



SYNERGY AMONG SUSTAINABLE DEVELOPMENT GOALS AND BIODIVERSITY-RELATED CONVENTIONS IN BAHRAIN

Dr. Khaled Allam and Dr. Humood Naser



Kingdom of Bahrain
Supreme Council for Environment

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Dr. Khaled Allam¹ and Dr. Humood Naser²

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EXECUTIVE SUMMARY

The objective of this report is to analyse the potential for enhancing synergies among the biodiversity-related conventions and to develop a set of practical options for synergies in Bahrain. This report focuses on the following five biodiversity-related conventions: (1) Convention on Biological Diversity (CBD); (2) Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); (3) Convention on Migratory Species (CMS); (4) Ramsar Convention on Wetlands; and (5) World Heritage Convention (WHC).

The Secretariats of all five biodiversity-related conventions have adopted decisions or resolutions calling for enhanced synergies with other conventions; in addition, the strategic planning documents of CBD, CITES, CMS and Ramsar Convention carry provisions for implementing synergies. Also, a wide range of mechanisms for coordination and collaboration between the biodiversity-related conventions already exists. These include, but are not exclusive to, the Biodiversity Liaison Group (BLG), the Chairs of the Scientific Advisory Bodies of Biodiversity-related Conventions (CSAB) and the Environment Management Group (EMG). Additionally, the biodiversity-related conventions have established a range of bilateral or multilateral memoranda of understanding for joint cooperation as well as joint work plans or programmes with other conventions.

The recent international reports developed by these five conventions confirm that the loss of biodiversity continues all over the world, in spite of all existing efforts at the national, regional and international levels. This means that additional efforts must be exerted to enable the biodiversity-related conventions to fully deliver their planned targets. In this regard, enhancing synergies and coherence among the biodiversity-related conventions is essential, as a huge potential for synergies lies unrealized.

The tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COPD) (Nagoya, Japan) called on the UN Environment Management Group (EMG) to contribute to the international decade on biodiversity 2011-2020. The COPD also specifically invited the EMG to build on its “Advancing the Biodiversity Agenda, a UN System-Wide Contribution” report to identify measures for effective and efficient implementation of the Strategic Plan for Biodiversity across the United Nations system. With the adoption of the National Biodiversity Strategies and Action Plan 2011-2020 (NBSAP) and the Aichi Biodiversity Targets, the Conference of the Parties to the CBD has clearly reached out to the other conventions, inviting them to contribute to the collaborative implementation of this global plan, stressing synergies with the national implementation of the other biodiversity-related conventions. By understanding how each UN agency and convention can help advance the NBSAP and target development on a variety of topics, each agency can better understand how its efforts contribute to a more efficient, targeted, strategic and comprehensive approach to country support.

Therefore, conventions have begun to acknowledge the opportunities that the Aichi Targets offer for enhancing collaboration and synergies. For example, both CITES and CMS have encouraged their national focal points to engage in the process of updating and revising NBSAPs at the national level.

Based on this, UNEP/ROWA and IUCN/ROWA offices have agreed to develop a joint study to promote synergies among the biodiversity conventions and establish links to the Sustainable Development Goals' (SDGs) targets in Bahrain. A national workshop was organized in Manama, Bahrain in close cooperation with the Supreme Council of Environment (SCE). With a wide range of national stakeholders in attendance, the workshop covered synergy among biodiversity-related conventions and the December 2016 SDGs.

After the workshop and feedback from stakeholders, several recommendations were put forward suggesting options for further action to promote synergies, cooperation and harmonization. It is important to recognize, however, that the identification and implementation of synergies is a process that needs to be implemented in accordance with the identified needs, the ongoing processes and the available resources of each convention. In addition, many of the following recommendations, if implemented, would require political support and institutional and financial resources, which may not be currently available if SCE continues to rely on government funding.

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ACRONYMS

ACAP	Agreement on the Conservation of Albatrosses and Petrels
ACCOBAMS	Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area
AEWA	Agreement on the Conservation of African-Eurasian Migratory Waterbirds
AGU	Arabian Gulf University
ARCWH	Arab Regional Centre for World Heritage
ASCOBANS	Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas
BCCI	Bahrain Chamber of Commerce and Industry
BIP	Biodiversity Indicator Partnership
BIOFIN	Biodiversity Finance Initiative
BLG	Biodiversity Liaison Group
BWA	Bahrain Women Association
CBD	Convention on Biological Diversity
CEPA	Communication, Education and Public Awareness
CHM	Clearing House Mechanism
CITES	Convention on International Trade of Endangered Fauna and Flora Species
CITO	Central Informatics and Telecommunications Organization
CMS	Convention on Migratory Species
COP	Conference of the Parties
CSAB	Chairs of Scientific Advisory Bodies of Biodiversity-Related Conventions
DAA	Directorate of Agriculture Affairs
DCG	Directorate of Coast Guards
DOF	Directorate of Fisheries
DOT	Directorate of Tourism
EBM	Ecosystem Based Management
EBSA	Ecologically or Biologically Significant Marine Area
EIA	Environmental Impact Assessment
EMG	Environment Management Group
EPC	Environmental Protection Committee
ETIS	Elephant Trade Information System
EUROBATS	Agreement on the Conservation of Populations of European Bats
FAO	Food and Agriculture Organization
GBIF	Global Biodiversity Information Facility
GCC	Gulf Cooperation Council
GEF	Global Environment Facility
GIIC	Gulf Industrial Investment Company
GSPC	Global Strategy for Plant Conservation
IAS	Invasive Alien Species
ICCWC	International Consortium on Combating Wildlife Crime
IEGA	Informatics and E-Government Authority
ILC	Indigenous and Local Communities
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature
MDGs	Millennium Development Goals
MEAs	Multilateral Environmental Agreements
MIKE	Monitoring the Illegal Killing of Elephants
MOE	Ministry of Education
MOF	Ministry of Finance
MP	Monitoring Program

MPA	Marine Protected Area
MRA	Marine Resource Affairs
MTT	Ministry of Transportation and Telecommunications
MWMU	Ministry of Works, Municipalities and Urban Planning
NBSAP	National Biodiversity Strategy and Action Plan
NBSC	National Biodiversity Steering Committee
NES	National Environmental Strategy
NFPs	National Focal Points
NGOs	Non-Governmental Organizations
OUV	Outstanding Universal Value
PAs	Protected Areas
PoW	Programme of Work
PCPMREW	Public Commission for the Protection of Marine Resources, Environment and Wildlife
PoWPA	Programme of Work on Protected Areas
PPPs	Public Private Partnerships
RMC	Resource Mobilization Committee
ROWA	Regional Office of West Asia
SCE	Supreme Council for Environment
SCW	Supreme Council for Women
SEA	Strategic Environmental Assessment
SDGs	Sustainable Development Goals
SLRB	Survey and Land Registration Bureau
SOC	State of Conservation Information System
TEEB	The Economics of Ecosystems and Biodiversity
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGA	UN General Assembly
WHC	World Heritage Convention
WHS	World Heritage Site

INTRODUCTION

The conservation of biodiversity and sustainable use of natural resources remain one of the defining challenges of our world and form an essential element of sustainable development. Over the last century, countries have developed a range of legal international agreements that tackled different aspects of this challenge. In the past decades, a number of biodiversity-related conventions were adopted, which led to establishing a comprehensive legal and governance regime for addressing most biodiversity issues.

The Kingdom of Bahrain consists of an archipelago of approximately 40 natural islands in addition to several islets, shoals and patches of reefs, lying centrally on the southern shores of the Arabian Gulf. The current total land and marine areas of Bahrain are around 770 and 7,499 km², respectively.¹

Bahrain's islands and their surrounding waters support several valued ecosystem components ranging from desert and agricultural ecosystems to coastal and marine ecosystems. Terrestrial ecosystems in Bahrain include palm groves, fresh water springs and local varieties of crops. These ecosystems provide important ecological services such as food provisioning, medicinal plants and recreational services. Additionally, genetic diversity is demonstrated in the native Arabian horse breeds and palm tree species, which represent historical and cultural values for Bahraini people. The coastal and marine environment in Bahrain supports a variety of productive habitats such as seagrass beds, coral reefs, mangroves and mudflats. In addition to their intrinsic value and role in maintaining biodiversity, these ecosystems provide important ecological, economic and cultural services to communities in Bahrain.

Marine resources, including fisheries, provide sources of income, employment and recreation and contribute to the cultural heritage and food security. Seagrass beds provide food sources and nursery grounds for turtles, dugongs, shrimps and a variety of economically important marine organisms. Coral reefs in Bahrain are characterized by both biological diversity and high levels of productivity. Coral reef ecosystems maintain genetic, biological and habitat diversity while providing renewable sources of seafood and recreational benefits. Mangrove swamps are an ecologically important coastal ecosystem that provide food, shelter and nursery areas for a variety of terrestrial and marine fauna. This ecosystem also contributes to carbon fixation and coastal protection.

The Kingdom of Bahrain includes biological diversity with regional and international importance. For instance, Hawar islands host the world's largest breeding colony of Socotra Cormorants (*Phalacrocorax nigrogularis*), with a winter population of 200,000 individuals. Further, the waters surrounding Bahrain support a large population of the globally threatened dugongs (*Dugong dugong*) with an estimated 5,800 individuals. This population of dugongs is considered the largest one known outside Australia.

1- Census Summary Results, 2013. Central Informatics Organization. Kingdom of Bahrain. www.cio.gov.bh.

1. OVERVIEW OF THE SYNERGY AMONG THE BIODIVERSITY-RELATED CONVENTIONS IN BAHRAIN

A wide range of mechanisms for coordination and cooperation among the biodiversity-related conventions already exists. They can be grouped into multilateral (generic and thematic ones) and bilateral mechanisms, including cooperation and coordination bodies and other arrangements. The most important existing mechanisms are briefly described below.

1.1 Summary of biodiversity-related conventions

1. Convention on Biological Diversity² (CBD)

Logo		Date of Entry Into The Force	29 December 1993
Objectives	<p>It has 3 main objectives:</p> <ol style="list-style-type: none"> 1. The conservation of biological diversity. 2. The sustainable use of the components of biological diversity. 3. The fair and equitable sharing of benefits arising out of the utilization of genetic resources. 		
Background	<p>In 1981, through Resolution 15/10, IUCN Members called on the IUCN Secretariat to analyse the technical, legal, economic and financial matters related to the conservation, accessibility and use of genetic resources. This is to provide the basis for international arrangements and for rules to implement these arrangements. The Ad Hoc Working Group of Experts on Biological Diversity, under the United Nations Environment Programme (UNEP), convened in November 1988 to explore the need for an international convention on biological diversity. In May 1989, UNEP established the Ad Hoc Working Group of Technical and Legal Experts to prepare an international legal instrument for the conservation and sustainable use of biological diversity. By February 1991, the Ad Hoc Working Group had become known as the Intergovernmental Negotiating Committee. Its work culminated on 22 May 1992 with the Nairobi Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity. The Convention was opened for signature on 5 June 1992 at the United Nations Conference on Environment and Development (the Rio Earth Summit). It remained open for signature until 4 June 1993, by which time it had received 168 signatures. The Convention entered into force on 29 December 1993, which was 90 days after the 30th ratification. The first session of the Conference of the Parties was scheduled for 28 November – 9 December 1994 in the Bahamas.</p>		
Programmes	<p>There are seven thematic programmes of work which correspond to some of the major biomes on the planet: (1) Agricultural Biodiversity; (2) Dry and Sub-humid Lands Biodiversity; (3) Forest Biodiversity; (4) Inland Waters Biodiversity; (5) Island Biodiversity; (6) Marine and Coastal Biodiversity; and (7) Mountain Biodiversity.</p>		
Number of parties	196	Status of Bahrain	Party since 28 November 1996
Major implementation tools	National Biodiversity Strategies and Action Plans (NBSAPs)		
Other agreements under the Convention	Cartagena Protocol	Status of Bahrain	Party since 7 May 2012
	Nagoya Protocol on Access and Benefit-Sharing	Status of Bahrain	In the process of becoming a party
National Focal Point	Dr. Mohammed Mubarak Bin Daina		

2. Convention on International Trade in Endangered Species of Wild Fauna and Flora³ (CITES)

Logo		Date of Entry Into The Force	1 July 1975
Objectives	<p>To ensure that international trade in specimens of wild animals and plants does not threaten their survival. Through its three appendices, the Convention offers varying degrees of protection to more than 30,000 plant and animal species.</p>		
Background	<p>In the 1960s, the international discussion of the regulation of the wildlife trade for conservation purposes was relatively new. Now, the need for CITES is clear. Annually, international wildlife trade is estimated to be worth billions of dollars and to include hundreds of millions of plant and animal specimens. CITES was drafted as a result of a resolution adopted in 1963 at a meeting of IUCN members (The World Conservation Union). The text of the Convention was finally agreed upon at a meeting of representatives of 80 countries in Washington, D.C., the United States of America, on 3 March 1973.</p> <p>On 1 July 1975, CITES entered into force. CITES is an international agreement to which States (countries) adhere voluntarily. States that have agreed to be bound by the Convention (<joined> CITES) are known as Parties. Although CITES is legally binding on the Parties – in other words, they have to implement the Convention – it does not take the place of national laws. Rather, it provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level.</p>		
Programmes	<p>There are seven species programmes under the CITES Convention: (1) African cherry; (2) Elephant; (3) Falcon; (4) Great apes; (5) ITTO-CITES programme on tree species; (6) Big-leaf mahogany; and (7) Sturgeons.</p>		
Number of parties	183	Status of Bahrain	Party since 19 August 2012
Major implementation tools	CITES strategic vision: 2020-2008		
Other agreements under the Convention	N/A		
National Focal Point	Dr. Mohammed Mubarak Bin Daina		

3. Convention on the Conservation of Migratory Species of Wild Animals⁴ (Bonn Convention)

Logo		Date of Entry Into The Force	1 November 1983
Objectives	To conserve terrestrial, marine and avian migratory species throughout their ranges.		
Background	<p>CMS provides a global platform for the conservation and sustainable use of migratory animals and their habitats. CMS brings together the States through which migratory animals pass, known as the Range States, and lays the legal foundation for internationally coordinated conservation measures throughout a migratory range. As the only global convention specializing in the conservation of migratory species, their habitats and migration routes, CMS complements and cooperates with several international organizations, NGOs and media partners as well as with the corporate sector. The migratory species that are threatened with extinction are listed in Appendix I of the Convention. CMS Parties strive to protect these animals, conserve/restore the places where they live, mitigate obstacles to migration and control other factors that might endanger them. Besides establishing obligations for each State joining the Convention, CMS promotes concerted action among the Range States of many of these species.</p> <p>Migratory species that need or would significantly benefit from international co-operation are listed in Appendix II of the Convention. For this reason, the Convention encourages the Range States to conclude global or regional agreements. In this respect, CMS acts as a framework Convention. The agreements may range from legally binding treaties (called Agreements) to less formal instruments, such as Memoranda of Understanding, and can be adapted to the requirements of particular regions. The development of models tailored according to the conservation needs throughout the migratory range is a unique capacity to CMS.</p>		
Programmes	Several agreements have been concluded to date under the auspices of CMS. They aim to conserve: (1) Populations of European Bats (EUROBATS); (2) Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS); (3) Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS); (4) Seals in the Wadden Sea (Wadden Sea Agreement); (5) African-Eurasian Migratory Waterbirds (AEWA); (6) Albatrosses and Petrels (ACAP); and (7) Gorillas and Their Habitats (Gorilla Agreement).		
Number of parties	124	Status of Bahrain	Non-party
Major implementation tools	Strategic Plan for Migratory Species (2015-2023)		
Other agreements under the Convention	<ul style="list-style-type: none"> • Agreement on the Conservation of Albatrosses and Petrels (ACAP) • Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) • Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) • Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS) • Agreement on the Conservation of Populations of European Bats (EUROBATS) • Agreement on the Conservation of Gorillas and their Habitats • Agreement on the Conservation of Seals in the Wadden Sea 		
National Focal Point			

4. Ramsar Convention⁵

Logo			Date of Entry Into The Force	1 December 1975
Objectives	Conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world.			
Background	<p>Ramsar is the oldest of the modern global intergovernmental environmental agreements. The treaty was negotiated in the 1960s by countries and non-governmental organizations concerned with the increasing loss and degradation of wetland habitat for migratory water birds. It was adopted in the Iranian city of Ramsar in 1971 and came into force in 1975. In 1960, the MAR Conference called for an international treaty on wetlands and for a list of internationally important wetlands. Between 1963 and 1970 the text of the Convention was negotiated. In 1974, Australia became the first State to deposit an instrument of accession to the Convention, and it named the Cobourg Peninsula as the first Ramsar Site.</p> <p>In 1986, the Paris Protocol entered into force, after being ratified by two thirds of the Contracting Parties. The Protocol established a procedure for amending the Convention and adopted official versions of the treaty in Arabic, French, English, German, Russian and Spanish.</p>			
Programmes	The Ramsar Convention has seven major activities, rather than programmes, and all of them are wetland-related activities: (1) World Wetlands Day; (2) Ramsar Awards; (3) Ramsar CEPA Programme; (4) Ramsar Regional Initiatives; (5) Ramsar Culture Network; (6) Ramsar Advisory Missions; and (7) Investing in Wetlands.			
Number of parties	169	Status of Bahrain	Party since 27 February 1998	
Major implementation tools	Fourth Ramsar Strategic Plan for 2016-2024			
Other agreements under the Convention	N/A			
National Focal Point	Nouf Ali Abdulmohsen Al Wasmi			

5. World Heritage Convention⁶

Logo			Date of Entry Into The Force	16 November 1972
Objectives	<p>To encourage identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity.</p>			
Background	<p>In 1959, UNESCO launched an international campaign to save Abu Simbel temples in the Nile Valley, and a draft of the Convention on the protection of cultural heritage was prepared. In 1965, the organization called for a 'World Heritage Trust' to protect natural and scenic areas and historical sites.</p> <p>In 1966, UNESCO spearheaded an international campaign to save Venice after disastrous floods threatened the city. In 1968, IUCN developed a proposal similar to the 'World Heritage Trust' for its members. In 1972, the work of experts from IUCN, ICOMOS and UNESCO and their proposals came together in the Convention concerning the Protection of World Cultural and Natural Heritage, which was adopted by the General Conference of UNESCO in Paris on 16 November 1972. In 1978, the first twelve sites were inscribed on the World Heritage List. In 1992, the UNESCO World Heritage Centre was created and the cultural landscapes category was adopted by the World Heritage Committee.</p>			
Number of parties	185	Status of Bahrain	Party since 28 May 1991	
Major implementation tools	The Operational Guidelines for the Implementation of the World Heritage Convention			
Other agreements under the Convention	N/A			
National Focal Point	Higher National Council for Environment			

6- <http://whc.unesco.org>

1.2 JOINT ACTIVITIES AMONG BIODIVERSITY-RELATED CONVENTIONS AT THE GLOBAL LEVEL

Each of the biodiversity-related conventions works to implement actions at the national, regional and international levels to reach shared goals for conservation and sustainable use. In meeting their objectives, the conventions have developed several complementary approaches (site, species, genetic resources and/or ecosystem-based) and operational tools (e.g. programmes of work, trade permits and certificates, multilateral system for access and benefit-sharing, regional agreements, site listings and funds).

In 2010, the Strategic Plan for Biodiversity 2011-2020 was adopted at the tenth meeting of the Conference of the Parties to the CBD (CBD COP10) in Nagoya, Japan. Parties agreed to translate this overarching international framework into revised and updated NBSAPs by 2015. Subsequent to its adoption, the UN General Assembly (UNGA) agreed to take the Strategic Plan for Biodiversity 2011-2020 as a universal framework for action on biodiversity and a foundation for sustainable development for all stakeholders, including agencies across the UN system. The adoption of the Strategic Plan for Biodiversity 2011-2020 and its Aichi Biodiversity Targets, therefore, created a significant momentum to foster a new generation of NBSAPs that address the coherent implementation of the biodiversity-related conventions. Accordingly, the CBD decision that adopted the strategy invites parties to involve National Focal Points (NFPs) in all the biodiversity-related agreements, as appropriate, in the process of updating and implementing NBSAPs and their related enabling activities.

The biodiversity-related conventions also explicitly encouraged their NFPs to engage in their country's NBSAP revision process. In addition, the CMS and the CITES Secretariats have developed guidance materials which support parties that consider the inclusion of migratory species or their CITES national and regional actions in a revised and updated NBSAP while other conventions like the WHC are currently in the process of compiling guidance material. Other conventions (e.g. WHC, Ramsar Convention) have determined that protected areas will be the one major entry point into NBSAPs.

At the thirteenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 13), which was held in Cancun, Mexico in December 2016, a decision on options for enhancing synergies among the biodiversity-related conventions was adopted. These options address the local, national and international levels through a defined set of measures. "The implementation of these measures should be to the mutual benefit of the conventions concerned and be compatible with their provisions, obligations, mandates and objectives, respecting their independent nature. They should also respect ongoing efforts to enhance synergies, taking into consideration the need to make an efficient use of resources and result in improved implementation of the relevant conventions and more efficient and streamlined processes."

The following section will highlight the joint activities among biodiversity-related conventions.

1.3 GLOBAL AICHI BIODIVERSITY TARGETS AND OTHER BIODIVERSITY-RELATED CONVENTIONS

As mentioned earlier, the UNGA considers the Strategic Plan for Biodiversity 2011-2020 (Aichi Targets) as a universal framework for conservation of biodiversity and a basis for sustainable development. Therefore, in this section, the joint activities and the links among the biodiversity-related conventions will be discussed.

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

Aichi Biodiversity Target 1: By 2020, at the latest, people will be aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

General Observations:

1. Articles:

- Only CBD and WHC Conventions have actions related to raising awareness described in Aichi Target 1 while the remaining conventions (CMS, Ramsar, CITES) do not have corresponding articles in their convention texts.

2. Guidance:

- All biodiversity-related conventions have developed guidance materials that are of relevance for Aichi Target 1. (Ramsar Strategic Plan for 2016-2024⁷, Strategic Plan for Migratory Species 2015-2023⁸, CITES strategic vision: 2008-2020).⁹

CBD:

- CBD decisions call specifically on different stakeholders to build capacity and raise awareness at the community level.
- CBD decisions also call on parties to review and revise strategies for communicating biodiversity agenda and policies to businesses. The CEPA Toolkit¹⁰ was designed for CBD focal points.

CITES:

- CITES decisions that are relevant to Aichi Biodiversity Target 1 provide guidance to parties involved in the illegal trade of rhinoceros horns to develop and implement strategies or programmes to enhance community awareness with regard to the economic, social and environmental impacts of illicit wildlife trafficking.
- Parties are also encouraged to report illegal activities related to wildlife trade and collaborate on public education programmes of selected species.
- Relevant tools include Hope for a Sustainable Future (2014)¹¹, which aims to raise awareness of the role of CITES in biodiversity conservation.

CMS:

- CMS COP 11 invited UNEP to celebrate and raise awareness of the World Migratory Bird Day in 2015.

7- <http://www.ramsar.org/the-ramsar-strategic-plan-2016-24>

8- <http://www.cms.int/en/document/strategic-plan-migratory-species-2015-2023-2>

9- <https://cites.org/sites/default/files/eng/res/16/E-Res-16-03.pdf>

10- <https://www.cbd.int/cepa/toolkit/2008/cepa/index.htm>

11- https://cites.org/sites/default/files/i/CITES_WWD_Brochure2014.pdf

Ramsar Convention:

- The Ramsar Convention resolutions promote links between wetlands, the Millennium Development Goals (MDGs) and sustainable tourism in Ramsar Sites.
- The Convention urges parties to strengthen the role of CEPA in working with local communities to improve available information and enhance community understanding of the risks of pesticides on wetlands.
- Tools that support the implementation of CEPA include:
 - A Handbook on the Best Practices for Planning, Design and Operation of Wetland Education Centres (2014)¹²
 - World Wetlands Day materials available on the main World Wetlands Day website¹³
 - Destination Wetlands: Supporting Sustainable Tourism 2012, which aims to raise awareness of the close relationship between wetlands and tourism

WHC:

- WHC decisions call on all States Parties to the Convention to contribute to the improvement of the information system and its access for the international community.
- WHC has a range of tools that contribute to raising awareness on biodiversity:
 - Património's World Heritage Adventures, a series of cartoons that focus on threats affecting the World Heritage Sites¹⁴
 - World Heritage in Young Hands Education Resource Kit, which highlights the importance of preserving local, national and world heritage¹⁵

12- http://www.ramsar.org/sites/default/files/documents/library/2014wec-hb_en_lr.pdf

13- <http://www.worldwetlandsday.org/documents>

14- <http://whc.unesco.org/en/patrimonio>

15- <http://whc.unesco.org/en/educationkit/>

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

Aichi Biodiversity Target 2: By 2020, at the latest, biodiversity values will be integrated into national and local development and poverty reduction strategies and planning processes; the values will also be incorporated into national accounting and reporting systems, as appropriate.

General Observations:

1. Articles:

- Only CBD and Ramsar Convention have actions related to the biodiversity values described in Aichi Target 2 while the remaining conventions (CMS, WHC, CITES) do not have articles on biodiversity values in their convention texts.

2. Guidance:

- The Strategic Plan for Migratory Species 2015-2023, which includes a target on the integration of the multiple values of migratory species and their habitats, is closely aligned with Aichi Target 2.
- The CITES Strategic Vision: 2008-2020 includes objectives to comply with their obligations under the Convention through appropriate policies, legislation and procedures.
- The Ramsar Convention and the CBD provide guidance in their 5th Joint Work Plan 2011-2020, which outlines how to make use of the ecosystem approach¹⁶ in planning processes; this approach was identified as a key activity for collaboration in the Joint Work Plan.

CBD:

- CBD invites all partners and stakeholders to integrate the objectives of the Convention into sustainable development and poverty eradication national plans and policies.
- The Convention also invites all parties to monitor, evaluate and report on these integration efforts in their national reports and the Clearing House Mechanism (CHM) with special attention to identifying and overcoming barriers to the integration efforts (e.g. lack of cross-sectoral coordination).
- CBD has developed NBSAP training Module 3 on 'Mainstreaming biodiversity into national sectoral and cross-sectoral strategies, policies, plans and programs,' which was developed to help NFPs mainstream biodiversity at the national level.¹⁷ The Convention encourages parties to apply the Chennai Guidance for the integration of biodiversity and poverty eradication.¹⁸
- Parties are encouraged to apply the findings of the study of The Economics of Ecosystems and Biodiversity (TEEB) and other valuation tools to support decision-making at the national level.¹⁹
- CBD invites parties to consider the information in the Connecting Global Priorities: Biodiversity and Human Health, State of Knowledge Review (2015) to identify opportunities for supporting implementation of NBSAPs through the national plans and programmes for human health.²⁰

CITES:

- CITES encourages parties to enhance community awareness on the economic, social and environmental impacts of illegal wildlife trade.

CMS:

- CMS resolutions urge parties and encourage non-parties to implement the AEWA Conservation Guidelines No. 11 on Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) procedures regarding the development of power lines.²¹
- CMS decisions also urge parties to implement post-construction monitoring of environmental impacts, including those on migratory species, especially wind power projects.

16- <https://www.cbd.int/ecosystem/sourcebook/default.shtml>

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

18- <https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-05-en.pdf>

19- http://doc.teebweb.org/wp-content/uploads/2013/04/TEEB_WaterWetlands_Report_2013.pdf

20- <http://www.cbd.int/en/health/stateofknowledge>

21- http://www.unep-aewa.org/sites/default/files/publication/cg_11_0.pdf

Ramsar Convention:

- The Ramsar Convention provides guidance on the integration of wetland biodiversity conservation as well as the wise use of pesticides into national policies and strategies.
- The Ramsar Convention also co-published The Economics of Ecosystems and Biodiversity (TEEB) for Water and Wetlands (2013).²²

WHC:

- WHC decisions guide parties to develop adequate legislative frameworks along with collaborative frameworks between agencies for the conservation of properties.
- WHC encourages parties to establish and promote cooperation between various institutions that have an impact on cultural and natural heritage.
- WHC encourages parties to conduct a SEA at the time of nomination to anticipate the impact of any potential development on the area of Outstanding Universal Value (OUV) by using the Heritage and EIAs before the World Heritage reactive monitoring process comes into action.²³

22- http://doc.teebweb.org/wp-content/uploads/2013/04/TEEB_WaterWetlands_Report_2013.pdf

23- <http://whc.unesco.org/archive/2014/whc14-38com-7-en.pdf>

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

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

General Observations:

1. Articles:

- None of the biodiversity-related conventions outline actions related to Aichi Target 3 in their convention texts.

2. Guidance:

- The Ramsar Strategic Plan promotes incentives that encourage the application of wise use of wetlands.
- The CMS Strategic Plan for Migratory Species 2015-2023 promotes incentives that are not harmful to migratory species; these incentives are relevant to Aichi Target 3.

CBD:

- CBD invites parties to implement measures regarding biodiversity-related positive incentives and share lessons learned in overcoming obstacles encountered when implementing policies that address harmful incentives.
- CBD developed an analysis of obstacles encountered in implementing options identified for eliminating, phasing out or reforming incentives that are harmful for biodiversity (2014).²⁴

Ramsar Convention:

- The Ramsar Convention encourages parties to explore opportunities for positive incentives to support the wise use and restoration of degraded wetlands.

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

Aichi Biodiversity Target 4: By 2020, at the latest, governments, businesses and stakeholders at all levels will take steps to achieve or implement plans for sustainable production and consumption and will keep the impacts of use of natural resources well within safe ecological limits.

General Observations:

1 Articles:

- Only the CBD Convention has actions related to sustainable production and consumption described in Aichi Target 4 while the remaining conventions (Ramsar Convention, CMS, WHC, CITES) do not have articles on biodiversity values in their convention texts.

2. Guidance:

- The Strategic Plan for Migratory Species 2015-2023 includes a relevant target that is closely aligned to Aichi Target 4.
- The Ramsar Strategic Plan for 2016-2024 promotes the involvement of the private sector in the conservation and wise use of wetlands.
- The CITES Strategic Vision 2008-2020 invites parties to achieve a coherent and collaborative approach to species that can be endangered by unsustainable trade.
- CBD encourages parties to include specific measures on national strategies for sustainable consumption and production.

CBD:

- CBD calls on parties to:
 - Enhance cooperation and partnerships on sustainable tourism management
 - Consider the impact of the production and use of biofuels on biodiversity
 - Take a precautionary approach by implementing effective risk assessment procedures and regulatory systems for synthetic biology
 - Make use of the recommendations of the Liaison Group on Bushmeat (2012)²⁵ on illegal wildlife trade as a potential complement to the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity (2004).²⁶

CITES:

- CITES invites parties to explore the use of certification and adopting mitigation strategies for human-wildlife conflict.

CMS:

- CMS urges parties to address the negative impacts of marine debris in waters within their jurisdiction and to engage in international cooperation on migratory freshwater fish.
- Parties are also urged to promote the sustainable management of migratory land birds of the African-Eurasian flyway, in particular by eliminating unsustainable harvesting.
- CMS promotes relevant tools from other organizations like:
 - FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations (2009)²⁷
 - FAO International Guidelines on Bycatch Management and Reduction of Discards (2011)²⁸
 - FAO International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries (1999)²⁹
 - FAO International Plan of Action for the Conservation and Management of Sharks (1999).³⁰

Ramsar Convention:

- The Ramsar Convention encourages private companies to apply standards of sustainable business to ensure the integrity and the ecosystem services of wetlands.
- The Ramsar Convention encourages parties to enhance application of guidance for SEA and EIA for the regulation and use of pesticides in rice production and urges parties to collaborate closely with stakeholders at all levels involved in tourism and wetland management.
- The Ramsar Convention encourages parties to make use of the Integrated Framework and guidelines for mitigating and compensating for wetland losses (2012).³¹

25- <https://www.cbd.int/doc/decisions/cop-11/cop-11-dec-25-en.pdf>

26- <https://www.cbd.int/sustainable/addis.shtml>

27- <http://www.fao.org/docrep/012/i0725e/i0725e00.htm>

28- <http://www.fao.org/docrep/015/ba0022t/ba0022t00.pdf>

29- <http://ftp.fao.org/docrep/fao/006/x3170e/X3170E00.pdf>

30- <http://ftp.fao.org/docrep/fao/006/x3170e/X3170E00.pdf>

31- <http://www.ramsar.org/sites/default/files/documents/pdf/guide/guide-losses-e.pdf>

<p>Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use.</p>
<p>Aichi Biodiversity Target 5: By 2020, the rate of loss of all natural habitats, including forests, will be at least halved and, where feasible, brought close to zero; degradation and fragmentation will be significantly reduced.</p>
<p>General Observations:</p> <p>1. Articles:</p> <ul style="list-style-type: none"> • CBD, CITES, Ramsar and WHC Conventions have actions related to the degradation of natural habitats described in Aichi Target 5 while the CMS Convention does not have articles on degradation of natural habitats in their convention texts. <p>2. Guidance:</p> <ul style="list-style-type: none"> • The Ramsar Strategic Plan 2016-2024 fosters appropriate management and wise use for those internationally important wetlands that have not yet been formally designated as Ramsar Sites.
<p>CBD:</p> <ul style="list-style-type: none"> • CBD encourages parties to enhance cooperation on forest biodiversity through implementing the Collaborative Initiative for Tropical Forest Biodiversity³² and the Programme of Work (PoW) on Forest Biodiversity.³³ • The Convention invites parties to engage with both the PoW on Island Biodiversity³⁴ and the Global Island Partnership (GLISPA). • CBD invites parties and other relevant organizations to develop spatial planning approaches to help reduce habitat loss and to promote ecosystem restoration. • CBD invites parties and other relevant organizations to develop and strengthen monitoring of ecosystem degradation and restoration.
<p>CITES:</p> <ul style="list-style-type: none"> • CITES Article II provides that parties shall not allow trade in specimens of species listed in Appendices I, II, and III, in which a number of tree species are listed.
<p>CMS:</p> <ul style="list-style-type: none"> • CMS requests that parties take measures to avoid habitat loss, disturbance and barrier effects from geo- energy technologies. • CMS fosters the development of Action Plans to address particular conservation issues for threatened habitats of migratory bird species.
<p>Ramsar Convention:</p> <ul style="list-style-type: none"> • The Ramsar Convention encourages parties to make use of the Integrated Framework and guidelines for avoiding, mitigating and compensating for wetland losses (2012).³⁵ • The Ramsar Convention encourages parties to promote the wise use and maintenance of the ecological character of wetlands.
<p>WHC:</p> <ul style="list-style-type: none"> • Article 4 of WHC invites parties to identify, protect and conserve areas considered as ‘natural heritage’, which includes areas covering a range of natural habitats.

32- http://www.itto.int/files/user/biodiversity/ITTO_CBD_Initiative_2011.pdf

33- <https://www.cbd.int/doc/publications/for-pow-en.pdf>

34- <https://www.cbd.int/island/pow.shtml>

35- <http://www.ramsar.org/sites/default/files/documents/pdf/guide/guide-losses-e.pdf>

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

Aichi Biodiversity Target 6: By 2020, all fish and invertebrate stocks and aquatic plants will be managed and harvested sustainably and ecosystem-based approaches will be legally applied. This is to ensure 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.

General Observations:

1. Articles:

- Only CITES and CMS Conventions have actions related to sustainable harvesting of aquatic species as described in Aichi Target 6 while the remaining conventions (Ramsar Convention, WHC, CBD) do not have articles on sustainable harvesting of aquatic species in their convention texts.
- Article II in CITES Convention invites parties to adhere to measures regarding the disallowance of trade in specimens of species listed in Appendices I, II, and III, in which a number of fish species are listed.
- Article III in CMS Convention invites parties to conserve, prevent, reduce or control factors that are endangering or are likely to further endanger the species (some species of fish are included in Appendix 1).

2. Guidance:

- Target 6 in the CMS Strategic Plan for Migratory Species 2015-2023 specifies that “Fisheries and hunting have no significant direct or indirect adverse impacts on migratory species, their habitats or their migration routes, and impacts of fisheries and hunting are within safe ecological limits.”

CBD:

- CBD encourages parties to strengthen the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity (2004).³⁶
- The Convention encourages parties to make use of the scientific information from the fisheries sector in the development of representative networks of marine protected areas.

CITES:

- CITES decisions of relevance for Aichi Target 6 deal in particular with sharks and stingrays, freshwater stingrays, Humphead wrasse, sturgeons and paddlefish and queen conch or *Strombus gigas*.
- CITES maintains two online portals, one on Sturgeons³⁷ and one on Sharks and Manta Rays³⁸, both of which include a wide range of tools and resources relevant to the implementation of the CITES Convention.

CMS:

- CMS urges parties to assess the risk arising from gillnet fisheries and to conduct research to identify and improve mitigation measures.
- The Convention provides guidance to parties on sustainable fishing and the trade of sharks and rays; it also addresses steps to eliminate shark finning. Furthermore, parties are encouraged to prioritise programmes to monitor and document shark and ray fisheries and those fisheries where sharks and rays are a significant bycatch.
- It encourages parties and other relevant bodies to minimize the impact of fishing in migration corridors and other habitats deemed critical to the recovery and sustainability of shark and ray populations. Parties are also called on to engage in international cooperation on migratory freshwater fish (focusing on CMS-listed species).
- CMS advocates the use of tools which are of relevance for Aichi Biodiversity Target 6:
- FAO International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries (1999)³⁹
- FAO International Plan of Action for the Conservation and Management of Sharks (1999)⁴⁰
- FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations (2010)⁴¹
- FAO International Guidelines on Bycatch Management and Reduction of Discards (2011)⁴²

Ramsar Convention:

- The Ramsar Strategic Plan 2016-2024 generally addresses the cooperative monitoring and management of shared wetland-dependent species.

36- <https://www.cbd.int/sustainable/addis.shtml>

37- <https://cites.org/eng/prog/sturgeon.php>

38- <https://cites.org/eng/prog/shark>

39- <ftp://ftp.fao.org/docrep/fao/006/x3170e/X3170E00.pdf>

40- <ftp://ftp.fao.org/docrep/fao/006/x3170e/X3170E00.pdf>

41- <http://www.fao.org/docrep/012/i0725e/i0725e.pdf>

42- <http://www.fao.org/docrep/015/ba0022t/ba0022t00.pdf>

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

Aichi Biodiversity Target 7: By 2020, areas under agriculture, aquaculture and forestry will be managed sustainably, ensuring conservation of biodiversity.

General Observations:

1. Articles:

- Only the CBD Convention has actions related to agriculture, aquaculture and forestry as described in Aichi Target 7 while the remaining conventions (Ramsar Convention, WHC, CMS, CITES) do not have articles on sustainable agriculture, aquaculture and forestry in their convention texts.

2. Guidance:

- Ramsar Strategic Plan 2016-2024 includes a strategy on cross-sectoral recognition of wetland services, including food security.
- Goal 3 of the CITES Strategic Vision 2008-2020 describes measures to reduce biodiversity loss and sustainably manage the protection of species that could be endangered by unsustainable trade.

CBD:

- CBD invites parties to use the guidance related to raising awareness of best practices of the sustainable use of the agro-ecological approaches that have positive impacts on the conservation of biodiversity.
- The Satoyama Initiative may also afford another guidance on synergies between the various existing regional and global initiatives:
- The Man and the Biosphere Programme of UNESCO
- The International Model Forest Network
- Initiatives related to community conservation areas developed and managed by indigenous and local communities (ILC)
- CBD further encourages parties to enhance the implementation of the Global Partnership for Plant Conservation.
- Meanwhile, some CBD decisions welcome the collaboration between the CBD and the International Tropical Timber Organization (ITTO) regarding implementation of the Initiative for Tropical Forest Biodiversity.

CMS:

- CMS urges parties to implement the Guidelines to Prevent Poisoning of Migratory Birds (2014)⁴³ and to note agricultural pesticides in particular

Ramsar Convention:

- The Ramsar Convention encourages parties to incorporate conservation and the wise use of pesticides in rice paddies into national policies and strategies.
- The Ramsar Convention urges parties to strengthen the role of CEPA when working with local communities regarding traditional agricultural practices, organic farming and a ban on illegal/counterfeit pesticides.

43- <http://www.cms.int/en/document/guidelines-prevent-risk-poisoning-migratory-birds-short-version>

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

Aichi Biodiversity Target 8: By 2020, pollution, including from excess nutrients, will be at levels that are not detrimental to ecosystem function and biodiversity.

General Observations:

1. Articles:

- Only the Ramsar Convention has actions related to pollution as described in Aichi Target 8 while the remaining conventions (CBD, WHC, CMS, CITES) do not have articles on pollution in their convention texts.

2. Guidance:

- CMS Strategic Plan for Migratory Species 2015-2023 includes specific text related to Target 8: "Multiple anthropogenic pressures have been brought to levels that are not detrimental to the conservation of migratory species or to the functioning, integrity, ecological connectivity and resilience of their habitats."

CBD:

- CBD calls on parties to enhance regional and international cooperation to address transboundary pollution that has significant impacts on island ecosystems and discharges from land-based sources.
- The Convention also calls on parties to take appropriate measures to avoid, minimize and mitigate the potential significant adverse impacts of anthropogenic underwater noise on marine and coastal biodiversity.

CMS:

- CMS invites parties to consider implementing cost-effective measures for the prevention of marine debris and to identify and address the sources and impacts of marine debris.
- Under the CMS, parties are encouraged to develop and implement national plans of action that address the negative impacts of marine debris in waters within their jurisdiction.
- Tools to address this include:
- FAO Code of Conduct for Responsible Fisheries (1995)⁴⁴
- Guidelines to Prevent Poisoning of Migratory Birds⁴⁵

Ramsar Convention:

- The Ramsar Convention provides guidance on the use of pesticides in wetlands.

44- <ftp://ftp.fao.org/docrep/fao/005/v9878e/v9878e00.pdf>

45- <http://www.cms.int/sites/default/files/document/Guidelines%20to%20prevent%20the%20risk%20of%20poisoning%20to%20migratory%20birds.pdf>

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

Aichi Biodiversity Target 9: By 2020, invasive alien species and pathways will be identified and prioritised, priority species will be controlled or eradicated and measures will be in place to manage pathways to prevent their introduction and establishment.

General Observations:

1. Articles:

- Only CBD has actions related to invasive alien species described in Aichi Target 9 while the remaining conventions (Ramsar, WHC, CMS, CITES) do not have articles on invasive alien species in their convention texts.

2. Guidance:

- Ramsar Strategic Plan 2016-2024⁴⁶ encourages parties to develop a national inventory of Invasive Alien Species (IAS) and promote procedures and actions to prevent, control or eradicate such species in wetland systems.
- The Ramsar wetland disease manual (2012)⁴⁷ addresses IAS.

CBD:

- CBD invites parties, when developing and implementing their national IAS strategies, to consider making use of existing guidance on risk analysis relevant to IAS to enhance prevention.
- Parties are also encouraged to provide information to the Global IAS Information Partnership on the invasive species recorded in their respective territories through the Global Register of Introduced and Invasive Species.⁴⁸
- CBD also promotes reporting on the progress towards the Global Strategy for Plant Conservation with special attention on preventing new biological invasions and managing important areas for plant diversity that are subject to IAS.
- There are several decisions addressing IAS under the CBD to enable effective invasive species monitoring and eradication on islands:
 - Threatened Island Biodiversity Database⁴⁹
 - Database of Island Invasive Species Eradications⁵⁰
 - Global Invasive Species Database⁵¹
 - Island Biodiversity and Invasive Species Database⁵²
- CBD has developed guidance on implementing measures to address the risks associated with the introduction of alien species as pets, aquarium and terrarium species (2014).⁵³

CITES:

- CITES provides guidance on addressing threats from IAS and considers IAS when developing national legislation and regulation pertaining to the trade of animals or plants.
- The Convention also urges parties to undertake an ecological risk assessment to identify any negative effects on ecosystems and native species, before the establishment of any captive-breeding operations for exotic species.

CMS:

- CMS invites parties to consider the risk of migratory species becoming invasive themselves if translocated and/or introduced outside their natural range; parties should pay special attention to future climate change scenarios for endangered species.
- The Convention also invites parties to consider the risk of facilitating the introduction or spread of IAS while implementing any mitigation or adaptation measures related to climate change.
- No relevant tools have been identified related to CMS.

46- http://www.ramsar.org/sites/default/files/documents/library/cop12_res02_strategic_plan_e_0.pdf

47- http://www.wwt.org.uk/uploads/documents/Ramsar_Wetland_Disease_Manual.pdf

48- <http://www.issg.org/database/welcome/aboutGISD.asp>

49- <http://tib.islandconservation.org/>

50- <http://diise.islandconservation.org/>

51- <http://www.issg.org/database/welcome/>

52- <http://www.issg.org/database/welcome/>

53- <https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-16-en.pdf>

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

Aichi Biodiversity Target 10: 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 functionality.

General Observations:

1. Articles:

- Only Ramsar and CITES Conventions have actions related to coral reef described in Aichi Target 10 while the remaining conventions (CBD, WHC, CMS) do not have articles on coral reef in their convention texts.
- Article II of the Ramsar Convention addresses the designation of areas under the List of Wetlands of International Importance, including coastal zones adjacent to islands or bodies of marine water deeper than six meters at low tide lying within the wetlands.
- Article II of the CITES Convention encourages parties not to trade specimens of species listed in Appendices I, II, and III, where a number of coral species are listed.

2. Guidance:

- The Strategic Plan for Migratory Species 2015-2023 adopted by CMS includes Aichi Target 10, which highlights efforts needed to manage the anthropogenic pressures to levels that are not detrimental to the conservation of migratory species or to the functionality, integrity, ecological connectivity and resilience of their habitats.
- The Ramsar Strategic Plan 2016-2024 includes a strategy for the recognition of wetland services; this includes reasons for biodiversity conservation, water supply and quality, coastal protection, environmental integrity, flood defense and climate change mitigation and/or adaptation.

CBD:

- CBD developed the PoW on Marine and Coastal Biodiversity where parties are invited to consider reviewing land-use planning with a view to enhancing ecosystem-based adaptation to climate change (e.g. the role of mangroves in adapting to changes at sea level, the conservation and restoration of coastal wetlands).
- CBD also guides parties to take actions that would enhance the resilience of coral reefs and their closely associated ecosystems through ecosystem-based adaptation.
- The Convention offers additional guidance on enhancing efforts regarding the monitoring of ocean acidification and its impacts on marine biodiversity.⁵⁴

CITES:

- CITES urges parties to produce practical guides on corals and coral rock in trade.
- CITES developed a list of coral taxa (to genus level) to be used for national reporting and permits/certificates.

CMS:

- CMS invites parties to continue taking action to mitigate the impacts of climate change on migratory bird species.

Ramsar Convention:

- The Ramsar Convention urges parties to maintain the ecological character of wetlands and their ecosystem services to enhance the resilience of wetlands against climate-driven ecological changes.

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

Aichi Biodiversity Target 11: 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, will be 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 landscapes and seascapes.

General Observations:

1. Articles:

- Only CBD, Ramsar and WHC Conventions have actions related to protected areas described in Aichi Target 11 while the remaining conventions (CITES, CMS) do not have articles on protected areas in their convention texts.

2. Guidance:

- The CMS Strategic Plan for Migratory Species 2015-2023 includes a target on identification and inclusion of key habitats and sites for migratory species.
- The Ramsar Strategic Plan 2016-2024, also includes several targets of relevance for Aichi Target 11, including Ramsar site management effectiveness, monitoring and addressing negative changes in wetland ecological character.
- CBD calls on parties to achieve the Programme of Work on Protected Areas (PoWPA) goals, which require progress in order to reach Aichi Target 11.

CBD:

- The Global Environment Facility (GEF), through the fourth, fifth and sixth replenishment periods, has approved and funded many national and regional projects in order to implement national action plans for the PoWPA.
- CBD invites parties to report (e.g. the fifth and sixth national reports) on the implementation of PoWPA national action plans.
- The Convention also invites parties to support implementation of the community-based approaches to conservation and sustainable use of biodiversity in situ.
- CBD developed guidance on sustainable tourism and invites parties to build the capacity of national- and sub-national park and protected area agencies to engage in partnerships with the tourism industry and to contribute financially and technically to the establishment, operations and maintenance of protected areas.
- Parties and other governments are encouraged to utilize the scientific information that was used to inform descriptions of areas encountering EBSA criteria when carrying out marine spatial planning for the purpose of developing networks of marine protected areas.
- Additionally, CBD provides guidance on addressing adverse impacts of underwater noise on marine and coastal biodiversity during the development of management plans for marine protected areas.

CMS:

- CMS urges parties to prioritise the conservation of sites and habitats identified as being of importance to migratory birds.
- Some CMS resolutions promote transboundary area-based conservation measures and call for exploring the applicability of ecological networks to marine migratory species with an emphasis on the implementation of management plans at the site level.
- The Convention urges parties to make use of existing monitoring methods:
 - The Monitoring Important Bird Areas: a global framework developed by BirdLife International to track the status and trends of biodiversity⁵⁵
 - The International Waterbirds Census coordinated by Wetlands International⁵⁶
- CMS has not established any reporting obligations related to Aichi Target 11.

55- http://www.birdlife.org/datazone/userfiles/file/IBAs/MonitoringPDFs/IBA_Monitoring_Framework.pdf

56- <http://www.wetlands.org/OurWork/Biodiversity/Monitoringwaterbirdpopulations/tabid/773/Default.aspx>

Ramsar Convention:

- The Ramsar Convention urges parties to use the Integrated Framework for linking wetland conservation and the wise use of resources with poverty eradication (2012) to promote the wise use and maintenance of the ecological character of wetlands.⁵⁷
- The Convention urges parties to make use of the Ramsar guidance on the conservation and wise use of wetlands as described in the 4th edition of the Ramsar handbooks for the wise use of wetlands.⁵⁸
- The most relevant tools are:
 - Handbook I on the wise use of wetlands (4th edition)⁵⁹
 - Handbook II on national wetland policies (4th edition)⁶⁰
 - Handbook III on laws and institutions (4th edition)⁶¹
 - Handbook XVII on designating Ramsar sites (4th edition)⁶²
 - Handbook XVIII on frameworks for managing Ramsar sites and other wetlands (4th edition)⁶³

WHC:

- WHC has developed guidelines to put relevant legal tools or management plans in place; these are regarding the conservation of properties and management of buffer zones.
- WHC has requested that parties pay exceptional attention to the management of properties inscribed on the List of World Heritage in Danger due to armed conflict.
- The Convention encourages parties to respect the rights of indigenous peoples when nominating, managing and reporting on World Heritage sites in indigenous peoples' territories.
- A relevant tool is Managing effectively the world's most iconic Marine Protected Areas: A Best Practice Guide (2015), which offers a step-by-step guide to pro-active, future-oriented management of marine protected areas.⁶⁴

57- <http://www.ramsar.org/sites/default/files/documents/pdf/guide/guide-poverty-e.pdf>

58- http://archive.ramsar.org/cda/en/ramsar-pubs-handbooks/main/ramsar/1-30-33_4000_0

59- <http://www.ramsar.org/sites/default/files/documents/library/hbk4-01.pdf>

60- <http://www.ramsar.org/sites/default/files/documents/library/hbk4-02.pdf>

61- <http://www.ramsar.org/sites/default/files/documents/pdf/lib/hbk4-03.pdf>

62- <http://www.ramsar.org/sites/default/files/documents/pdf/lib/hbk4-17.pdf>

63- <http://www.ramsar.org/sites/default/files/documents/pdf/lib/hbk4-18.pdf>

64- <http://whc.unesco.org/en/news/1300/>

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

Aichi Biodiversity Target 12: By 2020, the extinction of known threatened species will be prevented and their conservation status, particularly of those most in decline, will be improved and sustained.

General Observations:

1. Articles:

- Only CBD, CMS and CITES Conventions have actions related to threatened species described in Aichi Target 12 while the remaining conventions (Ramsar, WHC) do not have articles on threatened species in their convention texts.
- CBD has articles relating to both in-situ and ex-situ conservation of ecosystems and threatened species.
- CITES has provisions for ensuring the conservation and sustainable use of listed species (i.e. international trade in wild fauna and flora). CITES aims to regulate the commercial and non-commercial trade of live and dead specimens, as well as parts and derivatives of over 35,000 species. Species listed in CITES Appendix I are species threatened with extinction, and trade of these species is permitted only in exceptional circumstances (trade in wild-taken specimens of these species is generally prohibited). Meanwhile, species listed in Appendices II and III can be commercially traded under general conditions.
- CMS has provisions for ensuring the conservation and sustainable use of listed species (e.g. migratory species). Migratory species threatened with extinction are listed in CMS Appendix I, and all parties should work to protect these species, conserving or restoring the ecosystems where they live.

2. Guidance:

- CITES Strategic Vision: 2008-2020 is relevant to Aichi Biodiversity Target 12.
- The Wildlife and Forest Crime Analytic Toolkit (2012)⁶⁵ can be considered a reliable guide to implement CBD and CMS related to sustainable use of wildlife.

CBD:

- CBD invites parties to develop and promote sustainable use of wildlife.
- The Convention calls on parties to develop regulatory systems to manage illegal hunting, subsistence use and the commercial trade of specimens of wild species in a conjoined manner with CITES.

CITES:

- CITES encourages parties to design, implement and monitor effective strategies with regard to the implementation of CITES listings, recognizing that community and traditional knowledge should be considered.
- CITES also calls on parties to adopt national mitigation strategies for human-wildlife conflict with respect to CITES-listed species.
- The Convention developed two tools against the illegal killing of elephants and the ivory trade with the intent of monitoring and managing African and Asian Elephants as well as a comprehensive information system to track the illegal trade of ivory:
 - Illegal Killing of Elephants (MIKE)⁶⁶
 - Elephant Trade Information System (ETIS)⁶⁷
- Other relevant tools developed by the Convention include:
 - CITES Trade Database⁶⁸
 - Trade Dashboards⁶⁹
 - CITES Electronic Permitting Toolkit⁷⁰
 - CITES Checklist⁷¹
 - CITES and Livelihoods⁷²
 - The Database Species+⁷³
 - The National Legislative Guidance⁷⁴
 - The International Consortium on Combating Wildlife Crime (ICCWC) Wildlife and Forest Crime Analytic Toolkit.⁷⁵
- The Convention text establishes two types of national reporting obligations: (1) annual trade reports and (2) biennial reports on implementation.

65- https://www.unodc.org/documents/Wildlife/Toolkit_e.pdf

66- <http://www.cites.org/eng/prog/mike/index.php>

67- <http://www.cites.org/eng/prog/etis/index.php>

68- <http://trade.cites.org/>

69- <http://dashboards.cites.org/>

70- <http://www.cites.org/eng/prog/e/e-permitting-toolkit.php>

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

72- <https://cites.org/eng/prog/livelihoods>

73- <http://www.speciesplus.net/species>

74- <https://cites.org/legislation>

75- http://www.cites.org/common/resources/pub/ICCWC_Toolkit_v2_english.pdf

CMS:

- CMS invites parties to prepare national species action plans and conservation strategies.
- The Convention also calls for the development and implementation of national legislation and/or the strengthening of the monitoring and enforcement systems for tackling wildlife crime.
- In addition, the Convention, promotes the use of specific tools, such as:
 - The online database of animal tracking data (Movebank)⁷⁶
 - The global satellite system to observe migratory movements of small animals (ICARUS)⁷⁷
- CMS requests that parties identify those migratory species in Appendix I and II that are listed on the IUCN Red List and are most vulnerable to climate change.
- The database Species+ is also considered to assist parties with implementing CMS.

Ramsar Convention:

- The Ramsar Convention urges parties to address gaps in understanding wetland wildlife health and the impacts of disease on biodiversity.
- Tools developed by the Ramsar Convention related to wildlife health include:
 - The Ramsar Wetland Disease Manual (2012)⁷⁸
 - The Handbook III on Avian Influenza and Wetland (4th edition)⁷⁹

76- <https://www.movebank.org/>

77- <http://icarusinitiative.org>

78- http://www.wwt.org.uk/uploads/documents/Ramsar_Wetland_Disease_Manual.pdf

79- <http://www.ramsar.org/sites/default/files/documents/pdf/lib/hbk4-04.pdf>

<p>Strategic Goal C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.</p>
<p>Aichi Biodiversity Target 13: By 2020, the genetic diversity of cultivated plants, farmed and domesticated animals and wild relatives, including other socio-economically as well as culturally valuable species, will be maintained; strategies to minimize genetic erosion and safeguard genetic diversity will be developed and implemented.</p>
<p>General Observations:</p> <p>1. Articles:</p> <ul style="list-style-type: none"> • Only the CBD Convention has actions related to cultivated plants and farmed animals as described in Aichi Target 13 while the remaining conventions (CMS, CITES, Ramsar, WHC) do not have articles on cultivated plants and farmed animals in their convention texts. <p>2. Guidance:</p> <ul style="list-style-type: none"> • N/A
<p>CBD:</p> <ul style="list-style-type: none"> • CBD encourages parties to pay attention to the conservation of wild relatives of cultivated crops and wild edible plants in protected areas. • The Convention invites parties to direct attention towards native species as well as genetic diversity in ecosystem conservation while avoiding the introduction of IAS.
<p>CITES:</p> <ul style="list-style-type: none"> • CITES invites parties to consider the potential contribution of CITES to the objectives and targets of the consolidated update of the Global Strategy for Plant Conservation (GSPC) 2011-2020 (under the CBD).
<p>Ramsar Convention:</p> <ul style="list-style-type: none"> • The Ramsar Convention encourages parties to maintain and protect wetland systems containing traditional and native rice species.

Strategic Goal D: Enhance the benefits of biodiversity and ecosystem services for all.

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

General Observations:

1. Articles:

- All the biodiversity-related conventions have actions related to ecosystem services, and their contribution to health and human well-being as described in Aichi Target 14 is in their convention texts.
- In the same way, multiple species that are fundamental to ecosystem functioning for ecosystem services are included in CMS Appendix 1 (as described in Article III).

2. Guidance:

- The Ramsar Strategic Plan 2016-2024 includes strategies relevant to Aichi Target 14, such as the strategies addressing important wetland ecosystem services decisions.

CBD:

- CBD invites parties to make more of an effort to achieve other Aichi Biodiversity Targets by restoring ecosystems and maintaining services.
- The Convention encourages parties to integrate ecosystem conservation and restoration in protected areas with the intent of reducing ecosystem losses and promoting ecosystem restoration.
- Similarly, CBD promotes the conservation and restoration of coastal wetlands in support to the work of the Ramsar Convention.
- CBD encourages parties to implement efforts related to linkages between biodiversity and human health, with a special highlight on the importance of mainstreaming ecosystem restoration for human health and well-being and capacity building in their application.
- Also, the Convention urges parties to support the implementation of ecosystem restoration for the mitigation and management of the impact of extreme weather events.
- CBD develops and promotes a number of tools relevant to Aichi Target 14:
 - Guidelines on Ecosystem Restoration (2012)⁸⁰
 - Tools and Technologies on Ecosystem Restoration (2012)⁸¹
 - Synthesis Report on Approaches to Valuation and Restoration of Damage to Biological Diversity (2008)⁸²

CITES:

- Article II in CITES Convention concerns trade in specimens of species listed in Appendices I, II, and III, which include a number of species that contribute to provisioning ecosystem services (e.g. medicinal plants, bushmeat).

CMS:

- CMS provides guidance to the parties on habitat degradation of migratory land-bird species through implementing actions that maintain, manage and restore natural habitats. This includes working with local communities, poverty alleviation schemes and the agriculture and forestry sectors.

80- <https://www.cbd.int/doc/meetings/cop/cop-11/information/cop-11-inf-17-en.pdf>

81- <https://www.cbd.int/doc/meetings/cop/cop-11/information/cop-11-inf-17-en.pdf>

82- <https://www.cbd.int/doc/meetings/cop/cop-09/official/cop-09-20-add1-en.pdf>

Ramsar Convention:

- The Ramsar Convention urges parties to develop and implement procedures to conserve regulatory services already provided by wetlands and at the same time, contribute to improving human livelihoods and eradicating poverty.
- The Convention urges parties to adopt an ecosystem approach to health in wetlands and their catchments.
- Similarly, the Ramsar Convention encourages parties to undertake studies on the role of the conservation and/or restoration of both forested and non-forested wetlands aiming to ensure that sustainable groundwater recharge and flood control services are provided effectively.
- The Ramsar Convention also encourages parties to adopt and apply suitable monitoring programmes like:
 - The Wetland Risk Assessment Framework (1999)⁸³
 - The Integrated Framework and Guidelines for Avoiding, Mitigating and Compensating for Wetland Losses (2012)⁸⁴
 - The Integrated Framework for Linking Wetland Conservation and Wise Use with Poverty Eradication (2012)⁸⁵
 - The Ramsar Scientific and Technical Briefing Notes n. 4 on the Benefits of Wetlands Restoration (2012)⁸⁶

WHC:

- WHC encourages parties to respect the rights of indigenous people when nominating, managing and reporting on World Heritage sites in indigenous people's territories.
- Similarly, the Convention invites parties to ensure that Environmental and Health Impact Assessments are conducted for development projects that analyse and assess the impact on the OUV of properties.

83- http://www.ramsar.org/sites/default/files/documents/library/key_res_vii.10e.pdf

84- <http://www.ramsar.org/sites/default/files/documents/pdf/guide/guide-losses-e.pdf>

85- <http://www.ramsar.org/sites/default/files/documents/pdf/guide/guide-poverty-e.pdf>

86- <http://archive.ramsar.org/bn/bn4.pdf>

Strategic Goal D: Enhance the benefits of biodiversity and ecosystem services for all.

Aichi Biodiversity Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks will be enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby combating desertification and contributing to climate change mitigation and adaptation.

General Observations:

1. Articles:

- Only CBD and Ramsar Conventions have actions related to combating climate change and desertification as described in Aichi Target 15 while the remaining conventions (CMS, CITES, WHC) do not have articles on combating climate change and desertification in their convention texts.

2. Guidance:

- CMS does not have relevant articles in its Convention text, however, the Strategic Plan for Migratory Species 2015-2023 includes a target on maintenance and restoration of migratory species and their habitats which provides important ecosystem services.
- CBD provides guidance on integrating biodiversity considerations into climate change-related activities, including how to address gaps in knowledge and information and how to reduce the risk of displacement of deforestation and forest degradation.⁸⁷

CBD:

- CBD encourages parties to implement ecosystem-based measures for climate change-related activities and disaster risk reduction, in both terrestrial and marine environments.
- The Convention urges parties to make use of the existing Ramsar guidance on the wise use of wetlands (see the Ramsar handbooks for the wise use of wetlands, 4th edition), which deals with mitigation of threats arising from climate change on wetlands.
- CBD also urges parties to implement policies that promote opportunities of the regulatory services that are already provided by wetlands to the global climate system, specifically those related to improving human livelihoods, eradicating poverty and meeting biodiversity goals.

CMS:

- CMS encourages parties to ensure that any climate change mitigation and adaptation actions have appropriate environmental safeguards through the use of SEA and EIA requirements and take into account CMS-listed species.
- Similarly, parties are also urged to employ adaptive management measures when addressing climate change impacts.

Ramsar Convention:

- The Ramsar Strategic Plan 2016-2024 includes strategies relevant to wetlands ecosystem services, including those related to climate change mitigation and adaptation.

Strategic Goal D: Enhance the benefits of biodiversity and ecosystem services for all.

Aichi Biodiversity Target 16: 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, operational and consistent with national legislation.

General Observations:

1. Articles:

- Only the CBD Convention has actions related to Access to Genetic Resources and the Fair and Equitable Sharing of Benefits described in Aichi Target 16 while the remaining conventions (Ramsar, CMS, CITES, WHC) do not have articles on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits in their convention texts.

2. Guidance:

- N/A

CBD:

- CBD calls parties to ratify, approve, accept or have access to the Nagoya Protocol.
- The Convention invites parties to undertake and provide support for capacity building and development initiatives to support the ratification and implementation of the Protocol.
- CBD also guides parties to integrate biosafety and access and benefit-sharing into NBSAPs, national development plans and other relevant sectoral and cross-sectoral policies, plans and programmes.

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

Aichi Biodiversity Target 17: By 2015, each Party has developed, adopted as a policy instrument and commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

General Observations:

1. Articles:

- Only the CBD Convention has actions related to updated national biodiversity strategy and action plan as described in Aichi Target 17 while the remaining conventions (Ramsar, CMS, CITES, WHC) do not have articles on updated national biodiversity strategy and action plan in their convention texts.

2. Guidance:

- There are major activities under the CBD-Ramsar Joint Work Plan that include the development and implementation of NBSAPs and National Wetland Policies in a consistent and mutually supportive way.
- CBD, in cooperation with other international organizations, has developed the NBSAP Forum web portal⁸⁸ as a tool to facilitate information and experience-sharing among NBSAP practitioners and other interested stakeholders.
- At the same time, CBD has developed a number of NBSAP capacity building modules,⁸⁹ one of which includes details on mainstreaming biodiversity into sectoral and cross-sectoral strategies, plans and programmes as well as setting national targets.
- Additionally, CBD has developed the Biodiversity Indicator Partnership (BIP) where there is a guidance document: Incorporating Indicators into NBSAPs – Guidance for Practitioners (2014).⁹⁰

CBD:

- CBD invites parties to include all stakeholders during the updating process of the NBSAPs.
- The Convention invites parties to use the flexible framework and the indicative list of indicators in their updated NBSAPs and in reporting.
- CBD decisions recognize that NBSAPs provide a useful tool for cooperation and synergy among Convention focal points of the biodiversity-related conventions and focal points of other relevant sectoral processes.
- Furthermore, CBD encourages parties to use the opportunity of revising NBSAPs as a key entry point for mainstreaming biodiversity conservation with other key sectors.
- Parties are urged to undertake voluntary peer-review of NBSAPs and to share experiences derived from it through the CHM.

88- <http://nbsapforum.net/>

89- <https://www.cbd.int/nbsap/training/>

90- <http://www.bipindicators.net/LinkClick.aspx?fileticket=FttX0tpVwfc%3d&tabid=38>

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

Aichi Biodiversity Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity and their customary use of biological resources will be respected and subject to national legislation and relevant international obligations; these traditions will also be 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.

General Observations:

1. Articles:

- Only the CBD Convention has actions related to Aichi Target 18 while the remaining conventions (Ramsar, CMS, CITES, WHC) do not have articles in their convention texts.

2. Guidance:

- Target 14 of the Strategic Plan for Migratory Species 2015-2023 is closely aligned with Aichi Biodiversity Target 18.
- The Ramsar Convention Strategic Plan 2016-2024 promotes that national policies and wetland management plans are based on the best available scientific knowledge, including technical and traditional knowledge.
- CBD supports the voluntary use of the ICCA Registry managed by UNEP-WCMC.⁹¹
- Finally, CBD has developed the Working Group on Article 8(j) and its PoW on traditional knowledge through the Traditional Knowledge Information Portal of the Convention.⁹²

CBD:

- CBD invites parties to submit to its Secretariat relevant information on the development of the draft voluntary guidelines to promote and enhance the repatriation of traditional knowledge relevant to the conservation of biological diversity.⁹³
- CBD invites parties to consider how ILC might effectively participate in the development and how a Multiple Evidence Base approach might be applied for validation of such data.
- CBD also provides guidance to facilitate workshops specific to ILC as well as providing ILC with the resources needed to undertake 'indigenous to indigenous' and 'community to community' training projects.

CITES:

- CITES encourages parties to design, implement and monitor effective strategies with regard to the implementation of CITES listings with special attention to traditional knowledge.

CMS:

- CMS urges parties and relevant stakeholders to share knowledge and expertise and to utilize local knowledge.
- The Convention also encourages parties to engage in the international cooperation at sub-regional or regional levels on practical alternatives to uses of endangered migratory freshwater fish, while recognizing the cultural and economic importance of these species for some communities.

Ramsar Convention:

- Ramsar Convention urges parties to strengthen the role of CEPA in working with local communities to enhance community understanding of the risks to wetland ecological character and ecosystem services from the unsustainable use of pesticides.

WHC:

- WHC encourages parties to involve ILC in decision making, monitoring and evaluation of the state of conservation of the properties and their OUV and to respect the rights of indigenous peoples when nominating, managing and reporting on World Heritage sites in indigenous people's territories.
- WHC relevant tools include:
 - Engaging Local Communities in Stewardship of World Heritage (2014), which provides guidance in engaging ILC in World Heritage.⁹⁴

91- <http://www.iccaregistry.org/>

92- <https://www.cbd.int/tk>

93- <https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-12-en.pdf>

94- <http://whc.unesco.org/en/series/40/>

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

Aichi Biodiversity Target 19: By 2020, knowledge, science base and technologies related to biodiversity, its values, functionality, status, trends and the consequences of its loss will be improved, widely shared, transferred and applied.

General Observations:

1. Articles:

- All the five biodiversity-related conventions have articles that are related to progress in achieving Aichi Biodiversity Target 19.

2. Guidance:

- Target 15 in the CMS Strategic Plan for Migratory Species 2015-2023 is closely aligned with Aichi Biodiversity Target 19.
- The Ramsar Strategic Plan 2016-2024 includes strategies related to Aichi Target 19, including the promotion of science-based management of wetlands, and sharing of expertise and information.
- The CITES Strategic Vision 2008-2020 includes objectives to apply the best available knowledge as the basis for non-detriment findings.
- CBD highlights the importance of CHMs and encourages parties to establish and develop their national CHMs.

CBD:

- CBD encourages parties to update, verify and maintain relevant national data in regional and global data sets.
- The Convention invites parties to enhance and increase human resources for creating inventories and monitoring of biodiversity as well as to maintain publicly available information systems.
- Regarding biodiversity indicators, the tool Guidance for National Biodiversity Indicator development and Use (2011) has been developed by the BIP.⁹⁵
- CBD also provides guidance to improve taxonomic skills through the implementation of the Global Taxonomy Initiative and to report on progress through national reporting.
- CBD guides parties to enhance their international collaboration to improve the monitoring of ocean acidification and its impacts on marine biodiversity (CBD Technical Series No. 75, 2014).⁹⁶
- The Convention, in collaboration with the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), addresses knowledge gaps and lack of scientific information regarding the description of areas meeting the EBSA criteria; the convention also contributes to the scoping process for the global and regional assessments of IPBES.

CITES:

- CITES has developed or published a number of tools relevant to Aichi Biodiversity Target 19 which are:
 - The CITES Virtual College as a tool to enhance capacities of parties and to provide learning and training materials on CITES⁹⁷
 - The website Species+ as a centralized portal for accessing key information on species of global concern, including CMS listed species⁹⁸
 - The Wildlife and Forest Crime Analytic Toolkit (2012) as a tool to provide an overview for understanding the main issues related to criminal justice responses to wildlife and forest offences in any given country⁹⁹

CMS:

- CMS calls upon parties to strengthen national and local capacity for the implementation of the PoW on Climate Change and Migratory Species and to promote a standardized methodology for evaluating the susceptibility of species to climate change.
- Furthermore, CMS calls on universities and other scientific institutions to publish periodic scientific reviews and to support their production, ensuring that parties have access to the scientific information.
- CMS urges parties and relevant stakeholders to contribute and/or enhance scientific research and information, aiming to share research information and data and develop relevant research into common threats and issues.

94- <http://whc.unesco.org/en/series/40/>

95- <http://www.bipindicators.net/LinkClick.aspx?fileticket=brn%2FLxDzLio%3D&tabid=157>

96- <https://www.cbd.int/doc/publications/cbd-ts-75-en.pdf>

97- <https://cites.unia.es/>

98- <http://www.speciesplus.net/species>

99- https://cites.org/common/resources/pub/ICCWC_Toolkit_v2_english.pdf

Ramsar Convention:

- The Ramsar Convention invites parties to share information and case studies on energy plans, SEAs, sustainable tourism and recreation and the management of rice paddy biodiversity.
- Parties are also encouraged to make use of the *Scientific and Technical Briefing Notes* series to share good practices on wise use of wetlands.¹⁰⁰
- The Ramsar Convention invites parties to determine their financial support towards the scientific and technical implementation of the Ramsar Convention as well as to provide expertise to IPBES and IPCC to help in developing information on wetlands.

WHC:

- WHC encourages parties to support the new World Heritage Capacity Building Strategy by focusing on train-the-trainers programmes in particular.
- Additionally, the Convention invites parties to support and contribute to the improvement of the State of Conservation Information System (SOC), which is a comprehensive and integrated information system on the state of conservation of World Heritage properties.¹⁰¹

100- <http://strp.ramsar.org/strp-publications/ramsar-briefing-notes>

101- <http://whc.unesco.org/en/soc>

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

Aichi Biodiversity Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources - and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization - will be increased substantially from previous levels. This target will be subject to changes contingent on resource needs assessments to be developed and reported by parties.

General Observations:

1. Articles:

- CBD and WHC are the only biodiversity-related conventions that have actions related to Aichi Target 20 while the remaining conventions (Ramsar, CMS, CITES) do not have articles in their convention texts.

2. Guidance:

- The Strategic Plan for Migratory Species 2015-2023 includes a target to substantially increase resources from all sources to effectively implement the Plan.
- The Ramsar Strategic Plan 2016-2024 includes a strategy on international assistance and Convention financial capacity.
- Goal 2 and its associated objectives in the CITES Strategic Vision 2008-2020 are closely related to Aichi Target 20 in that they call for securing the necessary financial resources and means for the operation and implementation of the conventions.

CBD:

CBD has agreed on a set of preliminary targets for resource mobilization,¹⁰² related to: (1) doubling total biodiversity-related international financial resource flows to developing countries; (2) the inclusions of biodiversity in national priorities or development plans; (3) reporting on domestic biodiversity expenditures, as well as funding needs, gaps and priorities; and (4) mobilization of domestic financial resources.

Further, CBD urges parties to develop their national resource mobilization strategies or finance plans within the framework of revising NBSAPs.¹⁰³ Parties should report on their contributions to the collective efforts to reach the global targets for resource mobilization in their sixth national report.

Furthermore, parties are urged to develop and use various sources of funding, together with market and non-market based instruments, REDD+ and other policy approaches for results-based finance.

Parties are further urged to consider undertaking a review and assessment of existing relevant legislation and policies governing biodiversity financing mechanisms.

Regarding resource effectiveness and sustainability of financial flow, CBD invites parties to support developing countries, to enhance institutional, national, administrative and managerial capacities and to strengthen cooperation and synergy among Convention focal points and focal points for other relevant sectoral processes.

- CBD invites developed countries to increase their financial assistances to the sixth GEF replenishment period (GEF- 6) and encourages parties to submit multi-focal area projects for GEF funding.
- CBD promotes the work of the Biodiversity Finance Initiative (BIOFIN)¹⁰⁴ and the CBD LifeWeb Initiative.¹⁰⁵

CITES:

- CITES invites parties to initiate or strengthen collaborative partnerships among all stakeholders and conservation agencies to enhance financial support for wildlife conservation and rural communities.
- The Convention encourages parties to provide financial and in-kind resources for capacity building activities, particularly those in support of Goals 1 and 3 of the CITES Strategic Vision.
- Parties are further urged to consider the identified needs of developing countries when implementing capacity building, fundraising and budget allocation programmes.

CMS:

- CMS invites parties and other relevant international organizations to financially support the implementation of different task forces under the Convention (e.g. Task Force for Illegal Killing – Trade of Migratory Birds in the Mediterranean).
- In addition, parties are encouraged to provide financial resources and in-kind support to reinforce and strengthen existing ecological network initiatives within the CMS Family of instruments and urged to cooperate with developing parties and support them with adequate resources.

102- <https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-03-en.pdf>

103- <https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-03-en.pdf>

104- <http://www.biodiversityfinance.net/>

105- <https://lifeweb.cbd.int/>

Ramsar Convention:

- The Ramsar Convention urges parties to consider making additional voluntary contributions to support the Convention's programme of scientific and technical work and promote the development of partnerships with the private sector as a possible income generation source.

WHC:

- WHC urges parties and other stakeholders to provide more resources to the World Heritage Fund as well as to the African World Heritage Fund.
- Parties are further encouraged to support the new World Heritage Capacity Building Strategy and consider the allocation of additional financial resources to contribute to its implementation.

2. SUSTAINABLE DEVELOPMENT GOALS (SDGs)

2.1 Sustainable Development Goals

On 1 January 2016, the world officially began implementation of the 2030 Agenda for Sustainable Development - the transformative plan of action based on 17 Sustainable Development Goals to address urgent global challenges over the next 15 years. This agenda is a road map for people and the planet that will build on the success of the Millennium Development Goals and ensure sustainable social and economic progress worldwide. It seeks not only to eradicate extreme poverty, but also to integrate and balance the three dimensions of sustainable development (economic, social and environmental) in a comprehensive global vision. It is vital that we begin implementation based on an accurate evaluation of where the world stands now.

Goal 1: End poverty in all its forms everywhere

Goal 1 calls for an end to poverty in all its manifestations, including extreme poverty, over the next 15 years. All people everywhere, including the poorest and most vulnerable, should enjoy a basic standard of living and social protection benefits.

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Goal 2 seeks to end hunger and all forms of malnutrition and to achieve sustainable food production by 2030. It is premised on the idea that everyone should have access to sufficient nutritious food, which will require widespread promotion of sustainable agriculture, doubling of agricultural productivity, increased investments and properly functioning food markets.

Goal 3: Ensure healthy lives and promote well-being for all at all ages

Goal 3 aims to ensure health and well-being for all at all ages by improving reproductive, maternal and child health; ending the epidemics of major communicable diseases; reducing non-communicable and environmental diseases; achieving universal health coverage; and ensuring access to safe, affordable and effective medicines and vaccines for all.

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 4 focuses on the acquisition of foundational and higher-order skills; greater and more equitable access to technical and vocational education and training and higher education; training throughout life; and the knowledge, skills and values needed to function well and contribute to society.

Goal 5: Achieve gender equality and empower all women and girls

Goal 5 aims to empower women and girls to reach their full potential, which requires eliminating all forms of discrimination and violence against them, including harmful practices. It seeks to ensure that they have every opportunity for sexual and reproductive health and reproductive rights; receive due recognition for their unpaid work; have full access to productive resources; and enjoy equal participation with men in political, economic and public life.

Goal 6: Ensure availability and sustainable management of water and sanitation for all

Goal 6 goes beyond drinking water, sanitation and hygiene to addressing the quality and sustainability of water resources. Achieving this Goal, which is critical to the survival of people and the planet, means expanding international cooperation and garnering the support of local communities in improving water and sanitation management.

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 7 seeks to promote broader energy access and increased use of renewable energy, including through enhanced international cooperation and expanded infrastructure and technology for clean energy.

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Continued, inclusive and sustainable economic growth is a prerequisite for global prosperity. Goal 8 aims to provide opportunities for full and productive employment and decent work for all while eradicating forced labor, human trafficking and child labor.

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 9 focuses on the promotion of infrastructure development, industrialization and innovation. This can be accomplished through enhanced international and domestic financial, technological and technical support, research and innovation and increased access to information and communication technology.

Goal 10: Reduce inequality within and among countries

Goal 10 calls for reducing inequalities in income, as well as those based on sex, age, disability, race, class, ethnicity, religion and opportunity—both within and among countries. It also aims to ensure safe, orderly and regular migration and addresses issues related to representation of developing countries in global decision-making and development assistance.

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 11 aims to renew and plan cities and other human settlements in a way that fosters community cohesion and personal security while stimulating innovation and employment.

Goal 12: Ensure sustainable consumption and production patterns

Goal 12 aims to promote sustainable consumption and production patterns through measures such as specific policies and international agreements on the management of materials that are toxic to the environment.

Goal 13: Take urgent action to combat climate change and its impacts

Climate change presents the single biggest threat to development, and its widespread, unprecedented effects disproportionately burden the poorest and the most vulnerable. Urgent action is needed not only to combat climate change and its impacts, but also to build resilience in responding to climate-related hazards and natural disasters.

Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

This Goal seeks to promote the conservation and sustainable use of marine and coastal ecosystems, prevent marine pollution and increase the economic benefits to Small Island Developing States and LDCs through the sustainable use of marine resources.

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

Goal 15 focuses on managing forests sustainably, restoring degraded lands and successfully combating desertification, reducing degraded natural habitats and ending biodiversity loss. All of these efforts in combination will help ensure that livelihoods are preserved for those that depend directly on forests and other ecosystems, that biodiversity will thrive and that the benefits of these natural resources will be enjoyed for generations to come.

Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 16 envisages peaceful and inclusive societies based on respect for human rights, the rule of law, good governance at all levels and transparent, effective and accountable institutions. Many countries still face protracted violence and armed conflict, and far too many people are poorly supported by weak institutions and lack of access to justice, information and other fundamental freedoms.

Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

The 2030 Agenda requires a revitalized and enhanced global partnership that mobilizes all available resources from Governments, civil society, the private sector, the United Nations system and other actors. Increasing support to developing countries, in particular LDCs, landlocked developing countries and Small Island Developing States, is fundamental to equitable progress for all.

2.2 THE AICHI BIODIVERSITY TARGETS AND THEIR CONTRIBUTION TO THE ACHIEVEMENT OF THE SDGs

As described above, biodiversity obviously spans many of the Sustainable Development Goals (SDGs). They contribute directly to human well-being and development priorities. Biodiversity is at the center of many economic activities, particularly those related to agriculture, livestock, forestry and fisheries. 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 fulfill their daily subsistence needs.

As mentioned before, the Aichi Biodiversity Targets have been adopted under the Convention on Biological Diversity and have been recognized as setting the global framework for priority actions on biodiversity. The SDGs Agenda is consistent with other existing international commitments, including Aichi Biodiversity Targets.

Table 1 offers a summary of linkages between SDGs, Aichi Biodiversity Targets and other biodiversity-related conventions as a short guide for the Bahraini government to share with decision-makers and development professionals and better understand how the contributions of biodiversity-related conventions help the involved parties reach the SDGs.

Table 1: Links among sustainable development goals and biodiversity-related conventions

SDGs	Aichi Targets	CMS Targets	CITES Objectives	Ramsar Targets
Goal 1	2, 6, 7, 14	2, 5, 6, 11	1.1, 1.4, 1.5, 1.6 1.7, 3.1, 3.3, 3.4, 3.5	1, 2, 5, 7, 8, 9, 11 12, 13
Goal 2	4, 6, 7, 13, 18	5, 6, 12, 14	1.1, 1.3, 1.4, 1.5 1.6, 1.7, 3.2, 3.3, 3.4, 3.5	2, 3, 5, 7, 8, 9, 10 11, 13, 16
Goal 3	8, 13, 14, 16, 18	7, 11, 12, 14	1.1, 1.3, 1.5, 3.2 3.3, 3.4, 3.5	2, 8, 10, 11, 12, 16,
Goal 4	1, 19	1, 15	1.4, 1.5, 1.6, 1.8 2.2, 2.3, 3.2, 3.3, 3.4, 3.5	8, 14, 15, 16, 19
Goal 5	14, 17, 18	11, 13, 14	1.1, 1.3, 1.5, 3.2, 3.3, 3.4, 3.5	8, 10, 11, 12, 16 19
Goal 6	8, 11, 14, 15	7, 10, 11	1.3, 1.4, 1.5, 3.3, 3.4, 3.5	2, 5, 6, 7, 8, 11 12,
Goal 7	5, 7, 14, 15, 19	5, 10, 11, 15	1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 2.2, 2.3, 3.3, 3.4, 3.5	2, 7, 8, 11, 12, 13 14, 15
Goal 8	2, 4, 6, 7, 14, 16	2, 5, 6, 11	1.1, 1.3, 1.4, 1.5 1.6, 1.7, 3.1, 3.2, 3.3, 3.4, 3.5	1, 2, 3, 5, 7, 8, 9 11, 12, 13
Goal 9	2, 4, 8, 14, 15, 19	2, 5, 7, 11, 15	1.1, 1.3, 1.4, 1.5 1.6, 1.7, 1.8, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5	1, 2, 3, 8, 9, 11 12, 14, 15

SDGs	Aichi Targets	CMS Targets	CITES Objectives	Ramsar Targets
Goal 10	8, 15, 18, 20	7, 11, 14, 16	1.1, 1.3, 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.4	2, 8, 10, 12, 16, 17, 18
Goal 11	2, 4, 8, 11	2, 5, 7, 10, 11	1.1, 1.3, 1.4, 1.5, 1.6, 1.7, 3.1, 3.2, 3.3, 3.4, 3.5	1, 2, 3, 5, 6, 7, 8, 9, 11, 12
Goal 12	1, 4, 6, 7, 8, 19	1, 5, 6, 7, 15	1.1, 1.4, 1.5, 1.6, 1.7, 1.8, 2.2, 2.3, 3.2, 3.3, 3.4, 3.5	2, 3, 5, 7, 8, 9, 11, 13, 14, 15, 16, 19
Goal 13	2, 5, 10, 14, 15, 17	2, 7, 10, 11, 13	1.1, 1.3, 1.4, 1.5, 1.6, 1.7, 3.1, 3.3, 3.4, 3.5	1, 6, 7, 8, 11, 12, 19
Goal 14	1 – 20	1, 2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16	1.1, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
Goal 15	1 – 20	1, 2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16	1.1, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
Goal 16	17	13	3.4	19
Goal 17	2, 17, 19, 20	2, 13, 15	1.1, 1.4, 1.5, 1.6, 1.8, 2.1, 2.2, 2.3, 3.1, 3.3, 3.4, 3.5	1, 8, 11, 14, 15, 17

For further guidance to Bahraini government, Table 2 provides a summary of possible global indicators that could help measure the progress of Aichi targets and SDGs at the national level:

Table 2: Suggested global indicators for measuring progress in implementing both Aichi targets and SDGs at national level

Aichi Targets		SDGs Targets		Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 1: By 2020, at the latest, people will be aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.</p>		 <p>Target 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of culture of peace and non-violence, global citizenship, the appreciation of cultural diversity and culture's contribution to sustainable development.</p>		<p>Biodiversity Barometer: The Biodiversity Barometer indicator measures the level of public awareness of biodiversity in five case countries and relates to Aichi Target 1.</p>	CITES, CMS, Ramsar	http://ethicalbiotrade.org/biodiversity-barometer/
		 <p>Target 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.</p>				
 <p>Target 2: By 2020, at the latest, biodiversity values will be integrated into national and local development and poverty reduction strategies and planning processes; the values will also be incorporated into national accounting and reporting systems, as appropriate.</p>				N/A	N/A	N/A

Aichi Targets	SDGs Targets	Suggested indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity will be eliminated, phased out or reformed in order to minimize or avoid negative impacts; at the same time, positive incentives for the conservation and sustainable use of biodiversity will be developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.</p>	 <p>Target 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.</p> <p>Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production; help maintain ecosystems; strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters; and progressively improve land and soil quality.</p> <p>Target 2.b: Correct and prevent trade restrictions and distortions in world agricultural markets, including through parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.</p>  <p>Target 15.9: By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes and poverty reduction strategies and accounts.</p>	<p>Trends in potentially environmentally harmful elements of government support to agriculture (producer support estimate): The data provides an indication of the trends in environmentally harmful elements caused by the government's support to producers, as measured by the Producer Support Estimates (PSE). Government support refers to payments made to farmers to manage the supply of agricultural commodities, influence their cost, supplement producers' income and achieve other social and environmental aims.</p>	<p>CMS, Ramsar</p>	<p>www.oecd.org/tad/agriculturalpolicies/producerandconsumersupportestimatesdatabase.htm</p>

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 4: By 2020, at the latest, governments, businesses and stakeholders at all levels will take steps to achieve or implement plans for sustainable production and consumption and will keep the impacts of use of natural resources well within safe ecological limits.</p>	 <p>Target 8.4: Improve global resource efficiency in consumption and production progressively through 2030, and endeavor to decouple economic growth from environmental degradation in accordance with the 10-year framework of programmes on sustainable consumption and production with developed countries taking the lead.</p>	<p>Ecological Footprint: The Ecological Footprint compares human demand on nature against nature supply. Demand is measured in terms of biologically productive areas a population uses for producing all the renewable resources it consumes and absorbing its waste. The availability of nature, called biocapacity, is measured in surface area, and represents the regenerative capacity of nature. An increase in a nation's Ecological Footprint stands for an increase in its population's pressure on biodiversity and a greater risk of biodiversity loss.</p>	<p>CMS, Ramsar</p>	<p>http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/</p>
	 <p>Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.</p>			
	 <p>Target 14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.</p>	<p>Red List Index (impacts of utilization): The RLI (impacts of utilization) shows trends in the status of all mammals, birds and amphibians worldwide driven only by the negative impacts of utilization or the positive impacts of measures to control or manage utilization sustainability. <u>This indicator is used also for SDG targets 8.4 and 12.2</u></p>		

Aichi Targets	SDGs Targets		Suggested Indicators	Link to other biodiversity-related conventions	Websites
		<p>Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.</p> <p>Target 15.7: Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both the demand and the supply of illegal wildlife products.</p>		CITES, CMS, Ramsar	http://intranet.iucn.org/webfiles/doc/SpeciesProg/RLI_Guidelines_Final_4march09.pdf
 <p>Target 5: By 2020, the rate of loss of all natural habitats, including forests, will be at least halved and, where feasible, brought close to zero; degradation and fragmentation will be significantly reduced.</p>		<p>Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.</p>	<p>Wetland Extent Trends Index: The WET index is already proving useful for evaluating progress on wetland-related policy objectives, including those adopted under the Ramsar Convention and the Convention on Biological Diversity.</p>	CMS, Ramsar	http://www.sciencedirect.com/science/article/pii/S0006320715301476
		<p>Target 15.1: By 2020, ensure that conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, are in line with obligations under international agreements.</p>	<p>Forest area as a percentage of total land area: Information on the extent of forests is regularly collected and analysed by the Food and Agriculture Organization of the UN (FAO) through its Global Forest Resources Assessments (FRA).</p>		http://www.fao.org/forest-resources-assessment/en/

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 6: By 2020, all fish and invertebrate stocks and aquatic plants will be managed and harvested sustainably and ecosystem-based approaches will be legally applied. This is to ensure 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.</p>	 <p>Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production; help maintain ecosystems; strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters; and progressively improve land and soil quality.</p>	<p>Marine Trophic Index: The Marine Trophic Index measures the mean trophic level for all Large Marine Ecosystems and hence indicates the extent of “fishing down the food webs.” This indicator is used also for SDG 14</p>	<p>CMS, Ramsar</p>	<p>http://www.seaaroundus.org/data/#/marine-trophic-index.</p>
	 <p>Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.</p>			
	<p>Target 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.</p>			

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
	<p>Target 14.4: By 2020, effectively regulate harvesting, end overfishing and ban illegal, unreported and unregulated fishing and destructive fishing practices; implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.</p>	<p>Marine Stewardship Council (MSC): MSC Certified Catch measures the green weight catch of fisheries certified by the Marine Stewardship Council, and compares this to total wild capture production as reported by the FAO. This indicator is used also for SDG targets 14.7 and 14.b</p>	<p>CMS</p>	<p>http://www.fao.org/fishery/statistics/global-capture-production/en</p>
	<p>Target 14.7: By 2030, increase the economic benefits to Small Island Developing States and Least Developed Countries from the sustainable use of marine resources, including the sustainable management of fisheries, aquaculture and tourism.</p>	<p>Proportion of fish stocks within biologically sustainable levels: This directly indicates the level of progress towards sustainable management of fish stocks, in which overfishing is avoided and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits. This indicator is used also for SDG targets 14.4, 14.7 and 14.c</p>	<p>CITES, CMS, Ramsar</p>	<p>www.fao.org</p>
	<p>Target 14.b: Provide access to small scale artisanal fishers, marine resources and markets.</p>	<p>Red List Index (impacts of fisheries): The RLI shows trends in the status of birds and mammals worldwide driven by the negative impacts of fisheries or the positive impacts of measures to control or manage fisheries sustainably.</p>	<p>CMS, Ramsar</p>	<p>http://intranet.iucn.org/webfiles/doc/SpeciesProg/RLI_Guidelines_Final_4march09.pdf</p>

Aichi Targets		SDGs Targets		Suggested Indicators	Link to other biodiversity-related conventions	Websites
			<p>Target 14.c: Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources as recalled in paragraph 158 of The Future We Want.</p>			
 <p>Target 7: By 2020, areas under agriculture, aquaculture and forestry will be managed sustainably, ensuring conservation of biodiversity.</p>		 <p>Target 2.5: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domestic animals and their related wild species through good management and diversified seed and plant banks at national, regional and international levels; promote access to the fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional</p>	<p>Area of forest under sustainable management: total FSC and PEFC forest management certification: The “forest certification” indicator measures the area certified as responsibly managed forests, including natural or semi-natural forests that are used to produce timber and non-timber forest products, and forest plantations. This indicator is used also for SDG targets 8.4, 12.2, 12.5, 12.8, 15.1, 15.2, 15.3, 15.4, 15.5, 15.6 and 15.c</p>	Ramsar	https://ic.fsc.org/en	
		 <p>Target 6.4: By 2030, substantially increase water-use efficiency across all sectors, ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.</p>				
		<p>Target 6.5: By 2030, implement integrated water resource management at all levels, including through transboundary cooperation, as appropriate.</p>				
		<p>Target 6.6: By 2020, protect and restore water-related ecosystems including mountains, forests, wetlands, rivers, aquifers and lakes.</p>				

Aichi Targets	SDGs targets	Suggested indicators	Link to other biodiversity-related conventions	Websites
	<div data-bbox="312 237 395 322"> </div> <p data-bbox="411 237 807 618">Target 8.4: Improve progressively through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.</p> <div data-bbox="312 629 395 714"> </div> <p data-bbox="411 629 807 752">Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p data-bbox="411 763 807 887">Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.</p> <p data-bbox="411 898 807 1088">Target 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.</p>	<p data-bbox="826 629 1137 1043">Wild Bird Index (forest and farmland specialist birds): The Wild Bird Index (WBI) is the average trend in relative abundance of a group of bird species during the breeding season, often grouped by their association and dependence on a particular habitat.</p>		http://intranet.iucn.org/webfiles/doc/SpeciesProg/RLI_Guidelines_Final_4march09.pdf
	<div data-bbox="312 1102 395 1187"> </div> <p data-bbox="411 1102 807 1393">Target 15.1: By 2020, ensure that the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, are in line with obligations under international agreements.</p> <p data-bbox="411 1404 807 1650">Target 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.</p> <p data-bbox="411 1662 807 1874">Target 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.</p>			

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
	 <p>Target 15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.</p> <p>Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.</p> <p>Target 15.7: Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.</p>	<p>The Wild Bird Index (WBI) is the average trend in relative abundance of a group of bird species during the breeding season, often grouped by their association and dependence on a particular habitat.</p>		<p>http://intranet.iucn.org/webfiles/doc/SpeciesProg/R_LI_Guidelines_Final_4march09.pdf.</p>
	<p>Target 15.c: Enhance global support for efforts to combat poaching and trafficking of protected species by increasing the capacity of local communities to pursue sustainable livelihood opportunities.</p>			

Aichi Targets		SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 8: By 2020, pollution, including from excess nutrients, will be at levels that are not detrimental to ecosystem function and biodiversity.</p>		<p>Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help maintain ecosystems, strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and progressively improve land and soil quality.</p>	<p>Trends in Loss of Reactive Nitrogen to the Environment: Inefficient use of fertilizer and/or fossil fuels results in loss of reactive nitrogen to the environment. Eventually, the lost reactive nitrogen to the environment can end up close to the sources or in remote areas located far from human activities, where it is often the dominant source of reactive nitrogen. Once introduced there, the increased reactive nitrogen levels can severely impact associated biodiversity. Reactive nitrogen can also contribute to eutrophication of coastal ecosystems, acidification of forests, soils, and freshwater streams and lakes. This indicator is used also for SDG targets 14.1, 15.1</p>	<p>CMS, Ramsar</p>	<p>www.initrogen.org</p>
		<p>Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help maintain ecosystems, strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and progressively improve land and soil quality.</p>	<p>Trends in the numbers of invasive alien species introduction events: This indicator measures the trends of invasive alien species introduction events (IAS) of 21 countries, which were selected for having at least 30 records of species with known invasion date. The indicator was based on 3914 IAS and 4903 species-country records.</p>	<p>CMS, Ramsar</p>	<p>www.initrogen.org</p>

Aichi Targets		SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
		 <p>Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.</p>	<p>Trends in Nitrogen Deposition: The Nitrogen Deposition Indicator (NDI) shows where energy and food production have resulted in increased ammonia and nitrogen oxide emissions to the atmosphere on a global and regional basis, with subsequent increase in nitrogen depositions. This indicator is used also for SDG targets 2.4, 15.2</p>	CMS, Ramsar	www.initrogen.org
		 <p>Target 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.</p> <p>Target 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.</p>	<p>Red List Index (impacts of pollution): This version of the RLI shows trends in the status of all mammals, birds and amphibians worldwide driven only by the negative impacts of pollution or the positive impacts of measures to control pollution. This indicator is used also for SDG targets 14.1</p>	CMS, Ramsar	http://intranet.iucn.org/webfiles/doc/SpeciesProg/RLI_Guidelines_Final_4march09.pdf

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 9: 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.</p>	 <p>Target 15.8: By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.</p>	<p>Red List Index (impacts of invasive alien species): This indicator shows trends in the status of all birds worldwide driven only by the negative impacts of invasive alien species or the positive impacts of their control. It is based on Birdlife International's assessments of extinction risk for all birds for the IUCN Red List, specifically the number of species in each Red List category of extinction risk, and the number moving categories between assessments owing to genuine improvement or deterioration in status driven by impacts of invasive alien species or their control.</p>	CMS, Ramsar	http://intranet.iucn.org/webfiles/doc/SpeciesProg/RLI_Guidelines_Final_4march09.pdf
		<p>Trends in the numbers of invasive alien species introduction events: This indicator measures the trends of invasive alien species introduction events (IAS) of 21 countries, which were selected for having at least 30 records of species with known invasion date. The indicator was based on 3914 IAS and 4903 species-country records.</p>	CMS, Ramsar	http://www.eea.europa.eu/highlights/publications/progress-towards-the-european-2010-biodiversity-target/

Aichi Targets		SDGs Targets		Suggested Indicators	Link to other biodiversity-related conventions	Websites
				<p>Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species: This indicator measures the adoption of national legislation relevant to the prevention or control of invasive alien species.</p>	CMS	www.bipindicators.net/iaslegislationadoption
				<p>Trends in invasive alien species vertebrate eradications: Invasive species indicators and alien species trends allow assessment of the efficacy of biosecurity policies. Trends in policy responses, legislation and management plans to control and prevent spread of invasive alien species demonstrates the commitment of nations and institutions to addressing this threat.</p>	CMS	http://diise.islandconservation.org/
 <p>Target 10: 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.</p>	 <p>Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.</p> <p>Target 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts by strengthening their resilience and take action for their restoration in order to achieve healthy and productive oceans.</p>	<p>Cumulative Human Impacts on Marine Ecosystems: The Cumulative Human Impact on Marine Ecosystems indicator predicts the impact on marine biodiversity and ecosystems from multiple anthropogenic stressors. Cumulative impact assessments model, or predict, the overall impact from a suite of stressors based on the unique and cumulative vulnerability of biodiversity to anthropogenic stressors such as pollution, climate change and fishing.</p>	CMS, Ramsar	https://www.bipindicators.net/indicators/cumulative-human-impacts-on-marine-ecosystems		

Aichi Targets		SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 11: 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, will be conserved through effectively and equitably managed, ecologically representative well-connected systems of protected areas and other effective area-based conservation measures and integrated into the wider landscapes and seascapes.</p>		<p>Target 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage.</p>	<p>Protected Area Coverage of Key Biodiversity Areas: This indicator shows trends over time in the degree to which KBAs are covered by protected areas. This indicator is used also for SDG targets 14.5, 15.4</p>	CMS, Ramsar	https://www.ibat-alliance.org/ibat-conservation/login
		<p>Target 14.5: By 2020, conserve at least 10 per cent of coastal and marine areas consistent with national and international law and based on the best available scientific information.</p>	<p>Protected Area Coverage of Key Biodiversity Areas: This indicator shows trends over time in the degree to which KBAs are covered by protected areas. This indicator is used also for SDG targets 11.4, 15.1, 15.2, 15.3, 15.4, 15.5, 15.7 and 15.c</p>	CMS	https://www.ibat-alliance.org/ibat-conservation/login
		<p>Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.</p> <p>Target 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.</p>	<p>Protected Areas Management Effectiveness: This indicator provides information on status and trends in the effectiveness of management of protected areas that can be disaggregated to examine environmental, social and managerial aspects of protected area management.</p>	CMS, Ramsar	http://www.eci.ox.ac.uk/publications/downloads/coad11-protected-areas.pdf

Aichi Targets		SDGs Targets		Suggested Indicators	Link to other biodiversity-related conventions	Websites
			<p>Target 15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.</p> <p>Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.</p> <p>Target 15.7: Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.</p> <p>Target 15.c: Enhance global support for efforts to combat poaching and trafficking of protected species by increasing the capacity of local communities to pursue sustainable livelihood opportunities.</p>	<p>This indicator records the number and area of assessments of management effectiveness completed by countries and the overall management effectiveness score for each aspect of management. The indicator therefore measures how effectively and equitably protected areas are managed, which is of critical importance in meeting Aichi Target 11, as the declaration of a protected area does not always result in adequate protection. This indicator is used also for SDG targets 11.4, 14.5</p>		
	<p>Target 12: By 2020, the extinction of known threatened species will be prevented and their conservation status, particularly of those most in decline, will be improved and sustained.</p>		<p>Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help maintain ecosystems, strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and progressively improve land and soil quality.</p>	<p>Wildlife Picture Index: The WPI is a biodiversity index that uses camera trap data to quantitatively measure changes in species variation over time. WPI was adopted as a way to quickly synthesize and understand how tropical wildlife is changing and why. The WPI is sensitive to changes in the number of species and their relative occurrence and evenness over time. The WPI is not limited to camera trap data, but can also be used for other presence/absence data, such as information collected using sound sensors. This indicator is used also for SDG targets 15.1, 15.2</p>	CITES, Ramsar	www.livingplanetindex.org

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 12: By 2020, the extinction of known threatened species will be prevented and their conservation status, particularly of those most in decline, will be improved and sustained.</p>	 <p>Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help maintain ecosystems, strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and progressively improve land and soil quality.</p>	<p>Wildlife Picture Index: The WPI is a biodiversity index that uses camera trap data to quantitatively measure changes in species variation over time. WPI was adopted as a way to quickly synthesize and understand how tropical wildlife is changing and why. The WPI is sensitive to changes in the number of species and their relative occurrence and evenness over time. The WPI is not limited to camera trap data, but can also be used for other presence/absence data, such as information collected using sound sensors. This indicator is used also for SDG targets 15.1, 15.2</p>	<p>CITES, Ramsar</p>	<p>www.livingplanetindex.org</p>
	 <p>Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.</p>	<p>This indicator records the number and area of assessments of management effectiveness completed by countries and the overall management effectiveness score for each aspect of management. The indicator therefore measures how effectively and equitably protected areas are managed, which is of critical importance in meeting Aichi Target 11, as the declaration of a protected area does not always result in adequate protection. This indicator is used also for SDG targets 11.4, 14.5</p>		

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
	 <p>Target 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage.</p>	See the Red List Index below		
 <p>Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.</p>				
<p>Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.</p>				
<p>Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.</p>				
 <p>Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.</p>				

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
	 <p>Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.</p> <p>Target 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.</p> <p>Target 14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.</p> <p>Target 14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.</p> <p>Target 14.5: By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.</p> <p>Target 14.7: By 2030, increase the economic benefits to Small Island Developing States and Least Developed Countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.</p>	<p>Living Planet Index: The Living Planet Index (LPI) is calculated using time-series data on more than 14,000 populations of over 3,700 vertebrate species from around the globe. The LPI uses data that is of high temporal resolution and spatially explicit through being tied to a particular location. This allows for recording of metadata on local threats and conservation action and allows for disaggregation at different scales. The LPI data are accessible online through the Living Planet Database. This indicator is used also for SDG targets 15.1, 15.4, 15.5, 15.7, 15.8</p>	<p>CITES, CMS, Ramsar</p>	
	<p>Target 14.b: Provide access for small-scale artisanal fishers to marine resources and markets.</p>			

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
<p>Target 8: By 2020, pollution, including from excess nutrients, will be at levels that are not detrimental to ecosystem function and biodiversity.</p>	<p>Target 14.c: Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want.</p>			
	 <p>Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.</p>	<p>Red List Index: The Red List Index (RLI) shows trends in the extinction risk of sets of species. It requires data from repeated assessments of species using the Red List categories and criteria, which are far more commonly available than detailed reliable time-series of population abundance data. Because such data are generally available for entire suites of species (e.g. all regularly occurring species in a country for a particular taxonomic group) they produce less-biased indicators than those based on a sample selected better-studied species. This indicator is used also for SDG targets 2.4, 6.6, 11.4, 12.2, 12.4, 12.5, 14.1, 14.2, 14.3, 14.4, 14.5, 14.7, 14.b, 14.c</p>	<p>CITES, CMS, Ramsar</p>	<p>http://www.iucnredlist.org/about/publication/red-list-index</p>
	<p>Target 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.</p>			
	<p>Target 15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.</p>			
	<p>Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.</p>			
	<p>Target 15.7: Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.</p>			
	<p>Target 15.8: By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.</p>			
	<p>Target 15.b: Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.</p>			
<p>Target 15.c: Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.</p>				

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
<p>Target 13: By 2020, the genetic diversity of cultivated plants, farmed and domesticated animals and wild relatives, including other socio-economically as well as culturally valuable species, will be maintained; strategies to minimize genetic erosion and safeguard genetic diversity will be developed and implemented.</p>	 <p>Target 2.5: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.</p>	<p>Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction: This indicator aims to show whether genetic diversity of farmed and domesticated animals is being maintained using the proportion of local breeds classified as at risk, not at risk and unknown risk of extinction at a certain moment in time, as well as the trends for those proportions.</p>	CITES	/http://lad.fao.org
 <p>Target 14: By 2020, ecosystems that provide essential services, including services related to water and those that contribute to health, livelihoods and well-being, will be restored and safeguarded, taking into account the needs of women, indigenous and local communities and the poor and vulnerable.</p>	 <p>Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help maintain ecosystems, strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and progressively improve land and soil quality.</p>	See Ocean Health Index Indicator below		
	 <p>Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.</p>	<p>Red List Index (species used for food and medicine): This version of the RLI is based only on data for birds, mammals and amphibians that are known to be used by people for food or medicine. It shows changes in the aggregate extinction risk of these species over time. This indicator is used also for SDG targets 12.2, 12.8, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c</p>	CMS, Ramsar	http://intranet.iucn.org/webfiles/doc/SpeciesProg/RLI_Guidelines_Final_4march09.pdf
	 <p>Target 8.4: Improve progressively through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.</p>			

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
	 <p>Target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.</p>	<p>SDG targets 12.2, 12.8, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c</p>		
	 <p>Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p>Target 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.</p>	<p>Ocean Health Index: The Ocean Health Index (OHI) is a scientific method to assess the benefits the ocean provides to people, and was developed because of the need for a quantifiable and easily communicated method to define, measure, and evaluate 'ocean health.' The OHI method can be tailored to different geographies with different contexts, data and priorities, and can be used to inform policy - particularly when assessments are repeated to track changes through time. This indicator is used also for SDG targets 2.4, 8.4, 15.5</p>	Ramsar	http://ohi-science.org
	 <p>Target 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.</p> <p>Target 14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.</p> <p>Target 14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.</p>			

Aichi Targets	SDGs Targets		Suggested Indicators	Link to other biodiversity-related conventions	Websites
		<p>Target 14.6: By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and Least Developed Countries should be an integral part of the World Trade Organization fisheries subsidies negotiation.</p>			
		<p>Target 14.7: By 2030, increase the economic benefits to Small Island Developing States and Least Developed Countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.</p>			
		<p>Target 14.b: Provide access for small-scale artisanal fishers to marine resources and markets.</p>			
		<p>Target 14.c: Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want.</p>			

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
	 <p>Target 15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.</p> <p>Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p> <p>Target 15.6: Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed.</p> <p>Target 15.7: Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.</p> <p>Target 15.c: Enhance global support for efforts to combat poaching and trafficking of protected species by increasing the capacity of local communities to pursue sustainable livelihood opportunities.</p>	<p>Red List Index (pollinating species): This version of the RLI is based only on data for birds and mammals that are known or inferred to be pollinators and shows changes in the aggregate extinction risk of pollinator species over time. The decline in the Red List Index for pollinators indicates that ecosystems supporting them are not currently being adequately safeguarded. This indicator is used also for SDG targets 2.4</p>		<p>http://intranet.iucn.org/webfiles/doc/SpeciesProg/RLI_Guidelines_Final_4march09.pdf</p>

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
	<p>Target 15: By 2020, ecosystem resilience and contribution of biodiversity to carbon stocks will be enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby combating desertification and contributing to climate change mitigation and adaptation.</p>	N/A	N/A	N/A
	<p>Target 16: 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.</p>	N/A	N/A	
	<p>Target 17: 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.</p>	N/A	N/A	

Aichi Targets	SDGs Targets		Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant to conservation and sustainable use of biodiversity and their customary use of biological resources will be respected and subject to national legislation and relevant international obligations; these traditions will also be 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.</p>		<p>Target 1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.</p>	<p>Index of Linguistic Diversity: Over the past few decades, it has become clear that biodiversity and cultural diversity (including linguistic diversity) are inextricably interrelated and interdependent, and that the permanence of loss of diversity in one realm closely tracks the permanence or loss of diversity in the other realm. Furthermore, language and traditional environmental knowledge are intimately linked. Therefore, tracking the state of linguistic diversity over time provides evidence of changes in the state of “traditional knowledge, innovations and practices of indigenous and local communities relevant to conservation and sustainable use of biodiversity, and their customary use of biological resources.”</p>	Ramsar	http://d2ouvy59p0dg6k.cloudfront.net/downloads/biocultural_report_june_2014.pdf
		<p>Target 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels.</p>			

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 19: By 2020, knowledge, science base and technologies related to biodiversity, its values, functionality, status, trends and the consequences of its loss will be improved, widely shared, transferred and applied.</p>	 <p>Target 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage.</p>	<p>Growth in Species Occurrence Records Accessible Through GBIF: This indicator tracks the number of digitally accessible records published through the Global Biodiversity Information Facility (GBIF). An increase in the value of this indicator means that a larger volume of records documenting the spatial and temporal occurrence of species is being shared by holders of biodiversity data, in formats that make them free for use by researchers and policymakers via the Internet. A decline would indicate reduced availability of such data for research and policy.</p>	<p>CITES, CMS, Ramsar</p>	<p>http://www.gbif.org/country</p>
	 <p>Target 14.a: Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular Small Island Developing States and Least Developed Countries.</p>			
	 <p>Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.</p>			
	<p>Target 15.8: By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.</p> <p>Target 15.9: By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.</p>			

Aichi Targets		SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
		 <p>Target 17.6: Enhance North-South, South-South and triangular regional and international cooperation and access to science, technology and innovation, and enhance knowledge sharing on mutually agreed terms including through improved coordination among existing mechanisms, in particular at the United Nations level, and through global technology facilitation mechanism.</p>			http://www.oecd.org/dac/stats/biodiversity.htm

Aichi Targets	SDGs Targets	Suggested Indicators	Link to other biodiversity-related conventions	Websites
 <p>Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources - and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization - will be increased substantially from previous levels. This target will be subject to changes and contingent on resource needs assessments to be developed and reported by parties.</p>	 <p>Target 10.b: Encourage official development assistance and financial flows, including foreign direct investment to states where the need is greatest, in particular Least Developed Countries, African countries, Small Island Developing States and landlocked developing countries, in accordance with their national plans and programmes.</p>	<p>Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems: The Official Development Assistance in Support of the CBD indicator tracks the transfer of bilateral aid from OECD DAC members to developing countries for the effective implementation of their commitments under the Convention, thus monitoring the level of resource mobilization for the Strategic Plan 2011-2020.</p>	<p>CITES, CMS, Ramsar</p>	
	 <p>Target 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage.</p>			
	 <p>Target 15.a: Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.</p> <p>Target 15.b: Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.</p>			
	 <p>Target 17.3: Mobilize additional financial resources for developing countries from multiple sources.</p>			

2.3 NATIONAL EFFORTS OF BAHRAIN IN ACHIEVING AICHI TARGETS AS A BASELINE FOR THE SDGS

This section discusses the efforts of Bahrain to achieve the Aichi Biodiversity Targets as a baseline for future national efforts related to the Sustainable Development Goals (SDGs), specifically to those related to biodiversity. The following table describes these efforts; stakeholders can link them to the SDGs by using links illustrated in Table 2 above.

Table 3: Bahrain’s efforts towards achieving Aichi Targets (2011-2014) as a baseline to compare progress made to biodiversity within the SDGs.

National Efforts	Implementation Status
<p>Aichi Biodiversity Target 1: By 2020, at the latest, people will be aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.</p>	
<ul style="list-style-type: none"> • The period 2011-2014 witnessed increased participation by civil society in implementing projects and programs related to biodiversity, some of which include environmental awareness programs, conducting surveys, restoration projects and monitoring programs. • Meanwhile, approximately 51 awareness lectures were conducted along with other activities (e.g. workshops and seminars) for the aim of raising people’s awareness of the values of biodiversity and the threats faced. • In 2014, a documentary was produced to shed light on the unique biodiversity present in the Kingdom of Bahrain. • Numerous publications were printed and distributed to schools and the general public in the form of books, magazines and brochures on biodiversity in Bahrain. • Within the first half of 2014, over 30 articles related to biodiversity issues in Bahrain were published in the daily local newspapers. • The organizing committee of the Bahrain International Garden Show organizes an annual event that has proven to be very popular amongst members of the public, tourists and the private sector. The show aims to spread awareness of plant diversity to enhance food security by displaying samples of local plants and various agricultural techniques while hosting competitions suited to all ages. 	<ul style="list-style-type: none"> • It is thought that the status, direction and projected scenario in achieving this goal are highly positive.
<p>Aichi Biodiversity Target 2: By 2020, at the latest, biodiversity values will be integrated into national and local development and poverty reduction strategies and planning processes; the values will also be incorporated into national accounting and reporting systems, as appropriate.</p>	
<ul style="list-style-type: none"> • Numerous efforts have been made to enhance the integration of biodiversity values into national policies, programs, projects, activities and sector initiatives through the utilization of various tools such as strategic planning processes in sectors, legislations, environmental planning strategies, environmental impact assessment strategies and national committees. 	<ul style="list-style-type: none"> • It is thought that the status, direction and projected scenario in achieving this goal are positive.
<p>Aichi Biodiversity Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity will be eliminated, phased out or reformed in order to minimize or avoid negative impacts; at the same time, positive incentives for the conservation and sustainable use of biodiversity will be developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.</p>	

<ul style="list-style-type: none"> • Economic incentives are given to support handicrafts produced using materials derived from palm trees for the aim of conserving cultural and heritage practices related to biodiversity. • Economic incentives and support are given to farmers to encourage them to utilize modern methods of farming. • Economic incentives are also given to fishermen who are willing to abandon their fishing permit in an effort to limit the growing pressure on marine fisheries. 	<ul style="list-style-type: none"> • It is thought that the status, direction and projected scenario in achieving this goal are neutral.
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Aichi Biodiversity Target 4: By 2020, at the latest, governments, businesses and stakeholders at all levels will take steps to achieve or implement plans for sustainable production and consumption and will keep the impacts of use of natural resources well within safe ecological limits.

<ul style="list-style-type: none"> • An annual shrimp fishing ban season is put into force during the breeding season in national waters (15 March to 15 July – Source: Legislation and Legal Opinion Commission, 2014). • Restrictions are set on the export of fisheries. • Encourage fishermen to catch and export crustaceans and mollusks of low economic value in the local markets in an effort to lower the growing pressure on various finned fish species of high economic value. • Encouraging citizens and expats to consume varied species of fish to lower the pressure on major fish groups that are of high economic value. • Implement restrictions on the number of fishing permits in an effort to lower the pressure caused by fishing activities. • Strengthen marine monitoring to ensure that fishermen are utilizing non-destructive fishing gear and are abiding by the law during the fishing ban season. • Cooperation with neighboring countries in the Arabian Gulf to strengthen the regional sustainable management of fisheries (e.g. Mackerel fisheries) • Adoption of an initiative that incorporates the encouragement of utilizing the mangroves present in Ras Sanad as a location for sustainable eco-tourism. • Usage of treated sewage water for irrigation purposes in farms and gardens. 	<ul style="list-style-type: none"> • The constant increase in the amount of yearly fisheries landings in addition to increased fishing effort indicates that the fish stock is below the biological safe limits (refer to Chapter 1, Sections 2-3 and 2-4). • Increase in landing size for jellyfish following the policies which encourage the export of species of low economic value from 130.2 kg in 2004 to 1381.5 kg in 2013 which amounts to a 961.05% increase.
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Aichi Biodiversity 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.

<ul style="list-style-type: none"> • The implementation of the mangrove planting project for the aim of rehabilitating deteriorated mangrove areas in addition to increasing the green area in the Kingdom of Bahrain. • The expansion in the construction of artificial reefs accompanied by the launch of initiatives for coral propagation in an effort to rehabilitate destroyed and degraded coral reefs. • The launch of initiatives to rehabilitate degraded sea grass beds due to trawling activities. 	<ul style="list-style-type: none"> • Despite the improvement noted in the current status of mangroves, no significant positive improvement was observed in the status and direction of coastal and marine habitats due to the increasing pressures resulting from urban development.
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Aichi Biodiversity Target 6: 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.

- Efforts are similar to those stated under Target 4 above.
- During the period (2012-2014), an ambitious project, adopting the Ecosystem Based Approach in the Kingdom of Bahrain, was launched; it includes the development of an environmental management plan for a UNESCO World Heritage site that consists of three important oyster bed sites and a coral reef.

- Similar to Target 5 above.

Aichi Biodiversity Target 7: By 2020, areas under agriculture, aquaculture and forestry will be managed sustainably, ensuring conservation of biodiversity.

- Integrating the requirements of conserving the green belt that includes the palm groves in the urban planning process.
- Economic incentives and technical support are given to farmers to strengthen sustainable farming activities whereby technical support is extended as consultations in restoring and rehabilitating degraded lands e.g. saline lands.
- Ensuring fish farms are subjected to regularly monitoring programs.
- Expanding the use of treated sewage water for irrigation purposes for the aim of limiting the use of groundwater. In 2014, the number of farms connected to the treated sewage water network has reached 410, which represents 75% of the total number of farms (Directorate of Agriculture Affairs and Marine Resources, 2014).
- The registration of fertilizers and soil improves in an effort to limit any harm to the soil whereby, number of certificates issued in 2011-2014 totaled 300 certificates (Directorate of Agriculture Affairs and Marine Resources, 2014).
- Implementing regular programs to measure agricultural soil salinity and acidity, whereby between January to May 2014, 20 farms were surveyed and a total of 116 samples were analysed (Directorate of Agriculture Affairs and Marine Resources, 2014).

- The number of fish farms has increased by a total number of 2 new farms since 2010.
- It is thought that the status, direction and projected scenario in achieving this goal are positive

Aichi Biodiversity Target 8: By 2020, pollution, including from excess nutrients, will be at levels that are not detrimental to ecosystem function and biodiversity.

- On-going implementation of a project which aims to increase the receiving capacity of Tubli Sewage Treatment Plant.
- The construction of a temporary sewage treatment plant inside Tubli Sewage Treatment Plant to enhance the quality of treated water.
- The opening of Muharraq Station for Sewage Treatment that will contribute to lowering the load on the Tubli Sewage Treatment Plant.
- The continuation of the seasonal marine environment quality monitoring program which is present opposite to the Tubli Plant effluent outflow executed by the Supreme Council for Environment.
- The continuation of the periodic monitoring program executed by the Supreme Council for Environment to assess the quality of treated sewage water expelled into the sea.
- The formation of a national committee to monitor and study the phenomena of red tides within national waters.
- The continuation of the monitoring program for deceased fish and marine life by the Supreme Council for Environment in collaboration with academic institutions and civil society.

- The improvement in the quality of treated sewage water drained into the marine environment.
- The concentration of dissolved oxygen in the waters surrounding the Tubli Plant area remains low.
- Records for some of the red tide incidents equal that to the year 2010.

Aichi Biodiversity Target 9: By 2020, invasive alien species and pathways will be identified and prioritised, priority species will be controlled or eradicated and measures will be in place to manage pathways to prevent their introduction and establishment.

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| <ul style="list-style-type: none"> • Monitoring of borders and exit points to ensure that entry of invasive species into the country is detected (especially poisonous and predatory species). • Continuation of the House Crow (<i>C. splendens</i>) monitoring and management program in residential and agricultural areas. • Increasing the efforts of the red palm weevil (<i>R. ferrugineus</i>) pest management program executed by the Directorate of Agricultural Affairs and Marine Resources following legislative, mechanical, cultural chemical and behavioural control which includes efforts related to monitoring, surveying, pest control and treatment. Examples of the most prominent efforts implemented during 2011-2014 include (Directorate of Agricultural Affairs and Marine Resources, 2014): <ul style="list-style-type: none"> • The survey of 1,815 farms and analysis of 738,062 palm trees to ensure that they are not infected by the red weevil. • Preparation of a detailed map illustrating the geographic spread of red weevil infections in Bahrain. • The treatment of 14,364 infected trees (either through pest control or removal). • The distribution of 3,972 free red palm weevil pheromone traps and 12,023 pheromones on farmers. • Conducting two workshops on palm tree services and mitigating the red palm weevil pest. • Implementation of a project in collaboration with the International Research Center for Research in Dry Areas (ICARDA) that aims to create an inventory for palm pests which includes agricultural insects whilst dividing them based on their economic importance in dry areas. | <ul style="list-style-type: none"> • Decrease in House Crows numbers despite its presence in many residential neighbourhoods and agricultural lands. • Increase in the number and geographical extent of the common Mynah bird (<i>Acriclotheres tristis</i>). • Increase in the geographical extent of the red palm weevil (<i>R. ferrugineus</i>) and its economic, environmental impacts on the northern and western regions of the northern governorate. • Monitoring of a total of 61 agricultural pest species that impact date trees in the Kingdom of Bahrain (Directorate of Agricultural Affairs and Marine Resources, 2014). |
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Aichi Biodiversity Target 10: 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 functionality.

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| <ul style="list-style-type: none"> • Implementation of a strategic project aiming to revive reef fish stock by lowering the pressures on natural coral reefs through creating artificial reefs. • Launch of an initiative to restore degraded coral reefs through coral propagation. • The integration of biodiversity values in climate change mitigation policies, programs and activities especially those relating to assessing the sensitivity and adaptation rates of marine and coastal ecosystems to climate change. | <ul style="list-style-type: none"> • Although indications of some encouraging signs were noted, the general status of coral reefs in Bahrain remains critical. |
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Aichi Biodiversity Target 11: 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, will be 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 landscapes and seascapes.

<ul style="list-style-type: none"> • The declaration of <i>Najwat</i> and <i>Hayr Bul Thamah</i>, <i>Hayr Amamah</i> and <i>Hayr Shtayyah</i> as UNESCO World Heritage Site covering a total area of approximately 1638.23 km². • Implementing the Ecosystem Based Approach in preparing the Environmental Management Plan for <i>Najwat</i> and <i>Hayr Bul Thamah</i>, <i>Hayr Amamah</i> and <i>Hayr Shtayyah</i>. • The addition of MPA values in area planning projects for coastal and marine areas based on the 2030 Urbanization Plan. 	<ul style="list-style-type: none"> • The increase in the number of protected areas by one which equals an increase by 16.66% in comparison to the year 2010. • No change was seen in the area of inland waters and terrestrial land located within declared protected areas. • Stabilization in the good status of Hawar Islands, Al Areen Nature Reserve, Dohat Arad and Mashtan Island in comparison to the no signs of improvements seen in Tubli Bay and Reef <i>Bul Thamah</i>.
<p>Aichi Biodiversity Target 12: By 2020, the extinction of known threatened species will be prevented and their conservation status, particularly of those most in decline, will be improved and sustained.</p>	
<ul style="list-style-type: none"> • The continuation in implementing regular breeding programs in families from various rare and endangered species such as the Arabian Reem Gazelle (<i>Gazella subgutturosa marica</i>) and the Arabian Oryx (<i>Oryx leucoryx</i>), the marsh frog (<i>R. ridibunda</i>) and the Caspian turtle (<i>M. caspica</i>). • Implementation of the monitoring of dead marine turtles which include periodic surveys and fishermen surveys to estimate the number of dead turtles in Bahrain. • Efforts were made by civil society organizations to rehabilitate a number of injured marine turtles. 	<ul style="list-style-type: none"> • Stabilisation of the status of the Arabian Reem Gazelle (<i>G. subgutturosa marica</i>) and the Arabian Oryx (<i>Oryx leucoryx</i>) as a result of protection and breeding programs. • No improvements were noted in the numbers of marsh frogs (<i>R. ridibunda</i>) and caspian turtles (<i>M. caspica</i>). • Fishing activities utilising nets continue having negative impacts on marine turtles and mammals.
<p>Aichi Biodiversity Target 13: By 2020, the genetic diversity of cultivated plants, farmed and domesticated animals and wild relatives, including other socio-economically as well as culturally valuable species, will be maintained; strategies to minimize genetic erosion and safeguard genetic diversity will be developed and implemented.</p>	
<ul style="list-style-type: none"> • The continuation of the “National campaign for planting a palm tree in every house” whereby a total number of 3,752 saplings belonging to 23 varieties were distributed amongst 4,376 homes throughout the country. • The analysis of the genetic make-up of pure Arabian horses whilst maintaining documented records of relative species. In addition to the organization of periodic speed races and competitions for pure Arab thoroughbreds on various aspects. • Encouragement of breeders to acquire and breed native pure Arab thoroughbreds. • Bahrain has taken special interest in conserving the purity of Arab thoroughbreds whereby the royal stables for Arab thoroughbreds comprises approximately 20 stalls. • Technical support is given to farmers to encourage them to grow local and native species of palm trees in addition to breeding palm species of high economic value using tissue culture. • The establishment of a genetic center which consists of a botanical garden where a total number of 200 trees belonging to 19 species of native and local species of plants are grown in addition to those that have adaptation to the country’s harsh environment. • Free veterinary services are given to breeders to aid them in caring for good genetic breeds of farm animals (e.g. cows, goats, chickens etc.). 	<ul style="list-style-type: none"> • The status of pure Arab thoroughbreds remains good and these species continue receiving high levels of protection. • Species of palm trees continue facing increased threats due to the decrease of green spaces caused by urbanization in addition to the introduction of alien species.
<p>Aichi Biodiversity Target 14: By 2020, ecosystems that provide essential services, including services related to water and those that contribute to health, livelihoods and well-being, will be restored and safeguarded, taking into account the needs of women, indigenous and local communities and the poor and vulnerable.</p>	

<ul style="list-style-type: none"> • Two studies were conducted during 2011-2014 to determine the services provided by ecosystems and various biodiversity aspects in the northern oyster beds and coral reefs of Bahrain. • In 2013, a specialized study was undertaken to assess the economic impacts resulting from the degradation of coastal and marine habitats in Bahrain's territorial waters. • Efforts are being made to halt the overexploitation of groundwater, which is believed to be the main reason for the extinction of freshwater spring's habitats. These efforts include: <ul style="list-style-type: none"> • The expansion in the desalination of sea water to provide water for domestic and industrial use. • The expansion of utilising sewage treated water for irrigation purposes in farms, roads and public gardens. • The opening of Muharraq Sewage Treatment Station in 2014, which is estimated to contribute towards tripling the increase in production of treated water by 100,000 m³/day. 	<ul style="list-style-type: none"> • The increase in the participation of the civil society and NGOs in implementing biodiversity related projects (refer to Chapter 2, Section 4).
<p>Aichi Biodiversity Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks will be enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby combating desertification and contributing to climate change mitigation and adaptation.</p>	
<ul style="list-style-type: none"> • The launch of a mangrove planting project which involved planting 1004 seedlings during 2013-2014 in the selected coastal areas in Tubli Bay and Dohat Area with the aim of rehabilitating degraded mangrove sites in addition to increasing the vegetation cover within coastal areas. • Increase in planting campaigns in residential and public areas and roads, thereby contributing towards mitigating the concentration of greenhouse gases. • The continuation in the implementation of the "National campaign for planting a palm tree in every house," whereby free palm saplings are distributed among citizens. • In 2014, a comprehensive scientific study was launched to investigate the degree of carbon sequestration in marine ecosystems within Bahrain's territorial waters. 	<ul style="list-style-type: none"> • It is thought that the status, direction and projected scenario in achieving this goal are highly positive.
<p>Aichi Biodiversity Target 16: 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, operational and consistent with national legislation.</p>	
<ul style="list-style-type: none"> • Imposing restrictions on importing genetic resources to protect the rights of exporting countries. • The Kingdom of Bahrain allows other countries access to its genetic resources including agricultural and marine resources such as vegetables and commercial fisheries based on certain restrictions. • Conducting a study to assess the benefits gained by the Kingdom of Bahrain on joining the Nagoya Protocol which included consulting national relevant stakeholders. • Bahrain contributes along-side neighboring countries in the GCC in capacity building on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization. 	<ul style="list-style-type: none"> • Bahrain did not yet sign or ratify the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization under the CBD. However, Bahrain is expected to sign and ratify this protocol shortly.
<p>Aichi Biodiversity Target 17: By 2015, each Party has developed, adopted as a policy instrument and commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.</p>	

<ul style="list-style-type: none"> • The formation of the Directorate of Biodiversity following Decision No (44) of 2012 that oversees the implementation of the NBSAP. • The launch of the revision of the NBSAP project in collaboration with the United Nations Environment Programme (UNEP) and the support of the Global Environment Facility (GEF). 	<ul style="list-style-type: none"> • It is thought that the status, direction and projected scenario in achieving this goal are highly positive.
<p>Aichi Biodiversity Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity and their customary use of biological resources will be respected and subject to national legislation and relevant international obligations; these traditions will also be 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.</p>	
<ul style="list-style-type: none"> • Implementing the “Pearl Route” Project which aims to revive the national heritage that accompanied pearling and its trade which was known to be the heart of the cultural and economic life for centuries in Bahrain. • Encouraging the use of traditional fishing methods (such as <i>hadrahs</i> and <i>gargoors</i>). • Numerous efforts are being exerted to conserve the inherited culture accompanying palm trees. The most significant being the establishment of a permanent handicrafts center for palm products. • Growing more local plants that are used in traditional medicine in the medical botanical garden situated in Al Areen Nature Reserve. 	<ul style="list-style-type: none"> • The increase in the number of participants in projects related to reviving national heritage accompanying pearl diving and trade (refer to Chapter 2, Section 4). • The increase in participation of civil society in biodiversity projects bringing together local NGOs, youth groups and movements.
<p>Aichi Biodiversity Target 19: By 2020, knowledge, science base and technologies related to biodiversity, its values, functionality, status, trends and the consequences of its loss will be improved, widely shared, transferred and applied.</p>	
<ul style="list-style-type: none"> • The Central Informatics Organisation has an electronic portal that can access national database which includes data on habitat maps and marine species in Bahrain. • The Ministry of Municipalities and Urban Planning maintains a comprehensive database which includes statistical information on agriculture and fisheries that is updated regularly. • Specialists at the University of Bahrain and the Arabian Gulf University conduct regular studies on various biodiversity aspects in Bahrain. • The Supreme Council for Environment possesses a database updated using GIS which outlines the geographic extent of marine, terrestrial and anthropogenic impacts on biodiversity (e.g. dredging and reclamation activities, camping activities, factories outfalls and quarries). • The Kingdom of Bahrain contributed to the implementation of the United Arab Emirates’ project surrounding the Atlas of habitat and protected areas in the Arabian Peninsula. • The introduction of the latest technologies by the Directorate of Agricultural Affairs and Marine Resources some of which includes: distance consultations, genetic engineering applications and nanotechnology. The number of farms adopting hydroponic farming has reached 10 by 2014 (Directorate of Agricultural Affairs and Marine Resources, 2014). • The period 2011-2013 witnessed an increase in the number of companies and farmers who have adopted the method of farming using hydroponics, hence increasing the area of land using this technique. • The Supreme Council for Environment utilizes the latest techniques in its monitoring programs, water quality assessment in addition to inspection of industrial activities programs. 	<ul style="list-style-type: none"> • Despite the efforts made, no central national database exists dedicated to biodiversity in Bahrain. • In comparison to 2010, no improvements were recorded in the transfer of new technology related to biodiversity in Bahrain.

Aichi Biodiversity Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources - and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization - will be increased substantially from previous levels. This target will be subject to changes contingent on resource needs assessments to be developed and reported by parties.

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| <ul style="list-style-type: none">• Completing an updated national legislation draft which frames the establishment of an environmental fund.• Completing a draft of a legal legislation document illustrating compensation mechanisms for dredging and reclamation projects.• The private sector contributes through financial donations to assist the implementation of projects involving biodiversity protection which includes captivity breeding programs.• Financial aid is given to farmers and garden owners through services, such as the analysis of farm soil and sand samples. A total number of 3313 samples were analysed between January 2010 and May 2014 as for the number of soil samples taken reached 1279 within the same period (Directorate of Agricultural Affairs and Marine Resources, 2014). | <ul style="list-style-type: none">• Despite this, the amount of financial aid directed towards biodiversity projects remains very limited.• Financial aid sources for biodiversity projects lack diversity and also remain from traditional sources. |
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2.4 THE ROLE OF BAHRAINI NBSAP IN ACCELERATING ACTION ON SDGs

Despite decline in demand for land during recent years, the demand for residential space is still increasing, involving both dredging and infilling operations, where urban sprawl is considered the major challenge facing biodiversity in the Kingdom of Bahrain. Other major anthropogenic stresses on local biodiversity include sewage outfall, industrial and oil pollution, over-fishing and invasive alien species. To reduce these threats, efforts have been undertaken to promote the conservation and sustainable use of biodiversity in Bahrain. A legislative framework for biodiversity management exists and includes a wide range of national laws, multi-lateral agreements and international agreements pertaining to environmental protection in Bahrain with particular reference to the conservation of biodiversity.

The purpose of this section is to provide a framework to analyse and understand the relationship between Bahraini National Biodiversity Strategy and Action Plan (NBSAP) under the CBD and the Sustainable Development Goals as Bahraini Government will use them to meet its international commitments for the welfare of its people. This framework is based on a recent report published by UNEP. The UNEP report reviewed more than 6,000 actions included in NBSAPs of 60 countries. The analysis includes two parts taxonomy for actions found within the NBSAP. Each action is classified based on a thematic category (restoration, protection, sustainable use, etc.) and generic action statement (develop a plan, conduct research, strengthen governance, etc.).

These actions can subsequently be linked to the associated Sustainable Development Goals. Such analysis will shed light on the collective impact of the contribution of NBSAPs toward fulfilling the SDGs. Generally, the full implementation of the NBSAP's actions can contribute to several goals, including national food security, water security, economic growth, reduction of pollution and climate resilience. Further, the role of NBSAP as a policy instrument can pave the way for fast implementation of national sustainable development goals.

The analysis of Bahraini NBSAP included its vision, mission and guiding principles. This was followed by analysing the national priorities actions, strategic goals and objectives and national targets. The detailed analysis of the Bahraini NBSAP is as follows:

2.4.1 VISION AND MISSION

NBSAP actions	Analysis	SDGs
<p>Vision: “Strive towards improving resilience of all four ecosystems in the Kingdom and sustainably manage ecosystem services to ensure good quality of life for the Bahraini citizens by 2030.”</p>	<p>Improving resilience of all ecosystems in Bahrain, adopting sustainable management systems, securing ecosystems services and aiming for good quality of life for all Bahraini citizens contribute to several SDGs.</p>	 <p>1.4, 2.4, 2.5, 2.a, 4.7, 6.5, 6.6, 8.4, 9.4, 11.4, 12.2, 12.4, 12.5, 13.1, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.b, 14.c, 15.1, 15.3, 15.5, 15.6, 15.7, 15.8, 15.9, 15.a, 15.c</p>
<p>Mission: “Biodiversity in the Kingdom is assessed, mapped and valued and its conservation is integrated into all national policies and accounted for in national budgeting by 2021.”</p>	<p>Assessing, mapping and valuing biodiversity; mainstreaming of planning and policies in Bahrain; funding biodiversity.</p>	 <p>2.4, 2.5, 11.4, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.b, 14.c, 15.1, 15.3, 15.5, 15.6, 15.7, 15.8, 15.9, 15.a, 15.c</p>
<p>Guiding principles</p>	<p>Good practices in governance, social and economic levels related to biodiversity, including consistency within and integration beyond the biodiversity conservation sector; good governance; sustainable management; ecosystem approach; ecosystem-based management; stakeholders’ participation; science – policy interface; human well-being.</p>	 <p>1.4, 2.5, 4.7, 8.4, 9.4, 11.4, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.b, 14.c, 15.1, 15.3, 15.5, 15.6, 15.7, 15.8, 15.9, 15.a, 15.c, 16.7</p>

2.4.2 STRATEGIC GOALS AND OBJECTIVES OF THE NBSAP

The strategic goals and their general objectives of the Bahraini NBSAP are based on biodiversity assessment and stakeholders' contributions. These strategic goals incorporate all aspects of biodiversity conservation, including governance at all levels, ecological functioning and services, communication and outreach:

NBSAP actions	Analysis	SDGs
1. Strengthen the governance of biodiversity conservation in national development strategies.	Mainstream into national strategies; update and implement laws; strengthen institutional and individual capacities on biodiversity governance.	 <p>9.4, 11.4, 12.2, 12.4, 12.5, 13.1, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.b, 14.c, 15.1, 15.3, 15.5, 15.6, 15.7, 15.8, 15.9, 15a, 15.c, 16.7</p>
2. Infuse biodiversity conservation in schools and university curricula and develop outreach programs addressed to the general public.	Upgrade schools and university curricula; develop communication strategies to address decision-makers, investors and the general public; develop a framework to strengthen capacities and increase awareness of the value of biodiversity and its role in ensuring human well-being.	 <p>4.7, 11.4, 12.8, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.b, 14.c, 15.1, 15.3, 15.5, 15.6, 15.7, 15.8, 15.9, 15.a, 15.c</p>
3. Bridge the gaps between scientists, citizens and decision-makers by fostering innovation and research.	Develop a national research policy and program in partnership with universities, civil society, politicians, industries and NGOs; establish a national research council with the necessary budget; put a science-policy interface system in place.	 <p>4.7, 8.4, 9.4, 11.4, 12.8, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.b, 14.c, 15.1, 15.3, 15.5, 15.6, 15.7, 15.8, 15.9, 15.a, 15.c</p>
4. Strengthen existing ecological functioning systems and improve resilience of all ecosystems.	Work towards increasing the abundance of all organisms; establish a network of protected areas; ensure sustainable management of marine natural resources; restore coral reefs.	 <p>2.5, 4.7, 8.9, 9.c, 11.4, 12.8, 13.3, 14.1, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c</p>
5. Foster international and regional cooperation.	Increase the participation in biodiversity conservation at international and regional levels and through regional and international networks.	 <p>2.5, 6.5, 13.3, 14.3, 15.6, 17.6, 17.7</p>

2.4.3 NATIONAL TARGETS BY ECOSYSTEM

In the Bahraini NBSAP, there are twelve national targets categorized by relevant ecosystems, namely marine and coastal ecosystems, coral reefs, mangroves, desert ecosystem, agriculture ecosystem and freshwater springs:

Ecosystem	Indicators	Analysis	SDGs
Marine and coastal ecosystems	1. Protect an additional 10% of Bahrain's territorial marine and coastal areas.	Assess and value coastal ecosystems and their services; develop integrated management plans; plan to control invasive species and the accession of the Ballast Water Management Convention.	    11.4, 12.2, 14.1, 14.2, 14.4, 14.5, 14.7, 15.1, 15.5, 15.6, 15.8
	2. Reduce the number of bycatch from fishing by 10%.	Monitor bycatch and introduce regulatory measures to reduce it.	   2.4, 12.2, 14.4, 14.7, 14.b, 14.c
	3. Improve seawater quality by 50% from wastewater and sewage discharge resulting from municipal treatment plants.	Monitor effluents and introduce regulatory measures to control it.	       2.4, 6.6, 8.4, 9.4, 12.2, 12.8, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 15.4, 15.5, 15.6, 15.7, 15.c
Coral reefs	4. Protect no less than %25 of the remaining unprotected coral reefs.	Map ecosystem services of coral reefs; put in place mechanisms for their conservation; apply restoration program; implement monitoring program.	    6.6, 13.1, 14.1, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1.
	5. Raise awareness among %90 of key stakeholders and %50 of the general public.	Implement mechanisms for key stakeholders' engagement; develop communication strategy for the values and services of coral reefs and all marine and coastal habitats.	         4.7, 8.9, 9.c, 11.4, 12.8, 13.3, 14.1, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1
Mangroves	6. Rehabilitate mangroves by %25 and increase the populations of migratory bird species.	Assess ecological and socio-economic services of mangroves; develop management plan for mangroves; reduce sewage and industrial effluents.	      2.4, 6.6, 11.4, 12.2, 12.4, 12.5, 13.1, 14.1, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c

Ecosystem	Indicators	Analysis	SDGs
Desert ecosystem	7. To protect at least 60% of remaining desert ecosystems and wildlife.	Develop a comprehensive database including desert plants and animals; plant genetic resources and traditional knowledge; develop regulatory measures; establish a gene bank for desert plants and wildlife.	   2.5, 12.2, 12.8, 15.1, 15.3, 15.5, 15.a, 15.c
	8. Rehabilitate desert ecosystems to increase the promotion of eco-tourism by 17%.	Develop an eco-tourism strategy to revive traditions and reconnect Bahrainis with nature; develop and implement a communication strategy including outreach materials for potential cultural services.	   2.5, 12.2, 12.8, 15.1, 15.3, 15.5, 15.7
Agriculture ecosystem and Freshwater springs	9. Revive agricultural land systems, including Palm groves, by 25%.	Assess agricultural land systems and map their potential services; develop management plan for agricultural systems in partnership with farmers and stakeholders.	     2.5, 6.4, 6.5, 6.6, 8.4, 12.8, 15.1, 15.2, 15.3, 15.5, 15.8
	10. Decrease pest infestations in Palm grove by 100% and reduce other infestations.	Develop and implement an integrated pest management program to reduce red weevil and other pests.	  2.5, 15.5, 15.8.
	11. Protect no less than 100% of healthy freshwater spring.	Assess the status of freshwater springs and develop regulatory measures and an action plan to protect them.	 6.3, 6.4, 6.5, 6.6, 6.b
	12. Increase green area in the governorates by 50%.	Develop management strategy for streetscapes, pockets gardens and public spaces; rehabilitate green corridors and enhance the value of the green corridors and urban biodiversity.	  12.8, 15.9

3. APPROACH AND METHODOLOGY

3.1 Study objectives

The IUCN ROWA was commissioned to conduct a study to promote synergies among the biodiversity conventions and link SDG targets in Bahrain with the following objectives and activities:

- Moderate a consultative meeting on synergies within NBSAP in November 2016.
- Organize a back-to-back consultative meeting with the above focusing on SDGs and NBSAPs.
- Undertake a desk study on financing implication options.
- Prepare a report on synergies and SDGs.
- Set a framework for the operational plan for Hyrat Island.

3.2 Methodology

i. Gathering secondary information and data

Many publications, reports and statistics related to the research topic and research area are collected, and credible internet-based materials are also used. Secondary information is partly used in supporting questionnaire design and interpreting research findings.

ii. Participatory rapid review

Participatory rapid review is a key method in this assessment. This method has enabled key actors and stakeholders (SCE, ARCWH, DCG, DOF) and other stakeholders (UNEP/ROWA, IUCN/ROWA, etc.), to share and present information, facts and experience that relate to daily implementation of the biodiversity-related conventions through individual observations and informal interviews. A set of techniques and tools was adopted and used during a national workshop.

iii. Synergies workshop

A workshop addressing synergies, sustainable development goals and financing regarding biodiversity-related conventions in the national context of Bahrain was held in Manama, Bahrain from 30 November to 1 December 2016. The workshop took place with the participation of representatives from several national stakeholders, IUCN/ROWA and UNEP/ROWA.

iv. Synergies questionnaires

Questionnaires were developed in consultation with SCE, IUCN/ROWA and UNEP-ROWA in order to reflect the current situation and future options for synergies. The questionnaires were disseminated to all related stakeholders in Bahrain. Stakeholders filled the required sheets and the data obtained was analysed.

4. INSTITUTIONAL FRAMEWORK AND IMPLEMENTATION OF THE BIODIVERSITY- RELATED CONVENTIONS

4.1 CURRENT INSTITUTIONAL SYNERGY FRAMEWORK FOR THE IMPLEMENTATION OF THE BIODIVERSITY RELATED CONVENTIONS

This section provides an overview of the development of the institutional framework of biodiversity conservation in Bahrain. The Environmental Protection Committee (EPC), established by Legislative Decree No. 7 of 1980 under the Ministry of Health, was the first governmental authority concerned with environmental protection in Bahrain. The EPC was upgraded by Legislative Decree No. 21 of 1996, establishing 'Environmental Affairs' under the Ministry of Housing, Municipalities and Environment. In 2000, Environmental Affairs was reorganized under the Ministry of Municipalities Affairs and Urban Planning.

A second governmental body concerned with wildlife protection is the National Committee for Wildlife Protection, which was established by Legislative Decree No. 2 of 1995. This committee was upgraded to become the National Commission for Wildlife Protection by Legislative Decree No. 12 of 2000. Wildlife protection in Bahrain started as early as 1976 with the establishment of the Al-Areen Wildlife Park. This park is among the earliest sanctuary areas in the Arabian Gulf region dedicated to the protection of endangered animals. This park joined the National Commission for Wildlife Protection based on Directive No. 28 of 2000.

Another governmental sector concerned with fisheries management is the Directorate of Fisheries, which was previously part of Agriculture Affairs. To integrate efforts and resources and achieve effective protection of the environment, the main governmental bodies concerned with the environment were put under the umbrella of the Public Commission for the Protection of Marine Resources, Environment and Wildlife (PCPMREW) in 2002. The PCPMREW was established by Legislative Decree No. 50 of 2002 and reorganized further by Legislative Decrees No. 10 and No. 43 of 2005.

The Supreme Council for Environment (SCE) was established by Legislative Decree No. 47 of 2012. The SCE forms the foundation of the strategic integration of biodiversity considerations among all governmental and private sectors in Bahrain. The Legislative Decree with respect to establishing and organizing the Supreme Council for Environment (47/2012) explicitly indicates that decisions of the Council are binding to all ministries, authorities and institutions in the Kingdom (Article 4). Additionally, Article 5 indicates that all ministries, authorities and institutions must provide information and studies that the Council deems necessary for its work.

His Highness Shaikh Abdullah bin Hamad Al Khalifa, Personal Representative of His Majesty the King, is the President of the Supreme Council for Environment. Members of the SCE based on Legislative Decree No. 90 of 2012 with respect to the formation of the Supreme Council for Environment, include:

- Minister of Industry and Commerce
- Minister of Health
- Minister of Municipalities Affairs and Urban Planning
- Minister of Social Development
- Minister of Oil and Gas Affairs
- Minister of Electricity and Water
- The CO of the SCE
- Mrs. Khawla Al-Mohandy

According to Directive No. 91 of 2012 with respect to organizing the Executive Institution of the Supreme Council for Environment, there are six directorates, namely:

- Directorate of Human and Financial Resources
- Directorate of Projects and Services
- Directorate of Assessment and Environmental Control
- Directorate of Biodiversity
- Directorate of Environmental Policies and Planning
- Directorate of International Relation and Information

The establishment of the Directorate of Biodiversity at the Supreme Council for Environment in 2012 is considered a major step forward in strengthening the institutional capacity of biodiversity protection in Bahrain.

Al-Areen Wildlife Park is currently affiliated with the Supreme Council for Environment. The Directorate of Fisheries is currently part of Agriculture and Marine Resources Affairs at the Ministry of Work, Municipalities and Urban Planning. Figure 1 shows the chronological development of environmental bodies in Bahrain.

Figure 1: Institutions concerned with biodiversity in Bahrain



Steering Committee for Biodiversity

Bahrain established a steering committee for biodiversity. This committee is composed of relevant institutions concerned with the protection of biodiversity in Bahrain. The ministerial rank is not less than undersecretary assistant. This committee was formed based on the Council of Ministers Order No. 44 of 2011 with respect to establishing the National Steering Committee for Biodiversity.

According to this order, the committee aims to supervise the preparation and implementation of policies and programs aimed at preserving biodiversity and encourage the sustainable use of biodiversity resources. Additionally, it aims to ensure the fulfillment of the regional and international agreements related to biodiversity, particularly the obligations stipulated in the bilateral and multilateral agreements. The main tasks of this Committee include:

- Prepare the national biodiversity strategy and action plan and ensure the effectiveness of its programs and activities.
- Reexamine and update the national biodiversity strategy and follow up with the action plan and ensure that the plan is in harmony with the national priorities related to biodiversity.
- Implement plans for mainstreaming biodiversity in all governmental and non-governmental sectors.
- Identify potential terrestrial and marine protected areas with national, regional and international importance, especially those related to Ramsar and World Heritage Conventions.
- Prepare guidelines for the selection of protected areas and prepare operational plans for these areas that are in line with the obligations of the country towards regional and international agreements.
- Advise relevant parties when Bahrain joins bilateral and multilateral agreements related to biodiversity.
- Review periodic national reports from the Secretariats of bilateral and multilateral agreements related to biodiversity.
- Coordinate between all sectors in Bahrain to enhance Bahrain's efforts to preserve biodiversity in the regional and international forums and COP meetings.
- Propose mechanisms to strengthen cooperation in biodiversity conservation with regional and international institutions, in particular GCC countries and the League of Arab States.
- Supervise the implementation of biodiversity-related studies to assess the current condition and specify the anthropogenic threats to biodiversity resources.
- Propose mechanisms and programs to enhance the human, financial and technical resources related to biodiversity in Bahrain.
- Propose mechanisms and programs for environmental awareness in all Bahraini society.

The members of the committee were selected based on the Council of Ministers Order No. 81 of 2011 with respect to forming the National Steering Committee for Biodiversity. Recently, the Council of Ministers Order No. 44 of 2011 was amended by the Council of Ministers Order No. 47 of 2016. According to the recent Order (47/2016), the National Steering Committee constitutes representatives from:

- Coast Guards
- Customs Affairs
- Municipalities Affairs
- Marine Resources
- Ministry of Industry, Commerce and Tourism
- Ministry of Information Affairs
- Information and Electronic Government Authority
- Bahrain Authority for Culture and Antiquities
- University of Bahrain
- Chamber of Bahrain Industry and Commerce

The Supreme Council for Environment is the institutional body responsible for the implementation of the following biodiversity related conventions:

- The Convention on Biological Diversity (CBD)
- The Convention on International Trade in Endangered Species of Fauna and Flora (CITES)
- The Convention on Migratory Species of Wild Animals (CMS)
- The Convention on Wetlands of International Importance (Ramsar Convention)

The Directorate of Biodiversity at the Supreme Council for Environment is the focal point of the above mentioned conventions.

Bahrain Authority for Culture and Antiquities is considered the official institution responsible for the implementation of the World Heritage Convention. Bahrain Authority for Culture and Antiquities was established by Directive No. 10 of 2015 with respect to establishing Bahrain Authority for Culture and Antiquities. This Authority replaced the former Ministry of Culture and is administratively affiliated with the Council of Ministers.

4.2 CURRENT LEGAL SYNERGY FRAMEWORK RELATED TO THE IMPLEMENTATION OF THE BIODIVERSITY-RELATED CONVENTIONS

The implementation of a biodiversity-related convention is facilitated by a range of policies, strategies, national laws as well as regional and international agreements. The protection of biodiversity is widely reflected in several legal and environmental instruments ranging from the Constitution and the governmental action plan to national laws and international agreements.

Constitution of Bahrain

The protection of biodiversity and natural resources is reflected in the Constitution of Bahrain. Article 11 refers to the conservation of all natural resources. Similarly, Article 117 (A) emphasizes the legal regulation of investments in natural resources.

Economic Vision 2030

The Bahraini Economic Vision (2030) stresses the conservation of natural resources for future generations. This Vision also encourages young generations of Bahrainis to gain the knowledge related to their cultural heritage.

National Environmental Strategy

Bahrain launched the National Environmental Strategy (NES), which was approved by the Council of Ministers in 2006 (Edict No. 02-1902 on 8/10/2006). The NES identifies mechanisms by which principles of sustainable development can be implemented, including enforcing the role of EIA during planning, implementation and after commissioning phases of major projects, adopting principles of integrated environmental management for coastal and marine environments, applying valuation systems to estimate the costs of environmental degradation and rehabilitation, strengthening institutional and legal frameworks and increasing public awareness and participation.

Government Action Plan 2015-2018

Protection of the environment and conservation of natural resources are key elements in the Government Action Plan (2015-2016), which emphasizes the following:

- Give priority, in particular, to projects related to the protection of coastal and marine protected areas and support greening projects.
- Develop measures for the conservation of the environment and the protection of species, ecosystems and resources with environmental, economic and cultural importance.
- Develop new control measures and increase the frequency of inspections.
- Review and update the legislative framework of environmental issues to keep up with rapid developments and to ensure the protection of natural habitats, wild flora and fauna and marine life.
- Develop awareness and environmental education projects and strengthen partnerships with the local community in various environmental fields.

Regional agreements

The Convention on the Conservation of Wildlife and their Natural Habitats in the Gulf Cooperation Council Countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates) provides the basis for integrating biodiversity issues within national and regional environmental strategies and policies. This convention also helps with the implementation of biodiversity-related conventions and aims to effectively conserve ecosystems and wildlife habitats. It is also concerned with the protection of threatened species at the regional level, especially when the distribution of these species goes across the international borders of two or more neighbouring countries or when these species migrate across the boundaries of member states.

The Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution (Kuwait Convention), which was adopted in 1978, provides the basis for an integrated regional response to protecting biodiversity and combating pollution. Currently, there are four protocols under the Kuwait Convention: a protocol concerning regional cooperation in combating pollution by oil and other harmful substances in cases of emergency, a protocol concerning marine pollution resulting from exploration and exploitation of the continental shelf, a protocol for the protection of the marine environment against pollution from land-based sources and a protocol on the control of marine transboundary movements and disposal of hazardous wastes. These protocols collectively address the pollution of marine environment and propose criteria for protection and management of ecosystems and marine resources.

National legislations

Environmental legislations related to biodiversity in Bahrain are based on a range of directives, laws and orders with respect to the environment, regulation of fishing, exploitation of marine resources, protection of wildlife, environmental quality standards for wastewater effluents, declarations of protected areas and banning of catching endangered species. These legal instruments contribute to the implementation of biodiversity-related conventions.

Tables 4, 5 and 6 show a range of laws and decisions related to the protection of ecosystems, species and natural resources that were identified in the Bahraini NBSAP (pages 35-37):

Table 4: Laws and decisions related to the protection of ecosystems

Ecosystem	Law / Decision	Objectives
All Ecosystems	Law No. 21/1996	Protect human health, reduce pollution and degradation
Coral Reefs	Decision No. 8/2007	Ban fishing with floating or trawling nets
Beaches, Coasts, Marine Entries	Law No. 20/2006	Control or ban the use of beaches, reclamation
All Ecosystems	Law No. 33/2006	Protect ecosystems from domestic water disposal into public facilities
Mangroves	Law No. 53/2006	Ban all kinds of filling and reclamation
Mangroves	Decision No. 70/2011	Delineate Tubli Bay
Marine Submerged Land	Decision 16/2005	Ban the levelling of the marine submerged areas by the owners of these areas
Agricultural Areas	Decision No. 20/1983	Control the port of entry
Soil and Ecosystems	Law No. 37/2005	Control the production, import and use of pesticides in the GCC countries
Soil	Law No. 38/2005	Control the production, import and use of fertilizers and soil amendments in the GCC countries

Table 5: Laws and decisions related to the protection of species

Species	Law / Decision	Objectives
Sea Cows, Sea Turtles, Dolphins	Decision No. 3/2003	Total ban of hunting
Habara and Bahraini bulbul	Law No. 2/2005	Ban of hunting and trade
Local varieties of date Palm	Decision No. 3/2006	Ban imports of date palm and ornamental palm trees from countries infested with palm tree insects
Shrimp	Decision No. 1/2007	Ban fishing or selling; existence of control on fishing gears on boats and exhibiting fresh shrimp for sale
Mackerel fish	Decision No. 1/2011	Permission to use floating net to catch with the exception of the area around Hawar Islands
Crab	Decision No. 44/2011	Temporal ban of catchment, exhibition and selling
Sword fish	Decision No. 1/2012	Total ban of catchment and exhibition, selling, or use of the fish or any part of sword fish

Table 6: Laws and orders related to the protection of natural resources

Resource	Law / Order	Objectives
Groundwater	Law No. 12/1980	Regulate the use of groundwater; Put controls on wells drilling
Water from Allat and Khubar Layer; Clean old neglected springs or wells	Law No. 4/1983 (Renewal of Decision 23/1980)	Ban water extraction; Stop issuance of license
Groundwater	Law No. 13/1983	Put tariffs on consumption
Pesticides	Law No. 11/1989	Control the use of pesticides in agriculture
Urban Planning	Law No. 2/1994	Develop planning projects for cities and villages.
Fish Stock and Marine Resources	Law No. 20/2002	Regulate methods of fishing, excavation of sand, marketing and manufacturing of fisheries
Agriculture Drainage	Law No. 4/1985	Control the construction of agricultural drainage systems
Fish stock and Shrimp	Decision No. 11/2009	Temporal ban
Sand Excavation	Law No. 37/2014	Ban extraction and export

4.3 SUMMARY OF CURRENT NATIONAL PROGRAMS AND ACTIVITIES RELATED TO THE SYNERGY AND IMPLEMENTATION OF THE CONVENTIONS' DECISIONS

4.3.1 Overview on the implementation of CBD

Bahrain ratified the Convention on Biodiversity in 1996 through the Legislative Directive No. 18 of 1996. Bahrain has taken several initiatives toward implementing the CBD such as strengthening environmental governance, establishing protected areas, incorporating biodiversity in education and adopting a participatory approach in biodiversity conservation. The main aspects of CBD implementation include:

Environmental governance: The establishment of the Directorate of Biodiversity at the Supreme Council for Environment in 2012 is considered a major step towards strengthening the biodiversity governance.

Establishment of protected areas: Recognizing the role of protected areas in conserving and maintaining biodiversity and ecosystem services, Bahrain has established several terrestrial, coastal and marine protected areas. In addition to Al-Areen Wildlife Park, there are five natural protected areas in the marine environment of Bahrain (Table 4).

Table 7: Natural coastal and marine protected areas in Bahrain

Protected Area	Ecological Importance
Hawar Islands	Extensive growth of seagrass beds and algal mats that support vulnerable species such as dugongs, turtles and dolphins. These islands host one of the largest breeding colonies of the endemic Socotra Cormorants with a winter population of 200,000 individuals.
Ras-Sanad area in Tubli Bay	A sheltered lagoon hosting the last remaining mangrove ecosystems in Bahrain. Foraging and roosting ground for migratory and breeding birds.
Mashtan Island	Offshore island characterized by extensive growth of seagrass beds and algal mats for the feeding of dugongs and turtles.
Duwhat Arad	Tidal mudflat used as a feeding and roosting ground for important shorebird populations.
Fasht Bulthama	Small reef characterized by relatively high levels of diversity and cover (> 50%).

Supporting laws: Bahrain has issued several laws or orders to support the conservation of biodiversity. These laws address controlling reclamation, combating pollution, maintaining marine resources and regulating marine sand extraction. These legislative instruments include among others, Law (37) of 2014 on the extraction and sale of marine sand, Decree (20) of 2002 with respect to the Regulation of Fishing and Exploitation of Marine Resources and Ministerial Order (10) of 1999 with respect to Environmental Standards (Air and Water) and its subsequent amendments.

National Biodiversity Strategy and Action Plan (NBSAP): Bahrain developed its NBSAP in 2007 and updated it in 2015. The Bahraini NBSAP specifies the vision of Bahrain toward biodiversity, which states 'Strive towards improving resilience of all four ecosystems in the Kingdom and managing sustainably ecosystems services to ensure good quality of life for the Bahraini citizens by 2030.' The development of the NBSAP brought together a wide range of national stakeholders that represented the public and private sector, academia and research institutions in addition to members of civil society. The NBSAP defines the next 5-year strategy (2016-2021) for biodiversity conservation in the Kingdom of Bahrain and sets the national priorities. The plan specifies twelve national targets (aligned with the Aichi Biodiversity Targets), draws a roadmap for the implementation of priority actions, provides a plan for mainstreaming biodiversity conservation in national policy instruments and proposes the financial needs for biodiversity conservation in the Kingdom of Bahrain.

Education: Biodiversity and conservation issues have been incorporated in curricula at schools and universities. For instance, a course in conservation biology was held in the Department of Biology at the University of Bahrain in 2009. This course explored the principles of conservation biology, including biological diversity and its value, threats to biological diversity, conservation of the population and species levels and management of habitats and ecosystems. The course discussed aspects of biodiversity conservation in Bahrain. Several graduate students skilled in knowledge related to conservation biology joined relevant institutions.

Environmental awareness: The Supreme Council for Environment, in cooperation with the Ministry of Information and Ministry of Education, has increased the aspects of environmental awareness through a range of media and activities. These include organizing lectures and workshops, producing short biodiversity films and TV advertisements and spreading the knowledge of biodiversity in Bahrain through local newspapers and magazines.

Restoration programs: The transplantation project for cultivating and planting mangrove seedlings along the coastline of Tubli Bay began in 2013. This project aimed at rehabilitating the coastal area in Tubli Bay, which hosts the last remaining mangroves in Bahrain.

Ecosystem-based management: A project aimed at improving the environmental, cultural and socio-economic management of protected areas in Bahrain through the application of an ecosystem-based management approach was carried out during from 2012 to 2014. The project was implemented through collaboration between the Supreme Council for Environment, the Bahrain Authority for Culture and Antiquities and the United Nations Environment Program.

Studies related to ecosystem services valuation: Linking ecosystem services and human well-being can lead to a better understating of the importance of biodiversity by decision makers, stakeholders and the public. For that purpose, Bahrain has conducted initial studies to assess provisioning, supporting and regulating cultural goods and services provided by coastal and marine ecosystems in Bahrain.

Participatory approach in biodiversity conservation: The SCE adopts the participatory approach to planning and implementing projects related to biodiversity in Bahrain. The involvement of stakeholders and NGOs in the programs related to the protection of biodiversity has substantially increased.

Scientific research related to biodiversity: Scientific studies related to biodiversity have increased in the last five years. This is reflected in increased published articles, chapters and books related to biodiversity in Bahrain and the Arabian Gulf. The University of Bahrain and the Arabian Gulf University contribute significantly to the studies related to the environment and biodiversity.

Non-Governmental Organizations (NGOs): There is a growing number of NGOs concerned with the environment and biodiversity such as Bahrain Environment Society, Arab Youth Climate Movement, Youth and Environment Association and Friends of Environment Society. These societies are involved in several environmental initiatives and contribute to environmental awareness in Bahrain.

Overview of the implementation of CITES

Several measures were taken to implement the requirements of CITES. To achieve this, the administrative authority (Supreme Council for Environment) and scientific authority (University of Bahrain) were assigned. Several workshops for customs staff and other relevant bodies were organized. An action plan to implement the CITES was developed by SCE. Additionally, a national legislation to implement this convention was prepared.

Overview of the implementation of CMS

Bahrain signed a memorandum of understanding for the protection of turtles and their habitats in the Indian Ocean and Southeast Asia. Additionally, several national legislations to protect turtles were issued in Bahrain. A range of national supporting laws to protect the marine environment in general will contribute to the protection of migratory species in the Arabian Gulf. These include laws and decisions establishing marine protected areas and regulating the marine resources.

Overview of the implementation of Ramsar

Hawar Islands and Tubli Bay were identified as wetlands of international importance in 1997. An initial management plan for Hawar Island was issued in 2003. Fishing around Hawar Islands was regulated by the Order No. 13 of 2005 by the Regulation of Fishing in Hawar Islands and their Territorial Waters. This order was amended by the Order No. 4 of 2010, which restricts the use of hadhrah (an intertidal fixed stake) in Hawar Islands.

Measures were taken to protect Tubli Bay including controlling reclamation and conducting rehabilitation activities. The Ministerial Order No. 70 of 2011 for the Determination of the Reclamation Line in Tubli Bay directs all competent governmental authorities to take all necessary measures to protect the environment and wildlife in the bay. Additionally, a program was initiated to rehabilitate the degraded areas of Tubli by transplanting mangrove plants.

Overview of the implementation of WHC

Bahrain ratified the World Heritage Convention based on Directive No. 3 of 1991 with respect to Bahrain joining the World Heritage Convention. Since then, Bahrain managed to register two sites: Bahrain Fort and Pearling Road. Bahrain Fort, which is considered one of the major archaeological sites in the Arabian Peninsula, was registered as a UNESCO site in 2005. Pearling Road (Testimony of an Island Economy) was registered as a UNESCO site in 2012. Specialized studies, including ecological and socio-economic characterizations for the oyster beds areas were conducted. These studies helped in developing the strategic, ecological and operational objectives for the protection and specifying target indicators and monitoring programs for the Pearling Road. Bahrain established the Arab Regional Centre for World Heritage (ARC-WH) based on the directive No. 53 of 2010 for the ratification of the agreement between Bahrain and the UNESCO to establish this centre. This centre was established under the auspices of the UNESCO as an autonomous and independent legal entity at the service of Arab States Parties to the World Heritage Convention. The ARC-WH can play important role in soliciting efforts of implementing the WHC in Arab States Parties, including Bahrain. For instance, the ARC-WH supported the preparation of the National Red List for Bahrain. A preliminary list for potential UNESCO sites in Bahrain includes Barbar temples, Aali Burial Mounds, Hawar Islands, and Sar Archaeological Site. Nationally, several archaeological sites were added recently to the national heritage list based on Order No. 2 of 2015 for the inclusion of archaeological sites in the Bahraini national heritage. According to this order, thirty five sites were declared and included in the national heritage list.

5. CHALLENGES AND OPPORTUNITIES IN THE IMPLEMENTATION OF BIODIVERSITY- RELATED CONVENTIONS

5.1 CHALLENGES TO SYNERGY IN THE IMPLEMENTATION OF THE BIODIVERSITY-RELATED CONVENTIONS AT THE NATIONAL LEVEL

Table 8 below presents a summary of challenges and recommendations identified by stakeholders during the National Workshop on NBSAP - Dealing with Synergies, SDGs and Financing which was organized in Down Town Rotana, Manama, Bahrain (30 November – 1 December 2016). This table showing challenges and recommendations is not comprehensive and some of the stakeholders may find other issues that are relevant to them.

Table 8: Challenges facing synergies among biodiversity-related conventions in Bahrain

Challenges	Root causes
Limited technical knowledge of stakeholders	<ul style="list-style-type: none"> Limited events (workshops, campaigns, celebrating international biodiversity days, etc.) to raise awareness of stakeholders and share the benefits of coordination among the biodiversity-related conventions Inadequate mechanism to provide high political levels as well as parliament in Bahrain with information about the ongoing conservation process and the key findings from national reports to the conventions (e.g. platform) Limited incorporation of biodiversity into curricula at universities and other educational institutions
Insufficient human resources dedicated to the implementation of biodiversity-related conventions	<ul style="list-style-type: none"> Limited recruitment in Bahrain of well-trained and specialized human resources personnel who could work in activities related to conservation of biodiversity
Partial enforcement of the current legal framework and lack of biodiversity-related legal tools	<ul style="list-style-type: none"> Inadequate enforcement of the environmental law as well as biodiversity-related regulations
Failure to develop a synergies agenda at the national level	<ul style="list-style-type: none"> Scattered plans for implementing biodiversity-related conventions Partial evaluation of coordination level among implementing agencies regarding the biodiversity-related conventions
Limited financial resources directed to implementation of the biodiversity-related conventions (especially from the government)	<ul style="list-style-type: none"> Insufficient efforts for mobilizing resources at the national level for the implementation of biodiversity-related conventions in Bahrain Limited involvement of NFPs in the GEF National Portfolio Formulation meetings Concentration mainly on national project and not considering projects at the regional level
Gaps in information needed for national reporting	<ul style="list-style-type: none"> Scientific research programmes in Bahrain are insufficient to cover issues that arise from the implementation of the biodiversity-related conventions Inadequate periodic monitoring of the national sets of indicators related to conservation of biodiversity
Existing databases are not linked	<ul style="list-style-type: none"> The existing centralized national data sets (Central Informatics Organization) have limited inputs in the development of biodiversity reporting to conventions
Inadequate cooperation among NFPs of the biodiversity-related conventions and other conventions (e.g. desertification)	<ul style="list-style-type: none"> Limited capacity building programs to NFPs and other related staff

As described in the above table, the importance of promoting and enhancing biodiversity conservation awareness is mentioned in all biodiversity-related conventions as a priority obligation to convention members. In Bahrain, these activities have been conducted for many years to increase people's awareness of their roles and responsibilities in biodiversity conservation. The national biodiversity strategy and action plan (2016-2021) for Bahrain calls, in its fifth national target, "to raise awareness among 90% of key stakeholders and 50% of the general public." Bahrain also has a biodiversity awareness programme on natural resources and protection through a network of universities and research institutes. Education and training have also been carried out through training courses, workshops, information exchanges, etc.; however, biodiversity conservation knowledge and awareness of officials and communities need to be enhanced.

So far in Bahrain, the development of national strategies, plans, programmes and legal framework (policies and laws) for implementing biodiversity-related conventions have initial achievements (see page 70). However, capacity-related issues that cross-cut these conventions and effectiveness of the implementation of the provided national plans, programmes and legal framework need to be supported.

At the moment, coordination between the ministries, agencies, sectors, departments, agencies and localities is still weak and needs more efforts to be enhanced. Meanwhile, biodiversity problems are complicated and have great impacts; therefore, there should be an efficient cross-sectoral coordination mechanism to solve these problems. This is also a challenge for biodiversity conservation in general and for the implementation of the conventions, particularly in Bahrain, in the years to come.

Currently, some of the thematic reports, research works, scientific research themes, investigation projects, etc. conducted by individuals and organizations that are funded by the government and/or international organizations are scattered. The information-sharing mechanism between relevant ministries, sectors and agencies is still constrained.

A significant problem faced in Bahrain is the capacity of the national focal points to respond to the demands of coordinating and implementing biodiversity-related conventions. Most focal points have only few officials assigned to handle the conventions, and in addition to a number of biodiversity conventions each has to handle, they are also invariably involved in other pressing national environmental activities. The lack of sufficient human resources tends to limit the ability of related agencies to effectively manage biodiversity-related conventions at the national and local levels.

5.2 OPPORTUNITIES FOR BETTER SYNERGY WITH THE IMPLEMENTATION OF BIODIVERSITY-RELATED CONVENTIONS AT THE NATIONAL LEVEL

5.2.1 Common thematic approaches to the conventions

All of the biodiversity-related conventions promote cooperation amongst each other in the context of NBSAP revision and implementation and point to convention specific issues that should be integrated in NBSAPs, e.g. biodiversity mainstreaming into sectoral and cross-sectoral plans (Ramsar Convention and CBD) and poverty eradication and development concerns and priorities (CBD). Furthermore, all the biodiversity-related conventions (except WHC) clearly address enhanced cooperation among NFPs. Similarly, CMS and CITES have already developed guidance documents to assist their parties in this process. CBD and CMS decisions promote the monitoring of biodiversity and ecosystem services in the context of ecosystem-based adaptation to climate change. Similarly, CBD, CMS, CITES and Ramsar Convention have a number of decisions about enhancing monitoring programmes; these conventions point to a number of tools in that regard.

CBD, CMS, WHC and Ramsar Conventions have decisions that promote cooperation in enhancing existing databases and strengthening information systems at the national, regional and global levels. Regarding awareness-raising, areas for considering coherent outreach include: engagement with agriculture and energy sectors (CBD, CMS, Ramsar Convention and WHC), sustainable use of wildlife and combating wildlife crime (CBD, CITES and CMS), sustainable tourism (CBD and Ramsar Convention), community-based approaches to biodiversity conservation and sustainable use (CBD, CITES, Ramsar Convention and CMS), control and risk analysis of IAS (CBD, CMS, Ramsar Convention), special biodiversity events (i.e. World Days) (CBD, CMS and Ramsar Convention).

A number of conventions provide guidance for countries regarding mobilizing support through public-private partnerships (CBD, Ramsar Convention), enhancing efficiencies through strengthened coordination at local, national and regional levels (CBD and CMS) and developing joint funding proposals on NBSAP implementation (CBD) and wildlife conservation through support of ILC (CBD and CITES).

5.2.2 Opportunities for synergy

After consultations with stakeholders, the opportunities for synergy in Bahrain are clustered into five thematic sections: (1) National Biodiversity Strategy and Action Plan for Bahrain (NBSAP 2016-2021); (2) national reporting to conventions; (3) sharing information and raising public awareness; (4) capacity-building related to the implementation of conventions; (5) resource mobilization and institutional collaboration. These opportunities were developed in harmony with the decisions by the biodiversity-related conventions, as well as recommendations from UNEP, for the governments as effective synergy mechanisms. The opportunities presented in this report are those that were suggested at either of the stakeholders meetings and then refined by national and international experts.

5.3 National Biodiversity Strategy and Action Plan for Bahrain (NBSAP: 2016-2021)

1. Adopt a new law for the conservation of biodiversity and protected areas in Bahrain, where all PAs will be managed by one national organization (i.e. SCE).
2. Establish a national technical unit under the SCE titled “synergy unit” which will contain in its structure all the NFPs of the biodiversity-related conventions and at least one full-time staff responsible for each convention to help the NFPs build their capacities. Members of the “synergy unit” will work to liaise with NFPs, ensuring that the synergies between the different conventions are captured and implementation of the NBSAP is also harmonized.
3. Set up clear Terms of Reference (ToRs) for all NFPs responsible for the biodiversity-related conventions. In these ToRs, synergy efforts should be described in detail to ensure that all NFPs will work effectively to implement their conventions to conserve biodiversity.
4. Establish a dialogue platform that brings together NFPs of all conventions as a means to promote synergy and collaboration in the activities of the NFPs.
5. Organize a biennial national dialogue under the supervision of the SCE to ensure regular evaluation of the NBSAP implementation process.
6. All climate change, biodiversity and desertification projects funded by Bahrain’s government should be assessed to ensure that they are mutually supportive of the objectives of the biodiversity-related conventions.
7. Conduct assessments every 5 years to evaluate the level of coordination among implementing agencies.
8. Develop a national road map as well as five-year plans for effective implementation of the biodiversity-related conventions.
9. Implement NBSAP. The Bahraini government needs to establish a new “environmental police” department under the Ministry of Interior to better enforce the existing environmental laws in general and in biodiversity-related conventions in particular.

5.3.1 National reporting to conventions

- a. Develop and monitor appropriate national sets of indicators to track progress.
- b. Develop harmonized reporting protocols for biodiversity in Bahrain.
- c. Evaluate the different reporting structures for the targeted conventions and identify the key areas of overlap between the required information of the biodiversity-related conventions.
- d. Identify opportunities to streamline the national reports and develop guidelines to support synchronized reporting.

The following table provides the main reporting requirements for the biodiversity-related conventions that could help NFP to conduct the harmonization reporting exercise:

Table 9: Overview of the main reporting requirements of the biodiversity-related conventions

Biodiversity-related conventions	Type	Types of Information Requested
CBD	A report every 4 years	Status and trends of biodiversity; actions to implement the Convention; contribution to SDGs and the convention's Strategic Plan 2011-2020.
CMS	A report every 3 years	Trends in conservation statuses of listed species; actions to implement the Convention.
CITES	Annual report (trade data)	Details of international trade in listed species.
	Biennial report	Actions to implement the Convention, details of how the Convention is implemented (i.e. measures for compliance, enforcement and legislative and regulatory measures).
Ramsar Convention	An information sheet every 6 years	Status and trends of biodiversity at listed sites, actions to implement the convention at those sites.
	A report every 3 years	Status and trends of biodiversity, actions to implement the convention, details of how the convention is implemented.
WHC	On ad hoc basis (state of conservation)	Status and trends of biodiversity at listed sites, actions to implement the convention at those sites.
	A periodic report every 6 years	Status and trends of biodiversity at listed sites, actions to implement the convention at those sites.

5.3.2 Sharing information and raising public awareness

- a. Organize a national dialogue on specific targeted national scientific research programmes that address gaps in information and develop unified monitoring protocols.
- b. Make use of regional and global datasets (e.g. GBIF – IUCN) as a complementary source of data and encourage the use of traditional knowledge as well (e.g. grey sources).
- c. Host periodic events (workshops, campaigns, celebrations of the international biodiversity days, etc.) to raise awareness for all stakeholders of the benefits of coordination among the biodiversity-related conventions.
- d. Create a centralized national depository that will allow easy access to and/or storage of data for biodiversity reporting and build on existing facilities (e.g. CHM).
- e. Incorporate mainstream education from biodiversity-related conventions into the curricula at universities and other educational institutions.
- f. Set up formal mechanism to provide high political levels and the parliament in Bahrain with information about the ongoing conservation process and the key findings from national reports to conventions (e.g. platform).
- g. Conduct a five-year periodic assessment to identify gaps in information related to conservation of biodiversity.

5.3.3 Capacity building related to implementation of conventions

- a. Conduct an assessment of human resources at the national level in Bahrain in order to identify gaps and needs related to the conservation of biodiversity.
- b. Organize periodic common capacity building programmes for NFPs and other related staff.
- c. Hold preparatory meetings before COPs of biodiversity-related conventions.
- d. Organize capacity building workshops for NFPs and other key stakeholders on the implementation of biodiversity-related conventions.
- e. Implement a staff rotation policy that can enhance the experience and connections for staff (even among NFPs).

5.3.4 Resource mobilization and institutional collaboration

- a. Develop a national resource mobilization strategy for biodiversity-related conventions in Bahrain with involvement of all stakeholders (e.g. NGOs, private sector, etc.).
- b. Establish a new biodiversity fund as a centralized mechanism under the SCE to receive financial resources and donations from national and international organizations. This fund will be used to implement project enhancing synergies among biodiversity-related conventions.
- c. Establish a multidisciplinary Resource Mobilization Committee (RMC) that will work on different aspects of the resource mobilization cycle (planning, fund acquisition, writing project proposals for the resource partners, direct interaction with the partners, monitoring and evaluation for biodiversity Bahrain).
- d. Involve all NFPs in the national GEF steering committee, especially during the development of the national portfolio formulation meetings.
- e. Consider joint/integrated project proposals at the regional level.

6. FINANCIAL NEEDS AND OPPORTUNITIES FOR FINANCING MECHANISMS

6.1 NBSAP and the CBD Strategic Plan and Aichi Targets

The updated document of NBSAP, which has its own action plan up to 2021, is closely aligned with the CBD Strategic Plan and Aichi Targets (2011-2020), targeting Bahrain's unique priorities and circumstances. In light of Bahrain's commitment to achieve the targets of Sustainable Development Goals (SDGs) by 2030, several national committees were established (e.g. Biodiversity Steering Committee) to achieve harmonization between policies, strategies and national action plans for development by executing specific indicators to determine implementation efficiency in different fields, such as environmental sustainability, enabling women and improving the quality of health and education.

Decision makers for the SCE in Bahrain need to exert more effort to enhance the environmental trust fund mechanism and support more investment projects inside protected areas, particularly for ecotourism and medicinal plants, both of which generate revenue and provide job opportunities for local communities. Efforts must continue to receive funding from multilateral international agencies (e.g. UNDP/GEF, EU).

A resource mobilization strategy is urgently needed for several reasons:

- The long-term nature of NBSAP as a development strategy for biodiversity conservation in Bahrain needs to have its own financing mechanisms in order to mobilize funding for the national/international economic and political integration agenda.
- Meeting Bahrain's requirements and commitments to achieve the CBD Aichi Targets for biodiversity conservation at the national level will need considerable financial resources.

The overall objective of the proposed Resource Mobilization Strategy (RMS) is to ensure that there is a systematic and well-coordinated approach to acquiring, utilizing, managing, reporting, monitoring and evaluating assistance from international partners and for expanding the resource base to ensure sustainable resource availability for implementation of the NBSAP programmes in support of the national action integrating the Sustainable Development Goals. For developing an effective RMS for biodiversity-related conventions, the Bahraini government would need to consider the following:

6.2 PRINCIPLES OF THE PROPOSED RMS

6.2.1 Institutional capacity for resource mobilization

The SCE should establish a multidisciplinary Resource Mobilization Committee (RMC) under its full policy and supervision with a mandate to:

- Engage resource partners.
- Negotiate resource partners.
- Maintain a thematic cooperation principle.
- Prepare and disseminate the RMS manual that facilitates the implementation of the process.
- Review and update the financial mechanisms that may enhance the implementation of the RMS.
- Ensure that the implementation of the RMS is aligned annually with the national plan and the NBSAP.
- Maintain an annual work plan - entirely based on the RMS - with an expected timeframe and a synchronization to the RMS and its and planning cycle.
- Communicate projects' implementation results.

6.2.2 Resource planning

The RMC, through close consultation with relevant stakeholders, shall define the areas where resources will be required annually to enhance the active project portfolios according to the requirements of the NBSAP 2021. All financial resources acquired by the SCE shall be monitored and reported through the RMC. The RMC shall encourage cooperating partners to program their financial support over multi-year timeframes as well as make multi-year funding commitments in a manner that makes it easier for the SCE to plan and make good projections in accordance with predictable funding. The SCE shall request timely information on cooperating partners' commitments and disbursement schedules so as to secure the required predictability of external support and its effective integration into the planning system.

6.2.3 Resource budgeting and accounting

- The RMC shall facilitate an effective and credible budget preparation process consistent with the SCE. The development of realistic budgets will remain a priority.
- The capacity for planning, monitoring, evaluating and managing the budget will be strengthened further in order to facilitate reliable and timely reports that clearly separate commitments, allocated budgets and actual expenditure for all budgets.
- The RMC must have the capacity to strengthen the implementation capacities to ensure that expenditures are in line with approved budgets and enhance the monitoring of budget execution to minimize the levels of discretion that could threaten the expenditure execution systems.
- The RMC will - upon SCE approval - implement reforms, where necessary, to strengthen its budgeting and accounting systems.
- The RMC shall be supported by a necessary IT infrastructure that enables it to create an enhanced electronic database that would capture key funding and budgeting information as well as to publish and share information on financial opportunities.

6.2.4 Resource Monitoring and Reporting

The internal monitoring system will be one of the responsibilities of the RMC and shall be strengthened and aimed at generating and disseminating quality reports, which feeds back into the policy process for informed actions.

Cooperating partners will be encouraged to adopt a single monitoring framework that stipulates common formats, content and frequency for reporting. The development and use of websites and related products will help improve information sharing among all stakeholders, including cooperating partners. In the same manner, the monitoring and reporting communication infrastructure (both hardware and software) shall be strengthened. Effective development assistance reporting and monitoring systems shall be fully integrated into the other existing systems that monitor all resources for the SCE cooperation programs.

6.3 DIVERSE AND SECURED FUNDING PORTFOLIO FOR BROADER RESOURCE CHANNELS

The SCE shall diversify its funding mechanisms and exert more efforts to mobilize resources for biodiversity programs. The financial plan for the SCE that had been implemented in 2016 showed several mechanisms for generating domestic funds with their conditions and indicators, which can be summarized as follows:

6.3.1 Multilateral and bilateral assistance

As the institutional structure operating the CBD's financial mechanism, GEF is the most important multilateral body that provides financial resources to developing countries that are CBD members. One of the more common criticisms directed at GEF is that project proposals often have to wait for up to six years to obtain funding. For this reason, in December 2012, the CBD COP called on 'GEF to avoid additional and lengthy processes.' Furthermore, the COP invited developed country parties and others to increase their financial contributions through the financial mechanism during the sixth GEF replenishment period (GEF-6) while recognizing the increase of funds under GEF-5, taking into account the substantial financial needs in order to implement the obligations of the Convention and the Strategic Plan for Biodiversity 2011-2020.

6.3.2 Carbon finance

Carbon finance includes all sources of funding linked to reducing greenhouse gas emissions or adapting to climate change. In many respects, carbon finance represents one of the new and very promising opportunities available to support the long-term funding of biodiversity, PAs, indigenous lands and conservation projects. Carbon finance could take the form of carbon markets ('cap-and-trade') or taxes on carbon emissions. Although various taxes on carbon (and other greenhouse gases) have been introduced at the national level, the international community has relied mainly on setting up carbon markets to tackle climate change.

6.3.3 Investment project concessions

The best approach for this is that SCE has its own annual investment package agenda. Specific bidding documents are prepared annually for those packages and then announced for bidding. The concession revenues would be used at least for operation and fixed assets priorities related to conservation of biodiversity.

6.3.4 Joint venture partnership

PA financing mechanisms that have emerged in recent years, including partnerships of PAs with private sector, NGOs and local communities as well as joint venture contracts with investors, offer a great chance to substantially increase revenues for PAs in the future, and can also help to stimulate broader improvements of PA management and sustainability. The partnership with the private sector can be addressed under Public Private Partnerships (PPP) sharing and may be under Building Operating Transfer (BOT) or Development Operating Transfer (DOT) agreements.

6.4 FINANCIAL NEEDS AND GAPS IN SYNERGY IN BAHRAIN

Once the costs for all strategies and actions are identified, according to the NBSAP, the next step is to summarize all these costs. These costs can then be compared with the past financial baseline, as well as the projected future. As a starting point, during the synergy workshop, all participating stakeholders were asked to identify joint programmes that they think will support the synergy efforts in Bahrain. After collecting inputs from stakeholders, all joint programmes were described in the following table, where the identified programmes were linked to the targeted biodiversity-related conventions, allocated budget identified, planned budget recommended and the financial gaps calculated.

As described in Table 10 and Figure 2, the following remarks were made:

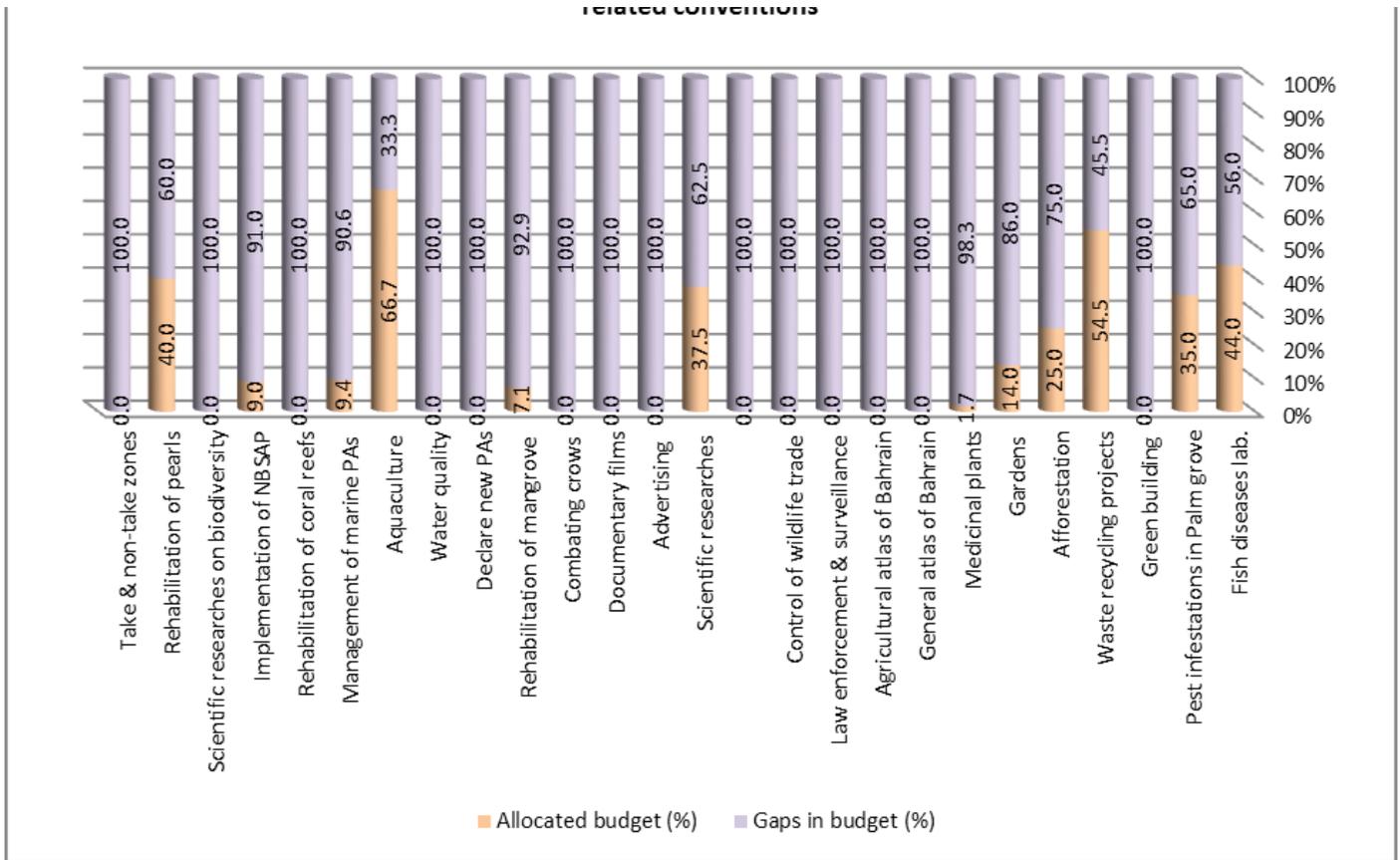
- There are several programmes with very limited budgets or even without a clear budget at all (e.g. green building, law enforcement and surveillance for environmental law, control of wildlife trade, declaration of new PA and rehabilitation of coral reefs). These programmes have big gaps in budget and SCE, through the proposed RMC, could seek more funds to cover these gaps as a priority.
- Other programmes have a considerable budget (e.g. pest infestations in palm grove) but they still have gaps in budget and more efforts are needed to fill these gaps.
- The remaining programmes have minor gaps in budget and they work well to some extent but they need also to collapse their gaps in the planned budget.
- The total allocated budget, by the Bahraini government, for all programmes represents 15.2% of the planned required budget while the remaining 84.8% represents the total gap in the budget for all programmes to be implemented efficiently.

Table 10: Current programmes identified by the different stakeholders

No	Stakeholders	Program(s) / Project(s)	Biodiversity related conventions*	Allocated budget (\$)	Planned budget (\$)	Gaps in budget (\$)
1	Ministry of Works, Municipalities and Urban Planning	Fish diseases lab	CBD, CMS, Ramsar	66000	150000	84000
2		Pest infestations in palm grove	CBD, CMS	350000	1000000	650000
3		Green building	CBD, WHC	0	9000000	9000000
4		Waste recycling projects	CBD, CMS, Ramsar	6000000	11000000	5000000
5		Afforestation	CBD, CMS	500000	2000000	1500000
6		Gardens	CBD	350000	2500000	2150000
7		Medicinal plants	CBD, CITES	50000	3000000	2950000
8	Informatics and E-Government Authority	General atlas of Bahrain	CBD, CMS, Ramsar, CITES, WHC	0	350000	350000
9		Agricultural atlas of Bahrain	CBD	0	150000	150000
10	Directorate of Coast Guards	Law enforcement and surveillance	CBD, CMS, Ramsar, CITES, WHC	0	750000	750000
11		Control of wildlife trade	CBD, CMS, CITES	0	1200000	1200000
12	Ministry of Education	Add curriculum to biodiversity in the education materials	CBD	0	3000000	3000000
13		Scientific researches	CBD, CMS, Ramsar, CITES, WHC	1500000	4000000	2500000
14	National media	Advertising	CBD, CMS, Ramsar, CITES, WHC	0	3000000	3000000
15		Documentary films	CBD, CMS, Ramsar, CITES, WHC	0	1000000	1000000
16	Supreme Council for Environment	Combating crows	CBD, CMS, Ramsar, CITES	0	2500000	2500000
17		Rehabilitation of mangrove	CBD, Ramsar	70000	980000	910000
18		Declare new PAs	CBD, CMS, Ramsar, CITES, WHC	0	22000000	22000000
19		Water quality	CBD, CMS, Ramsar	0	230000	230000
20		Aquaculture	CBD, CMS, Ramsar, CITES	2000000	3000000	1000000

21		Management of marine PAs	CBD, CMS, Ramsar, CITES, WHC	800000	8500000	7700000
22		Rehabilitation of coral reefs	CBD, Ramsar	0	3000000	3000000
23		Implementation of NBSAP	CBD, CMS, Ramsar, CITES, WHC	1060000	11800000	10740000
24	University of Bahrain	Scientific researches in conservation of biodiversity	CBD, CMS, Ramsar, CITES, WHC	0	1500000	1500000
26	Directorate of Fisheries	Take and non-take zones	CBD, Ramsar	0	1500000	1500000
Total				15230000	100110000	84880000

Figure 2: Financial gaps in programmes related to conservation of biodiversity



7. CONCLUSIONS AND RECOMMENDATIONS

7.1 General recommendations

The primary results of this report point out trends for better synergy in implementing the biodiversity-related conventions in Bahrain although they are limited to specific sectors. At the top of these is the issue of capacity. Although physical capacity is the most widely quoted source of inadequate efforts in dealing with the conventions, both at the negotiation and implementation levels, it is lack of mainstreaming of the biodiversity conservation policies with national sustainable development policies that seems to be the biggest issue the country now faces.

This report outlines an approach of synergy and harmonization that may provide a vision for implementing synergy among biodiversity-related conventions. The approach also provides an insight into the real challenges that national policy makers face when dealing with these issues. These insights can provide tips on how best to approach regional and global responses.

The following recommendations aim to suggest options for further action to promote synergies, cooperation and harmonization and are addressed to decision makers within the Bahraini Government. However, it is important to recognize that the identification and implementation of synergies is a process that needs to be implemented in accordance with the identified needs, the ongoing processes and available resources of each convention. In addition, many of the following recommendations, if implemented, would require the institutional and financial commitment of substantial resources, which may not be readily available.

Maintain communication with all stakeholders

Joint liaison groups of the biodiversity-related conventions should be established and meet on a regular basis. This could be the responsibility of the SCE as the major engine for these groups.

Enhance the existing information systems

- Links among information management systems involving biodiversity-related conventions could be particularly supportive to the national implementation of these conventions. These links could be established around themes such as species or sites, with links to a range of specific information systems held by agencies and organizations. Traditional knowledge could play a major role in this.
- Links to relevant websites of other conventions and mechanisms could be extremely useful, for example to the CBD Clearing-House Mechanism or NBSAP Forum, which encompasses a wide range of information and offers a number of search options.

Harmonize reporting to biodiversity-related conventions

- Joint standard data forms for the designation and/or description of sites, using, as appropriate, the same definitions and criteria, could be developed for a number of site-based conventions and instruments, allowing for an easier sharing of information and better access to relevant information.
- Opportunities for multiple designations, under more than one agreement, could lead to more collaborative action, in particular for threatened sites and regarding the attraction of funding.
- Joint site-based activities as already envisaged by few conventions could be developed for other conventions and provide case studies for on-the-ground cooperation. Such demonstration projects could develop lessons on how synergies between agreements manifest themselves at the national and local levels.

Focus on synergies at the national level

- All relevant actors, especially staff in the relevant ministries, need adequate capacity, particularly in terms of relevant information and resources. This includes full participation of national delegations at the regional and global levels. SCE could work to develop an annual schedule of meetings, based on the regional and international agendas of meetings of the biodiversity-related conventions, for staff of related stakeholders and partners to ensure regular management capacity of these stakeholders as well as effective dissemination of updated information on conservation of biodiversity at the global level.
- National and regional synergies workshops might provide a platform for developing synergies and linkages and discuss the benefits of a streamlined and harmonized approach to the implementation of the biodiversity conventions.
- The National Focal Points in Bahrain could exchange information and conduct discussions of areas of common interest on regular basis. At highest levels, these meetings could discuss policies, e.g. in the context of national sustainable development.
- SCE could be responsible for organizing national coordinating meetings ahead of meetings of the Conferences of the Parties to ensure an integrated approach and to avoid non-coordinated positions at COPs. These coordination meetings could also ensure a more integrated approach to reporting.
- Development of a common approach to implementation of biodiversity-related conventions, including working on the basis of a single integrated programme or strategy, might be seen as a goal for national harmonization efforts. This approach could be combined with any of the above-mentioned mechanisms, and would clearly lead to greater integration at the national and the regional levels.

7.2 Technical recommendations

National Biodiversity Strategy and Action Plan for Bahrain (NBSAP 2016-2021)

- Set up clear terms of reference, by the national biodiversity steering committee, for all NFPs responsible for the biodiversity-related conventions. In these TOR, synergy efforts should be described in detail to ensure that all NFPs work effectively to implement their conventions to achieve conservation of biodiversity.
- Establishment of a national technical unit, within the biodiversity department, under the SCE titled “synergy unit,” which will include all the NFPs of the biodiversity-related conventions in its structure. Members of the “synergy unit” will liaise with NFPs ensuring that the synergies between the different conventions are captured and implementation of the NBSAP is also harmonized.
- Organize periodic national dialogues, with two years’ span under the supervision of the SCE, to ensure regular evaluation of the implementation process of the NBSAP and the other conventions.
- SCE could establish a dialogue platform that will bring together NFPs of all conventions as a means to promote synergy and collaboration in the activities of the NFPs.
- All climate change, biodiversity and desertification projects funded by Bahrain’s government should be assessed by the national biodiversity steering committee to ensure that they are mutually supportive of the objectives of the biodiversity-related conventions.
- For seeking effective implementation of the NBSAP, a new police department could be established known as “environmental police” (including enforcement of laws related to Bahraini NBSAP) under the Ministry of Interior, as currently the Coast Guard is overwhelmed by the enforcement of the environmental law. In addition, the existing penalties in the Bahraini environmental law are weak and need to be strengthened with regard to violations against the environment in general and biodiversity-related conventions in particular.

- Develop a national road map and five-year plans for effective implementation of the biodiversity-related conventions aiming to establish a national schedule for tasks related to all NFPs for effective implementation of NBSAP.
- Conduct five-year periodic assessments to evaluate the level of coordination among implementing agencies.

National reporting to conventions

- Evaluate the different reporting structures for the targeted conventions and identify the key areas of overlap in the required information of the biodiversity-related conventions.
- Identify opportunities for streamlining the national reports and develop guidelines to support synchronized reporting.
- Develop and monitor appropriate national sets of indicators to track progress.
- Develop harmonized reporting protocols for biodiversity in Bahrain that help the NFPs to develop reliable national reports to the conventions without any contradictions in facts and figures within these reports.

Share information and raise public awareness

- SCE, in coordination with the National Biodiversity Steering Committee (NBSC), can create a centralized national depository that will allow easy access to and/or storage of data for biodiversity reporting and build on existing facilities (e.g. CHM).
- Make use of regional and global datasets (e.g. GBIF; IUCN) as a complementary source of data and encourage the usage of traditional knowledge (e.g. grey sources).
- Conduct a five-year periodic assessment to identify gaps in information related to conservation of biodiversity to be sure that there is periodic update of biodiversity data and information.
- Organize national dialogue on specific targeted national scientific research programmes to address gaps in information and develop unified monitoring protocols.
- Organize regular events (workshops, campaigns, celebrations, international biodiversity days, etc.) to raise awareness of the benefits of coordination among the biodiversity-related conventions for all stakeholders.
- Set up formal mechanisms (e.g. platform) to provide the high political levels and the parliament in Bahrain with information about the ongoing conservation processes (e.g. NBSAP implementation) and the key findings from national reports and conventions.
- Develop guidance for mainstreaming content from biodiversity conventions into education curricula at universities and other educational institutions.

Capacity building related to implementation of conventions for NFPs and related ministries

- SCE should first conduct an assessment of human resources at the national level in Bahrain in order to identify gaps and needs related to the conservation of biodiversity.
- Implement a staff rotation policy that can enhance the experience and connections of staff (even among NFPs).
- Organize periodic common capacity building programs to NFPs and other related staff.
- Hold preparatory meetings before COPs of biodiversity-related conventions to exchange information and develop a common vision for Bahraini negotiators.
- Organize capacity building workshops for NFPs and other key stakeholders on the implementation of biodiversity-related conventions.

Resource mobilization and institutional collaboration

- The NBSC can take necessary steps to establish a new biodiversity fund as a centralized mechanism under the SCE to receive financial resources and donations from national and international organizations. This fund will work to implement projects to enhance synergies among biodiversity-related conventions.
- Establishment of a multidisciplinary Resource Mobilization Committee (RMC) that will work on different parts of the resource mobilization cycle (planning, fund acquisition, writing project proposals for the partners, direct interaction with the partners, monitoring and evaluation for biodiversity in Bahrain).
- Develop a national resource mobilization strategy for biodiversity-related conventions in Bahrain with involvement of all stakeholders (e.g. NGOs, private sector, etc.).
- Involve all NFPs in the national GEF steering committee, especially during the development of the national portfolio formulation meetings.
- Consider joint/integrated project proposals at the regional level.

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ANNEX

Useful sources for biodiversity-related conventions

Sources	Links
UNEP (2014). Development of the “MEA synergies” debate, with a particular focus on the biodiversity-related conventions and the International Environmental Governance (IEG) reform process	http://wcmc.io/MEAsynergies
UNEP-WCMC (2012). Promoting synergies within the cluster of biodiversity-related multilateral environmental agreements. Cambridge, UK	http://www.unep-wcmc.org/system/dataset_file_fields/files/045/000/000/original/Promoting_synergies_in_the_biodiversity_cluster.pdf?1395761916
Norden (2010). Report from a Nordic Symposium: “Synergies in the Biodiversity Cluster”. Helsinki, Finland	http://www.biodivcluster.fi/pdf/Synergies_report_final.pdf
Secretariat of the Convention on Biological Diversity (2006). Guidance for Promoting Synergy among Activities Addressing Biological Diversity, Desertification, Land Degradation and Climate Change. Montreal, Technical Series No. 25. Montreal, Québec, Canada	https://www.cbd.int/doc/publications/cbd-ts25-.pdf
UNEP (2006). Manual on compliance with and Enforcement of Multilateral Environmental Agreements. Nairobi, Kenya	http://www.unep.org/delc/portals/119/UNEP_Manual.pdf
Díaz, C. (2001). Guide to Best Practices for Sectoral Integration: Legislative Complementarity and Harmonisation of Biodiversity-related Multilateral Environmental Agreements	https://www.cbd.int/doc/nbsap/legislation/LegalDiscussion.pdf
InforMEA (2015). United Nations Information Portal on Multilateral Environmental Agreements	http://www.informea.org/
Tematea (2010). Issue-based modules for coherent implementation of Biodiversity-related Conventions	http://www.tematea.org
UNEP-WCMC (2009). Preconditions for harmonization of reporting to biodiversity-related multilateral environmental agreements	http://www.cbd.int/cooperation/preconditions-harmonization-unep-wcmc-en.pdf
UNESCO World Heritage Centre (2013). Operational Guidelines for the Implementation of the World Heritage Convention. Paris, France	http://whc.unesco.org/archive/opguide-13en.pdf
UNEP/CMS (2013). Manual for National Focal Points in the CMS and its Instrument. Bonn, Germany	http://www.cms.int/sites/default/files/publication/manual_e.pdf
UNESCO World Heritage Centre (2012). Periodic Reporting – Handbook for Site Managers	http://whc.unesco.org/en/pr-questionnaire/
CITES (2011). Guidelines for the preparation and submission of CITES annual reports (2011)	http://www.cites.org/sites/default/files/eng/notif/2011/E019A.pdf
IPBES (2015). Science and policy for people and nature	http://www.ipbes.net
BIP (2015). Tracking global biodiversity	http://www.bipindicators.net
SPIRAL (2015). Interfacing biodiversity and policy	www.spiral-project.eu
UNEP (2013). Indicators and integration of CITES and CMS objectives as part of NBSAP updating	http://www.bipindicators.net/nationalindicatordevelopment/workshopsprojects/francophoneafricaworkshop
NBSAP Forum (2015) Support for action on NBSAPs	http://nbsapforum.net/
Convention on Biological Diversity, COP13, CBD/COP/DEC/XIII/24, 16 December 2016, Cancun, Mexico	https://www.cbd.int/conferences/2016/cop13-/documents
CMS Secretariat and Prip, C (2011). Guidelines on the integration of migratory species into National Biodiversity Strategies and Action Plans (NBSAPs)	http://www.cbd.int/doc/nbsap/NBSAP-guidelines-CMS.pdf
CITES (2011). Convention on International Trade in Endangered Species of Wilde Fauna and Flora (CITES): A Draft Guide for CITES Parties	http://www.cites.org/eng/notif/2011/E026A.pdf
BIOFIN Website	http://www.biodiversityfinance.net/resources

Conservation Finance Alliance (CFA) Environmental Funds Tool Kit	http://toolkit.conservationfinance.org/
Wealth Accounting and the Valuation of Ecosystem Services (WAVES)	http:// www.wavespartnership.org/en
UNDP (2014). The BIOFIN workbook: A Tool to Mobilize Financial Resources for Biodiversity and Development. New York, USA	http://www.biodiversityfinance.net/sites/default/files/uploads/documents/biofin_workbook_final.pdf
Parker, C; Cranford, M; Oakes, N; Leggett, M. eds. (2012). The Little Biodiversity Finance Book. Global Canopy Programme. Oxford, UK	http://globalcanopy.org/sites/default/files/LittleBiodiversityFinanceBook_3rd20%edition.pdf
CITES: Hope for a sustainable future (2014)	https://cites.org/sites/default/files/i/CITES_WWD_Brochure2014.pdf
CITES: 'Non-detriment findings'	https://cites.org/eng/prog/ndf/index.php
CEPA Programme of work on Communication, Education, Participation and Awareness	http://www.ramsar.org/activity/the-ramsar-cepa-programme
Ramsar Secretariat (2014). Handbook on the Best Practices for Planning, Design and Operation of Wetland Education Centres. Gland, Switzerland	http://www.ramsar.org/sites/default/files/documents/library/2014wec-hb_en_lr.pdf
Ramsar Convention Secretariat and World Tourism Organization (2012). Destination Wetlands: Supporting Sustainable Tourism. Gland, Switzerland and Madrid, Spain	http://archive.ramsar.org/pdf/cop11/tourism-publication/Ramsar_UNWTO_tourism_E_Sept2012.pdf
World Heritage in Young Hands Kit: To know, cherish and act	http://whc.unesco.org/en/educationkit/
Patrimonto's World Heritage Adventures	http://whc.unesco.org/en/patrimonito/
World Heritage Volunteers	http://whc.unesco.org/en/whvolunteers/
World Heritage Youth Forum	http://whc.unesco.org/en/youth-forum/
World Heritage Brochures and Info kits	http://whc.unesco.org/en/176/
World Heritage Review	http://whc.unesco.org/en/review/
The World Heritage List	http://whc.unesco.org/en/list/
List of World Heritage in Danger	http://whc.unesco.org/en/danger/
State of Knowledge Review: Connecting Global Priorities: Biodiversity and Human Health	https://www.cbd.int/getattachment/health/stateofknowledge/SOK-Biodiversity-full-final-low-res_040615_rev-(2).pdf
World Heritage and Sustainable Development	http://whc.unesco.org/en/sustainabledevelopment/
Operational Guidelines for the Implementation of the World Heritage Convention	http://whc.unesco.org/guidelines
UNESCO Database of National Cultural Heritage Laws	http://www.unesco.org/culture/natlaws/
UNEP/CBD (2014). Modalities and milestones for the full operationalization of Aichi Biodiversity Target 3, and obstacles encountered in implementing options identified for eliminating, phasing out or reforming incentives that are harmful for biodiversity (2014)	https://www.cbd.int/doc/meetings/sbstta/sbstta18-/official/sbstta-11-18-en.pdf
The Economics of Ecosystem and Biodiversity (TEEB) for Water	http://www.ramsar.org/sites/default/files/documents/library/teeb_waterwetlands_report_2013.pdf
Destination Wetlands: Supporting Sustainable Tourism (2012)	http://archive.ramsar.org/pdf/cop11/tourism-publication/Ramsar_UNWTO_tourism_E_Sept2012.pdf
World Heritage in Young Hands Kit	http://whc.unesco.org/en/educationkit/
Patrimonto's World Heritage Adventures	http://whc.unesco.org/en/patrimonito/



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