





# Convention on Biological Diversity

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**ENGLISH ONLY** 

AD HOC TECHNICAL EXPERT GROUP MEETING ON INDICATORS FOR THE STRATEGIC PLAN FOR BIODIVERSITY 2011-2020 Geneva, Switzerland, 14-17 September 2015 SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE Nineteenth meeting Montreal, Canada, 2–5 November 2015

# REPORT OF THE AD HOC TECHNICAL EXPERT GROUP ON INDICATORS FOR THE STRATEGIC PLAN FOR BIODIVERSITY 2011-2020

#### INTRODUCTION

- 1. In decision XI/3 the Conference of the Parties to the Convention on Biological Diversity took note of an indicative list of indicators available for assessing progress towards the goals of the Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets. This list, which Parties recognized as a starting point for assessing progress in the achievement of the Strategic Plan, was developed based on work undertaken by the first meeting of the Ad Hoc Technical Expert Group Meeting (AHTEG) on Indicators for the Strategic Plan for Biodiversity 2011-2020 held in High Wycombe, United Kingdom of Great Britain and Northern Ireland in 2011. The list of indicators contains 96 operational indicators divided into three categories: indicators which are ready for use at the global level (A), indicators which could be used at the global level but which require further development to be ready for use (B), additional indicators for consideration for use at the national or other subglobal level (C).
- 2. In paragraph 20(b) of decision XII/1, the Conference of the Parties requested the Executive Secretary to convene a further meeting of the Ad Hoc Technical Expert Group (AHTEG) on Indicators for the Strategic Plan for Biodiversity 2011-2020. In the terms of reference for the meeting, the Conference of the Parties requested the AHTEG:
- (a) To identify a small set of measurable potential indicators that could be used to monitor progress at the global level towards the Aichi Biodiversity Targets with a focus on those that are currently not well addressed and those that may be relevant to the United Nations post-2015 development agenda and sustainable development goals;
- (b) To prepare guidance on the different types of indicators and approaches used to monitor progress in the implementation of the Strategic Plan for Biodiversity 2011-2020 at the regional, national and subnational levels, reflecting, as appropriate, different perspectives among Parties for achieving conservation and sustainable use of biodiversity, drawing on a review of national reports and other relevant submissions to the Convention as well as reports prepared in compliance with other relevant processes.

<sup>&</sup>lt;sup>1</sup> For further details on this meeting see - <a href="https://www.cbd.int/doc/?meeting=AHTEG-SP-IND-01">https://www.cbd.int/doc/?meeting=AHTEG-SP-IND-01</a>

3. The AHTEG had before it a number of documents prepared by the Executive Secretary, the UNEP World Conservation Monitoring Centre, the Group on Earth Observations Biodiversity Observation Network and by other partners and conventions.<sup>2</sup>

#### ITEM 1. OPENING OF THE MEETING

- 4. The AHTEG meeting was opened by Mr. Robert Hoft on behalf of the Executive Secretary of the Convention on Biological Diversity. In his remarks he noted the importance of the meeting in the light of the upcoming discussions during the nineteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice. He noted that the Conference of the Parties would be reviewing implementation of the Strategic Plan for Biodiversity 2011-2020 at each of its subsequent meetings until 2020 and that indicators would be an important part of that process. He concluded by thanking the Government of Switzerland for hosting the meeting and expressed his gratitude to them, to the European Union and to the United Kingdom of Great Britain and Northern Ireland for their financial support to the meeting. He also thanked the Biodiversity Indicators Partnership, GEO BON, IPBES, UNCCD, FAO, UNEP-WCMC, OECD, and IUCN for contributing to the preparation of documents for the meeting.
- 5. On behalf of the Government of Switzerland Mr. Andreas Obrecht welcomed the members of the AHTEG to Geneva and noted that Switzerland was pleased to be able to host the meeting. He noted that he was looking forward to the technical discussions over the coming days and indicated that the good preparations for the meeting supported this. He also noted that indicator development should be thought of as a long term exercise and that participants should bear in the mind the link between indicators and the national reporting process under the Convention on Biological Diversity. He concluded by noting that the Convention needed a "SMART" set of indicators as well as a way of making the indicator framework more clear so that it would be better received.

#### ITEM 2. ORGANIZATIONAL MATTERS

#### 2.1. Adoption of the agenda

1. The Group adopted the provisional agenda (UNEP/CBD/ID/AHTEG/2015/1/1) as the basis for its work.

#### 2.2. Election of officers

2. After a self-introduction of participants, the Group elected Ms. Sarah Pearson Perret (Switzerland) as its Chair and Mr. Haigen Xu (China) as its Rapporteur. The list of meeting participants is contained in annex I.

#### 2.3. Organization of work

- 3. Under this item, the Group considered the proposed organization of work for the meeting. The Group decided to follow the proposal in the annotated agenda by first considering indicators for monitoring progress at the global level towards the Aichi Biodiversity Target and then addressing guidance on indicators and approaches to monitor progress in the implementation of the Strategic Plan for Biodiversity 2011-2020 at the regional, national and subnational levels.
- 4. In considering the items on its agenda, the AHTEG worked in groups and in plenary. The outcomes and recommendations are contained in the substantive report on the meeting (annex III to this report).

<sup>&</sup>lt;sup>2</sup> Document are accessible from <a href="https://www.cbd.int/doc/?meeting=ID-AHTEG-2015-01">https://www.cbd.int/doc/?meeting=ID-AHTEG-2015-01</a>

#### ITEM 3. SUBSTANTIVE ISSUES

- 3.1. Indicators for monitoring progress at the global level towards the Aichi Biodiversity Target of the Strategic Plan for Biodiversity 2011-2020
- 5. A general introduction on indicators under the Convention on Biological Diversity was provided by Mr. Robert Höft. He described past developments on monitoring and indicators and introduced the terms of reference for the AHTEG. Mr. Kieran Mooney introduced the main document for the meeting (UNEP/CBD/ID/AHTEG/2015/1/2/Rev.1). He described the different sections of the document, the information it contained and the approach that was used in preparing it.
- 6. Ms. Anna Chenery (UNEP-WCMC) introduced an information document reviewing the global indicator suite, key global gaps and indicator options for future assessment of the Strategic Plan for Biodiversity 2011-2020. Ms. Anne Larigauderie and Mr. Walter Jetz delivered a presentation providing on overview of the work being undertaken by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) related to indicators. Mr. Henrique Miguel Pereira provided an overview of the work being undertaken by GEO BON in support of generating data and standardizing variables that could serve to inform indicators. A number of participants reported on ongoing indicators work within the context of their respective organizations and processes. This included interventions by the Secretariat of UNCCD on the development of indicator of land degradation, by OECD on policy response indicators and by FAO on indicators being developed for monitoring selected Sustainable Development Goals.
- In addition to the document noted above, the AHTEG also had several information documents before it. These documents were a review of the global indicator suite, key gaps and options of the Strategic **Biodiversity** future assessment Plan for 2011-2020 (UNEP/CBD/ID/AHTEG/2015/1/INF/1), a review of national approaches to assessing progress towards the Aichi Biodiversity Targets (UNEP/CBD/ID/AHTEG/2015/1/INF/2), a document reviewing the use of indicators by Parties in their fifth national reports (UNEP/CBD/ID/AHTEG/2015/1/INF/3) and documents to assess the feasibility of developing an indicator based on countries' self-assessment of progress targets towards their national (UNEP/CBD/ID/AHTEG/2015/1/INF/4 UNEP/CBD/ID/AHTEG/2015/1/INF/6). Further this document drew on several information documents related to ongoing processes with implications for indicators. These include a proposal by the UNCCD Secretariat on an indicator of land degradation for joint monitoring and reporting by the Rio Conventions (UNEP/CBD/ID/AHTEG/2015/1/INF/5), biodiversity policy response (UNEP/CBD/ID/AHTEG/2015/1/INF/7), using global biodiversity indicators and underlying data to support NBSAP development and national reporting (UNEP/CBD/ID/AHTEG/2015/1/INF/8), barriers to the use of global indicators and datasets to support NBSAP implementation and national reporting processes (UNEP/CBD/ID/AHTEG/2015/1/INF/9), a toolkit for indicators of resilience in socioecological production landscapes and seascapes (UNEP/CBD/ID/AHTEG/2015/1/INF/10), the indicators process for the Sustainable Development Goals (UNEP/CBD/ID/AHTEG/2015/1/INF/11), the Ramsar Strategic Plan 2016-2024 (Resolution XII.2) (UNEP/CBD/ID/AHTEG/2015/1/INF/12), global biodiversity change indicators (UNEP/CBD/ID/AHTEG/2015/1/INF/13), integrating data from in-situ global impact reporting and data sets to measure and performance (UNEP/CBD/ID/AHTEG/2015/1/INF/14) for Agrobiodiversity and a proposal an (UNEP/CBD/ID/AHTEG/2015/1/INF/15). The list of documents is contained in annex II to this report.
  - 3.2. Guidance on indicators and approaches to monitor progress in the implementation of the Strategic Plan for Biodiversity 2011-2020 at the regional, national and subnational levels
- 8. Mr. Kieran Mooney introduced document UNEP/CBD/ID/AHTEG/2015/1/INF/3 which examined the use of indicators by Parties in their national reports. Ms. Anna Chenery introduced document UNEP/CBD/ID/AHTEG/2015/1/INF/2 which examined the different national approaches that

Parties use in assessing progress in the implementation of the Strategic Plan for Biodiversity and the attainment of the Aichi Biodiversity Targets.

#### ITEM 4. OTHER MATTERS

9. The members of the group visited the Les Conservatoire et Jardin Botaniques de la Ville de Genève. Director Pierre-André Loiseau and members of his team lead meeting participants through several of the institute's impressive labs, herbariums and historical collections. The role of the botanical garden in the onservation of plant biodiversity was discussed. AHTEG participants welcomed this visit and requested the organizers to convey their appreciation to the Director and team of the Botanical Garden.

#### ITEM 5. ADOPTION OF REPORT

10. At the plenary meeting on 17 September 2015, the AHTEG agreed that a draft report of the meeting would be prepared and made available for review by the AHTEG members. Following a review from participants, a revised draft would then be made available as an information document for the nineteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice.

#### ITEM 6. CLOSURE OF THE MEETING

11. Following the customary exchange of courtesies, the AHTEG meeting was closed at 5 p.m. on Thursday, 17 September 2015 by Ms. Sarah Pearson Perret.

# Annex I

# PARTICIPANT LIST

Country/Organization	Participant
Argentina	Ms. Carolina Padró
China	Mr. Haigen Xu
Colombia	Mr. Jorge Velásquez Tibatá
Costa Rica	Mr. Alvaro Enrique Aguilar Díaz
Ethiopia	Mr. Misikire Tessema Lemma
European Commission	Ms. Anne Teller
Georgia	Ms. Maka Bitsadze
India	Ms. Malvika Onial
Japan	Mr. Taku Kadoya
Palau	Ms. Umai Basilius
Serbia	Mr. Slaviša Popović
Switzerland	Mr. Andreas Obrecht
Switzerland	Ms. Sarah Pearson Perret
Tunisia	Mr. Mohamed Ali Ben Temessek
Turkmenistan	Ms. Shirin Karryeva
United Kingdom of Great Britain and Northern Ireland	Mr. Andrew Stott
Forest Peoples Programme	Ms. Jocelyn Carino - Nettleton
CBD	Mr. Kieran Mooney
CBD	Mr. Robert Höft
FAO	Mr. Damiano Luchetti
IPBES	Ms. Anne Larigauderie
IPBES	Mr. Walter Jetz
IPPC	Ms. Leanne Stewart
UNCCD	Ms. Sara Minelli
UNCTAD	Ms. Lorena Jaramillo
UNDP	Ms. Jamison Ervin
UNEP-WCMC	Ms. Anna Chenery
UNEP-WCMC	Mr. Derek Tittensor
UNEP-WCMC	Mr. Matt Walpole
Birdlife	Mr. Stuart Butchart
GEO BON	Mr. Henrique Miguel Pereira
IUCN	Ms. Ana Rodrigues
OECD	Ms. Katia Karousakis

### Annex II

# MEETING DOCUMENTS

Document number	Document title
UNEP/CBD/ID/AHTEG/2015/1/1	Provisional Agenda
UNEP/CBD/ID/AHTEG/2015/1/1/Add.1	Organization of Work: Annotations to the provisional agenda
UNEP/CBD/ID/AHTEG/2015/1/2/REV1	Global Indicators and Sub-Global Approaches to Monitor Progress in the Implementation of the Strategic Plan for Biodiversity 2011-2020
UNEP/CBD/ID/AHTEG/2015/1/INF/1/Rev.1	Review of the Global Indicator Suite, Key Global Gaps and Indicator Options for Future Assessment of the Strategic Plan for Biodiversity 2011-2020
UNEP/CBD/ID/AHTEG/2015/1/INF/2	Review of National Approaches to Assessing Progress Towards the Aichi Biodiversity Targets
UNEP/CBD/ID/AHTEG/2015/1/INF/3	The Use of Indicators to Assess Progress Towards the Attainment of the Aichi Biodiversity Targets in the Fifth National Reports to the Convention on Biological Diversify
UNEP/CBD/ID/AHTEG/2015/1/INF/4	Drawing Information from National Reporting Processes for the Review of Implementation of the Convention
UNEP/CBD/ID/AHTEG/2015/1/INF/5	Proposal on Joint Indicator for Monitoring Land Degradation
UNEP/CBD/ID/AHTEG/2015/1/INF/6	Analytical Options for Aichi National Indicators Reported to the CBD
UNEP/CBD/ID/AHTEG/2015/1/INF/7	Biodiversity Policy Response Indicators
UNEP/CBD/ID/AHTEG/2015/1/INF/8	Using Global Biodiversity Indicators and Underlying Data to Support NBSAP Development and National Reporting
UNEP/CBD/ID/AHTEG/2015/1/INF/9	Barriers to the Use of Global Indicators and Datasets to Support NBSAP Implementation and National Reporting Processes
UNEP/CBD/ID/AHTEG/2015/1/INF/10	Toolkit for Indicators of Resilience in Socio-Ecological Production Landscapes and Seascapes
UNEP/CBD/ID/AHTEG/2015/1/INF/11	Indicators Process for the Sustainable Development Goals
UNEP/CBD/ID/AHTEG/2015/1/INF/12	The RAMSAR Strategic Plan 2016-2024 (Resolution XII.2)
UNEP/CBD/ID/AHTEG/2015/1/INF/13	Global Biodiversity Change Indicators: Model-Based Integration of Remote-Sensing and In Situ Observations That Enables Dynamic Updates and Transparency at Low Cost
UNEP/CBD/ID/AHTEG/2015/1/INF/14	Overcoming the Challenges to Conservation Monitoring: Integrating Data From In-Situ Reporting and Global Data Sets to Measure Impact and Performance
UNEP/CBD/ID/AHTEG/2015/1/INF/15	The Agrobiodiversity Index: A Proposal

#### Annex III

#### INDICATORS FOR THE STRATEGIC PLAN FOR BIODIVERSITY 2011-2020

#### **EXECUTIVE SUMMARY**

- 1. In decision XI/3 the Conference of the Parties to the Convention on Biological Diversity took note of an indicative list of indicators available for assessing progress towards the goals of the Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets. This list, which was recognized by the Conference of the Parties, as a starting point for assessing progress in the achievement of the Strategic Plan, had been developed based on work undertaken by the first meeting of the Ad Hoc Technical Expert Group Meeting (AHTEG) on Indicators for the Strategic Plan for Biodiversity 2011-2020 held in High Wycombe, United Kingdom of Great Britain and Northern Ireland in 2011. In paragraph 20(b) of decision XII/1, the Conference of the Parties requested the Executive Secretary to convene a further meeting of the Ad Hoc Technical Expert Group (AHTEG) on Indicators for the Strategic Plan for Biodiversity 2011-2020 with the aim of identifying a small set of measurable potential indicators that could be used to monitor progress at the global level towards the Aichi Biodiversity Targets and to prepare guidance on the different types of indicators and approaches used to monitor progress in the implementation of the Strategic Plan for Biodiversity 2011-2020 at the regional, national and subnational levels.
- 2. The Ad Hoc Technical Expert Group (AHTEG) on Indicators for the Strategic Plan for Biodiversity 2011-2020 was held in Geneva, from 14 to 17 September 2015, with the generous support provided by the Government of Switzerland. Additional support for the preparation of background document was provided by the European Union and the Government of the United Kingdom of Great Britain and Northern Ireland.
- 3. The group identified a set of generic indicators for each target and listed specific indicators that were identified as relevant to monitoring the implementation of the Strategic Plan for Biodiversity 2011-2020. In doing so it considered indicators from other processes, including indicators proposed for the Sustainable Development Goals. A subset of 58 specific indicators, addressing all 20 Aichi Biodiversity Targets, was considered ready for use at the global level, while 30 of these were considered to also be easy to communicate and suitable for disaggregation/use at the national level and could be pursued as the small set of indicators called for by the Conference of the Parties. Further at least another 27 indicators were identified as being under active development, with a potential to fill gaps in coverage of the small set of indicators.
- 4. The group also identified a number of indicators that have the potential to strengthen the linkage between global, regional and national level indicators, and to facilitate the development of national indicators, offering opportunities to review, validate and supplement the national level data used in developing regional or global indicators. However the use of any indicator at the national level would require greater transparency and accessibility to the methods and data used in global indicators, and a mechanism to offer data disaggregated by country. The Group recognized that assessments of progress towards national targets would likely be based on a range of information sources including quantitative indicators, case studies, expert opinion, stakeholder views and consultations.

#### I. INTRODUCTION

5. In decision XI/3 the Conference of the Parties to the Convention on Biological Diversity took note of an indicative list of indicators available for assessing progress towards the goals of the Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets. This list, which was recognized by the Conference of the Parties as a starting point for assessing progress in the achievement of the Strategic Plan, had been developed based on work undertaken by the first meeting of the Ad Hoc Technical Expert

Group Meeting (AHTEG) on Indicators for the Strategic Plan for Biodiversity 2011-2020 held in High Wycombe, United Kingdom of Great Britain and Northern Ireland in 2011.

- 6. The indicators framework noted in decision XI/3 had served as a foundation for the preparation of the fourth edition of the *Global Biodiversity Outlook* (GBO-4) and the Biodiversity Indicators Partnership had a made use of the framework in the development of the Aichi Targets Passport.<sup>3</sup> Parties had made use of the list of indicators, to varying degrees, in their NBSAP development processes, the preparation of their fifth national reports and the development of biodiversity monitoring programmes.
- 7. In paragraph 20(b) of decision XII/1, the Conference of the Parties requested the Executive Secretary to convene a further meeting of the Ad Hoc Technical Expert Group (AHTEG) on Indicators for the Strategic Plan for Biodiversity 2011-2020 with the aim of identifying a small set of measurable potential indicators that could be used to monitor progress at the global level towards the Aichi Biodiversity Targets and to prepare guidance on the different types of indicators and approaches used to monitor progress in the implementation of the Strategic Plan for Biodiversity 2011-2020 at the regional, national and subnational levels.
- 8. The Ad Hoc Technical Expert Group (AHTEG) on Indicators for the Strategic Plan for Biodiversity 2011-2020 reviewed the indicative list of indicators, as noted in decision XI/3, together with additional indicators identified through the preparation of GBO-4 and the work of the Biodiversity Indicators Partnership, as well as indicators used or proposed by other organizations, including those being proposed by the United Nations system for the Sustainable Development Goals (noting that the latter may change in the light of the outcomes of the 47th Session of the United Nations Statistical Commission).

#### II. OBSERVATIONS AND RECOMMENDATIONS FROM THE GROUP

#### A. General points from review of use of indicators

- 9. The Ad Hoc Technical Expert Group on Indicators for the Strategic Plan for Biodiversity 2011-2020 welcomed the important contributions to the meeting from many international organizations, networks and partnerships including the members of the Biodiversity Indicators Partnership, BirdLife International, the Group on Earth Observations Biodiversity Observation Network (GEO BON), the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), the United Nations Convention to Combat Desertification (UNCCD), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), the Organisation for Economic Co-operation and Development (OECD), and the International Union for Conservation of Nature (IUCN), and noted the further opportunities for collaboration and continued support for work on indicators to track status and trends of biodiversity and related issues including underlying causes of biodiversity change, benefits from biodiversity and impacts of its loss and areas supporting implementation of the Strategic Plan for Biodiversity 2011-2020.
- 10. In considering the tasks assigned to it through decision XII/1, the Group made the following general observations. The Group noted:
- (a) The progress made towards the development and use of indicators to assess the implementation of the Strategic Plan and progress towards the Aichi Biodiversity Targets, as demonstrated in GBO-4 and its underlying technical studies;<sup>4</sup>
- (b) That in both GBO-4 and in national reports indicators were used alongside other types of information, scientific studies, case studies, expert opinion, stakeholder inputs and consultation to provide more comprehensive assessment of progress. About 40% of Parties included a specific assessment of progress towards targets in their national reports, but the methods used were not clear in all cases;

<sup>&</sup>lt;sup>3</sup> For further information on the Aichi Targets Passport see <a href="http://www.bipindicators.net/resource/aichipassport">http://www.bipindicators.net/resource/aichipassport</a>

<sup>&</sup>lt;sup>4</sup> For further information on GBO-4 and its technical studies see <a href="https://www.cbd.int/gbo4/">https://www.cbd.int/gbo4/</a>

- (c) Significant advances in the science and innovations of data management and analysis which create new opportunities for the development of indicators, including model-based approaches to reduce bias and the use of scenarios to develop projections;
- (d) The importance for global datasets and indicators to be validated through peer-review by Parties, national experts, and the scientific community more broadly, as well as the importance of providing opportunities to supplement global datasets with national data;
- (e) Opportunities for global indicators which are scalable and have sufficient resolution to be disaggregated to the national level to be offered for validation by national experts as part of the national reporting process;
- (f) That the ability to assess progress towards the Aichi Biodiversity Targets using indicators at the global level is variable with some targets and some target elements (as identified in GBO-4) currently lacking relevant and robust indicators (see figure 1);
- (g) That for many indicators the representativeness of data in terms of spatial, geographic or thematic coverage can be improved to reduce bias. It was further noted that many 'state' indicators for Targets 5-15 are underpinned by a relatively small set of 'essential biodiversity variables';
- (h) Some progress in capacity-building at the national level, an increase in use of indicators and ongoing work to develop indicators and associated monitoring systems with support from the Biodiversity Indicators Partnership, GEO BON and other initiatives;
- (i) That the use of indicators in national reports is variable. Indicators are most often used for Targets 5, 11 and 12, but there are often gaps for Targets 2, 3, 13, 16, 17, 18 and 19. Indicators in national reports from different Parties tend to address similar issues but use different data sources and methodologies. Parties often take advantage of indicators used in other national or international reporting processes and there are further opportunities to make these links. Further, the use of common indicators offers the possibility of strengthening synergies with other Conventions and international agreements, increasing efficiency and avoiding duplication of efforts;
- (j) That capacity for development and implementation of monitoring and indicator systems remains a limitation for many Parties.

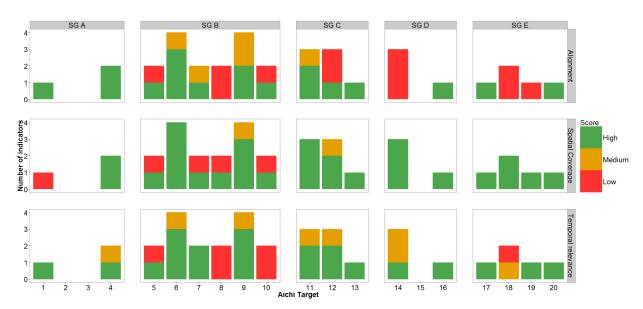


Figure 1: The number, alignment, spatial coverage and temporal relevance of the global indicators brought together under the Biodiversity Indicators Partnership in relation to the 20 Aichi Biodiversity Targets and the five Strategic Goals.<sup>5</sup>

#### B. The purpose of using global and national indicators

- 11. The AHTEG noted that indicators used to monitor progress towards the Aichi Biodiversity Targets could be used in a number of different contexts including:
  - (a) To inform and influence decision making;
- (b) Communicating with policymakers and other stakeholders unfamiliar with the Strategic Plan;
- (c) Mainstreaming the Aichi Biodiversity Targets within other international processes, including in particular the sustainable development goals, by facilitating the integration of biodiversity in other processes through shared indicators or (dis/aggregated) elements of indicators;
  - (d) Reporting by Parties;
- (e) To enable the Conference of the Parties and/or its subsidiary bodies, to monitor progress in implementation;
- (f) Providing an evidence base for developing future plans and targets within the Convention on Biological Diversity and other Multilateral Environmental Agreements.

#### C. Indicative list of global indicators

- 12. In considering the suitability of individual indicators, the AHTEG decided to use the criteria previously recommended by the Expert Meeting on Indicators of Biological Diversity Including Indicators for Rapid Assessment of Inland Water Ecosystems (UNEP/CBD/SBSTTA/9/INF/7, paragraphs 60-66) to ensure that indicators were relevant, scientifically sound, and sensitive to change.
- 13. In addition the AHTEG emphasized that where possible the data used in indicators should be representative in terms of spatial and thematic coverage: data and methods should also be transparent, accessible and supporting methods should be peer-reviewed to ensure scientific rigour.
- 14. The AHTEG reviewed the indicative list of indicators as noted in decision XI/3, together with additional indicators identified by the Biodiversity Indicators Partnership and/or used in the fourth edition of the *Global Biodiversity Outlook*, as well as indicators proposed by the United Nations system for the Sustainable Development Goals (SDGs), noting that the latter may change in the light of the outcomes of the 47th Session of the United Nations Statistical Commission. The AHTEG also considered indicators used by relevant Multilateral Environmental Agreements and international processes.
- 15. The list of indicative indicators from decision XI/3 was subsequently updated (see tables 1). In the updated list the group identified a set of generic indicators for each of the Aichi Biodiversity Target and listed specific indicators. Indicators that the group did not consider appropriate or feasible at the global scale were removed from the list.
- 16. With regard to Aichi Biodiversity Target 20, the AHTEG noted that in decision XI/3 the indicators identified for Aichi Biodiversity Target 20 were those agreed through decision X/3. Of the indicators identified in decision X/3 one of these was official development assistance. Official Development Assistance can currently be used globally and OECD provides periodic updates to it. It was also used in GBO-4 to help assess progress towards Aichi Biodiversity Target 20. Subsequently, in decision XII/3, the Conference of the Parties adopted a Financial Reporting Framework (annex II to decision XII/3) to be used by Parties to provide baseline information and reporting on their contribution

<sup>&</sup>lt;sup>5</sup> For further information on this assessment see document UNEP/CBD/ID/AHTEG/2015/1/INF/1/Rev.1.

to reach the global financial targets, under Aichi Biodiversity Target 20. Official Development Assistance is one element of the reporting framework. The AHTEG noted that the Financial Reporting Framework provided a basis for assessing progress towards Aichi Biodiversity Target 20.

- 17. The updated list of indicators provided a coherent framework for the development of indicators within the Convention and for promoting synergies with other relevant Multilateral Environmental Agreements and international processes. However there still remained a number or gaps for some target elements where specific indicators were not available or in development, or where there were no suitable data sets and/or methodologies at the time. For each of the identified gaps recommended generic indicators had been noted. Further efforts were required to address these gaps in coordination with other international initiatives.
- 18. The group also assessed the specific indicators for their usefulness in communicating the scope and ambition of the Strategic Plan and the progress towards Aichi Biodiversity Targets to a wide range of policymakers and stakeholders, for their potential for strengthening the linkage between global, regional and national level indicators, and for facilitating the development of national indicators and for the possibility of disaggregating the indicators data sets to the national scale among other things (see table 2). Those indicators which met the criteria above would constitute a small set of indicators for monitoring implementation of the Strategic Plan for Biodiversity 2011-2020 (see table 3). However indicators under active development were not assessed and, as several of these indicators were likely to be available in the near future, this list should be kept under review. A similar situation applied to those indicators proposed for the sustainable development goals.
- 19. Those indicators that the group identified as having potential use in reporting on related targets within the SDG process, including some of those currently in consideration by the United Nations Statistical Commission, are presented in table 4.

#### D. Guidance on national level indicators

- 20. The AHTEG highlighted the following issues with regard to the use of indicators at the national level:
- (a) There is a need for further guidance on the most appropriate indicators for use at the national level, including methods, data and monitoring requirements. In particular, there is a need for guidance on consistent approaches for development and use of indicators and underpinning data that could be aggregated into regional and global indicators;
- (b) Guidance is needed on the use of targets and indicators within national biodiversity strategies and action plans and on the use of these indicators in reporting on progress towards the Aichi Biodiversity Targets;
- (c) Greater coherence and collaboration is needed between national institutions involved in policy development, planning and implementation and monitoring and assessment, across different sectors:
- (d) Improved opportunities to review, validate and supplement national level data used within regional or global indicators are needed. This requires greater transparency and accessibility of the data sets and methodologies used in developing global indicators and facilities to make effective use of global datasets that have potential for disaggregation to the national level;
- (e) Enhanced capacity-building and opportunities for sharing experience and enhancing knowledge transfer between those working on indicators, both at national levels, and between national and global levels is required. Further the development of factsheets for each of the identified specific global indicators would facilitate their use at the national level;

- (f) Enhanced capacity-building in relation to mobilizing national data, improving data management systems and developing cost-effective monitoring programmes to support both national and global indicators is needed;
- (g) To promote consistency in national reporting and assessment processes, further guidance is needed on best practice in using indicators and other sources of information. Such guidance should address criteria and categories to be used in assessments of progress. It should also promote transparency regarding the sources of evidence used (quantitative indicators, case studies, expert opinion, stakeholder views and consultation), methods for considering conflicting lines of evidence and methods for determining the level of confidence in any assessment;
- (h) There is a need for the development of tools that would allow countries to undertake analysis based on global datasets and for tools which would allow for national data sets to feed into global data sets and indicator processes;
- (i) There is a need to increase the accessibility of global data sets, including by making national disaggregations easily available.

#### E. Role of indicators in national reporting and review of implementation of the Strategic Plan

- 21. The full set of global indicators provides a strong basis for making assessments but should be complemented with other sources of information, including information from national reports submitted by Parties, relevant assessments undertaken by IPBES, contributions from other MEAs, and contributions from indigenous peoples and local communities.
- 22. The online reporting tool under development by the Secretariat in response to decision XII/2 should offer an opportunity to improve consistency and efficiency and enhance flexibility of national reporting, including the use of indicators and assessments of progress towards national biodiversity targets and/or Aichi Biodiversity Targets. Information provided through the tool should inform the review of progress in implementation to be undertaken by each meeting of the Conference of the Parties until 2020 and complement information provided through the national reports. However the AHTEG noted that national assessment procedures could be complex and therefore may prevent more frequent reporting by Parties on their assessments of progress towards selected targets. The development of the online reporting tool would also need to be guided by relevant decisions of the Conference of the Parties.
- 23. The ATHEG noted that the sixth national reports could provide a means of collecting information from Parties that would complement, or support the development of, global indicators. This issue should be considered during the development of the guidelines for the sixth national reports.
- 24. The use of common indicators between the Convention on Biological Diversity and different multilateral environmental agreements represents an opportunity to align different reporting requirements.
- 25. The AHTEG recognized the strong link between the Aichi Biodiversity Targets and the sustainable development goals (see table 4). A number of specific indicators identified by the AHTEG had also been proposed to be used for assessing progress towards the Sustainable Development Goals. Conversely a number of the indicators proposed for the SDG process were also relevant to assessing the Aichi Biodiversity Targets. Given these multiple linkages, efforts should be made to promote the use of shared indicators and information derived from the list of indicators identified by the AHTEG could be used to demonstrate the contribution of actions under the Strategic Plan to the achievement of the SDGs.
- 26. GBO-4 provided an assessment of mid-term progress towards the Aichi Biodiversity Targets and a review of implementation of the Strategic Plan based on indicators and other sources of information. The AHTEG noted that reviews of progress in the implementation of the Strategic Plan for Biodiversity 2011-2020 would be able to draw relevant conclusions from completed IPBES assessments, while avoiding the need to duplicate the assessment process. This may depend on the extent to which the IPBES assessments were aligned with the Aichi Biodiversity Targets and utilized relevant indicators.

27. An important purpose of the next GBO will be to provide an evidence base for the next Strategic Plan and an update of its goals and targets post 2020. Therefore the GBO, building on the outputs of IPBES, where appropriate, should include information on trajectories, scenarios, policy options and potential outcomes so that this information can be considered in developing any future targets. The production of these elements of the GBO should be timed to enable consideration by the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) and the Subsidiary Body on Implementation (SBI) in advance of the fifteenth meeting of the Conference of the Parties.

#### F. The role of community based monitoring

- 28. The AHTEG took note of the progress made on indicators relevant to Articles 8(j) and 10(c) of the Convention. In this context it was noted that Aichi Biodiversity Target 18 was relevant for and applicable to all Parties to the Convention, not just those countries where there were recognized indigenous peoples. It covered traditional knowledge, innovations and practices, and customary sustainable use of indigenous peoples and local communities (IPLCs) under Article 8(j), Article 10(c) and other related provisions.
- 29. Parties reporting on Target 18 had mostly focused on response/process indicators about laws, programmes, or actions they had taken to implement this target. The agreed indicators (decision X/43) related to traditional knowledge (on linguistic diversity and numbers of speakers of indigenous languages; traditional occupations; land-use change and land tenure in the traditional territories of indigenous and local communities; traditional knowledge and practices are respected through their full integration, safeguards and the full and effective participation of indigenous and local communities in the national implementation of the Strategic Plan) were outcome indicators which required different methodologies and different sources of data to generate the needed information.
- 30. The AHTEG discussed indicators to detect land-use change in traditional territories of indigenous and local communities, noting that land acquisitions, land-use change and land cover conversions constituted a major threat to customary sustainable use practices and traditional knowledge of IPLCs.
- 31. The AHTEG took note of the role of IPLCs in validating data products derived from remote sensing and other sources, thereby supporting larger planning efforts, such as assessments of the adequacy of the protected area systems including the role of ICCAs in this context. Traditional knowledge combined with the use of new technologies enabled indigenous peoples and local communities to map and monitor biodiversity and contribute to information systems in support of local governance and planning. Community-based monitoring and information systems were important complementary sources of knowledge that could inform local, national and global policy and decision-making, monitoring and reporting. Significant efforts were being made to support monitoring of Aichi Biodiversity Target 14 as a key priority for IPLCs

#### G. Invitation/information to other initiatives

- 32. The AHTEG took note of a number of processes developing and applying indicators relevant to the Convention:
- (a) *IPBES*: Drawing on the BIP and GEO BON set of indicators the IPBES Task Force on Data and Knowledge has developed a draft core set of indicators to support coherent regional and global assessments. The list has been reviewed and approved by the regional assessments with additions expected as the global assessment begins. As further indicators are added and IPBES regional and global assessments advance, close communication and shared information about work and reporting processes between the respective Secretariats of CBD and IPBES is seen as important, in accordance with decision XII/25:
- (b) *UNCCD*: The UNCCD secretariat is promoting the use of the indicator 'Trends in land degradation', which is currently the only indicator being proposed for the SDG target 15.3, to monitor

progress towards Aichi Biodiversity Target 15. The indicator uses a practical suite of metrics (i.e. trends in land use/cover, trends in land productivity and trends in soil organic carbon stocks) within a tiered framework to monitor trends in degrading, stable, or improving land at the global, regional and national level. Data underpinning the indicator is mainly derived from remote sensing, can be disaggregated to the national level and offered for validation to country Parties as part of the national reporting process. The indicator is currently under active development and testing at national level in the context of the Land Degradation Neutrality project;

- (c) *IUCN and BirdLife International*: Work is being undertaken on the development of a global standard for the identification of Key Biodiversity Areas (KBAs) and a KBA partnership is being established. This work is relevant to the identification of areas of particular importance for biodiversity under Target 11 and the recommended generic indicator on trends in protected area coverage of Key Biodiversity Areas;
- (d) Biodiversity Indicators Partnership: As part of the Mind the gap and Connect projects, the Biodiversity Indicators Partnership is supporting the use of indicators within the biodiversity related Conventions by working to enhance the global suite of indicators available and enable the development of specific indicators with particular regard to gaps in global indicators for the Strategic Plan, and further, to work with partners to provide information, guidance and capacity-building for the development of indicators identified at the national level;
- (e) GEO BON: Projects such as Map of Life and PREDICTS are developing large-scale analytical approaches and modelling techniques enabling the development and validation of scalable indicators with high temporal and spatial resolution. Indicators being developed cover Targets 5, 11, 12, 14, 15 and 19. They are mostly based on a small set of essential biodiversity variables modelled at the global scale;
- (f) *OECD*: A number of processes are ongoing to collect data which is relevant to monitoring the implementation of the Strategic Plan for Biodiversity 2011-2020. This includes information on official development assistance, incentives, and environmental expenditures among other things. This information is available from *OECD.Stat* for members of OECD as well as other selected countries.

#### H. Immediate actions

- 33. As part of its discussions the group identified a number of actions which could facilitate the identification and development of global indicators as well as the increased use of indicators at the national level. These actions are:
  - (a) The list of generic and specific indicators identified should be peer-reviewed;
- (b) SBSTTA should consider requesting the Executive Secretary of the Convention on Biological Diversity to provide an update of the progress in selecting indicators for the sustainable development goals so that this issue could be further considered by the Convention;
- (c) Given the relevance of the indicators to other multilateral environmental processes the results of the AHTEG should be communicated to, among others, the SDG process, IPBES and the RAMSAR Convention, so that the results can be considered in their assessment processes. Further, IPBES should be invited to consider using the updated list of indicators, as appropriate, when undertaking regional and global assessments of Aichi Biodiversity Targets and to provide input on updates to the list of indicators to support, as possible, a harmonized approach;
- (d) For the identified indicators, factsheets should be developed, where they do not already exist, to increase understanding and to support their use by Parties and stakeholders;
- (e) Parties, other Governments and stakeholders should be encouraged to promote monitoring efforts, including in relation to essential biodiversity variables;

- (f) SBSTTA should consider requesting the Biodiversity Indicator Partnership to review its membership in the light of the updated list of generic and specific indicators to develop global indicators to address the identified gaps and to continue its work in supporting countries in developing and using national indicators;
- (g) Encourage those organizations working on indicator development to undertake work aimed at addressing the indicator gaps identified by the group;
- (h) Call on those institutions who are compiling global indicators to make national disaggregation of data easily available, including by supporting the free and open access to data and methodologies.

# Appendix I

**Table 1** – This table illustrates the relationship between the Aichi Biodiversity Targets and the generic and specific indicators identified by the AHTEG.<sup>6</sup> In many cases the identified indicators are relevant to the several Aichi Biodiversity targets; however each indicator has only been included in the table once in order to limit the size of the table, with each indicator listed according to the Aichi Biodiversity Target to which it is most relevant. Those cases where no specific indicator was identified for the generic indicator have also been noted. These represent gaps that need to be addressed.

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
Target 1 - By 2020, at the latest, people are aware of	Trends in awareness and attitudes to biodiversity	Biodiversity Barometer
the values of biodiversity and the steps they can take to conserve and use it sustainably		Online interest in biodiversity (Google Trends)
		Percentage of students of a given age (eg 15-year olds) enrolled in secondary school demonstrating at least a fixed level of knowledge across a selection of topics in environmental science and geoscience (proposed indicator for SDG target 4.7)
	Trends in public engagement with biodiversity	Civil membership to biodiversity-relevant NGOs
Target 2 - By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	Trends in incorporation of measures of stock and flow of natural capital into national accounting	Number of countries implementing natural resource accounts, excluding energy, within the System of Environmental-Economic Accounting (SEEA)
	Trends in number of countries that have assessed values of biodiversity, in accordance with the Convention	Number of countries with National Economic Ecosystem Assessments and subnational assessments
		Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020 (proposed indicator for SDG target 15.9)
	Trends in integration of biodiversity and ecosystem service values into sectoral and development policies	Integration of biodiversity in National Development Plans, poverty reduction strategies or other key development plans
Target 3 - By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated,	Trends in the number and value of incentives, including subsidies, harmful to biodiversity, removed, reformed	Trends in the number and value of incentives, including subsidies, harmful to biodiversity, removed, reformed

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<sup>&</sup>lt;sup>6</sup> Indicators being proposed by the United Nations system for the Sustainable Development Goals have been included in the table. Changes to these may be required in the light of the outcomes of the 47th Session of the United Nations Statistical Commission.

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international	or phased out	or phased out
		Trends in potentially harmful elements of government support to agriculture (produced and consumer support estimates)
obligations, taking into account national socioeconomic condition		Trends in potentially harmful elements of government support to fisheries (produced and consumer support estimates)
		Agricultural Export Subsidies / OECD PRODUCER SUPPORT ESTIMATE (PSE) (proposed indicator for SDG target 2.b)
	Trends in development and application of incentives that promote biodiversity conservation and sustainable use	Number of countries with national instruments on biodiversity-relevant taxes, charges and fees
		Number of countries with national instruments on payments for ecosystem services schemes
		Number of countries with national instruments on REDD plus schemes
		Number of countries with national instruments on biodiversity relevant tradable permit schemes (e.g. ITQs for fisheries)
		Number of countries with national instruments on biodiversity offset schemes
Target 4 - By 2020, at the latest, Governments,	Trends in population and extinction risk of utilized	Red List Index (impacts of utilization)
business and stakeholders at all levels have taken steps to achieve or have implemented plans for	species, including species in trade	Percentage of Category 1 nations in CITES
sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.		Ratio between detected illegal trafficking and legal trade in wildlife and wildlife products (proposed indicator for SDG target 15.7)
	Trends in ecological footprint and/or related concepts	Ecological footprint
		Material efficiency/productivity (see SDG target/indicator 8.4)
	Number of countries with SCP National Action Plans or SCP mainstreamed as a priority or target into national	

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
		policies (proposed indicator for SDG target 12.1)
		Material Footprint (MF) and MF per capita (proposed indicator for SDG target 12.1)
	Ecological limits assessed in terms of sustainable	Human appropriation of net primary productivity
	production and consumption	Human appropriation of fresh water (water footprint)
		Percentage of change in water use-efficiency over time (proposed indicator for SDG target 6.4)
	Trends in biodiversity of cities (decision X/22)	Number of cities applying and reporting on the Cities Biodiversity Index
		Efficient land use (by enhancing inclusive and sustainable urbanization) (ratio of land consumption rate to population growth rate at comparable scale) (proposed indicator for SDG target 11.3)
	Trends in extent to which biodiversity and ecosystem service values are incorporated into organizational accounting and reporting	Percentage of businesses reporting on environmental issues making specific references to biodiversity, natural capital and/or ecosystem functions and services
Target 5 - By 2020, the rate of loss of all natural	Trends in extent of forest	Trends in forest extent (tree cover)
habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.		Forest area as a percentage of total land area (proposed indicator for SDG target 15.1)
	Trends in extent of natural habitats other than forest	Percentage of change in wetlands extent over time (proposed indicator for SDG target 6.6)
		Natural habitat extent (land area minus urban and agriculture)
	Trends in fragmentation of forest and other natural habitats	No specific indicators identified
	Trends in degradation of forest and other natural	Biodiversity Habitat Index
	habitats	Local Biodiversity Intactness Index
		Trends in land degradation (proposed for SDG target 15.3)

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
	Trends in extinction risk and populations of habitat specialist species in each major habitat type	Red List index (forest specialists)
		Living Planet Index (forest specialists)
		Species Habitat Index
Target 6 - By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably,	Trends in certified sustainable fisheries	Trends in fisheries certified by the Marine Stewardship Council
legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species,		Proportion of fish stocks within biologically sustainable levels (proposed indicator for SDG target 14.4)
fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems	Trends in proportion of depleted, target and bycatch species with recovery plans	No specific indicators identified
are within safe ecological limits.	Trends in population and extinction risk in target and	Red List Index (harvested aquatic species)
	bycatch species	Red List Index (impacts of fisheries)
		Living Planet Index (trends in target and bycatch species)
	Trends in destructive fishing practices	Global effort in bottom trawling
		Progress by countries in the implementation of international instruments aiming to combat IUU fishing (proposed indicator for SDG target 14.6)
	Trends in proportion of fish stocks outside safe biological limits (questions concerning MSY)	Proportion of fish stocks within biologically sustainable levels (proposed indicator for SDG target 14.4)
	Trends in catch per unit effort	Estimated fisheries catch and fishing effort
		Percentage of catches that are subject to a catch documentation scheme or similar traceability system as a percentage of the total catches that are less than x tons and traded in major markets (proposed indicator for SDG target 14.b)
Target 7 - By 2020 areas under agriculture,	Trends in proportion of area of agriculture under	Areas of agricultural land under organic production
aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	sustainable practices	Areas of agricultural land under conservation agriculture
		Percentage of agricultural area under sustainable agricultural practices (proposed indicator for SDG

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
		target 2.4)
	Trends in extinction risk and populations of agroecosystem associated species	Wild Bird Index for farmland birds / Living Planet Index (farmland specialists)
	Trends in proportion of production of aquaculture under sustainable practices	Proportion of aquaculture under certified sustainable production
		Productivity of aquaculture in utilizing natural resources (land, water and wild stock) (proposed indicator for SDG target 14.7)
	Trends in proportion of area of forest production under sustainable practices	Proportion of area of forest production under FSC and PEFC certification
		Sustainable Forest Management Index (proposed indicator for SDG target 15.2)
	Trends in extinction risk and populations of forest- specialist species in production forest	No specific indicators identified
Target 8 - By 2020, pollution, including from excess	Trends in pollutants	Trends in emissions NOX, SOX, POPS
nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity		Trends in pesticide use
		Trends in CFC emissions (chlorofluorocarbons (CFCs) in ODP
		Floating Plastic Debris (Particles/Km2) (proposed indicator for SDG target 14.1)
		Mean levels of exposure to ambient air pollution (population weighted) (proposed indicator for SDG target 3.9)
		Number of deaths from air, water and soil pollution and contamination (proposed indicator for SDG target 3.9)
	Trends in extinction risk and populations driven by pollution	Red List Index (impacts of pollution)
	Trends in ecosystems affected by pollution	Water Quality Index for Biodiversity
	Trends in nutrient levels	Trends in Nitrogen deposition
		Loss of reactive nitrogen to the environment

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
		Trends in global surplus of nitrogen
		Nitrogen use efficiency composite indicator - reflects the N input, the N output, the output/input ratio, and the N surplus/deficit (proposed indicator for SDG target 14.1)
		Index of Coastal Eutrophication (ICEP) (proposed indicator for SDG target 14.1)
		Percentage of water bodies with good ambient water quality (proposed indicator for SDG target 6.3)
Target 9 - By 2020, invasive alien species and	Trends in identification and prioritization of IAS	No specific indicators identified
pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and	Trends in identification and prioritization of IAS pathways	No specific indicators identified
establishment.	Trends in the distribution and populations of IAS	No specific indicators identified
	Trends in eradication of priority IAS	Trends in invasive alien species vertebrate eradications
		Adoption of national legislation relevant to the prevention or control of invasive alien species (proposed indicator for SDG target 15.8)
	Trends in extinction risk and populations driven by IAS impacts	Red List Index (impacts of invasive alien species)
	Trends in impacts of IAS on ecosystems	No specific indicators identified
	Trends in the numbers of invasive alien species introduction and establishment events	Trends in the numbers of invasive alien species introduction events
	Trends in implementation of policy responses preventing the introduction and establishment of IAS	Trends in adoption of national legislation for prevention of invasive alien species
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.	Trends in extent and condition of coral reefs	Trends in proportion of live coral cover
	Trends in extinction risk and populations of coral and coral-reef dependent species	Red List Index (reef-building coral species)
	Trends in pressures on coral reefs	Loss of marine biodiversity caused by ocean acidification (proposed indicator for SDG target 14.3)

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
	Trends in responses to reduce pressures on coral reefs	No specific indicators identified
	Trends in extent and condition of other vulnerable ecosystems impacted by climate change or ocean acidification	No specific indicators identified
	Trends in species extinction risk and populations or condition of other vulnerable ecosystems impacted by climate change or ocean acidification	Climatic Impact Index for birds
		Red List Index (impacts of climate change)
	Trends in pressures on other vulnerable ecosystems impacted by climate change or ocean acidification	No specific indicators identified
	Trends in responses to reduce pressures on other vulnerable ecosystems impacted by climate change or ocean acidification	No specific indicators identified
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	Trends in area of terrestrial and inland water areas conserved	% terrestrial and inland water areas covered by protected areas
for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically	Trends in area of coastal and marine areas conserved	% marine and coastal areas covered by protected areas
representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider		Coverage of protected areas (marine and coastal) (proposed indicator for SDG target 14.5)
landscapes and seascapes.	Trends in areas of particular importance for biodiversity conserved	Protected area coverage of Key Biodiversity Areas (including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites)
		Protected Area Overlays with Biodiversity (proposed indicator for SDG target 15.1)
	Trends in areas of particular importance for ecosystem services conserved	No specific indicators identified
	Trends in ecological representativeness of areas conserved	Protected area coverage of terrestrial, marine and freshwater ecoregions
		Species protection index
		Protected Area Representativeness Index
	Trends in effectiveness and/or equitability of management of conserved areas	Management effectiveness of protected areas
	management of conserved areas	Trends in protected area funding

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
	Trends in connectivity and integration of conserved areas	Protected Area Connectedness Index
	Trends in policy responses promoting conserved area connectivity	Land-/Seascape Connectivity Index
Target 12 - By 2020 the extinction of known threatened	Trends in number of extinctions	Number of species extinctions
species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	Trends in extinctions prevented	Number of extinctions prevented by conservation action
	Trends in extinction risk and populations of species	Red List Index (proposed indicator for SDG target 15.5)
		Living Planet Index
		Species Habitat Index
		Species Protection Index for species in decline
		Local biodiversity intactness index
		Funds towards species protection
Target 13 - By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	Trends in genetic diversity of cultivated plants	Ex-situ crop collections enrichment index (proposed indicator for SDG target 2.5)
	Trends in genetic diversity of farmed and domesticated animals (SDG 2.5)	Trends in numbers of local breeds at risk (proposed indicator for SDG target 2.5)
genetic diversity.	Trends in extinction risk and populations of wild relatives	Red List Index (wild relatives)
		Species Habitat Index (wild relatives)
	Trends in protected area coverage of wild relatives (to be resolved)	Species Protection Index (wild relatives)
	Trends in genetic diversity of socio-economically as well as culturally valuable species	No specific indicators identified
	Trends in development and implementation of strategies for minimizing genetic erosion and safeguarding genetic diversity	Level of implementation of global plan of actions on genetic resources for food and agriculture
Target 14 - By 2020, ecosystems that provide essential	Trends in safeguarded ecosystems that provide	Wetland extent

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
services, including services related to water, and contribute to health, livelihoods and well-being, are	essential services	
restored and safeguarded, taking into account the needs of women, indigenous and local communities,	Trends in extinction risk and populations of species that provide essential services	Red List Index (species used for food and medicine; pollinating species)
and the poor and vulnerable.		Living Planet Index (utilized species)
		Species Habitat Index (species that provide essential services)
	Trends in benefits from ecosystem services	Wellbeing indicator for the environment
		Mountain Green Cover Index (proposed indicator for SDG target 15.4)
		Percentage of change in wetlands extent over time (proposed indicator for SDG target 6.6)
		Percentage of water bodies with good ambient water quality (proposed indicator for SDG target 6.3)
		a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) Share of women among owners or rights-bearers of agricultural land", by type of tenure (proposed indicator for SDG target 1.4 and 5.a
	Trends in restoration of ecosystems that provide essential services	No specific indicators identified
	Trends in the degree to which ecosystem services provides for the needs of women, indigenous and local communities, and the poor and vulnerable	Inadequate access to food – average dietary energy supply adequacy (measured by the Food Insecurity Experience Scale)
		Percentage of population using safely managed drinking water services (proposed indicator for SDG target 15.4)
Target 15 - By 2020, ecosystem resilience and the	Trends in ecosystem resilience	No specific indicators identified
contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded	Trends in carbon stocks within ecosystems	Trends in forest carbon stocks (proposed indicator for SDG target 15.2)
ecosystems, thereby contributing to climate change mitigation and adaptation and to combating		Trends in carbon sequestration rate or avoided emissions

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
desertification.	sertification. Trends in proportion of degraded ecosystems restored	Trends in land degradation (proposed indicator for SDG target 15.3)
		Global ecosystem restoration index
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.	Trends in the implementation of the Nagoya Protocol	Trends in the number of permits or their equivalents made available to the Access and Benefit-sharing Clearing-House established under the Nagoya Protocol and number of Standard Material Transfer Agreements, as communicated to the Governing Body of the International Treaty (proposed indicator for SDG target 15.6)
Target 17 - By 2015 each Party has developed, adopted as a policy instrument, and has commenced	Trends in adoption and implementation of national biodiversity strategies and action plans, as policy instruments including development, comprehensiveness, adoption and implementation	Number of countries with developed or revised NBSAPs
implementing an effective, participatory and updated national biodiversity strategy and action plan		Number of countries with NBSAPs adopted as policy instruments
		Number of national action plans related to multi-lateral environmental agreements that support accelerated investment in actions that eradicate poverty and sustainably use natural resources (proposed indicator for SDG target 1.b)
Target 18 - By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and	Trends in land-use change and land tenure in the traditional territories of indigenous and local communities (B) (decision X/43)	Percentage of women, men indigenous peoples and local communities with secure rights to land property and natural resources measured by: • Percentage with legally documented or recognized evidence of tenure • Percentage who perceive their rights recognized and protected (proposed indicator for SDG target 1.4)
effective participation of indigenous and local communities, at all relevant levels		a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) Share of women among

Aichi Biodiversity Target	Generic Indicator	Specific Indicator
		owners or rights-bearers of agricultural land", by type of tenure (proposed indicator for SDG target 1.4)
	Trends in the practice of traditional occupations (decision X/43)	No specific indicators identified
	Trends in which traditional knowledge and practices are respected through their full integration, safeguards and the full and effective participation of indigenous and local communities in the national implementation of the Strategic Plan	No specific indicators identified
	Trends of linguistic diversity and numbers of speakers of indigenous languages (B) (decision VII/30 and VIII/15)	Global Index of Linguistic Diversity and language threat level.
Target 19 - By 2020, knowledge, the science base and		Species represented in the barcode of life data system
technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	Number of maintained species inventories being used to implement the Convention	Growth in species occurrence records accessible through GBIF
		Species Status Information Index
		Proportion of known species assessed through the IUCN Red List
	Trends in coverage of comprehensive policy-relevant	
	subglobal assessments including related capacity-building and knowledge transfer, plus trends in uptake into policy	Growth in ocean science capacity, technology and knowledge, as well as cooperation between countries and regions (proposed indicator for SDG target 14.a)
		Growth in scientific ocean acidification cooperation (proposed indicator for SDG target 14.3)
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, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	Trends in the mobilization of financial resources	Information provided through the financial reporting framework, adopted by decision XII/3 (https://chm.cbd.int/search/financial-reporting)

Table 2 – This table illustrates the specific indicators identified by the AHTEG and the different criteria the group considered. Those indicators currently under active development as well as those proposed as part of the Sustainable Development Goals process were not assessed. However as these indicators are

likely to be available in the near future this should be revised in the future and kept under review.

Target	Specific Indicator	Available today (X) or under active development (Y)	Easy to communicate	Global indicator can be disaggregated to create national indicator	National data are aggregated to form global indicator	Used in GBO3/ GBO4	Source
Target 1 - By 2020, at the latest,	Biodiversity Barometer	Х	Х		Х	Х	UEBT
people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably	Online interest in biodiversity (Google Trends)	Х			Х	Х	Google trends
	Percentage of students of a given age (eg 15-year olds) enrolled in secondary school demonstrating at least a fixed level of knowledge across a selection of topics in environmental science and geoscience (proposed indicator for SDG target 4.7)						
	Civil membership to biodiversity-relevant NGOs						
Target 2 - By 2020, at the latest, biodiversity values have been integrated into national and local	Number of countries implementing natural resource accounts, excluding energy, within the System of Environmental-Economic Accounting (SEEA)	Х	х		х	х	UNSTATS, World Bank
development and poverty reduction strategies and planning processes and are being incorporated into national	Number of countries with National Economic Ecosystem Assessments and subnational assessments				Х		
accounting, as appropriate, and reporting systems.	Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020 (proposed indicator for SDG target 15.9)						
	Integration of biodiversity in National Development Plans, poverty reduction strategies or other key development plans	Х	Х		Х	х	Roe D. (2010)
Target 3 - By 2020, at the latest, incentives, including subsidies,	Trends in the number and value of incentives, including subsidies, harmful to biodiversity, removed, reformed or phased out						
harmful to biodiversity are eliminated, phased out or	Trends in potentially harmful elements of government support to	Y					OECD

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reformed in order to minimize or avoid negative impacts, and	agriculture (produced and consumer support estimates)						
positive incentives for the conservation and sustainable use of biodiversity are developed and	Agricultural Export Subsidies / OECD PRODUCER SUPPORT ESTIMATE (PSE) (proposed indicator for SDG target 2.b)	Υ					OECD
applied, consistent and in harmony with the Convention and other relevant international	Number of countries with national instruments on biodiversity-relevant taxes, charges and fees						
obligations, taking into account national socioeconomic condition	Number of countries with national instruments on payments for ecosystem services schemes						
	Number of countries with national instruments on REDD plus schemes	Х			Х	Х	UN-REDD programme
	Number of countries with national instruments on biodiversity relevant tradable permit schemes (e.g. ITQs for fisheries)						
	Number of countries with national instruments on biodiversity offset schemes						
Target 4 - By 2020, at the latest,	Red List Index (impacts of utilization)	Х	Х	Х		Х	IUCN
Governments, business and stakeholders at all levels have	Percentage of Category 1 nations in CITES	Х			Х	Х	CITES
taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the	Ratio between detected illegal trafficking and legal trade in wildlife and wildlife products (proposed indicator for SDG target 15.7)						
impacts of use of natural resources well within safe	Ecological footprint	Х	Х		Х	Х	GFN
ecological limits.	Material efficiency/productivity (see SDG target/indicator 8.4)						
	Number of countries with SCP National Action Plans or SCP mainstreamed as a priority or target into national policies (proposed indicator for SDG target 12.1)						
	Material Footprint (MF) and MF per capita (proposed indicator for SDG target 12.1)						
	Human appropriation of net primary productivity	Х		Х	Х	Х	Krausmann etal (2013)
	Human appropriation of fresh water (water footprint)	Х			Х	Х	Joint Research Centre

	Percentage of change in water use-efficiency over time (proposed indicator for SDG target 6.4)						
	Number of cities applying and reporting on the Cities Biodiversity Index	Υ					CBD
	Efficient land use (by enhancing inclusive and sustainable urbanization) (ratio of land consumption rate to population growth rate at comparable scale) (proposed indicator for SDG target 11.3)						
	Percentage of businesses reporting on environmental issues making specific references to biodiversity, natural capital and/or ecosystem functions and services						
Target 5 - By 2020, the rate of	Trends in forest extent (tree cover)	Х	Х	Х			Hansen et al
loss of all natural habitats, including forests, is at least halved and where feasible	Forest area as a percentage of total land area (proposed indicator for SDG target 15.1)	Х	х	Х	Х		FAO
brought close to zero, and degradation and fragmentation is significantly reduced.	Percentage of change in wetlands extent over time (proposed indicator for SDG target 6.6)	Х	х				UN Water
	Natural habitat extent (land area minus urban & agriculture)						
	Biodiversity Habitat Index	Υ					GEOBON
	Local Biodiversity Intactness Index	Υ					PREDICTS
	Trends in land degradation (proposed indicator for SDG target 15.3)	Υ					UNCCD
	Red List index (forest specialists)	х	х	Х			IUCN & BirdLife International
	Living Planet Index (forest specialists)	Υ					WWF/ZSL
	Species Habitat Index	Υ					GEOBON
Target 6 - By 2020 all fish and	Trends in fisheries certified by the Marine Stewardship Council	Х	Х	Х		Х	MSC
invertebrate stocks and aquatic plants are managed and harvested sustainably, legally	Proportion of fish stocks within biologically sustainable levels (proposed indicator for SDG target 14.4)	Х		Х	Х	Х	FAO

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and applying ecosystem based approaches, so that overfishing is	Red List Index (harvested aquatic species)	Υ					IUCN
avoided, recovery plans and measures are in place for all depleted species, fisheries have	Red List Index (impacts of fisheries)	Х	Х	Х		х	IUCN/BirdLife International
no significant adverse impacts on threatened species and	Living Planet Index (trends in target and bycatch species)	Υ					WWF/ZSL
vulnerable ecosystems and the impacts of fisheries on stocks,	Global effort in bottom trawling	Х	Х			Х	UBC
species and ecosystems are within safe ecological limits.	Progress by countries in the implementation of international instruments aiming to combat IUU fishing (proposed indicator for SDG target 14.6)						
	Proportion of fish stocks within biologically sustainable levels (proposed indicator for SDG target 14.4)	Х		Х		х	FAO
	Estimated fisheries catch and fishing effort (Sea Around us)	Х		Х			UBC
	Percentage of catches that are subject to a catch documentation scheme or similar traceability system as a percentage of the total catches that are less than x tons and traded in major markets (proposed indicator for SDG target 14.b)	Y					FAO
Target 7 - By 2020 areas under agriculture, aquaculture and	Areas of agricultural land under organic production	Х	Х	Х		Х	IFOAM
forestry are managed sustainably, ensuring	Areas of agricultural land under conservation agriculture	Х		Х	Х	Х	FAO
conservation of biodiversity.	Percentage of agricultural area under sustainable agricultural practices (proposed indicator for SDG target 2.4)						FAO
	Wild Bird Index for farmland birds / Living Planet Index (farmland specialists)	Х	х	Х	х	х	BirdLife International /EBCCC
	Proportion of Aquaculture under certified sustainable production						
	Productivity of aquaculture in utilizing natural resources (land, water and wild stock) (proposed indicator for SDG target 14.7)						
	Proportion of area of forest production under FSC and PEFC certification	Х	Х	Х	Х	х	FSC/PEFC
	Sustainable Forest Management Index (proposed indicator for SDG	Y					FAO

	target 15.2)						
Target 8 - By 2020, pollution,	Trends in emissions NOX, SOX, POPS						
including from excess nutrients, has been brought to levels that	Trends in Pesticide use	Х	Х	Х	Х	Х	FAO
are not detrimental to ecosystem function and biodiversity	Trends in CFC emissions (chlorofluorocarbons (CFCs) in ODP	Х	Х	Х	х		Ozone Secretariat
	Floating Plastic Debris (Particles/Km2) (proposed indicator for SDG target 14.1)						
	Mean levels of exposure to ambient air pollution (population weighted) (proposed indicator for SDG target 3.9)						
	Number of deaths from air, water and soil pollution and contamination (proposed indicator for SDG target 3.9)						
	Red List Index (impacts of pollution)	Х		Х		Х	IUCN/BirdLife International
	Water Quality Index for Biodiversity						UNEP GEMS
	Trends in Nitrogen deposition						
	Loss of reactive nitrogen to the environment						
	Trends in global surplus of nitrogen	Х	Х	Х		Х	PBL
	Nitrogen use efficiency composite indicator - reflects the N input, the N output, the output/input ratio, and the N surplus/deficit (proposed indicator for SDG target 14.1)						
	Index of Coastal Eutrophication (ICEP) (proposed indicator for SDG target 14.1)						
	Percentage of water bodies with good ambient water quality (proposed indicator for SDG target 6.3)						
Target 9 - By 2020, invasive alien	Trends in invasive alien species vertebrate eradications	Υ					
species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in	Adoption of national legislation relevant to the prevention or control of invasive alien species (proposed indicator for SDG target 15.8)	х			х	х	IUCN SSC Invasive Species

place to manage pathways to prevent their introduction and establishment.							Specialist Group, Monash University, BirdLife International, Concordia University
	Red List Index (impacts of invasive alien species)	Х	х	Х		х	IUCN/BirdLife International
	Trends in the numbers of invasive alien species introduction events	Х	Х	Х	Х	Х	ISSG
	Trends in adoption of national legislation for prevention of invasive alien species	Х			Х	Х	Mcgeoch et al
Target 10 - By 2015, the multiple	Trends in proportion of live coral cover	Х	Х	Х		Х	Mumby et al
anthropogenic pressures on coral reefs, and other vulnerable	Red List Index (reef-building coral species)	Х	Х	Х		Х	IUCN
ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their	Loss of marine biodiversity caused by ocean acidification (proposed indicator for SDG target 14.3)						
integrity and functioning.	Climatic Impact Index for birds	Х		Х		х	Gregory et al. 2009 PloS ONE
	Red List Index (impacts of climate change)	Υ					IUCN/BirdLife International
Target 11 - By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal	Percentage of terrestrial and inland water areas covered by protected areas	Х	х	Х	Х	Х	WDPA
and marine areas, especially	Percentage of marine and coastal areas covered by protected areas	Х	Х	Х	Х	Х	WDPA
areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-	Coverage of protected areas (marine and coastal) (proposed indicator for SDG target 14.5)	Х	х	Х	Х	х	WDPA
	Protected area coverage of Key Biodiversity Areas (including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites)	Х	х	Х	Х	Х	BirdLife International /IUCN/AZE
based conservation measures, and integrated into the wider	Protected Area Overlays with Biodiversity (proposed indicator for SDG	Х	Х	Х	Х	Х	WCMC/BirdLife International

landscapes and seascapes.	target 15.1)						/IUCN/AZE
	Protected area coverage of terrestrial, marine and freshwater ecoregions	Х	х	Х	Х	х	WCMC/BirdLife International /IUCN/AZE
	Species protection index	Υ					GEOBON
	Protected Area Representativeness Index	Υ					GEOBON
	Management effectiveness of protected areas	Х		Х	Х	Х	WCMC
	Trends in protected area funding	Х	Х			Х	AidData
	Land-/Seascape Connectivity Index						
Target 12 - By 2020 the extinction of known threatened	Number of species extinctions	Х	Х	Х		х	IUCN/BirdLife International
species has been prevented and their conservation status, particularly of those most in	Number of extinctions prevented by conservation action	Y					IUCN/BirdLife International
decline, has been improved and sustained.	Red List Index (proposed indicator for SDG target 15.5)	Х	Х	Х		х	IUCN/BirdLife International
	Living Planet Index	Х	Х	Х		Х	WWF/ZSL
	Species Habitat Index	Υ					GEOBON
	Species Protection Index for species in decline	Υ					GEOBON
	Local biodiversity intactness index	Υ					PREDICTS
	Funds towards species protection	Х	Х			Х	AidData
Target 13 - By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socioeconomically	Ex-situ crop collections enrichment index (proposed indicator for SDG target 2.5)	Y					FAO
	Trends in numbers of local breeds at risk (proposed indicator for SDG target 2.5)	Х	Х			х	FAO
as well as culturally valuable species, is maintained, and	Red List Index (wild relatives)	Υ					IUCN

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strategies have been developed and implemented for minimizing	Species Habitat Index (wild relatives)	Υ					GEOBON
genetic erosion and safeguarding their genetic diversity.	Species Protection Index (wild relatives)	Υ					GEOBON
,	Level of implementation of global plan of actions on genetic resources for food and agriculture						
Target 14 - By 2020, ecosystems	Wetland extent	Х	Х	Х		Х	WCMC
that provide essential services, including services related to water, and contribute to health, liveliheads and well being are	Red List Index (species used for food and medicine; pollinating species)	Y				х	IUCN/BirdLife International
livelihoods and well-being, are restored and safeguarded, taking into account the needs of	Living Planet Index (utilized species)	Х	Х	Х		Х	WWF/ZSL
women, indigenous and local	Species Habitat Index (species that provide essential services)	Y					GEOBON
communities, and the poor and vulnerable.	Wellbeing indicator for the environment	Y					OECD
	Mountain Green Cover Index (proposed indicator for SDG target 15.4)	Υ					FAO
	Percentage of change in wetlands extent over time (proposed indicator for SDG target 6.6)						
	Percentage of water bodies with good ambient water quality (proposed indicator for SDG target 6.3)						
	a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) Share of women among owners or rights-bearers of agricultural land", by type of tenure (proposed indicator for SDG target 1.4 and 5.a						
	Inadequate access to food – average dietary energy supply adequacy (measured by the Food Insecurity Experience Scale)						
	Percentage of population using safely managed drinking water services (proposed indicator for SDG target 15.4)	Х	Х	Х	Х		WHO/UNICEF
Target 15 - By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through	Trends in forest carbon stocks (proposed indicator for SDG target 15.2)	Υ					FAO/GFW
	Trends in carbon sequestration rate or avoided emissions						
conservation and restoration, including restoration of at least	Trends in land degradation (proposed indicator for SDG target 15.3)	Υ					UNCCD

15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	Global ecosystem restoration index	Y					GEOBON/iDiv
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.	Number of permits or their equivalents made available to the Access and Benefit-sharing Clearing-House established under the Nagoya Protocol and number of Standard Material Transfer Agreements, as communicated to the Governing Body of the International Treaty (proposed indicator for SDG target 15.6)	х	х		х		Secretariat of the Convention on Biological Diversity, FAO
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	Number of countries with developed or revised NBSAPs	х	х		х	Х	Secretariat of the Convention on Biological Diversity
	Number of countries with NBSAPs adopted as policy instruments	Υ					Secretariat of the Convention on Biological Diversity
	Number of national action plans related to multilateral environmental agreements that support accelerated investment in actions that eradicate poverty and sustainably use natural resources (proposed indicator for SDG target 1.b)						
Target 18 - By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of	Percentage of women, men indigenous peoples and local communities with secure rights to land property and natural resources measured by • Percentage with legally documented or recognized evidence of tenure • Percentage who perceive their rights recognized and protected (proposed indicator for SDG target 1.4)						
	a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) Share of women among owners or rights-bearers of agricultural land", by type of tenure (proposed indicator for SDG target 1.4)						
	Global Index of Linguistic Diversity and language threat level	Х		х	Х	Х	Teralingua

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indigenous and local communities, at all relevant levels							
Target 19 - By 2020, knowledge, the science base and	Species represented in the barcode of life data system	Х				х	Barcode of Life Data Systems
technologies relating to biodiversity, its values,	Growth in species occurrence records accessible through GBIF	Х	Х	Х	Х	Х	GBIF
functioning, status and trends, and the consequences of its loss,	Species Status Information Index	Y					GEOBON
are improved, widely shared and transferred, and applied.	Proportion of known species assessed through the IUCN Red List	Х		Х			IUCN
	Growth in ocean science capacity, technology and knowledge, as well as cooperation between countries and regions (proposed indicator for SDG target 14.a)						
	Growth in scientific ocean acidification cooperation (proposed indicator for SDG target 14.3)						
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, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	Information provided through the financial reporting framework, adopted by decision XII/3 (https://chm.cbd.int/search/financial-reporting)	X	×		X	X	Secretariat of the Convention on Biological Diversity

**Table 3:** Indicators identified by the AHTEG as being ready for use, good for communication and which can be disaggregated to create national indicators. The indicators identified in this table would constitute a small set of indicators to monitor progress towards the Aichi Biodiversity Targets. However indicators currently under active development were not assessed. Given that many of these indicators are expected to be available in the near future this list should be kept under review.

Aichi Biodiversity Target	Generic Indicator	Specific Indicators
Target 4 - By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	Trends in population and extinction risk of utilized species, including species in trade (A) (also used by CITES)	Red List Index (impacts of utilization)
Target 5 - By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where	Trends in extent of forest	Trends in forest extent (tree cover)
feasible brought close to zero, and degradation and fragmentation is significantly reduced.		Forest area as a percentage of total land area (proposed indictor for SDG target 15.1)
	Trends in extinction risk and populations of habitat specialist species in each major habitat type	
Target 6 - By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably,	Trends in certified sustainable fisheries	Trends in fisheries certified by the Marine Stewardship Council
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.	Trends in population and extinction risk in target and bycatch species	Red List Index (impacts of fisheries)
Target 7 - By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	Trends in proportion of area of agriculture under sustainable practices	Areas of agricultural land under organic production
conservation of blodiversity.	Trends in extinction risk and populations of agroecosystem associated species	Wild Bird Index for farmland birds / Living Planet Index (farmland specialists)
	Trends in proportion of area of forest production under sustainable practices	Proportion of area of forest production under FSC and PEFC certification
Target 8 - By 2020, pollution, including from excess nutrients, has been brought to levels that are not	Trends in pollutants	Trends in Pesticide use
detrimental to ecosystem function and biodiversity		Trends in CFC emissions (chlorofluorocarbons (CFCs) in ODP
	Trends in nutrient levels	Trends in global surplus of nitrogen

Aichi Biodiversity Target	Generic Indicator	Specific Indicators
Target 9 - By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place	Trends in extinction risk and populations driven by IAS impacts	Red List Index (impacts of invasive alien species)
to manage pathways to prevent their introduction and establishment.	Trends in the numbers of invasive alien species introduction and establishment events	Trends in the numbers of invasive alien species introduction events
Target 10 - By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable	Trends in extent and condition of coral reefs	Trends in proportion of live coral cover
ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	Trends in extinction risk and populations of coral and coral-reef dependent species	Red List Index (reef-building coral species)
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	Trends in area of terrestrial and inland water areas conserved	Percentage of terrestrial and inland water areas covered by protected areas
biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected	Trends in area of coastal and marine areas conserved	Percentage of marine and coastal areas covered by protected areas
areas and other effective area-based conservation measures, and integrated into the wider landscapes		Coverage of protected areas (marine and coastal) (proposed indictor for SDG target 14.5)
and seascapes.	Trends in areas of particular importance for biodiversity conserved	Protected area coverage of Key Biodiversity Areas (including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites)
		Protected Area Overlays with Biodiversity (proposed indicator for SDG target 15.1)
	Trends in ecological representativeness of areas conserved	Protected area coverage of terrestrial, marine and freshwater ecoregions
Target 12 - By 2020 the extinction of known threatened species has been prevented and their conservation	Trends in number of extinctions	Number of species extinctions
status, particularly of those most in decline, has been improved and sustained.	Trends in extinction risk and populations of species	Red List Index (proposed indictor for SDG target 15.5)
improved and sustained.		Living Planet Index
Target 14 - By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are	Trends in safeguarded ecosystems that provide essential services	Wetland extent
Contribute to meanin, livelinoous and well-being, are	Trends in extinction risk and populations of species that	Red List Index (species used for food and medicine;

Aichi Biodiversity Target	Generic Indicator	Specific Indicators
restored and safeguarded, taking into account the needs of women, indigenous and local communities,	provide essential services	pollinating species)
and the poor and vulnerable.		Living Planet Index (utilized species)
	Trends in the degree to which ecosystem services provides for the needs of women, indigenous and local communities, and the poor and vulnerable	Percentage of population using safely managed drinking water services (proposed indictor for SDG target 15.4)
Target 19 - By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	Number of maintained species inventories being used to implement the Convention	Growth in species occurrence records accessible through GBIF

## UNEP/CBD/ID/AHTEG/2015/1/3 UNEP/CBD/SBSTTA/19/INF/5 Page 40

**Table 4** - The following table provides an analysis of the links of the Aichi Biodiversity Targets to the relevant targets of the sustainable development goals. Comments are provided describing the relation and noting overlaps, gaps and differences in scope where relevant. In cases where multiple sustainable development targets apply to a single Aichi Biodiversity Target this is also noted. The level of complementarity between the Aichi Biodiversity Targets and the SDGs is also illustrated in the table (\* refers to a weak relationship, \*\* refers to moderate relationship and \*\*\* refers to a strong relationship). The table also includes indicators identified by the AHTEG as mutually relevant to the Aichi Biodiversity Targets and the targets of the sustainable development goals. In some cases the indicators have been identified through the SDG process while in others they have been identified by the AHTEG. Where the indicators have been proposed through the SDG process this has been noted. As the SDG indicator process is still ongoing this table should be reviewed in the light of the ongoing discussions on this issue.

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
Target 1 - By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably	4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	*	The Aichi Biodiversity Target is narrower in its scope then the Sustainable Development Targets as it focuses specifically on biodiversity. The Aichi Biodiversity Target also refers to people being aware of the actions they can take, which is not explicitly reflected in	Percentage of students of a given age (eg 15-year olds) enrolled in secondary school demonstrating at least a fixed level of knowledge across a selection of topics in environmental science and geoscience (proposed indicator for SDG target 4.7)
	12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	**	the Sustainable Development Target.	
Target 2 - By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	***	There is a close match in the scope of the two targets.	Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020 (proposed indicator for SDG target 15.9)

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
Target 3 - By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic condition	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	**	The Aichi Biodiversity Target is broader than the Sustainable Development Target which only refers to fishery subsidies. The Aichi Biodiversity Target refers to harmful incentives, including subsidies, generally as well as to the promotion of positive incentives. These elements are not captured in the Sustainable Development Target.	Trends in potentially harmful elements of government support to agriculture (produced and consumer support estimates)  Agricultural Export Subsidies / OECD Producer Support Estimate (PSE) (proposed indicator for SDG target 2.b)
Target 4 - By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or	8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour 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	**	Sustainable Development Targets 8.4 and 9.4 refer to improving resource use efficiency in production and consumption which is relevant to Aichi Biodiversity Target 4 but is more specific. Sustainable Development Target 12.2 refers to the management of natural resources. This is broader	Ratio between detected illegal trafficking and legal trade in wildlife and wildlife products (proposed indicator for SDG target 15.7)  Material efficiency/productivity (see SDG target/indicator 8.4)  Number of countries with SCP National Action Plans or SCP mainstreamed as a
have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resourceuse efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	*	than the Aichi Biodiversity Target. The Aichi Biodiversity Target specifically refers to keeping the impacts of use within safe ecological limits which is not addressed by the Sustainable Development Targets.  These Sustainable Development Targets are also relevant to Aichi	priority or target into national policies (proposed indicator for SDG target 12.1)  Material Footprint (MF) and MF per capita (proposed indicator for SDG target 12.1)  Percentage of change in water use-efficiency over time (proposed indicator for SDG target
	12.2 By 2030, achieve the sustainable management and efficient use of	*	Biodiversity Target 7.	6.4)

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
	natural resources			Efficient land use (by enhancing inclusive and sustainable urbanization) (ratio of land consumption rate to population growth rate at comparable scale) (proposed indicator for SDG target 11.3)
Target 5 - By 2020, the rate of loss of all natural habitats,	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	***	There is a close match in the scope of the Aichi Biodiversity Target and the two related Sustainable Development Targets.  Sustainable Development Target	Forest area as a percentage of total land area (proposed indicator for SDG target 15.1)  Percentage of change in wetlands extent
including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	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	***	15.2 refers to sustainable management which is also relevant to Aichi Biodiversity Target 7. Sustainable Development Target 15.5 refers to protecting and preventing the extinction of threatened species which is relevant to Aichi Biodiversity Target 12.	over time (proposed indicator for SDG target 6.6)  Trends in land degradation (proposed indicator for SDG target 15.3)
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	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	***	Sustainable Development Target 14.4 and Aichi Biodiversity Target 6 are closely related, though the Aichi Biodiversity Target is more specific in that is specifies fish and invertebrate stocks and aquatic plants. Sustainable development Target 14.7 is weakly related to Aichi Biodiversity Target 6 as it refers to the sustainable management of fisheries.	Proportion of fish stocks within biologically sustainable levels (proposed indicator for SDG target 14.4)  Progress by countries in the implementation of international instruments aiming to combat IUU fishing (proposed indicator for SDG target 14.6)  Proportion of fish stocks within biologically sustainable levels (proposed indicator for
and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.	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	*	The Aichi Biodiversity Target also refers to the impacts of fisheries practices on threatened species and vulnerable ecosystems. These issues are not explicitly addresses in the Sustainable Development	sustainable levels (proposed indicator for SDG target 14.4)  Percentage of catches that are subject to a catch documentation scheme or similar traceability system as a percentage of the

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
	sustainable management of fisheries, aquaculture and tourism		Targets.  Sustainable development target 14.7 is also related to Aichi Biodiversity Target given the reference to the sustainable management of aquaculture.	total catches that are less than x tons and traded in major markets (proposed indicator for SDG target 14.b)
Target 7 - By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	2.4 y 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	**	The Sustainable Development Targets refer to sustainable food production as well as to the sustainable management and efficient use of natural resources. As such their scope is largely addressed by Aichi Biodiversity Target 7. However Aichi Biodiversity Target 7 focuses explicitly on the sustainable management of	Areas of agricultural land under conservation agriculture  Percentage of agricultural area under sustainable agricultural practices (proposed indicator for SDG target 2.4)  Productivity of aquaculture in utilizing natural resources (land, water and wild stock)
,	agriculture, aquaculture and	forestry. While these issues are not addressed by these Sustainable Development Targets they are addressed to a certain degree by	(proposed indicator for SDG target 14.7)  Sustainable Forest Management Index (proposed indicator for SDG target 15.2)	
Target 8 - By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity	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	***	Aichi Biodiversity Target 8 and Sustainable Development Target 14.1 are closely associated. However the Aichi Biodiversity Target is broader in its scope as it focuses on all types of pollution, not just those related to the marine environment.	Floating Plastic Debris (Particles/Km2) (proposed indicator for SDG target 14.1)  Mean levels of exposure to ambient air pollution (population weighted) (proposed indicator for SDG target 3.9)  Number of deaths from air, water and soil pollution and contamination (proposed indicator for SDG target 3.9)  Water Quality Index for Biodiversity  Nitrogen use efficiency composite indicator - reflects the N input, the N output, the

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
				output/input ratio, and the N surplus/deficit (proposed indicator for SDG target 14.1)
				Index of Coastal Eutrophication (ICEP) (proposed indicator for SDG target 14.1)
				Percentage of water bodies with good ambient water quality (proposed indicator for SDG target 6.3)
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.	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	***	The Aichi Biodiversity Target and the Sustainable Development Target are close related. The Aichi Biodiversity Target is more specific in that it specifies controlling pathways.	Adoption of national legislation relevant to the prevention or control of invasive alien species (proposed indicator for SDG target 15.8)  Trends in adoption of national legislation for prevention of invasive alien species
Target 10 - By 2015, the multiple anthropogenic pressures on coral reefs, and	14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	**	Aichi Biodiversity Target 10 is significantly boarder than the related Sustainable Development Targets as it refers to all ecosystems vulnerable to the effects of climate change and ocean acidification. The Aichi Biodiversity Target is moderately related to	Loss of marine biodiversity caused by ocean acidification (proposed indicator for SDG target 14.3)
other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	*	Sustainable Development Target 14.2 as it refers to strengthening the resiliency of marine and coastal systems. Sustainable Development Target 14.3 is weakly related to Aichi Biodiversity Target 10 as it relates to addressing the impacts of ocean acidification, which, while relevant, to the Aichi Biodiversity Target, is not its focus.	

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
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	11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	**	Sustainable Development Target 11.4 is broader than Aichi Biodiversity Target 11 as it refers to protecting cultural and natural heritage. Sustainable Development Target 14.5 is directly relevant to the marine component of Aichi Biodiversity Target 11 and they have identical percentage elements.	Percentage of marine and coastal areas covered by protected areas  Coverage of protected areas (marine and coastal) (proposed indicator for SDG target 14.5  Protected area coverage of Key Biodiversity
importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider andscapes and seascapes.  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  Aichi Biodiversity T addresses a number which are not cove related Sustainable Targets. These incorpercentage based target, an emphasic particularly importate effective and equitation management of province and equitation as well making use effective area based	for biodiversity and services, are chrough effectively bly managed, representative and cted systems of reas and other ea-based n measures, and not the wider and seascapes.  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  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  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  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  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  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  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  15.5 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	addresses a number of issues which are not covered by the related Sustainable Development Targets. These include a percentage based protected area target, an emphasis on protecting particularly important areas, effective and equitable management of protected areas, integrating protected area systems into the wider land- and seascapes as well making use of other	Areas (including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites  Protected Area Overlays with Biodiversity (proposed indicator for SDG target 15.1)
Target 12 - By 2020 the extinction of known threatened species has been prevented	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	***	Both sustainable developments are targets are highly related to Aichi Biodiversity Target 12 as they both refer to preventing extinction. Sustainable Development Target 15.7 focuses on one specific	Red List Index (proposed indicator for SDG target 15.5)  Ratio between detected illegal trafficking and legal trade in wildlife and wildlife products
species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	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	***	pressure on wildlife and as such is more narrow in scope than the Aichi Biodiversity Target. Similarly the two Sustainable Development Targets do note explicitly refer to improving and sustaining the conservation status of species.	(proposed indicator for SDG target 15.7)

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
Target 13 - By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	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 and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	***	There is a close association between Aichi Biodiversity Target 13 and sustainable development goal 2.5. However there are some differences. The Aichi Biodiversity Target refers to socioeconomically as well as culturally valuable species which the Sustainable Development Target does not. However the Sustainable Development Target is more specific in that it specifies the use of seed and plant banks as well as the fair and equitable sharing of genetic resources (which is relevant to Aichi Biodiversity Target 16).	Ex-situ crop collections enrichment index (proposed indicator for SDG target 2.5)  Trends in numbers of local breeds at risk (proposed indicator for SDG target 2.5)
	6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	***		Wetland extent  Mountain Green Cover Index (proposed
Target 14 - By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	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	**	The two Sustainable Development Targets are closely related to Aichi Biodiversity Target 14 as they refer to protecting or sustaining ecosystems which provide benefits to people. The Sustainable Development Targets are narrower in scope however as they refer to specific ecosystem types. In addition Aichi Biodiversity Target 14 specifies the need to consider the needs or women and indigenous and local communities, and the poor and vulnerable.	Percentage of change in wetlands extent over time (proposed indicator for SDG target 6.6  Percentage of water bodies with good ambient water quality (proposed indicator for SDG target 6.3)  a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) Share of women among owners or rights-bearers of agricultural land", by type of tenure (proposed indicator for SDG target 1.4 and 5.a  Percentage of population using safely

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
				managed drinking water services (proposed indicator for SDG target 15.4
Target 15 - By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through	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	***	Sustainable Development Targets 15.1 and 15.3 have a close relationship to Aichi Biodiversity Target 15 as they all relate to restoration. The Aichi Biodiversity Target also refers to carbon stocks	Trends in forest carbon stocks (proposed indicator for SDG target 15.2)  Trends in carbon sequestration rate or avoided emissions  Trends in land degradation (proposed
conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	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	***	as well as specifies a quantitative restoration target. Neither of these two elements are contained in the Sustainable Development Targets.	indicator for SDG target 15.3)
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.	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	***	The Aichi Biodiversity Target and the Sustainable Development Target are closely related.	Number of permits or their equivalents made available to the Access and Benefit-sharing Clearing-House established under the Nagoya Protocol and number of Standard Material Transfer Agreements, as communicated to the Governing Body of the International Treaty (proposed indicator for SDG target 15.6)
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.	15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	*	This Sustainable Development Target is only slightly related to Aichi Biodiversity Target 17 in that it refers to national planning processes. The Aichi Biodiversity Target specifically addresses issues related to the operation of the	Number of national action plans related to multi-lateral environmental agreements that support accelerated investment in actions that eradicate poverty and sustainably use natural resources (proposed indicator for SDG target 1.b)

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
			Convention on Biological Diversity.	
traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and	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	*	The Sustainable Development Targets do not explicitly mention traditional and local communities	% of women, men indigenous peoples and local communities with secure rights to land property and natural resources measured by:  • Percentage with legally documented or recognized evidence of tenure and • Percentage who perceive their rights recognized and protected (proposed indicator for SDG target 1.4)
	16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	*	however it addresses a number of issues which are relevant.	a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) Share of women among owners or rights-bearers of agricultural land", by type of tenure (proposed indicator for SDG target 1.4)
Target 19 - By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely	17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	**	Aichi Biodiversity Target 19 refers to an increase in the amount, quality and use of biodiversity information and technologies. As such this Aichi Biodiversity Target is relevant to several of the Sustainable Development Targets. However the Sustainable Development Targets	Growth in ocean science capacity, technology and knowledge, as well as cooperation between countries and regions (proposed indicator for SDG target 14.a)  Growth in scientific ocean acidification cooperation (proposed indicator for SDG target 14.3)
shared and transferred, and applied.	17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved	**	are, for the most part, broader as they refer to improving information and technologies generally and not necessarily specific to biodiversity.	

Aichi Biodiversity Targets	Relevant Sustainable Development Targets	Degree of relation	Comments	Specific Indicators
	coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism			
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, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions	**	There are a number of sustainable development goals which refer to increasing the mobilization of resources. However these are broader than Aichi Biodiversity Target 20 which only focuses on issues related to biodiversity.	
	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	**		
	17.3 Mobilize additional financial resources for developing countries from multiple sources	**		