

Biodiversity considerations for UNFCCC

Another consideration that needs to be integrated in NDCs for climate change and national planning is biodiversity conservation. The UNFCCC recognises biodiversity conservation as a priority. As expressed in the CBD Cancun declaration:³⁶ *“Implementation of the Paris Agreement under the United Nations Framework Convention on Climate Change, which recognises the importance of ensuring the integrity of all ecosystems and the protection of biodiversity when taking action to address climate change, can and should also contribute to the implementation of the objectives of the Convention on Biological Diversity, and vice versa.”*

How civil society can engage with UNFCCC

Part of the NDC implementation process is the requirement that countries report on their emissions and climate change mitigation and adaptation efforts every five years. This leads to a worldwide assessment of progress, to evaluate and plan for continued improvement. During this process, NDCs are re-evaluated and updated.

The process of NDC development in each country provides a unique opportunity for civil society to encourage the mainstreaming of biodiversity within UNFCCC commitments and climate change considerations in different sectors. In 2018, a facilitative dialogue is taking place in which countries will assess the progress that NDCs have made so far, and what is achievable by 2020. Through its national Partners, regional offices and global secretariat, BirdLife can provide expertise

Case Study 1.6

Forests of Hope: the Belum Temongor Forest Complex in Malaysia and climate change

BirdLife’s Forests Programme aims to minimise deforestation and protect and restore natural forests as a contribution to both biodiversity conservation and climate change mitigation. Its objectives are to develop and promote mechanisms for long-term forest conservation and restoration efforts (for example through management), and advocate for policy approaches that address the drivers of deforestation.

Belum Temongor Forest Complex in Malaysia is one of the areas that BirdLife is working in. It is a priority area for biodiversity conservation as one of the largest remaining forest landscapes in Peninsular Malaysia. It is internationally recognised as a Biodiversity Hotspot and also an Important Bird and Biodiversity Area (IBA). The key threats to biodiversity in the forest are poaching, collection of agarwood that is used in perfume and medicine production, unsustainable timber extraction, land conversion and infrastructure development. In Malaysia, the main policy instruments used for biodiversity conservation are the National Physical Plan, Common Vision on Biodiversity and National Policy on Biological Diversity.

As a Party to the UNFCCC, Malaysia has obligations to formulate programmes that mitigate climate change, promote sustainable management and conservation of carbon sinks, and adapt to climate change impacts. Pre-emptive adaptation measures are critical to limiting the damage and economic costs of impacts. As such, a national framework for combating climate change is being developed, headed by a Cabinet Committee on Climate Change chaired by the Malaysian Prime Minister, as well as a project steering committee and working groups. The National Policy on Climate Change is in the final stages of being drafted.

Read more: <https://theredddesk.org/countries/policies/national-policy-climate-change-malaysia>

and support to these dialogues. It is in BirdLife's interest to ensure that Nationally Determined Contributions for climate change incorporate biodiversity consideration and are successfully implemented to support ambitious target-setting.

1.3.2 Sustainable Development Goals (SDGs)

In September 2015, global leaders gathered at a historic United Nations summit in New York to formally adopt a new global framework for sustainable development. This became known as the 2030 Agenda for Sustainable Development.³⁷

The 2030 Agenda is intended to guide all countries and stakeholders in eradicating poverty through development that is economically, socially and environmentally sustainable. This is being implemented through global cooperation to achieve 17 Sustainable Development Goals (SDGs) (Figure 2).³⁸ The Goals focus on topics such as seeking to 'conserve and sustainably use the oceans, seas and marine resources' (Goal 14) and 'protect, restore and promote sustainable use of terrestrial ecosystems ... and halt biodiversity loss' (Goal 15). The SDGs comprise 169 Targets and about 230 indicators. The 2030 Agenda for Sustainable Development and the SDGs are thus key mechanisms to integrate and mainstream biodiversity considerations in various sectors, including agriculture, forestry, fisheries and energy.

The SDGs provide:

- A shared development vision
- The opportunity for partnership (for example with the private sector)
- A basis for resource mobilisation
- A starting point for planning.

The SDGs build on the Millennium Development Goals (MDGs), previous international goals that existed from 2000 to 2015.

All countries are required to report on their implementation of the SDGs. As the goals are interconnected, implementation requires working with them as an integrated system. Similarly, development agencies, UN

	1 NO POVERTY End poverty in all its forms everywhere
	2 ZERO HUNGER End hunger, achieve food security and improved nutrition and promote sustainable agriculture
	3 GOOD HEALTH AND WELL-BEING Ensure healthy lives and promote well-being for all at all ages
	4 QUALITY EDUCATION Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
	5 GENDER EQUALITY Achieve gender equality and empower all women and girls
	6 CLEAN WATER AND SANITATION Ensure availability and sustainable management of water and sanitation for all
	7 AFFORDABLE AND CLEAN ENERGY Ensure access to affordable, reliable, sustainable and modern energy for all
	8 DECENT WORK AND ECONOMIC GROWTH Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
	10 REDUCED INEQUALITIES Reduce inequality within and among countries
	11 SUSTAINABLE CITIES AND COMMUNITIES Make cities and human settlements inclusive, safe, resilient and sustainable
	12 RESPONSIBLE CONSUMPTION AND PRODUCTION Ensure sustainable consumption and production patterns
	13 CLIMATE ACTION Take urgent action to combat climate change and its impacts
	14 LIFE BELOW WATER Conserve and sustainably use the oceans, seas and marine resources for sustainable development
	15 LIFE ON LAND Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
	16 PEACE AND JUSTICE Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
	17 PARTNERSHIPS FOR THE GOALS Strengthen the means of implementation and revitalise the global partnership for sustainable development

Figure 2. The 17 Sustainable Development Goals

organisations and Multilateral Environmental Agreements such as the CBD are moving to universally align their work with the SDGs.

The link between economic and social development with biodiversity conservation within the SDGs is key. Biodiversity provides a number of services that are fundamental to human development and well-being. Globally, nearly half of the human population is directly dependent on natural resources for its livelihood, and many of the most vulnerable people depend directly on biodiversity to fulfil their daily subsistence needs. In turn, many current economic practices harm biodiversity and result in diminished returns to communities, so implementation of the SDGs, including mainstreaming of biodiversity in industrial sectors, is a key way of benefiting both nature and humans.

The relationship between the Sustainable Development Goals and Aichi Targets

The CBD Aichi Targets are a global framework for prioritising action on biodiversity conservation by 2020. When the SDGs were developed, the Aichi Targets were incorporated in them. For example, Aichi Target 11 (i.e. by 2020, 10% of coastal and marine areas should be protected) is reflected in SDG Goal 14, Target 5 (i.e. by 2020 at least 10% of coastal and marine areas will be conserved).

The Aichi Targets expire in 2020 and are due to be updated. The development of new targets need to be integrated with the SDGs.

In summary, the SDGs support and reinforce the Aichi Targets and vice versa, with the implementation of one contributing to the achievement of the other.

National strategies

Countries are developing their own sets of national and regional indicators to measure successful implementation of the SDGs.

The national governments of some countries have set up a task force or steering committee to aid in guiding and overseeing SDG engagement.

The national development plan of a country should reflect the SDGs. As a part of the 2030 Agenda for Sustainable Development, Parties agreed to consider conducting “regular and inclusive reviews of progress at the national and sub-national levels”. These reviews are considered by the UN global platform responsible for the SDGs, known as the High-level Political Forum on Sustainable Development (HLPF).³⁹ The HLPF meets in July each year and conducts voluntary and state-led reviews of SDG implementation via the National Voluntary Review process. Information on a country’s progress towards implementation of the SDGs is available on the SDG Index and Dashboards Report website.⁴⁰

How civil society can engage with the SDGs

Civil Society Organisations are allowed to attend SDG meetings such as the HLPF but must have special accreditation to do so.⁴¹ At the meetings, some accredited observers are allowed to make interventions and may also be able to contribute expertise intersessionally (between meetings).

1.3.3 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is the core multilateral agreement overseeing regulation of international trade in specimens of wild animals and plants.⁴² Regulation is important to ensure that the international trade is not detrimental to species, in terms of threatening their survival. The treaty was established in 1973 and has 183 Parties as of 2018.

CITES has three appendices that regulate trade of more than 35,000 species. The species are placed under different Appendices based on potential level of threat to their survival from over-exploitation and subsequent international trade:

- Appendix I lists species threatened by extinction and prohibits international trade in specimens of these species except when the purpose of import is non-commercial, e.g. scientific research.
- Appendix II lists species that are not necessarily now threatened

Box 1.8

How BirdLife engages with the SDGs

BirdLife International is engaged in SDG discussions, for example through participating in the 2018 HLPF meeting, where it worked with countries such as Egypt and the Philippines to demonstrate how biodiversity is being integrated and mainstreamed into coastal development and the energy sector.

with extinction but may become so unless trade is closely controlled. International trade may be authorised by a country through granting an export permit but authorities in the country first need to determine that the trade will not be detrimental to the survival of the species in the wild.

- Appendix III lists species that a CITES Party already regulates trade in and needs the cooperation of other countries to prevent unsustainable or illegal exploitation. International trade of these species requires permits or certificates.

In all cases, scientific evidence is needed to prove that the international trade is sustainable and that the survival of the species in the wild will not be impacted by the trade.

Discussions of scientific data related to the impact of international trade on species take place at CITES Animals and Plants Committee meetings, whereas discussion of the convention's implementation and any illegal trade in particular takes place at the CITES Standing Committee meeting. These meetings generally take place each year except for when the Conference of the Parties (COP) meets, approximately every three years. Parties to the meetings are required to regularly report on trade, particularly to demonstrate sustainability via the Review of Significant Trade (RST) process. Biodiversity conservation is thus a main tenet of CITES, which aims to ensure that trade-based economic activities are sustainable for species.

How civil society can engage with CITES

Similar to other conventions, observers are allowed to attend CITES meetings and comment on documents either when sent out electronically or via interventions at meetings. CSOs must register for meetings and provide credential information before being admitted. Observers may not be admitted to all aspects of the meetings, for example working groups on specific topics which they must request to join.

Case Study 1.7

Illegal trade of the Helmeted Hornbill and CITES

The Helmeted Hornbill (*Rhinoplax vigil*)⁴³ is the largest hornbill in Asia, found in the pristine lowland rainforests of Southeast Asia. Its unique solid casque is a material in demand to make carved jewellery and ornaments for Chinese consumers. While the species has been listed on CITES Appendix I since 1975 (prohibiting international commercial trade), escalating demand and inadequate law enforcement have led to a recent surge in illegal trade. This, coupled with ongoing habitat loss, has resulted in sharp population declines.

In late 2015, BirdLife International uplisted the hornbill's global conservation status from Near Threatened to Critically Endangered. In 2016, the IUCN World Conservation Congress adopted the Resolution "Conservation of the Helmeted Hornbill". BirdLife and its partners played a key role in drafting, proposing and sponsoring the motion. The resolution calls for greater international action and support to strengthen ongoing domestic conservation efforts for the species, in particular: addressing threats, supporting *in situ* conservation, identifying trade routes, building local conservation capacity and raising awareness for demand reduction. It also encourages relevant governments to address legislative, policy or enforcement gaps, prosecute participants at all levels of the illegal trade network and enhance awareness of applicable laws.

Another resolution on "Conservation of and Trade in Helmeted Hornbill" was adopted at CITES CoP17 in 2016 which called for the development of an Action Plan for conservation of the Helmeted Hornbill. In response to this, stakeholders developed a range-wide conservation strategy for the Helmeted Hornbill. A Helmeted Hornbill Working Group was also established as a subgroup of IUCN SSC Hornbill Specialist Group and has a mandate to coordinate the development of the conservation strategy and drive its implementation. It also provides advice and supports government agencies and NGOs working to conserve the species. Capacity building is an integral and cross-cutting theme in the Working Group, focused on identifying gaps and training needs for successful implementation of the Action Plan.⁴⁴

Box 1.9

How BirdLife engages with CITES

As of 2018, more than 1,400 bird species have been listed on the CITES Appendices, mostly on Appendix II.⁴⁵ CITES is especially relevant for BirdLife in the context of trade of particular bird species (such as songbirds or parrots), which are increasingly illegally trafficked.⁴⁶ BirdLife is frequently requested to provide data on the trade and conservation status of bird species for CITES discussions, particularly for the Review of Significant Trade process and for proposals to put species on one of the three Appendices (or take them off or move them between the Appendices).

1.3.4 Convention on the Conservation of Migratory Species of Wild Animals (CMS)

The Convention on the Conservation of Migratory Species of Wild Animals (CMS)⁴⁷ arose from the 1992 Rio Summit. CMS focuses on the conservation of migratory species, which are vulnerable to many threats along their migration routes and so require conservation between range States. States must cooperate to conserve terrestrial, marine and avian species passing through their national jurisdictions. CMS is an international treaty with 126 Parties as of 2018.

The CMS Preamble states: *“Conservation and effective management of migratory species of wild animals require the concerted action of all States within the national jurisdiction boundaries of which such species spend any part of their life cycle.”* This outlines the clear need for transboundary and intergovernmental cooperation that supports species conservation.

CMS has a 2015–2023 Strategic Plan, which has four main objectives:

1. To ensure that the conservation and management of migratory species are based on the best available information
2. To ensure that migratory species benefit from the best possible conservation measures
3. To broaden awareness and enhance engagement in the conservation of migratory species amongst key actors
4. To reinforce the overarching and unifying role of CMS in the conservation and management of migratory species.

Parties to the CMS work together to conserve migratory species and their habitats by providing strict protection for the most threatened migratory species, which are placed on one of two Appendices, and by negotiating regional multilateral agreements for the conservation and management of specific species or categories of species, and by undertaking co-operative research and conservation activities.

Case Study 1.8

The Central Asian Flyway and CMS

There are several major migratory flyways spanning the globe. One of these is the Central Asian Flyway (CAF), which is used by over 300 migratory bird species, including 182 migratory waterbird species, 42 of which are globally threatened. Waterbird species are declining rapidly as they are under threat due to habitat degradation, poaching and unsustainable water management.

The Central Asian Flyway Action Plan was created to conserve migratory waterbirds and their habitats across the flyway. India has taken the lead in implementing the CAF Action Plan, which is science-based and internationally coordinated. Regional cooperation among the Central Asian Flyway states promotes conservation of the migratory birds and the habitats they rely on. This requires managing and protecting the wetlands as well as facilitating sustainable benefits for people. More than 500 Important Bird and Biodiversity Areas have been identified in the region.

The Bombay Natural History Society (BNHS – BirdLife Partner in India) monitors bird populations and migration in the area, as well as restoring degraded habitats, and is one of the stakeholders involved in the CAF Action Plan. BNHS has mapped the movement patterns of 108 species to determine their migratory routes and has been working on Bird Sensitivity Mapping to establish guidelines for development activities, especially for the energy sector. BNHS have been bringing this information forward to CMS and CBD meetings.

<http://www.birdlife.org/worldwide/programme-additional-info/migratory-birds-and-flyways>

<http://www.cms.int/en/document/central-asian-flyway-action-plan-conservation-migratory-waterbirds-and-their-habitats>

Migratory species threatened with extinction are listed on Appendix I of the CMS. Parties must have strict measures for protection in place for these species and make sure they are not endangered where they exist. Under Appendix I of CMS, Party range States are mandated to protect such listed species by prohibiting exploitation, undertaking conservation measures and, where necessary, preventing, removing and mitigating obstacles to their migration.

Migratory species that would benefit from international collaboration are listed under Appendix II. This appendix encourages regional and global agreements on conservation. Agreements can be legally binding treaties or Memoranda of Understanding (MoU) for specific regions that species pass through.

For example, in the African-Eurasian flyway, there is a legally binding Agreement for Waterbirds (which may be extended to cover the Central Asian Flyway for which a waterbird action plan was adopted in 2005 but has since remained dormant), a Memorandum of Understanding for Raptors and an Action Plan for Landbirds, the implementation of which is currently overseen by a Working Group. Furthermore, there are Working Groups to coordinate the implementation of single species action plans and, a multi-species Action Plan for African-Eurasian Vultures. Some species such as the Aquatic Warbler and Slender-billed Curlews have a Memorandum of Understanding with CMS.

In addition, CMS has established thematic intergovernmental Working Groups and Task Forces to address particular threats including the illegal killing of birds in the Mediterranean, poisoning of birds worldwide and energy infrastructure in the African-Eurasian Flyway.

Proposals to add species to one of the two appendices are put forward to Conference of the Parties (COP) meetings which happen every three years. CMS also has regular Scientific Council meetings to discuss science-related issues and Standing Committee meetings to discuss implementation of the convention.

In 1996, a Memorandum of Cooperation (MoC) was agreed between the CMS and CBD Secretariats.⁴⁸ CBD recognizes CMS as the lead partner for conservation of migratory species over their range. There is a joint work programme between the two conventions to collaborate on providing support and guidance to Parties on integrating migratory species considerations into NBSAPs.

Case Study 1.9

A CMS BirdLife example: Actions to save the Yellow-breasted Bunting

The Yellow-breasted Bunting (*Emberiza aureola*) was formerly a very common species of the woodland and steppes across much of northeastern Europe, Russia, Mongolia and eastern Asia. However, in recent years it has suffered massive declines, exceeding 90%, and many populations in the western part of its range (e.g. Finland) have disappeared, even though the birds' habitat remains relatively unchanged. One of the key drivers of the decline is that the Yellow-breasted Bunting has been heavily trapped for food and religious festivals in southern China and Southeast Asia. The rapid decline of this species exemplifies the diverse threats faced by migratory species across different parts of their distribution.

Recognising this, the Convention on Migratory Species offers an important platform to conserve the Yellow-breasted Bunting in its range States. The species is now listed in CMS Appendix I, recognising the high risk of extinction it faces. Through CMS Resolution 11.14 and the Programme of Work on Migratory Birds and Flyways, the development of a Species Action Plan for the Yellow-breasted Bunting is underway, pending consultations with stakeholders in both Party and non-Party range States.

Read more: <http://www.cms.int/en/document/cms-resolution-1114-programme-work-migratory-birds-and-flyways>

Yong, D. L., Y. Liu, B. W. Low, C. P. Española, C.-Y. Choi, and K. Kawakami. 2015. *Migratory songbirds in the East Asian-Australasian Flyway: a review from a conservation perspective*. Bird Conservation International 25:1–37.

How civil society can engage with CMS

Civil society organisations can work with CMS to mainstream biodiversity into a variety of sectors using the topic of migratory species. For example, the CMS administers the Energy Task Force, a multi-stakeholder platform that works on reconciling renewable energy developments with the conservation of migratory species.⁴⁹

Box 1.10

BirdLife engagement with CMS

As with other conventions, observers are permitted to participate in CMS meetings and discussions if they provide credentials when registering or they can work through an organisation that already attends such as BirdLife or through their own government CMS representatives.

1.3.5 Ramsar Convention on Wetlands (Ramsar)

The Ramsar Convention on Wetlands (or simply Ramsar) is an intergovernmental treaty dedicated to the conservation and wise use of wetlands and their resources.⁵⁰ Wetlands include swamps and marshes, lakes and rivers, wet grasslands and peat lands, oases, estuaries, deltas and tidal flats, near-shore marine areas, mangroves and coral reefs. Human-made sites, such as fish ponds, rice paddies, reservoirs and salt pans can also be designated as Ramsar sites.

The Convention has three main pillars:

1. Designation of wetlands of international importance as Ramsar Sites
2. The promotion of wise-use for all wetlands
3. International cooperation between countries to further the wise-use of wetlands and resources.

The current number of Parties to the Ramsar Convention is 170 as of 2018. Every three years, Conference of the Parties (Ramsar COP) meetings take place, at which resolutions and recommendations for work are adopted through decisions.⁵¹ Between COP meetings, there are meetings of the Standing Committee and Scientific and Technical Review Panel (STRP).⁵²

The Ramsar Convention sets guidelines for wetland conservation but does not have legally binding sanctions for States to implement them, so States cannot be forced to implement them. The primary measures of implementation include prevention of negative impacts to wetlands, research and raising public awareness.

There are some mechanisms, however, that enable Parties to identify threatened Ramsar Sites and improve their conservation status: the Montreux Record, the Article 3.2 process and Ramsar Advisory Missions.

The Ramsar List is a set of wetland sites of international importance. There are 2,315 Ramsar Sites as of July 2018 covering over 2.45 million km². The greatest number of sites are in the UK and the largest total area is in Bolivia. The Ramsar Site Information Service (RSIS) is a searchable database providing information on each site.⁵³

Ramsar wetlands have been shown to host a higher density of water birds than non-Ramsar wetlands, either because they have been designated due to the high abundance of water birds or because conservation of the wetlands has helped to conserve or restore waterbird populations.

Case Study 1.10

Wetland conservation challenges and policy intervention in Malaysia

Several Ramsar Sites exist in Malaysia, some of which overlap with IBAs, although many priority IBAs are not yet designated as Ramsar Sites.

The East Asian-Australasian Flyway (EAAF) is one of the 9 major global flyways. It covers 22 countries and 50 million migratory water birds spanning 250 different populations, 28 globally threatened species and 54 shorebird species. Malaysia is a vital link in the flyway with a long coastline dominated by mangroves, mudflats and sand flats. There are many wintering grounds and staging (resting and feeding) sites. Over 30 shorebird species migrate through this area and there are also resident populations of water birds, some of which are globally threatened such as the Far Eastern Curlew (*Numenius madagascariensis* – EN) and Spoon-billed Sandpiper (*Calidris pygmaeus* – CR). A survey performed in Malaysia showed that the coast of Selangor and Sarawak especially are very important for waterbirds. However, there was a 22% decline of water birds in Malaysia between 1983–1986 and 2004–2006. The cumulative impacts of reclamation and conversion of mangrove forests and mudflats for aquaculture, agriculture, industry, housing and recreation have proven to be a real threat.

Stopover sites for migratory shorebirds in this area are particularly important for maintaining a healthy ecosystem. Mangrove forests also protect against natural disasters, filter pollution, mitigate against sea-level rise and intrusion of salt water as well as provide for healthy fisheries, including serving as viable breeding and nursery grounds for marine resources.

The Malaysian Nature Society (MNS), BirdLife's Malaysian Partner, is contributing to habitat and species protection in the flyway with the EAAF Partnership, supported by BirdLife's strategic plan of action and Malaysia's 2016–2025 National Policy on Biological Diversity. The MNS has multiple roles including raising awareness, organising workshops and engaging communities on conservation of the area.

Box 1.11

BirdLife and Ramsar

Ramsar has a Memorandum of Understanding to work closely with six International Organisation Partners (IOPs): BirdLife International, International Union for the Conservation of Nature (IUCN), International Water Management Institute (IWMI), Wetlands International, WWF International and Wildfowl & Wetlands Trust (WWT). The organisations provide technical and expert advice, support activities such as communications and also implement projects.

BirdLife and its partners engage with Ramsar in a number of ways. BirdLife has identified IBAs that are candidate Ramsar Sites in Africa, Asia and Europe and published inventories of these sites. Nearly a third (29%) of these 3,227 wetland IBAs have at least some coverage by Ramsar Sites and 15.8% have more than half of their area covered.

BirdLife Partners can use the IBAs in Danger initiative to identify Ramsar Sites under pressure, notify their governments about these and urge listing of the sites under Article 3.2 which is regularly reported to the Standing Committee and COP. Partners can also request to participate in Ramsar Advisory Missions or at least meet the experts conducting these missions at the threatened sites.

BirdLife uses Ramsar national reports and analyses them to draft or help draft Decisions relating to wetlands with national government representatives. Several BirdLife Partners sit on national Ramsar Committees.

BirdLife also participates in meetings and works with governments to draft resolutions for consideration of the Conference of the Parties, for example on initiatives such as Caring for Coasts which links Ramsar's wetlands with CMS work on coastal ecosystems.

Ramsar closely cooperates with the other international environmental conventions. CBD and Ramsar have a Joint Work Plan 2011–2020 with the goal of conserving and sustainably using biodiversity, especially in wetlands, to achieve the Vision, Mission and Goals of the Strategic Plan for Biodiversity (2011–2020) and its Aichi Biodiversity Targets, as well as the Mission and Strategies of the Ramsar Strategic Plan. One approach to this is to develop and implement NBSAPs and National Wetland Policies in a consistent and mutually supportive way.

What can Civil Society Organisations do in the context of Ramsar?

Observers such as BirdLife International and the other International Organisation Partners can attend Ramsar meetings, comment on documents and give interventions.

When a State is not a party to the Convention, it can:

- Lobby to accede to the Convention
- Assist with the selection of candidate Ramsar Sites.

When a State is a Party, it can:

- Lobby for Dependent Territories, if they exist, to accede to the Convention
- Prepare a list of candidate sites or extensions to sites, especially wetland IBAs and KBAs that also meet Ramsar Site criteria
- Promote appropriate management and monitoring of Ramsar Sites, considering threats and changes
- Build volunteer networks and Local Conservation Groups in line with the IBA programme
- Participate in the development and implementation of management plans
- Lobby for the establishment of a national wetland policy and contribute to its development
- Lobby for the establishment of a national Ramsar committee, or if it already exists, join and contribute to its work
- Liaise with national Civil Society Organisations on wetland conservation matters
- Monitor national wetland legislation and policies, suggest improvements and promote accountable implementation
- Lobby for a high profile of Ramsar Sites
- Raise awareness of wetland issues
- Attend Ramsar regional and other meetings and COP, raising issues, suggesting decisions.

Case Study 1.11

Developing a global initiative for the conservation of coastal wetlands

The world's coastal wetlands are neglected ecosystems. While coastal tidal flats provide critical habitat for migratory water birds and a host of marine life, coasts also have the highest densities of human populations. All around the world, coastal wetlands have been degraded and converted for development. In eastern Asia, huge areas of coastal tidal flats have been lost to land claim to make space for many of the region's largest cities.

Recognising the urgency of this issue, Resolution 12.25 of The Convention of Migratory Species (CMS), 'Promoting conservation of critical intertidal and other coastal habitats for migratory species', was successfully adopted in October 2017 under leadership of the Philippine Government with support from other CMS Party States. The resolution calls for the CMS Secretariat to work with other stakeholders to establish a global 'Coastal Forum' 'Caring for Coasts' Initiative to promote restoration of coastal wetlands.

In a follow up to this, the Philippines drafted the resolution 'Promoting the conservation and wise-use of intertidal wetlands and ecologically associated habitats' in consultation with key stakeholders, including BirdLife, which will be considered by the 2018 Ramsar COP13 meeting.

Read more: https://www.cms.int/sites/default/files/document/cms_cop12_res.12.25_conservation-intertidal-coastal-habitats_e.pdf

As of 2018, there are about 400 IBAs that overlap with World Heritage Sites including 10 IBAs in Danger. BirdLife Partners are active in at least 50 of these World Heritage Sites around the world. World Heritage Sites under threat can be nominated as a World Heritage Site in Danger which obliges the relevant Party(ies) to report back on their conservation status to the World Heritage Committee. IUCN periodically reports on the status of World Heritage Sites in its Outlook report. BirdLife is an Outlook Partner to IUCN and has provided information on the status of selected sites.

A benefit of World Heritage status, particularly for developing countries, is access to the World Heritage Fund. Four million USD is made available each year to assist Parties in identifying, preserving and promoting World Heritage sites. The concept of World Heritage is so well recognised today that the List of sites draws international cooperation and financial assistance from an array of sources. Sites on the list also benefit from management plans and preservation schemes.

The Convention recognises some properties solely or predominantly for their biodiversity values and ecosystem importance. For example, there are currently 206 natural sites. They are described as "*outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, freshwater, coastal and marine ecosystems and communities of plants and animals*" or contain "*the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science and conservation*".⁵⁵

IUCN releases studies on terrestrial and marine biodiversity and natural heritage to find gaps in the current World Heritage List and add candidate sites.

Many cultural landscapes are also within natural ecosystems and safeguarding biodiversity can be a critical activity in these sites too. The Secretariat of the CBD accounts for this through a Joint Programme on Biological and Cultural Diversity since 2010.

1.3.6 World Heritage Convention (WHC)

The Convention Concerning the Protection of the World Cultural and Natural Heritage or World Heritage Convention (WHC) of 1972 defines natural and cultural sites that can be considered for inscription on the World Heritage List. The 193 State Parties to the Convention pledge to protect these sites designated as the world's natural and cultural heritage for future generations to enjoy.⁵⁴ By recognising the outstanding value of inscribed sites and through funding support, the UNESCO World Heritage Convention provides yet another important inter-governmental framework to support biodiversity conservation.

States have also been requested to incorporate World Heritage Convention sites into their NBSAPs, to achieve Aichi Biodiversity targets at the sites. This recognizes the importance of both natural and cultural World Heritage sites in the conservation and sustainable use of biodiversity.⁵⁶

Civil Society engagement in the World Heritage Convention

Observers can participate in World Heritage Convention discussions with permission and utilise the treaty to protect areas of natural and cultural importance.

Box 1.12

BirdLife and the World Heritage Convention

BirdLife International and its partners contribute scientific data for World Heritage discussions, for example bird conservation threat assessments in World Heritage Sites and / or area-based information including Important Bird and Biodiversity Areas that may overlap with World Heritage Sites. This assists with decision-making, particularly when designating World Heritage Sites in Danger and when proposing new areas for World Heritage protection.

BirdLife is also part of the Natural World Heritage Network, an informal partnership of NGOs working collaboratively to strengthen policy and decision-making and support State Parties in safeguarding World Heritage sites within the World Heritage Convention process.

Case Study 1.12

Advocating the nomination of key Yellow Sea wetland sites for UNESCO World Heritage Status

In January 2018, the government of the People's Republic of China submitted a phase 1 nomination of 14 wetland sites along the coast of Bohai Bay and the Yellow Sea to be considered for UNESCO World Heritage status. A similar nomination was submitted by the Republic of Korea for its Yellow Sea coastline and is being considered by the Democratic People's Republic of Korea which also joined the Ramsar Convention in May 2018.

While not every key site was included, the 14 wetland sites added by China to the tentative list of World Heritage Sites are well recognised for their immense value to coastal biodiversity, particularly globally important concentrations of nearly all threatened migratory waterbird species in the East Asian-Australasian Flyway (EAAF), including the Spoon-billed Sandpiper (CR), Spotted Greenshank (EN), Saunders's Gull (VU), Relict Gull (VU) and Red-crowned Crane (EN). The nominated areas also have high coastal landform and geological diversity, including deltas, sandbars, rocky shores, shell ridges and some of the most important intertidal mudflats. This nomination, which is comparable to that for the Wadden Sea in Europe, was made possible by the leadership of the governments of China and Republic of Korea, in close consultation with experts and partners from the International Union for the Conservation of Nature (IUCN), the East Asian-Australasian Flyway Partnership, BirdLife International and other organisations.

The case of the Chinese Yellow Sea nomination provides an excellent example of how well-guided advocacy work carried out with strong political will from national and subnational governments (in this case, support from both the Chinese national government and provincial governments on the Yellow Sea coast) can generate regionally significant outcomes for biodiversity conservation.

Read more: <https://whc.unesco.org/en/tentativelists/6189/>
<https://www.birdlife.org/worldwide/news/%E2%80%9Cwaterbird%E2%80%99s-paradise%E2%80%9D-shortlisted-world-heritage-status> and
<http://www.eaaflyway.net/china-adds-several-critical-migratory-waterbird-sites/>

1.3.7 Further reading

On UNFCCC

<https://unfccc.int/>

Intended Nationally Determined Contributions <http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx> and <http://ndcpartnership.org/toolbox-navigator#tools> and <https://www.cdkn.org/ndc-guide/book/planning-for-ndc-implementation-a-quick-start-guide/introduction/>

National Adaptation Plans <http://www4.unfccc.int/nap/Pages/Home.aspx>

Paris Climate Change Agreement <https://unfccc.int/resource/docs/2015/cop21/eng/I09.pdf>

REDD+ <http://redd.unfccc.int/>

World Resources Institute <http://www.wri.org/our-work/topics/indcs>

Climate Action Tracker <http://climateactiontracker.org/about.html>

<http://bigpicture.unfccc.int/#content-the-paris-agreement>

On the Sustainable Development Goals

<https://sustainabledevelopment.un.org/?menu=1300>

A dynamic version of the SDG 2017 report: <https://unstats.un.org/sdgs/report/2017/storymap/index.html>

The data underlying the indicators: <https://unstats.un.org/sdgs/indicators/database/%20metadata>

SDG progress report 2017: <https://unstats.un.org/sdgs/files/report/2017/TheSustainableDevelopmentGoalsReport2017.pdf>

Assessing interlinkages, trade-offs and synergies in SDGs for policy design <http://www.economics-ejournal.org/special-areas/special-issues/the-sustainable-development-goals2014-assessing-interlinkages-trade-offs-and-synergies-for-policy-design>

2030 agenda and ecosystems: http://swed.bio/wp-content/uploads/2016/11/The-2030-Agenda-and-Ecosystems_spread.pdf

Biodiversity and the 2030 agenda policy brief: <https://www.cbd.int/development/doc/biodiversity-2030-agenda-policy-brief-en.pdf>

Biodiversity and the 2030 agenda technical note: <https://www.cbd.int/development/doc/biodiversity-2030-agenda-technical-note-en.pdf>

<http://sdg.iisd.org/news/first-sdg-report-provides-benchmark-for-progress/>

<http://sdg.iisd.org/news/undg-launches-publication-on-national-sdg-implementation/>

<http://sdg.iisd.org/commentary/policy-briefs/the-pre-2015-agenda-status-of-efforts-to-devise-the-post-2015-development-agenda/>

<http://sdg.iisd.org/news/ecosoc-summary-highlights-convergence-on-unds-in-2030-agenda/>

<https://www.odi.org/our-work/programmes/development-progress>

High Level Political Forum on Sustainable Development <https://sustainabledevelopment.un.org/hlpf>

On CITES

<https://www.cites.org/>

<http://checklist.cites.org/#/en>

On CMS

<https://www.cms.int/>

Introduction to CMS: http://enb.iisd.org/process/biodiv_wildlife-cmsintro.htm

<http://www.cms.int/en/news/collaboration-between-national-focal-points-cbd-cms-and-cites-revising-national-biodiversity>

<http://www.cms.int/en/document/cooperation-between-cms-and-cbd-0>

<http://www.cms.int/en/document/guidelines-integration-migratory-species-national-biodiversity-strategies-and-action-plans>

Guidelines on the integration of migratory species into National Biodiversity Strategies And Action Plans (NBSAPs) http://www.cms.int/sites/default/files/document/doc_27_guidelines_nbsap_e_0.pdf

On Ramsar

<https://www.ramsar.org/>

<http://jncc.defra.gov.uk/page-1369>

The Convention on Biological Diversity (CBD) and the Ramsar Convention on Wetlands (Ramsar) 5th Joint Work Plan (JWP) 2011 –2020:

https://www.ramsar.org/sites/default/files/documents/pdf/moc/CBD-Ramsar5thJWP_2011-2020.pdf

Ramsar database: <https://www.ramsar.org/>

Ramsar Site Information Service: <https://rsis.ramsar.org/>

The Montreux Record is a record of Ramsar sites where changes in ecological character have occurred, are occurring or are likely to occur as a result of technological developments, pollution or other human interference: https://www.ramsar.org/sites/default/files/documents/library/montreux_list_2016_efs.pdf

Ramsar Strategic plan: <https://www.ramsar.org/document/the-fourth-ramsar-strategic-plan-2016-2024>

National wetland policies: <https://www.ramsar.org/document/handbook-2-national-wetland-policies>

Guide to participatory action planning: https://www.ramsar.org/sites/default/files/documents/library/outreach_actionplanning_guide.pdf

On the World Heritage Convention

<https://whc.unesco.org/en/convention/>

On the World Heritage List

<http://whc.unesco.org/en/list/?type=natural>

<http://whc.unesco.org/en/biodiversity/>



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References

³⁴ <https://unfccc.int/>

³⁵ http://unfccc.int/paris_agreement/items/9485.php

³⁶ <https://www.cbd.int/cop/cop-13/hls/cancun%20declaration-en.pdf>

³⁷ <https://sustainabledevelopment.un.org/post2015/transformingourworld>

³⁸ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

³⁹ <http://sustainabledevelopment.un.org/hlpf>

⁴⁰ <http://www.sdgindex.org/>

⁴¹ <https://sustainabledevelopment.un.org/hlpf/registration>

⁴² <https://cites.org/eng/disc/what.php>

⁴³ <http://datazone.birdlife.org/species/factsheet/helmeted-hornbill-rhinoplax-vigil>

⁴⁴ <https://www.birdlife.org/worldwide/news/international-plan-save-helmeted-hornbill>

⁴⁵ For more information on CITES and birds, see: http://checklist.cites.org/#/en/search/output_layout=alphabetical&level_of_listing=0&show_synonyms=1&show_author=1&show_english=1&show_spanish=1&show_french=1&scientific_name=Aves&page=1&per_page=20

⁴⁶ <https://www.birdlife.org/worldwide/policy/wild-bird-trade-and-cites>

⁴⁷ <https://www.cms.int/>

⁴⁸ http://www.cms.int/sites/default/files/document/Doc_18.1_CMS_CBD_Joint%20Work%20Plan-2016-18_0.pdf

⁴⁹ <https://www.cms.int/en/taskforce/energy-task-force>

⁵⁰ <https://www.ramsar.org/>

⁵¹ Read more about Ramsar sites: http://www.ramsar.org/sites/default/files/documents/pdf/moc/CBD-Ramsar5thJWP_2011-2020.pdf.

⁵² <https://www.ramsar.org/about/the-bodies-of-the-convention>

⁵³ <https://www.ramsar.org/document/using-the-ramsar-sites-information-service>

⁵⁴ <http://whc.unesco.org/>

⁵⁵ <http://whc.unesco.org/en/criteria/>

⁵⁶ <http://whc.unesco.org/en/biodiversity/> The list of current World Heritage Sites is at <http://whc.unesco.org/en/list/?&type=natural> and the global assessment of sites at <https://www.iucn.org/theme/world-heritage/our-work/iucn-world-heritage-outlook>

1.4

Section 1.4

Sector-specific advice for mainstreaming



Section 1.4

Sector-specific advice for mainstreaming

Objectives

One of the key challenges in stopping biodiversity loss is finding ways to combat the issue where it originates. Some of the sectors that exert the strongest pressure on biodiversity are forestry, agriculture and energy. This section will examine these three sectors and the ways that biodiversity can be mainstreamed into their operations, including through the CBD.

Agriculture Organization (FAO) estimates, each year 3 million hectares of forests are lost to deforestation.⁵⁸ The causes of this differ across the world, but humans have a direct responsibility through activities such as the conversion of forests to agricultural land, overgrazing, changing cultivation, unsustainable forest management, introduction of invasive plants and animals, infrastructure development, oil and mining activities, forest fires, pollution and climate change.

When forests disappear (or are fragmented and degraded), so does biodiversity. The more forest ecosystems degrade, the less resilient they become to changing environmental pressures.⁵⁹ One of the greatest challenges for the forestry sector will be making sure that future generations will be able to access the resources and services of forests for their wellbeing and welfare. Mainstreaming the consideration of biodiversity conservation into the forestry sector will help facilitate both species conservation as well as socio-economic development.

Forest biodiversity has been discussed at the international level as a priority issue for governments and institutions for decades. At the Rio United Nations Conference on Environment and Development in 1992, governments agreed on principles for the management and conservation of forests.⁶⁰ This was the first step for forests to become a priority issue in many subsequent international meetings.

Additionally, as climate change has also become a priority, the role of forests as a carbon sink has also granted them considerable attention. Deforestation and forest degradation account for significant carbon emissions worldwide, after the energy sector. In order to curb the impacts of climate change, reducing emissions from the forestry sector is a key initiative.

1.4.1 Mainstreaming biodiversity in forestry

Why should we mainstream biodiversity in the forestry sector?

Forests, and in particular tropical forests, are the greatest source of terrestrial biodiversity on earth. Forest biodiversity includes all forms of life and the roles they play within ecosystems. This includes trees, plants, animals and microorganisms. The biological diversity provided by forests is the basis for a range of goods and services such as clean water and air. Forestry provides more than 10% of the GDP in many of the most economically disadvantaged countries. Estimates indicate that in developing countries alone, forestry provides jobs for 10 million people formally and 30–50 million informally. Moreover, forests are an important source of medicine, food, raw materials and employment.⁵⁷

However, stressors such as deforestation, forest degradation and climate change are threatening the biodiversity of forests. According to Food and

Box 1.13

The New York Declaration on Forests

This UN declaration pledges to halve the rate of global deforestation by 2020 and end the practice by 2030. Additionally, it pledges to restore degraded forest land. Meeting these targets should cut between 4.5 and 8.8 billion tons of carbon each year, which is equal to the United States' current emissions.

The declaration is a non-legally binding political declaration between governments, Civil Society Organisations (CSOs) and corporations, resulting from the UN Secretary-General's 2014 Climate Summit. The declaration has been signed by 37 governments, 20 sub-national governments, 53 multinational organisations, 16 indigenous representative groups and 63 CSOs. A Voluntary Action Agenda guides actions that governments, corporations and organisations can take to achieve the declaration.

Read more: <http://forestdeclaration.org/>

Examples of mainstreaming in the forestry sector

Within the forestry sector, mainstreaming of biodiversity has taken various forms: two main early schemes were Sustainable Forest Management (SFM) which aims to reconcile economic, social and environmental interests in forests, and Community Forest Management (CFM) which focuses on uniting local communities and involving them in forestry management. Other schemes have also been developed over time to promote the conservation of forests including through organisations such as the International Tropical Timber Organisation (ITTO).

The Forest Stewardship Council (FSC), the earliest certification scheme for forests, has worked to identify areas of High Conservation Value in forests, to which precautionary principles in planning are applied.⁶¹ Certification schemes are often referred to as popular forestry mainstreaming mechanisms, which can be utilised by both governments and businesses engaged in forestry. As such, the involvement of the private sector has been critical in forest conservation.

The role of communities is also important for forest management. Many forests are managed by communities and as such should be involved in mainstreaming processes.

Case Study 1.13

Community management of forests in Cameroon

Mount Oku in Cameroon is an Important Bird and Biodiversity Area that holds populations of two globally threatened bird species: Bannerman's Turaco and the Banded Wattle-eye. Both species are Endangered, threatened by the loss of their montane forest habitats. BirdLife initiated a community-managed forest project at Mount Oku in 1987 and has been working with local communities since, to establish forest boundaries, enable sustainable use planning, improve agricultural operations and develop other sources of income. Significant regeneration of the forest and its biodiversity has been accomplished in the last 15 years. The project is managed by the community.

Read more: <http://datazone.birdlife.org/sowb/casestudy/community-management-of-forest-on-mount-oku-cameroon-has-led-to-significant-habitat-regeneration>

Box 1.14

Aichi Targets relevant to mainstreaming forests

The following Aichi Targets incorporate mainstreaming elements:

Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Target 14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced, through conservation and restoration, including restoration of at least 15 percent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

The CBD and biodiversity mainstreaming in forestry

The CBD addresses forests and threats to their biological diversity through its broader work programmes (see Annex to decision VI/22), which were adopted in 2002 at COP6. A series of goals, objectives and actions focus on conserving forest biodiversity and using its ecosystem services and resources equitably and sustainably. The three core elements to the work on forests are :

1. Conservation, sustainable use and benefit sharing
2. Institutional and socio-economic enabling environments
3. Knowledge, assessment and monitoring.

These elements are reflected in the Aichi Biodiversity targets, especially 5, 14 and 15.

Case Study 1.14

Participatory Forest Management in Uganda and Kenya

Participatory Forest Management (PFM) is a forest management approach that deliberately involves forest-adjacent communities and other stakeholders in forest management within a framework that contributes to livelihoods. PFM is part of a wider initiative to devolve management and decision-making on forests from government to local communities.

In Kenya, communities have historically been alienated from forest resource management and decision-making. The aim of PFM has been to promote better management of forests, more sustainable supplies of forests products and services, equitable resource benefit sharing and stable livelihoods for forest adjacent communities. Nature Uganda and Nature Kenya are both working on using PFM in their projects and programmes for forestry, as it greatly benefits communities and forest futures.

<http://natureuganda.org/ParticipatoryEnvironmentManagementProjectNatureUganda.html> and
https://issuu.com/nature_kenya/docs/bunyala_participatory_forest_mangem

Additionally, CBD has outlined the following guidance for the conservation and sustainable use of forests:

- “Promote sustainable forest management, which aims to maintain and enhance the economic, social and environmental values of all types of forests.
- Appreciate the importance of forest ecosystems as reservoirs of biodiversity and sources of environmental services, highlighting their crucial role for human development, water supply, food security, nutrition and human health, especially for forest-dependent communities.
- Emphasize the relevance of forests as carbon sinks and their critical role for climate change adaptation and mitigation, such as reducing emissions from deforestation and forest degradation as well as conservation, sustainable management, and enhancement of forests for carbon stocks.
- Highlight the role of forests in protecting against natural hazards and disasters.
- Strengthen the implementation of Global Soil and Mountain Partnerships.
- Design and promote incentive packages for restoration, conservation and sustainable use of forest resources.
- Promote private sector participation in the development of production chains that reduce deforestation and forest degradation while increasing the economic and social benefits of landholders and local communities;
- Promote the implementation of the International Agreement on Forests.”

The CBD also introduced the Forest and Ecosystem Restoration Initiative (FERI), under decision XII/19, which is currently being implemented. FERI directly supports developing country Parties as they operationalise national plans for ecosystem conservation and restoration within the framework of the Strategic Plan and Aichi Biodiversity Targets 5, 14 and 15.⁶²

Much of the work on forest conservation and sustainable management is focused on creating indicators to confirm the status of forests worldwide and inform the work needed to conserve them. Indicators are also used for the Aichi Targets. Though some policies and programmes exist to support mainstreaming of biodiversity in the forest sector, more is needed.

Case Study 1.15

Community-led forest conservation in Nepal

In the 1980s, a programme for Community Forest User Groups to manage forest conservation in Nepal was started. The project was designed with the aim of mainstreaming biodiversity and ecosystem services more effectively into Community Forests of Nepal and consequently benefiting people and wildlife through provision of capacity building as well as tools, new policies and processes.

Participatory forest management is one solution that can help to reduce degradation. It grants rights to communities over local commons to ensure equitable and sustainable use of environmental resources. It allows peoples' abilities to be encouraged and empowered by being involved with decision-making.

There are some key challenges in Community Forests. The level of awareness and knowledge about the conservation, management and utilisation of biodiversity and ecosystem services is very low among members and user groups of community forests. In many cases, if biodiversity conservation is considered, it is only floral versus faunal diversity. Also, there is significant attention placed on the productivity of forest products rather than addressing wider biodiversity or ecosystem values.

In response to these issues, Bird Conservation Nepal, as the BirdLife partner in Nepal, has developed a project to mainstream biodiversity into community forest areas. The intention is to raise the awareness, understanding and capacity of key staff and programmes in this regard, pilot new approaches, and ensure that lessons are learned.

The legal and policy frameworks for the conservation of biodiversity at local and national levels are favourable in Nepal. The Nepalese government has shown strong commitments towards the conservation of biodiversity. For example, Nepal has developed an NBSAP (2014-2020) which declares that by 2020 all community managed forests will include a biodiversity chapter in their plans of operation.

Current activities used to manage forests by local communities include local monitoring of biodiversity and ecosystem services, planting tree species and removing invasive species as well as reviewing forest operational plans and supporting their implementation. For community learning, a Resource Center has been established as well as non-formal education classes. There have also been site visits by community groups, the establishment of women's groups and the provision of school awareness activities.

Community Forest User Groups are fully autonomous institutions with self-governance systems and forest management and monitoring plans. Over the past few decades, community participation in forestry management in Nepal has increased tremendously. Currently there are over 18,000 user groups that manage 1.7 million hectares of forest, which is approximately 30% of the national forest, involving 2.2 million households (35% of Nepal's population).

Read more: <http://fecofun.org.np/> and <http://datazone.birdlife.org/sowb/casestudy/bird-conservation-nepal-works-with-community-forest-users-groups-for-sustainable-forest-management>

1.4.2 Mainstreaming biodiversity in agriculture

Threats to biodiversity from the agricultural sector

The agricultural sector underpins food and environmental security, but it is also pressured to meet the ever-growing food production requirements of expanding human populations. As a result, expansion and intensification of agriculture has been the major driver of biodiversity loss and ecosystem degradation worldwide. At the same time, agriculture is an essential source of livelihoods for many. For example, for over 70% of populations in Global South countries, agriculture comprises 30–50% of their Gross National Product (GNP).

Agricultural land areas are likely to increase in the future to meet increasing demand for crops such as oil palm and sugar cane. These crops generally provide poor substitute habitat for biodiversity compared to the original habitats they replace. For example, Global Biodiversity Outlook 4, published by CDB in 2014,⁶³ states that food production and agriculture are responsible for 50–70% of terrestrial and freshwater biodiversity declines. It also concluded that under a business-as-usual scenario, agriculture will remain as one of the key drivers of biodiversity loss in the future. The Strategic Plan and Aichi Targets reflect this and the importance of how food production and agriculture impact biodiversity.

Box 1.15

Example certification schemes and standards in agriculture

Better Sugarcane Initiative (Bonsucro) – <http://www.bonsucro.com/what-is-certification/>

Round Table on Responsible Soy – <http://www.responsiblesoy.org/certification/nuestra-certificacion/?lang=en>

Roundtable on Sustainable Biomaterials – <http://rsb.org/certification/>

Round Table on Sustainable Palm Oil – <https://www.rspo.org/certification>

Box 1.16

Reducing Emissions from Deforestation and forest Degradation (REDD+)

Reduction of greenhouse gas emissions is taking place through the Reducing Emissions from Deforestation and forest Degradation (REDD+) programme (<http://www.un-redd.org>).

The programme was developed by the United Nations Framework Convention on Climate Change (UNFCCC). It offers financial incentives to developing countries to reduce emissions from the forestry sector.

REDD+ helps create incentives for developing countries to engage in climate change mitigation through:

- Reducing carbon emissions from deforestation
- Reducing carbon emissions from forest degradation
- Conserving forest carbon stocks
- Sustainably managing forests
- Enhancing forest carbon stocks

Read more at: <http://www.unredd.net/documents/redd-papers-and-publications-90/un-redd-publications-1191/fact-sheets/15279-fact-sheet-about-redd.html> and <http://www.sciencedirect.com/science/article/pii/S1389934116302544>

How to mainstream biodiversity in agriculture

In the late 1990s, the World Bank expressed the importance of mainstreaming biodiversity in the agricultural sector. It suggested various actions to reduce biodiversity loss, including:

- Creating wildlife corridors between significant biodiversity areas
- Reducing the land mass used for agriculture in areas of biodiversity importance
- Restoring vegetation through replanting and reseedling
- Reclaiming previously contaminated agricultural lands.

Since then, many other methods of biodiversity mainstreaming in agriculture have been developed.⁶⁴ The link between biodiversity and agriculture has become increasingly apparent, and as such there has been more focus on mutually supportive policies and practices. For example, focus has been increasing on modifying agricultural

practices to reduce their negative impact on biodiversity. Techniques include management systems that are site specific in order to maintain year-long production sensitive to local resources, the ecosystem and socio-economics. Farming can be regenerative if considered within a wider ecosystem at watershed, landscape and community levels, using traditional knowledge and practices.

Mainstreaming biodiversity and ecosystem services in agriculture is one of the key steps to conserving biodiversity. However, this is not understood or implemented widely across the globe. With agriculture especially, short-term financial and nutritional gains often take precedence over the long-term benefits of using more sustainable practices.

Box 1.17

A unique partnership between BirdLife Netherlands and farmers to protect meadow birds

A large number of meadow birds breed in the Netherlands, most of them on farmland. However, agricultural intensification, urbanisation and predation have resulted in their decline. To stop this loss, a partnership was formed in 2010 between BirdLife Netherlands (BLN) and a network of over 130 dairy and cattle farmers.

The main achievements of this partnership are:

1. Greatly increased awareness and recognition amongst citizens, politicians, policy-makers and companies in agri-food chains of the important role farmers have in meadow bird protection
2. Increased knowledge among farmers about the conservation of meadow birds
3. Improved conservation efforts by participating farmers.

The partnership has been successful because of the alignment of interests and motivation among the partners.

While government has not been involved, which has implications for governance (e.g. the work has no direct influence on policies or legislation), the partnership can still influence companies and the public. The partnership clearly complements agri-environment schemes.

Read more: <https://www.redderijkeweide.nl/> and Runhaar, H., and N. Polman. 2018. *Partnering for nature conservation NGO-farmer collaboration for meadow bird protection in the Netherlands*. Land Use Policy 73:11–19.

The CBD and mainstreaming biodiversity in the agriculture sector

In CBD COP Decision V/5, agricultural biodiversity is described as “the variety and variability of animals, plants and microorganisms, at the genetic, species and ecosystem levels, that are necessary to sustain key functions of the agro-ecosystem, its structure and processes”.

There are a variety of ways that the CBD addresses food and agriculture and its interactions with biodiversity. This includes the CBD Programme of Work on Agricultural Biodiversity⁶⁵ and the Strategic Plan for Biodiversity and its Aichi Biodiversity Targets.⁶⁶

Moreover, commitments were made under the Cancun Declaration⁶⁷ at CBD COP13 specifically referring to agriculture. These include:

- Promoting sustainable agriculture for food security, human nutrition, health, economic development and environmental protection;
- Adopting a holistic integrated view and assessment of ecosystems and the interlinkages between agriculture and biodiversity
- Using integrated and cross-sectorial planning processes, reducing inefficiencies, and increasing productivity including through ecological intensification, when appropriate, while avoiding negative impacts on terrestrial, marine, coastal and inland ecosystems and their associated biodiversity;
- Conserving and cultivating native varieties of crops, as well as farmers’ landraces, locally adapted breeds and underutilised species, including those threatened by production intensification;
- Implementing the Global Plans of Action on Animal, Plant and Genetic Resources for the Food and Agriculture Organization (FAO) of the United Nations⁶⁸
- Effectively managing and conserving pollinators;
- Recognising, conserving and sustainably managing soil as a living ecosystem and as one of the foundations of agriculture and food security, and advancing the understanding and conservation of its biodiversity
- Using measures and incentives to promote diversified agro-ecological systems and the designation of agricultural biodiversity conservation sites, such as FAO Globally Important Agricultural Heritage Systems⁶⁹

- Preventing agricultural pollution and emphasising the efficient, safe and sustainable use of agrochemicals, fertilizers and other agricultural inputs
- Promoting the safe and sustainable use of appropriate technologies, and the integrated, efficient and sustainable management of energy, water and soil resources
- Encouraging the use of biological approaches to control or reduce pests and diseases.

The CBD Programme of Work on Agricultural Biodiversity

The CBD created the Programme of Work on Agricultural Biodiversity to:

- Assess the world's agricultural biodiversity
- Identify adaptive management practices that promote the positive aspects of agriculture on biodiversity

Box 1.18

Aichi Targets relevant to mainstreaming agriculture

The following Aichi Targets incorporate mainstreaming elements:

Target 7: By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled and eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

Target 14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being are restored and safeguarded, taking into account the needs of women, indigenous and local communities and the poor and vulnerable.

- Strengthen the capacity of farmers and communities to manage agricultural biodiversity sustainably
- Support mainstreaming of biodiversity in agriculture.⁷⁰

CBD Decision X/34 on agricultural biodiversity, paragraph 7

“invites Parties to incorporate, as appropriate, relevant elements of the programme of work on agricultural biodiversity into their National Biodiversity Strategy and Action Plans as well as into their relevant sectorial and inter-sectorial policies and plans”⁷¹

Case Study 1.16

The impacts of agriculture on birds

Bird species are greatly affected by intensive agriculture. Two types of harmful impacts are the conversion of key bird habitats which may impact on Important Bird Areas and the farming methods themselves.

Harmful substances such as insecticides, rodenticides, poison baits or pharmaceuticals are used in most countries of the world. Birds can be exposed through ingesting coated seeds, contaminated prey or water, often causing death. Migratory soaring birds, such as storks, pelicans, cranes, harriers and falcons, frequently feed during stopovers on their routes and are especially at risk.

Read more: http://migratorysoaringbirds.undp.birdlife.org/sites/default/files/msb_project_agro-chemical_guidance_.pdf

1.4.3 Mainstreaming biodiversity in the energy and mining sectors

A report published in September 2017 on energy and its transition to 2050 stated that the global primary energy supply (energy contained in raw fuels) will peak by 2030, at which point demand will plateau.⁷² It also stated that oil usage will level out and eventually decline by 2020, being replaced by gas which will peak by 2035.

Until then, the challenge will be to transition energy in a way that reduces reliance on fossil fuels which contribute to climate change. The report projects that energy efficiency will improve more quickly

than global economic growth because of the electrification of the energy system (increasingly using electrical energy, for example derived from wind or solar sources, which will replace other forms of energy such as fossil fuels).

Renewable energy sources are predicted to increase and make up nearly half of the energy supply by 2050, and consequently reduce CO₂ emissions. By 2050, 85% of global electricity is predicted to be derived from renewable energy sources: solar photovoltaic cells will provide a third of the total amount, followed by onshore wind, hydropower and offshore wind.⁷³

The worldwide increase in energy consumption, and the means by which the demand is met by the energy industry, is contributing to biodiversity declines. Biodiversity, unlike climate change, has not yet been a subject of significant consideration by the energy sector. Overall,

Case Study 1.17

BirdLife and the CMS Energy Task Force

At CMS COP11 in 2014, a resolution was adopted to create “a multi-stakeholder Task Force on Reconciling Selected Energy Sector Developments with Migratory Species Conservation.” Known as the Energy Task Force, it supports the implementation of good practice guidelines, makes recommendations, and develops tools and guidance to avoid negative effects on migratory species from energy sector developments.

BirdLife International coordinates the Energy Task Force and is also both undertaking projects and developing key tools for this work such as:

- Completing a global assessment of predicted impacts from large-scale renewable energy infrastructure on birds and mammals
- Developing spatial mapping tools to assess the potential risk of government commitments following the Paris Agreement, and helping to show governments how they can meet their commitments with minimal impact upon biodiversity.

For more information see: <https://www.cms.int/en/taskforce/energy-task-force>

Box 1.19

Mainstreaming biodiversity into the energy and mining sectors – example initiatives

CMS Energy Task Force – <https://www.cms.int/en/taskforce/energy-task-force> and <https://www.birdlife.org/worldwide/news/bird-friendly-renewable-energy-introducing-energy-task-force>

Artisanal and Small-scale Mining Dialogue in Ghana – <https://www.iied.org/delivering-solutions-through-multi-stakeholder-dialogue>

Artisanal and Small-scale Mining in Protected Areas and Critical Ecosystems (ASM-PACE) – <http://www.levinsources.com/assets/pages/Global-Solutions-Study.pdf>

Biodiversity and Ecosystem Services Transformative ASM ('BEST-ASM') Knowledge Hub – <http://www.levinsources.com/services/minerals-and-the-environment>

IPIECA – Association of stakeholders involved with oil and gas activities, collaboration with inter-governmental organisations, academia and NGOs, including UNEP-WCMC and CSBI – <http://www.ipieca.org/our-work/environment/bes-issue-management/>

International Council on Mining and Metals – <http://www.icmm.com/en-gb/members/member-commitments/icmm-10-principles/icmm-principle-7>

Towards Sustainable Mining (Mining Association of Canada) – <http://mining.ca/towards-sustainable-mining/protocols-frameworks/biodiversity-conservation-management>

the increasing demand for more energy has put a strain on ecosystems. General effects of the energy sector on biodiversity include: habitat loss, habitat fragmentation, wildlife mortality, noise and light pollution, introduction of invasive species and changes in carbon stocks and freshwater resources.⁷⁴

Even clean energy sources, such as wind energy – often referred to as the sustainable alternative to oil – can leave their mark on landscapes and cause habitat destruction and mortalities for animals. Biodiversity impacts of installations are often overlooked.

Current knowledge on the interaction between energy and biodiversity focuses predominantly on the impact of specific energy developments on individual species. A much studied example is the way off-shore wind farms affect whales and other marine mammals. Moreover, these studies are often based at specific sites, and as such are not necessarily comprehensive of a wider picture.

Unfortunately, in many cases there is not enough time or financial resources to assess to what extent a development will affect biodiversity at the site level, so it is often not considered crucial to the process of assessing environmental impacts. Therefore, it is vital to mainstream biodiversity considerations rooted in sound science into decision-making processes and policies for extraction and sourcing of energy.⁷⁵

Case Study 1.18

Mainstreaming biodiversity in the energy sector through the Migratory Soaring Birds Project

BirdLife international, through the Global Environment Facility (GEF) funded Migratory Soaring Birds (MSB) project, aims to promote and support the shift to renewable energy in the countries of the Rift Valley/Red Sea flyway. This shift to renewable sources of energy is vital to meet climate change targets and ensure sustainable development. However, inappropriately placed developments can have an impact on birds and biodiversity.

One of the objectives of the MSB project is to make the flyway safer for migratory soaring birds through mainstreaming biodiversity conservation considerations into the energy sector to limit adverse effects on species and nature.

The energy sector is a key component and driver of economic development in the region, requiring a large amount of infrastructure, both to generate electricity and to transmit it to end users and consumers through electrical power lines. The need to diversify energy resources and develop renewable energy farms (solar and wind) are leading to major developments within the Rift Valley/Red Sea flyway, sometimes at sensitive locations. A vast transmission line network to support this resource is also being planned – globally over 5 million km of power lines have been proposed for construction in the next five years.

The capacity for energy generation in the Rift Valley/Red Sea flyway is large given the natural resources present in the region, and a number of large-scale projects are already in operation. Governments across the region have committed to renewable energy targets for 2020: Egypt has a 20% target, Lebanon 12%, Jordan 10% and Saudi Arabia 10%. These targets

will result in the construction of more energy infrastructure across the flyway landscape.

The Rift Valley/Red Sea flyway is the second most important flyway in the world. As impacts in one area can potentially have a significant effect along the flyway, each country within the flyway has a specific role to play. The energy sector is likely to have an impact on birds in the flyway if infrastructure is inappropriately placed or fails to take birds and biodiversity into account. Potential impacts are likely to be related to death or injury of the birds themselves or degradation of habitat, which can affect both resident and migratory species. Greater risks are also associated with concentrations of vulnerable species at specific times of the year that create migratory bottlenecks. These risks can be minimised if appropriate actions and mitigation procedures are integrated into the energy sector.

The MSB project is working with a range of stakeholders in the energy sector, from civil society (including BirdLife Partners such as Nature Conservation Egypt) to utility companies and developers through to governments (including ministries of energy and planning as well as environment), development banks and funding organisations. The project has developed a sensitivity mapping tool and guidance material for different sectors and audiences on ways to reduce adverse impacts on birds and biodiversity and is informing Environmental Impact Assessments and Strategic Environmental Assessments across the region.

For more information see: <http://migratorysoaringbirds.undp.birdlife.org/en/sectors/energy> and <http://datazone.birdlife.org/info/mainstream>

The challenge lies in continuing to provide energy sustainably without losing biodiversity.

The juxtaposition between energy needs and biodiversity conservation has resulted in some challenges. On the one hand, energy companies seek to supply low-cost, abundant energy products, whilst meeting social expectations for corporate social responsibility. On the other hand, conservationists aim to be a voice for biodiversity decline, while working towards solutions with the public and private sectors for a sustainable future. The methods by which the energy sector chooses to meet the growing demand for energy and the prioritisation of this over potential conservation concerns can make reconciliation of the two needs difficult.

Mainstreaming the conservation of biodiversity in the energy sector

There is a need to approach and engage with businesses in the energy sector to convey why it is important to mainstream biodiversity in their operations. The core business argument is to minimise risks at the project level – projects can be executed more effectively if there are fewer external threats to biodiversity or changes in environmental conditions. Also, it is easier to plan and be risk-adverse if the natural environment is stable. Poor performance or delays due to biodiversity or environmental problems can negatively affect a company's reputation and lead to the loss of resources needed for future endeavours.⁷⁶

There is also a need to ensure that policy and legislation that regulate energy companies integrate biodiversity considerations, which in turn can influence their operations.

A number of examples of how civil society organisations are working with the energy sector are contained in this section.

1.4.4 Mainstreaming in other sectors

There are many other sectors in which biodiversity could and should be mainstreamed. Some of these are recognised by the CBD.

Case Study 1.19 The Palau Pledge Initiative – mainstreaming in tourism

Like many other island nations in the Pacific, Palau relies on tourism as a primary driver of its economy. Each year, thousands of tourists come from all over the world to explore Palau. In recent years, the average number of visitors to Palau's shores has increased tremendously, to almost seven times the size of the local population. However, as those numbers continue to grow, problems arise with impacts to the local environment.

As a response, the government has instituted a mandatory pledge for tourists—in the form of a passport stamp. Every incoming visitor must sign the pledge to be a good environmental steward for the duration of their stay.

In addition, the Palau Pledge initiative shows an in-flight video to incoming visitors (<https://youtu.be/KhuY8eNLzBM>) to educate them about their environmental responsibility. It also distributes a sustainable tourism checklist upon arrival. To ensure that the Palau Pledge is more than just a superficial effort, national policies are in place to strengthen the enforcement of environmental protection laws, including increased policing and reporting of any offences.

Read more: <https://palaupledge.com/>

Mainstreaming in tourism

One resource for mainstreaming biodiversity in the tourism sector is UNEP's Sustainable Tourism Programme. The programme was developed through regional consultations, a stock-taking exercise and global survey of existing data and initiatives on sustainable tourism, engaging nearly 400 actors as well as relevant UN agencies, resolutions and programmes.⁷⁷

The programme aims to:

- Integrate Sustainable Consumption and Production (SCP) patterns in tourism-related policies and frameworks
- Enhance collaboration among stakeholders for the improvement of SCP performance in the tourism sector

- Foster the application of guidelines, instruments and technical solutions to prevent and mitigate tourism impacts and mainstream SCP patterns among tourism stakeholders
- Enhance sustainable tourism investment and financing.

To reflect interest in the issue, there was a session on sustainable tourism at CBD COP12.⁷⁸

Mainstreaming in fisheries and aquaculture

Fisheries and aquaculture are important contributors to food security and livelihoods at household, local, national and global levels. Biodiversity conservation is strongly linked to food security and poverty reduction worldwide, in that areas with healthy biodiversity often support food security and alleviate poverty.

The Sustainable Ocean Initiative (SOI) aims to provide a global platform for building partnerships and enhancing capacity to conserve and sustainably use marine and coastal biodiversity in a holistic manner.⁷⁹

A roundtable on fisheries at CBD COP13 in Cancun highlighted that fish provide essential nutrition for 3 billion people and satisfy half of the protein and essential mineral needs of 400 million people, mainly in poor countries.

The Sustainable Ocean Initiative aims to:

- Achieve a balance between sustainable use and conservation and promote flexible and diverse approaches for this
- Identify best practices; facilitating information sharing and learning from experiences
- Create partnerships that can provide for targeted capacity building, training, technical assistance and learning exchange
- Provide for two-way communication among policymakers, scientific communities and local stakeholders
- Monitor progress towards the Aichi Biodiversity Targets in marine and coastal areas (particularly Targets 6, 10 and 11)

- Facilitate the provision of guidance and guidelines that will help achievement of the Aichi Targets, and
- Improve the scientific basis for implementation.

Mainstreaming in health

An important breakthrough for mainstreaming biodiversity in the health sector is a relatively new approach called One Health.⁸⁰ One Health is a problem-solving strategy that tackles issues at the interface of wildlife, domestic animal and human health. An effort by veterinarians and other scientists, working with communities and animal health organisations, One Health is developing solutions for biodiversity to contribute to health. For instance, instead of looking at livestock's geographic origin, it looks at the meat production process itself – from farm to fork – through a food safety lens.

Next steps for mainstreaming across sectors

At CBD COP13 in 2016, Parties adopted a decision on the mainstreaming of biodiversity within and across sectors with a particular focus on the agriculture, forestry, fisheries and tourism sectors (Decision XIII/3).⁸¹

It was also agreed to make mainstreaming of biodiversity into the sectors of energy and mining, infrastructure, manufacturing and processing, and health a topic of discussion at CBD COP14, in November 2018.⁸²

Case Study 1.20

Removing fences in Botswana – mainstreaming in health

A successful example of mainstreaming in health considers mitigating the effects of animal disease prevention. Fences erected to protect beef producers from foot-and-mouth disease have divided Botswana into 17 “islands”. These fences have impeded important migrations of millions of wild animals – wildebeest, zebra, hartebeest, springbok and many others. Animal movement is fundamental for ecosystem functioning and species survival, and fencing creates conflict zones between local people and wildlife. Wildlife does not play a significant role in the transmission of foot-and-mouth disease apart from the African buffalo – it is more likely to be spread by cattle. Many areas, like the Kalahari, have no cattle or buffalo so the fences in those areas serve no disease control purpose.

As a result, some areas are considering removing the fencing which will restore wildlife migration patterns. Recently, Ngamiland, home to world-renowned wildlife and the recently World Heritage-listed Okavango Delta, has committed to reassessing its fences with wildlife-friendly beef and wildlife concerns in mind.

Read more: <http://theconversation.com/africas-great-migrations-are-failing-but-there-is-a-solution-and-you-can-eat-it-too-93749>

Case Study 1.21

Mainstreaming biodiversity across production sectors

BirdLife International, UNDP and GEF have collaborated on a 10-year project covering 11 countries along the Rift Valley – Red Sea Flyway to mainstream biodiversity conservation into productive sectors that pose a risk to migratory birds – the Migratory Soaring Birds (MSB) project. The work is with sectors that threaten or benefit from these birds, such as agriculture, energy, hunting and tourism, with the aim of integrating conservation objectives into their strategies and activities.

The project considers over 1.5 million birds of 37 species, including five globally threatened species, 37 species with unfavourable conservation status (CMS), 35 CITES-listed species and 23 globally important bottleneck sites

(IBAs). The flyway is a single unit and actions taken in one country have knock-on effects beyond country borders, and therefore there is a joint responsibility for the conservation of these birds. Threats to migratory birds along the flyway include:

- Loss of habitat (e.g. from agricultural expansion)
- Use of pesticides, herbicides and agricultural waste
- Collision with energy power lines and wind farms, and electrocution
- Hunting, persecution, harvesting and falconry

Agriculture in particular is the backbone of most economies in the region, with many countries expanding land dedicated to agriculture for food security, job creation and raw materials for agro-processing. For energy, there are massive investments ongoing within and outside the region.

A number of technical tools have been developed for this work, such as the Sensitivity Mapping Tool which allows all stakeholders to identify areas important for birds across the region. The wind sensitivity layer of the tool helps to identify areas that would present a high risk to birds if wind energy developments occurred there.

There are also guidelines to:

- Mitigate habitat destruction from expanding agriculture
- Avoid poisoning risks to birds
- Conduct Environmental Impact Assessments that are sensitive to MSBs
- Sustainably hunt
- Monitor birds pre/post construction for energy infrastructure
- Encourage sustainable tourism

Some positive results from the project so far include:

- Enhanced national BirdLife Partner capacity on mainstreaming and environmental safeguards
- Switching off of the Port of Sudan “Power Killer line” which has killed hundreds of the globally threatened Egyptian Vulture
- More in-depth Environmental Impact Assessments conducted to account for MSBs
- Contribution to the resolutions of international conventions (e.g. CBD, CMS)

For more information, see: <http://migratorysoaringbirds.undp.birdlife.org/en>

1.4.5 Further reading

Participatory Forest Management

<http://www.fao.org/docrep/005/AC648E/ac648e0i.htm#TopOfPage>

Baynes, J., Herbohn, J., Smith, C., Fisher, R., and D. Bray (2015) *Key factors which influence the success of community forestry in developing countries*. *Global Environmental Change* 35: 226–238.

Birch, J.C., Thapa, I., Balmford, A., Bradbury, R.B., Brown, C., Butchart, S.H., Gurung, H., Hughes, F.M., Mulligan, M., Pandeya, B., and K.S. Peh (2014) *What benefits do community forests provide, and to whom? A rapid assessment of ecosystem services from a Himalayan forest, Nepal*. *Ecosystem Services* 8: 118–127.

Chhetri, B.B.K., Johnsen, F.H., Konoshima, M., and A. Yoshimoto (2013) *Community forestry in the hills of Nepal: Determinants of user participation in forest management*. *Forest Policy and Economics* 30: 6–13.

Mainstreaming in Forestry

Ecosystem Restoration Concessions: http://www.forestlivelihoods.org/wp-content/uploads/2016/12/Harrison_Rhett_P.pdf

Watson, J. E. M., T. D. Evans, O. Venter, B. Williams, A. I. T. Tulloch, C. Stewart, I. Thompson, J. C. Ray, K. A. Murray, A. Salazar, C. McAlpine, P. Potapov, J. Walston, J. G. Robinson, M. Painter, D. Wilkie, C. Filardi, W. F. Laurance, R. A. Houghton, S. Maxwell, H. Grantham, C. Samper, S. Wang, L. Laestadius, R. K. Runtang, G. A. Silva-Chávez, J. Ervin, and D. B. Lindenmayer (2018) *The exceptional value of intact forest ecosystems*. *Nature Ecology & Evolution* 2:599–610.

Mainstreaming in Agriculture

FAO on Mainstreaming ecosystem services and biodiversity into agricultural production and management in East Africa, 2016 <http://www.fao.org/3/a-i5603e.pdf>

<http://www.alianzadelpastizal.org>

Palacin, C., and J.C. Alonso (2018) *Failure of EU Biodiversity Strategy in Mediterranean farmland protected areas*. *Journal for Nature Conservation* 42: 62–66.

Mainstreaming in Energy

CMS Energy Task Force – <https://www.cms.int/en/taskforce/energy-task-force>

Cross-Sector Biodiversity Initiative (CSBI) – <http://www.csbi.org.uk/>

Energy Transition Outlook 2017 – <https://eto.dnvgl.com/2017/#At-a-glance>

www.icontrolpollution.com/articles/biodiversity-and-energy-.pdf

References

⁵⁷ www.fao.org/biodiversity/components/forests/en/

⁵⁸ <http://www.fao.org/news/story/en/item/1103556/icode>

⁵⁹ <https://www.cbd.int/forest/problem.shtml>

⁶⁰ <http://www.un.org/documents/ga/conf151/aconf15126-3annex3.htm>

⁶¹ <https://ic.fsc.org/en/what-is-fsc-certification/consultations/archive/hcv-common-guidance>

⁶² <https://www.cbd.int/restoration/feri/>

⁶³ <https://www.cbd.int/gbo4/>

⁶⁴ iied & UNEP-WCMC, Biodiversity and Development mainstreaming: A state of knowledge review: discussion paper <http://migratorysoaringbirds.undp.birdlife.org/en/sectors/agriculture>

⁶⁵ <https://www.cbd.int/doc/bioday/2008/ibd-2008-factsheet-02-en.pdf>

⁶⁶ <https://www.cbd.int/doc/strategic-plan/2011-2020/Aichi-Targets-EN.pdf>

⁶⁷ <https://www.cbd.int/cop/cop-13/hls/in-session/cancun-declaration-draft-dec-03-2016-pm-en.pdf>

⁶⁸ <http://www.fao.org/nr/cgrfa/cgrfa-global/cgrfa-globplan/en/>

⁶⁹ <http://www.fao.org/giahs/en/>

⁷⁰ <https://www.cbd.int/agro/pow.shtml>

⁷¹ <https://www.cbd.int/doc/decisions/cop-10/cop-10-dec-34-en.pdf>

⁷² <https://eto.dnvgl.com/2017/>

⁷³ <https://eto.dnvgl.com/2017/#At-a-glance>

⁷⁴ Jones, N. F., L. Pejchar, and J. M. Kiesecker. 2015. The Energy Footprint: How Oil, Natural Gas, and Wind Energy Affect Land for Biodiversity and the Flow of Ecosystem Services. *BioScience* 65:290–301. <https://doi.org/10.1093/biosci/biu224>

⁷⁵ www.icontrolpollution.com/articles/biodiversity-and-energy-.pdf

⁷⁶ www.theebi.org/pdfs/ebi_report.pdf

⁷⁷ <http://web.unep.org/10yfp/programmes/sustainable-tourism-programme>

⁷⁸ https://www.cbd.int/tourism/doc/COP12_Tourism_Event/Panel3-Biodiversity&Tourism_side_Event_DeirdreShurland.pdf

⁷⁹ <https://www.cbd.int/soi/>

⁸⁰ <http://www.who.int/features/qa/one-health/en/>
http://www.oneworldonehealth.org/sept2004/owoh_sept04.html

⁸¹ <https://www.cbd.int/decisions/cop/13/3>

⁸² <https://www.cbd.int/meetings/COP-14>